

Il-Ġurnal Uffiċjali

ta' l-Unjoni Ewropea

Hargha Speċjali *

4 ta' Lulju 2006

Edizzjoni bil-Malti

Legiżlazzjoni

Werrej	I Atti li l-pubblikazzjoni tagħhom hija obbligatorja	
		
	II Atti li l-pubblikazzjoni tagħhom mhijiex obbligatorja	
	Il-Kunsill	
	2006/443/KE:	
	★ Deċiżjoni tal-Kunsill tat-13 ta' Marzu 2006 li temenda d-Deċiżjonijiet 2001/507 u 2001/509 bil- hsieb li r-Regolamenti 109 u 108 tal-Kummissjoni Ekonomika għall-Ewropa tan-Nazzjonijiet Uniti (UN/ECE) dwar tajers b'wiċċ ġdid isiru obbligatorji	1
	2006/444/KE:	
	★ Deċiżjoni tal-Kunsill tat-13 ta' Marzu 2006 dwar l-adeżjoni tal-Komunità għar-Regolament Nru 55 tal-Kummissjoni Ekonomika għall-Ewropa tan-Nazzjonijiet Uniti dwar dispożizzjonijiet dwar l- approvazzjoni ta' komponenti ta' igganċjar mekkaniċi ta' tahlit ta' vetturi ⁽¹⁾	53
	Rettifika	
	★ Rettifika għar-Regolament tal-Kunsill (KE) Nru. 1175/2005 tat-18 ta' Lulju li jimponi dazju <i>anti-dumping</i> definitiv u jiġbor definittivament id-dazju provviżorju impost fuq importazzjonijiet tal-karbonju tal-barju li joriġinaw mir-Repubblika tal-Poplu taċ-Ċina (ĠU L 189, 21.7.2005) (Edizzjoni Speċjali L164M, 16.6.2006, p. 249)	111

Prezz: 22 EUR

⁽¹⁾ Test b'relevanza għaž-ŻEE.


* Din il-Hargha Speċjali bil-Malti hija ppubblikata bil-lingwi uffiċjali ta' l-Istituzzjonijiet ta' l-Unjoni Ewropea fil-ĠU L 181.

II

(Atti li l-pubblikazzjoni tagħhom mhijiex obligatorja)

IL-KUNSILL

DEĊIŻJONI TAL-KUNSILL

tat-13 ta' Marzu 2006

li temenda d-Deciżjonijiet 2001/507 u 2001/509 bil-hsieb li r-Regolamenti 109 u 108 tal-Kummissjoni Ekonomika għall-Ewropa tan-Nazzjonijiet Uniti (UN/ECE) dwar tajers b'wiċċ ġdid isiru obligatorji

(2006/443/KE)

IL-KUNSILL TA' L-UNJONI EWROPEA,

Wara li kkunsidra t-Trattat li jstabbilixxi l-Komunità Ewropea,

Wara li kkunsidra d-Deciżjoni tal-Kunsill 97/836/KE tas-27 ta' Novembru 1997 bil-hsieb ta' l-adeżjoni mill-Komunità Ewropea għall-Ftehim tal-Kummissjoni Ekonomika għall-Ewropa tan-Nazzjonijiet Uniti dwar l-adozzjoni tal-preskrizzjonijiet tekniċi uniformi għall-vetturi bir-roti, tagħmir u partijiet li jistgħu jkunu mqiegħda u/jew jintużaw fuq vetturi bir-roti u l-kondizzjonijiet għal rikonoxximent reċiproku ta' approvazzjonijiet mogħtija fuq bażi ta' dawn il-preskrizzjonijiet ("Ftehim Rivedut 1958")⁽¹⁾, u b'mod partikolari Artikolu 3(3), it-tieni inċiż ta' Artikolu 4(2) u Artikolu 4(4) tagħha,

Wara li kkunsidra l-proposta mill-Kummissjoni,

Wara li kkunsidra l-kunsens tal-Parlament Ewropew⁽²⁾,

Billi:

- (1) Ir-Regolamenti 109 u 108 tan-UN/ECE wasslu għall-armonija fir-rekwiżiti għat-tajers b'wiċċ ġdid u għal-livell għoli ta' sigurtà u protezzjoni ta' l-ambjent. Huma ppermettew helsen fiċ-ċirkolazzjoni ta' tajers b'wiċċ ġdid.
- (2) Bid-Deciżjoni 97/836/KE l-Komunità saret Parti Kontraenti għall-Ftehim Rivedut 1958 tan-UN/ECE. Bid-Deciżjonijiet 2001/507/KE⁽³⁾ u 2001/509/KE⁽⁴⁾, il-Komunità aderiet għar-Regolamenti 109 u 108 tan-UN/ECE, rispettivament. Bl-adeżjoni ma' dawk ir-Regolamenti, il-Komunità kkommettiet li taċċettahom bħala alternattivi għal-leġiżlazzjoni Komunitarja, skond id-dispożizzjonijiet ta' Artikolu 2 u 3 tal-Ftehim Rivedut 1958. Madankollu, sabiex tapplika dawk

ir-Regolamenti fuq bażi obligatorja, dispożizzjoni għal dak l-iskop għandha titniżżel fil-liġi Komunitarja skond l-Artikolu 4 (4) tad-Deciżjoni 97/836/KE.

- (3) Minhabba l-firxa limitata ta' l-azzjoni regolatorja meħtieġa, mhuwiex xieraq li l-applikazzjoni obligatorja taż-żewġ Regolamenti ssir billi tiġi adottata Direttiva kif sar fid-Deciżjonijiet 2001/507/KE u 2001/509/KE.
- (4) Id-Deciżjonijiet 2001/507/KE u 2001/509/KE għandhom jiġu emendati għaldaqstant,

IDDEĊIEDA KIF ĠEJ:

Artikolu 1

Id-Deciżjoni 2001/507/KE hija emendata kif ġej:

- 1) L-Artikolu wahdieni jiġi mibdul b'dan li ġej:

"Artikolu Wahdieni

Il-Komunità Ewropea għandha taderixxi mar-Regolament 109 tal-Kummissjoni għall-Ewropa tan-Nazzjonijiet Uniti li jikkonċerna l-approvazzjoni għall-produzzjoni ta' tajers pnevmatiċi b'wiċċ ġdid għall-vetturi kummerċjali u t-trejljers tagħhom.

Sa mitt-13 ta' Settembru 2006 d-dispożizzjonijiet tar-Regolament 109 kif imniżżla fl-Anness għandhom japplikaw bħala kondizzjoni obligatorja għat-tpoġġja fuq is-suq tal-Komunità ta' tajers b'wiċċ ġdid li jaqgħu fil-kamp ta' applikazzjoni ta' dak ir-Regolament."

⁽¹⁾ ĠU L 346, 17.12.1997, p. 78.⁽²⁾ Għadu mhux ippubblikat fil-Ġurnal Uffiċjali.⁽³⁾ ĠU L 183, 6.7.2001, p. 35.⁽⁴⁾ ĠU L 183, 6.7.2001, p. 37.

- 2) It-test tar-Regolament UN/ECE 109 meħmuż mad-Deciżjoni 2001/507/KE qed jiġi mibdul bit-test imniżżel fl-Anness I ta' din id-Deciżjoni.

Artikolu 2

Id-Deciżjoni 2001/509/KE hija emendata kif ġej:

- 1) L-Artikolu waħdieni jiġi mibdul b'dan li ġej:

"Artikolu Waħdieni

Il-Komunità Ewropea għandha taderixxi għar-Regolament 108 tal-Kummissjoni Ekonomika għall-Ewropa tan-Nazzjonijiet Uniti li jikkonċerna l-approvazzjoni għall-produzzjoni ta' tajers pnevmatiċi b'wiċċ ġdid għal vetturi tal-mutur u t-trejlers tagħhom.

Sa mitt-13 ta' Settembru 2006 d-dispożizzjonijiet tar-Regolament 108 kif imniżżla fl-Anness għandhom japplikaw bħala kondizzjoni għat-tpoġġija fuq is-suq tal-Komunità ta' tajers b'wiċċ ġdid li jaqgħu taħt il-kamp ta' applikazzjoni ta' dak ir-Regolament."

- 2) It-test tar-Regolament UN/ECE 108 meħmuż mad-Deciżjoni 2001/509/KE qed jiġi mibdul bit-test imniżżel fl-Anness II ta' din id-Deciżjoni.

Magħmula fi Brussell, nhar it-13 ta Marzu 2006.

Għall-Kunsill

Il-President

M. BARTENSTEIN

ANNEX I

"REGOLAMENT Nru 109

DISPOŻIZZJONIJIET UNIFORMI DWAR L-APPROVAZZJONI GHALL-PRODUZZJONI TA' TAJERS PNEWMATIČI B'WIČČ ĠDID GHALL-VETTURI KUMMERČJALI U L-KARRIJET TAGHHOM**(test konsolidat)**

WERREJ

REGOLAMENT

1. Kamp ta' applikazzjoni	4
2. Definizzjonijiet	4
3. Marki	8
4. Applikazzjoni għall-approvazzjoni	10
5. Approvazzjoni	10
6. Kriterji	11
7. Speċifikazzjonijiet	15
8. Modifiki fl-approvazzjoni	16
9. Il-konformità tal-produzzjoni	16
10. Penali għal nuqqas ta' konformità fil-produzzjoni	17
11. Produzzjoni li twaqqfet għal kollox	17
12. Ismijiet u indirizzi ta' servizzi tekniċi responsabbli biex iwettqu testijiet ta' approvazzjoni, ta' laboratorji li fihom isiru t-testijiet, u ta' dipartimenti amministrattivi	17

ANNESI

Anness 1 – Komunikazzjoni dwar l-approvazzjoni jew l-estensjoni jew ir-rifjut jew it-tnehhija ta' l-approvazzjoni ta' jew il-produzzjoni li twaqqfet għal kollox minn faċilità ta' produzzjoni ta' tajers b'wiċċ ġdid skond ir-Regolament Nru 109

Anness 2 – Arrangament tal-marka ta' approvazzjoni

Anness 3 – Arrangament ta' l-immarkar ta' tajers b'wiċċ ġdid

Anness 4 – Lista ta' l-indicijiet ta' tagħbija u kapacitajiet ta' tagħbija korrispondenti

Anness 5 – Il-qisien tat-tajers u l-klassifikazzjoni tagħhom skond il-qies

Anness 6 – Il-metodu li bih jitkejlu t-tajers pnevmatiċi

Anness 7 – Il-proċedura għat-testijiet tal-kapaċità tat-tagħbija/veloċità

Appendiċi 1 – Il-programm tat-test tal-kapaċità

Appendiċi 2 – Relazzjoni bejn l-indiċi tal-pressjoni u l-unitajiet tal-pressjoni

Anness 8 – Il-varjazzjoni tal-kapaċità tat-tagħbija skond il-veloċità: il-hxuna radjali u djaġonali tat-tajers ta' vetturi kummerċjali

Anness 9 – Il-figura ta' spjegazzjoni

1. KAMP TA' APPLIKAZZJONI

Dan ir-Regolament jghodd għall-produzzjoni ta' tajers b'wiċċ ġdid, maħsuba biex jitwāhlu fuq vetturi kummerċjali u l-karrijiet tagħhom li jintużaw fit-triq. Dan ma jghoddx iżda għal:

- 1.1. Tajers b'wiċċ ġdid għal karrozzi privati (tal-passiġġieri) u l-karrijiet tagħhom.
- 1.2. Tajers b'wiċċ ġdid b'kapacità ta' velocità taht it-80 km/s.
- 1.3. Tajers għar-roti u l-muturi.
- 1.4. Tajers li oriġinarjament kienu prodotti mingħajr simboli tal-velocità u/jew indicijiet tat-tagħbija.
- 1.5. Tajers li oriġinarjament kienu prodotti mingħajr l-approvazzjoni tat-tip u mingħajr il-marka "E" jew "e".

2. DEFINIZZJONIJIET – Ara wkoll il-figura fl-Anness 9

Għall-fini ta' dan ir-Regolament:

- 2.1. "Firxa ta' tajers pnevmatiċi b'wiċċ ġdid" – tfisser firxa ta' tajers pnevmatiċi b'wiċċ ġdid, kif ikkwotat fil-paragrafu 4.1.4.
- 2.2. "Struttura" ta' tajer pnevmatiku tfisser il-karatteristiċi tekniċi tal-qafas tat-tajer. L-istrutturi li ġejjin jingħarfu b'mod partikolari:
 - 2.2.1. "Djagonali" jew "Hxuna Mxaqilba" tiddekrivi struttura ta' tajer pnevmatiku li fih il-kurduni tal-hxuna jkun jestendu għax-xoffa ta' ġewwa tat-tajer u jitpoġġew f'angoli alternati sostanzjalment ta' inqas minn 90° għal-linja ċentrali tal-wiċċ ta' barra mfellel tat-tajer.
 - 2.2.2. "Bias-Belted" tiddekrivi struttura ta' tajer pnevmatiku ta' tip djagonali (hxuna mxaqilba) li fih il-qafas ikun stabilizzat permezz ta' cinturin, magħmul minn żewġ saffi jew aktar ta' kurdun ta' materjal li ma jkunx jista' jitwessa' wisq u li jitpoġġa f'angoli alternati qrib daww tal-qafas tat-tajer.
 - 2.2.3. "Radjali" tiddekrivi struttura ta' tajer pnevmatiku li fih il-kurduni tal-hxuna jkunu jestendu għax-xoffa ta' ġewwa tat-tajer u jitqiegħdu b'mod sostanzjali f'angolu ta' 90° għal-linja taċ-ċentru tal-wiċċ ta' barra mfellel tat-tajer. Il-qafas tat-tajer ikun stabilizzat b'cinturin mad-dawra li essenzjalment ma jkunx jitwessa' wisq.
- 2.3. "Kategorija ta' użu"
 - 2.3.1. Tajer normali huwa wiehed maħsub għall-użu normali fuq it-triq biss.
 - 2.3.2. Tajer ta' użu speċjali huwa wiehed maħsub għal użi differenti, kemm fuq u barra t-triq u/jew għal velocità ristretta.
 - 2.3.3. Tajer tas-silġ huwa wiehed li l-ghamla tal-wiċċ ta' barra mfellel tiegħu, jew l-ghamla tal-wiċċ ta' barra mfellel u l-istruttura tiegħu, tkun iddisinjata primarjament biex tiżgura li, fit-tajn u fis-silġ frisk jew li jkun qed jinħall, jkollu rendiment aħjar minn wiehed normali. L-ghamla tal-wiċċ ta' barra mfellel ta' tajer tas-silġ ġeneralment tikkonsisti minn kanal (strixxa) u elementi ta' materjal solidu li jkunu spazjati b'mod aktar wiesa' minn daww fuq tajer normali.
- 2.4. "Ix-xoffa ta' ġewwa tat-tajer" tfisser il-parti ta' tajer pnevmatiku li tkun ta' tali għamla u struttura li tkun toqgħod ġor-rimm u żżomm it-tajer fuqha.
- 2.5. "Kurdun" tfisser il-hjut li jiffurmaw il-fibra tal-hxuniet tat-tajer pnevmatiku.
- 2.6. "Hxuna" tfisser saff ta' kurduni paralleli mghottija tal-"gomma".
- 2.7. "Cinturin" tapplika għal hxuna radjali jew tajer bi hxuna mxaqilba u tfisser saff jew saffi ta' materjal jew materjali taht il-wiċċ ta' barra mfellel tat-tajer, impoġġi b'mod sostanzjali fid-direzzjoni tal-linja taċ-ċentru tal-wiċċ ta' barra mfellel tat-tajer biex jirrestringi l-qafas f'direzzjoni ċirkonferenzjali.
- 2.8. "Interruttur" tapplika għal tajer ta' hxuna djagonali u tfisser il-hxuna tan-nofs bejn il-qafas u l-wiċċ ta' barra mfellel tat-tajer.
- 2.9. "Interruttur protettiv" tapplika għal tajer ta' hxuna radjali u tfisser il-hxuna tan-nofs mhux obbligatorja bejn il-wiċċ ta' barra mfellel tat-tajer u ċ-ċinturin biex inaqqas il-hsara liċ-ċinturin.
- 2.10. "Chafar" tfisser materjal fil-parti tax-xoffa ta' ġewwa tat-tajer biex tipproteġi l-qafas kontra kull gherik jew brix mir-rimm tar-rota.

- 2.11. “Qafas” tfisser dik il-parti sturturali ta’ tajer pnevmatiku, hlief il-wiċċ ta’ barra mfellel u l-“gomma” ta’ barra nett tal-hitan tal-ġnub li, meta jintnefah, ikun jiflah għat-tagħbija.
- 2.12. “Il-wiċċ ta’ barra mfellel tat-tajer” tfisser dik il-parti ta’ tajer pnevmatiku li jkun imfassal biex ikollu kuntatt ma’ l-art, jipproteġi l-qafas kontra kull ħsara teknika u jgħin biex it-tajer jaqbad ma’ l-art.
- 2.13. “Il-ħajt tal-ġenb” tfisser il-parti ta’ tajer pnevmatiku bejn il-wiċċ ta’ barra mfellel tat-tajer u l-parti maħsuba biex tghatti l-flanġ tar-rimm.
- 2.14. “Il-parti t’isfel tat-tajer” tfisser dik il-parti inkluża bejn il-linja tal-wisa’ massima tas-sezzjoni tat-tajer u l-parti mfassla biex tkun mgħottija bix-xoffa tar-rimm.
- 2.15. “Il-kanal tal-wiċċ ta’ barra mfellel tat-tajer” tfisser l-ispażju bejn l-istrixxi jew il-blokki hdejn xuxlin fid-disinn tal-wiċċ ta’ barra mfellel tat-tajer.
- 2.16. “Il-wisa’ tas-sezzjoni” tfisser id-distanza lineari bejn il-parti ta’ barra tal-hitan tal-ġenb ta’ tajer pnevmatiku minfuħ, meta dan jitwahħal fuq ir-rimm ta’ ċertu qies speċifiku, iżda li teskludi l-elevazzjonijiet minhabba t-tikketti (immarkar), id-dekorazzjoni jew l-istrixxi jew kanali protettivi.
- 2.17. “Il-wisa’ ġenerali” tfisser id-distanza lineari bejn il-parti ta’ barra tal-hitan tal-ġnub ta’ tajer pnevmatiku minfuħ, meta dan jitwahħal fuq rimm ta’ qies speċifiku, u tinkludi it-tikketti (immarkar), id-disinn jew l-istrixxi jew kanali protettivi.
- 2.18. “L-gholi tas-sezzjoni” tfisser distanza ugwali għal nofs id-differenza bejn id-dijametru ta’ barra tat-tajer u d-dijametru nominali tar-rimm.
- 2.19. “Il-proporzjon ta’ l-aspett nominali” tfisser mitt darba n-numru miksub billi tiddividi n-numru li jesprimi l-gholi nominali tas-sezzjoni bin-numru li jesprimi l-wisa’ nominali tas-sezzjoni, fejn iż-żewġ figuri jkunu fl-istess unitajiet.
- 2.20. “Id-dijametru ta’ barra” tfisser id-dijametru ġenerali ta’ tajer minfuħ li jkun għadu kif kellu l-wiċċ ta’ barra mfellel mill-ġdid.
- 2.21. “Il-klassifikazzjoni tal-qies tat-tajer” tfisser klassifikazzjoni li turi:
- 2.21.1. Il-wisa’ nominali tas-sezzjoni. Din trid tkun imfissra f’millimetri, hlief fil-kazijiet ta’ tajers li l-klassifikazzjoni tal-qies tagħhom tidher fl-ewwel kolonna tat-tabelli li hemm fl-Anness 5 għal dan ir-Regolament.
- 2.21.2. Ir-ratio ta’ l-aspett nominali, hlief fil-każ ta’ tajers li għalihom il-klassifikazzjoni tal-qies tidher fl-ewwel kolonna tat-tabelli li hemm fl-Anness 5 għal dan ir-Regolament.
- 2.21.3. Numru konvenzjonali “d” (is-simbolu “d”) li juri d-dijametru nominali tar-rimm u li jikkorrispondi għad-dijametru ta’ dan imfisser jew permezz ta’ kodiċi (numri taħt il-100) jew f’millimetri (numri aktar minn 100). In-numri li jikkorrispondu għaž-żewġ tipi ta’ kejl jistgħu jintużaw fil-klassifikazzjoni.
- 2.21.3.1. Il-valuri tas-simboli “d” imfissra f’millimetri qed jidhru hawn taħt:

Kodiċi tad-Dijametru Nominali tar-Rimm – “d”	Valur tas-simbolu “d” imfisser f’m
8	203
9	229
10	254
11	279
12	305
13	330
14	356
15	381
16	406
17	432
18	457
19	483
20	508
21	533
22	559
24	610
25	635

Kodiċi tad-Dijametru Nominali tar-Rimm – “d”	Valur tas-simbolu “d” imfisser fmm
14,5	368
16,5	419
17,5	445
19,5	495
20,5	521
22,5	572
24,5	622
26	660
28	711
30	762

- 2.22. “Id-dijametru nominali tar-rimm (d)” ifisser id-dijametru tar-rimm li fuqu tajjer ikun imfassal biex jitwahhal.
- 2.23. “Rimm” ifisser l-appoġġ, jew għal assemblaġġ ta’ tajjer-u-tubu jew għal tajjer minghajr tubu, li fuqu titpoġġa x-xoffa ta’ ġewwa tat-tajjer.
- 2.24. “Ir-rimm tal-kejl” ifisser ir-rimm speċifikat bħala ‘l-wisa’ tal-kejl tar-rimm’ jew ‘il-wisa’ tad-disinn tar-rimm’ għal klassifikazzjoni partikolari tal-qies ta’ tajjer fi kwalunkwe edizzjoni ta’ wiehed mill-Istandards Internazzjonali tat-Tajers jew aktar.
- 2.25. “Ir-rimm tat-test” ifisser kwalunkwe rimm speċifikat bħala approvat jew rakkomandat jew awtorizzat f’xi wiehed mill-Istandards Internazzjonali tat-Tajers għal tajjer ta’ dik il-klassifikazzjoni ta’ qies jew tip.
- 2.26. “Standard Internazzjonali tat-Tajers” ifisser kwalunkwe wiehed mid-dokumenti standard li ġejjin:
- (a) L-Organizzazzjoni Teknika Ewropea tat-Tajers u r-Rimmijiet (ETRTO) ⁽¹⁾: “Il-Manwal ta’ l-Istandards”
 - (b) L-Organizzazzjoni Teknika Ewropea tat-Tajers u r-Rimmijiet (ETRTO) ⁽¹⁾: ‘Tagħrif ta’ Inġinerija dwar id-Disinn – data skaduta’
 - (c) L-Assoċjazzjoni inkorporata tat-tajjer u r-rimm. (l-Assoċjazzjoni tat-Tajers u r-Rimmijiet) (TRA) ⁽²⁾: ‘Il-Ktieb tas-Sena’
 - (d) L-Assoċjazzjoni tal-Manifatturi tat-Tajers tal-Karrozzi tal-Ġappun (JATMA) ⁽³⁾: ‘Il-Ktieb tas-Sena’
 - (e) L-Assoċjazzjoni tat-Tajers u r-Rimmijiet ta’ l-Awstralja (TRAA) ⁽⁴⁾: ‘Il-Manwal ta’ l-Istandards’
 - (f) L-Associação Brasileira de Pneus e Aros (ABPA) ⁽⁵⁾: ‘Manual de Normal Técnicas’
 - (g) L-Organizzazzjoni Skandinava tat-Tajers u r-Rimmijiet (STRO) ⁽⁶⁾: ‘Ktieb ta’ Tagħrif
- L-istandards tat-tajjer jistgħu jinkisbu mill-indirizzi li ġejjin:
- ⁽¹⁾ ETRTO, 32 Av. Brugmann – Bte 2, B-1060 Brussell, Il-Belġju,
 - ⁽²⁾ TRA, 175 Montrose West Avenue, Suite 150, Copley, Ohio, 44321 L-Istati Uniti ta’ l-Amerika,
 - ⁽³⁾ JATMA, 9th Floor, Toranomon Building No. 1-12, 1-Chome Toranomon Minato-ku, Tokyo 105, Il-Ġappun,
 - ⁽⁴⁾ TRAA, Suite 1, Hawthorn House, 795 Glenferrie Road, Hawthorn, Victoria, 3122 L-Awstralja,
 - ⁽⁵⁾ ABPA, Avenida Paulista 244-12º Andar, CEP, 01310 Sao Paulo, SP Il-Brazil,
 - ⁽⁶⁾ STRO, Älggatan 48 A, Nb, S-216 15 Malmö, L-Iżvezja.
- Il-lista ta’ indiċi ta’ tagħbija u t-tagħbija li jikkorrispondu jidhru fl-Anness 4 għal dan ir-Regolament.
- 2.27. “Tkissir fi bċejeċ” tfisser it-tkissir ta’ bċejeċ ta’ gomma mill-wiċċ ta’ barra mfellel tat-tajjer.
- 2.28. “Is-separazzjoni tal-kurdun” tfisser il-firda tal-kurduni mill-ghata tal-gomma tagħhom.
- 2.29. “Is-separazzjoni tal-hxuna” tfisser il-firda ta’ hxuniet minn maġenb xulxin.
- 2.30. “Is-separazzjoni tal-wiċċ ta’ barra mfellel tat-tajjer” tfisser it-tnehhija tal-wiċċ ta’ barra mfellel mill-qafas tat-tajjer.
- 2.31. “Deskrizzjoni tas-servizz” tfisser il-kumbinazzjoni speċifika ta’ l-indiċi tat-tagħbija u s-simbolu tal-velocità tat-tajjer.

- 2.32. “L-indiċi tat-tagħbija” tfisser kodiċi numeriku li juri t-tagħbija li t-tajer jista' jgħabbi fil-veloċità li tikkorrispondi għas-simbolu tal-veloċità assoċjat u meta dan jithaddem skond il-kundizzjonijiet tas-servizz speċifikati mill-manifattur. Tajer pnevmatiku jista' jkollu aktar minn indiċi wiehed tat-tagħbija biex juri l-kapaċità tat-tagħbija tiegħu meta dan jintuża f'formazzjoni waħda jew doppja, jew biex juri kapaċità ta' tagħbija oħra (punt uniku) li fuqu ma tkunx awtorizzata varjazzjoni ta' tagħbija skond il-paragrafu 2.35 u l-Anness 8 għal dan ir-Regolament.

Il-lista ta' indiċijiet tat-tagħbija u t-tagħbijiet li jikkorrispondu magħhom jidhru fl-Anness 4 ta' dan ir-Regolament.

- 2.33. “Simbolu tal-veloċità” tfisser:

- 2.33.1. Simbolu alfabetiku li juri l-veloċità li fiha t-tajer jista' jgħabbi t-tagħbija mogħtija mill-indiċi tat-tagħbija assoċjat miegħu.

- 2.33.2. Is-simboli tal-veloċità u l-veloċitajiet li jikkorrispondu magħhom qed jidhru fit-tabella t'hawn taht:

Simbolu tal-veloċità	L-Oghla Veloċità Korrispondenti (km/s)
F	80
G	90
J	100
K	110
L	120
M	130
N	140
P	150
Q	160
R	170
S	180
T	190
U	200
H	210

- 2.34. “Punt uniku” ifisser deskrizzjoni addizzjonali tas-servizz, immarkata magħn id-deskrizzjoni normali tas-servizz, iżda li ma tistax tintuża biex tkun ikkalkulata varjazzjoni tal-kapaċità tat-tagħbija kif definit fil-paragrafu 2.35 u fl-Anness 8 għal dan ir-Regolament.

- 2.35. “Il-varjazzjoni tal-kapaċità tat-tagħbija mal-veloċità” tfisser kapaċità oħra ta' tagħbija għat-tajer meta dan jintuża f'veloċità differenti minn dik murija bis-simbolu tal-veloċità fid-deskrizzjoni normali tas-servizz. Il-varjazzjonijiet awtorizzati qed jidhru fit-tabella fl-Anness 8 għal dan ir-Regolament.

- 2.36. “Faċilità ta' produzzjoni ta' tajers b'wiċċ ġdid” tfisser post jew grupp ta' siti lokalizzati fejn ikunu manifatturati tajers b'wiċċ ġdid.

- 2.37. “Tajers b' wiċċ ġdid” tfisser terminu ġeneriku għar-rikondizzjonar ta' tajers użati billi jinbidlulhom il-wiċċ mikul ta' barra b'wiehed ġdid. Dan jista' jinkludi wkoll it-tigdid tal-wiċċ l-aktar ta' barra tal-hitan tal-ġnub. Dan ikopri l-metodi ta' proċess li ġejjin:

- 2.37.1. “Il-capping ta' fuq” – il-bdil tal-wiċċ ta' barra;

- 2.37.2. “Il-capping mill-ġdid” – il-bdil tal-wiċċ ta' barra fejn il-materjal il-ġdid jibqa' sejjer għal fuq parti mill-hitan tal-ġenb;

- 2.37.3. “Xoffa għal xoffa” – il-bdil tal-wiċċ ta' barra u t-tigdid tal-wiċċ tal-ġenb, inkluża parti min-naha t'isfel, jew in-naha t'isfel kollha, tat-tajer.

- 2.38. “Casing” huwa t-tajer użat li jinkludi l-qafas u l-wiċċ ta' barra u l-materjal tal-hitan tal-ġnub li jkun għad fadal.

- 2.39. “Tindiġ” huwa l-proċess biex jitneħħa l-materjal il-qadim mill-casing biex jithejja l-wiċċ għall-materjal il-ġdid.

- 2.40. “Tiswija” huwa x-xogħol rimedjali li jsir fuq casing bil-ħsara fil-limiti magħrufa.

- 2.41. "Il-materjal tat-tiflil tal-wiċċ ta' barra" huwa materjal f'kundizzjoni li tkun tajba biex jitqiegħed minflok il-wiċċ mikul. Dan jista' jkun f'diversi forom, bħal per eżempju:
- 2.41.1. "Camel-back" – strixxi ta' materjal maqtugħin minn qabel li jkunu ngħataw is-sura tal-profil sezzjonali meħtieġ u wara jitwāhlu mingħajr l-użu ta' shana mal-casing imhejji. Il-materjal il-ġdid għandu jkun vulkanizzat.
- 2.41.2. "Mkebbeb bl-istrixxi" – strixxa ta' materjal għat-tiflil tal-wiċċ ta' barra li tingħata s-sura direttament u titkebbeb għal fuq il-casing imhejji u li jinbnew sal-kontorn sezzjonali meħtieġ. Il-materjal il-ġdid irid jiġi vulkanizzat.
- 2.41.3. "L-ghoti dirett ta' sura" – materjal tat-tiflil tal-wiċċ ta' barra li jitneħħa biex jintlahaq il-profil sezzjonali meħtieġ u li jingħata sura direttament għal fuq il-casing imhejji. Il-materjal il-ġdid għandu jkun vulkanizzat.
- 2.41.4. "Vulkanizzat minn qabel" – wiċċ tat-tiflil ta' barra li ġie ffurmat u vulkanizzat minn qabel li jiġi applikat direttament għall-casing imhejji. Il-materjal il-ġdid għandu jingħaqad mal-casing.
- 2.42. "Il-kisja tal-ħajt tal-ġenb" huwa materjal użat biex jgħatti l-ħitan tal-ġenb tal-casing biex b'hekk ikunu jistgħu jsiru l-marki meħtieġa.
- 2.43. "Gomma tal-kuxxin" huwa materjal użat bħala saff biex jgħaqqad il-wiċċ mfellel ta' barra l-ġdid u l-casing u biex jissewewew ħsarat żgħar.
- 2.44. "Siment" huwa sustanza likwida adeżiva biex iżomm materjali ġodda f'posthom qabel il-proċess ta' vulkanizzar.
- 2.45. "Vulkanizzar" huwa terminu użat biex jiddeskrivi l-bdil fil-karatteristiċi fiżiċi tal-materjal il-ġdid li s-soltu jsir bl-applikazzjoni tas-shana u l-pressjoni għal perjodu stabbilit ta' ħin taht kundizzjonijiet kontrollati.
3. IMMARKAR
- 3.1. Eżempju ta' l-arranġament ta' marki fuq tajjer b'wiċċ ġdid qed jidher fl-Anness 3 għal dan ir-Regolament.
- 3.2. It-tajers b'wiċċ ġdid għandhom juru, fuq iż-żewġ ħitan tal-ġenb fil-każ ta' tajers simetriċi, u mill-anqas fuq il-ħajt tal-ġenb ta' barra fil-każ ta' tajers mhux simetriċi:
- 3.2.1. L-isem tad-ditta jew il-marka tal-fabbrika;
- 3.2.2. Il-klassifikazzjoni tal-qies tat-tajjer kif definit fil-paragrafu 2.21.;
- 3.2.3. Indikazzjoni ta' l-istruttura kif ġej:
- 3.2.3.1. Fuq tajers djagonali (ħxuna mxaqilba); l-ebda indikazzjoni, jew l-ittra "D" impoġġija fuq quddiem tal-marka fuq id-dijametru tar-rimm;
- 3.2.3.2. Fuq tajers bi ħxuna radjali; l-ittra "R" impoġġija fuq quddiem tal-marka tad-dijametru tar-rimm, u, jekk mixtieq, il-kelma "RADIAL";
- 3.2.3.3. Fuq tajers *bias belted*, l-ittra "B" impoġġija fuq quddiem tal-marka tad-dijametru tar-rimm flimkien mal-kliem "BIAS-BELTED";
- 3.2.4. Id-deskrizzjoni tas-servizz li tinkludi:
- 3.2.4.1. Indikazzjoni tal-kapaċità/kapaċitajiet tat-tagħbija nominali tat-tajjer fil-forma ta' l-indiċi tat-tagħbija preskritt fil-paragrafu 2.32;
- 3.2.4.2. Indikazzjoni tal-kapaċità tal-veloċità nominali tat-tajjer fil-forma tas-simbolu preskritt fil-paragrafu 2.33;
- 3.2.5. Jekk jgħodd, deskrizzjoni alternattiva tas-servizz waħda, il-Punt uniku, li tinkludi:
- 3.2.5.1. Indikazzjoni tal-kapaċità/kapaċitajiet tat-tagħbija tat-tajjer fil-forma ta' l-indiċi tat-tagħbija preskritt fil-paragrafu 2.32.;

- 3.2.5.2. Indikazzjoni tal-kapaċità tal-veloċità fil-forma tas-simbolu preskritt fil-paragrafu 2.33;
- 3.2.6. Il-kelma “TUBELESS” jekk it-tajer huwa magħmul għal użu mingħajr it-tubu ta' ġewwa.
- 3.2.7. Il-kelmiet M+S jew MS jew M.S. jew M & S fil-każ ta' tajer tas-silġ.
- 3.2.8. Id-data meta l-wiċċ ta' barra tat-tajer tfell mill-ġdid, kif ġej:
- 3.2.8.1. Sal-31 ta' Diċembru 1999; jew kif spjegat fil-paragrafu 3.2.8.2. jew fil-forma ta' grupp ta' tliet figuri, l-ewwel tnejn juru n-numru tal-ġimgha, waqt li t-tielet is-sena tad-deċennju tal-manifattura. Il-kodiċi tad-data jista' jkopri perjodu ta' produzzjoni li jibda mill-ġimgha murija bin-numru tal-ġimgha sa, u li jinkludi, in-numru tal-ġimgha u tlieta ohra. Per eżempju, il-marka “253” tista' turi tajer b'wiċċ ġdid li sar fil-ġimghat 25, 26, 27 jew 28 tas-sena 1993.
- Il-kodiċi tad-data għandu jkun immarkat fuq wiehed mill-hitan tal-ġenb biss.
- 3.2.8.2. Mill-1 ta' Jannar 2000; fil-forma ta' grupp ta' erba' figuri, l-ewwel tnejn juru l-ġimgha u t-tieni tnejn juru s-sena li fiha t-tajer kellu l-wiċċ ta' barra mfellel mill-ġdid. Il-kodiċi tad-data jista' jkopri perjodu ta' produzzjoni mill-ġimgha murija bin-numru tal-ġimgha sa, u li jinkludi n-numru tal-ġimgha miżjuda bi tlieta. Per eżempju, il-marka “2503” tista' turi tajer b'wiċċ ġdid li jkun sar fil-ġimghat 25, 26, 27 jew 28 tas-sena 2003.
- Il-kodiċi tad-data għandu jkun immarkat fuq wiehed mill-hitan tal-ġenb biss.
- 3.2.9. Fil-każ ta' tajers skanalati mill-ġdid, is-simbolu “” f'ċirku b'dijametru ta' madwar 20 mm, jew il-kelma “REGROOVABLE”, imhaffra fil- jew fuq kull hajt tal-ġenb.
- 3.2.10. Indikazzjoni, permezz ta' l-indiċi “PSI”, tal-pressjoni tan-nefha li għandha tkun adottata għat-testijiet tal-kapaċità tat-tagħbija/veloċità, kif spjegat fl-Anness 7, l-Appendiċi 2 għal dan ir-Regolament.
- Din l-indikazzjoni għandha titpoġġa fuq wiehed mill-hitan tal-ġenb biss.
- 3.2.11. It-terminu “RETREAD” jew “REMOULD” (wara l-1 ta' Jannar 1999 il-kelma “RETREAD” biss għandha tintuza). Fuq it-talba ta' min jagħmel it-tajers b'wiċċ ġdid, jista' jiżjed l-istess terminu f'lingwi ohra.
- 3.2.12. Il-kelmiet “ET” jew “ML” jew “MPT” għal “Tajers ta' użu speċjali” ⁽¹⁾
- 3.3. Qabel ma jkunu approvati, it-tajers għandhom juru spazju liberu sostanzjalment kbir, li fih tkun tista' titpoġġa marka ta' l-approvazzjoni kif imsemmi fil-paragrafu 5.8. u kif muri fl-Anness 2 għal dan ir-Regolament.
- 3.4. Wara l-approvazzjoni, il-marki msemija fil-paragrafu 5.8. u murija fl-Anness 2 għal dan ir-Regolament, għandhom jitwawhlu fl-isparju liberu msemmi fil-paragrafu 3.3. Din il-marka għandha titwawhal fuq wiehed mill-hitan tal-ġenb biss.
- 3.5. Il-marki msemija fil-paragrafu 3.2. u l-marka ta' l-approvazzjoni preskritta fil-paragrafi 3.4. u 5.8 għandhom ikunu jinqraw b'mod ċar u jkunu fformati fuq jew fit-tajer jew inkella jkunu mmarkati b'mod permanenti fuq it-tajer.
- 3.6. Sakemm kwalunkwe mill-ispeċifikazzjonijiet oriġinali tal-manifattur ikunu għandhom jinqraw wara li jkun sar il-wiċċ ta' barra mfellel mill-ġdid fuq it-tajer, dawn għandhom jibqgħu jitqiesu bħala speċifikazzjonijiet tal-manifattur tat-tajers b'wiċċ ġdid għal dak it-tajer. Jekk dawn l-ispeċifikazzjonijiet oriġinali ma jkunux jghoddu wara li jkun sar il-wiċċ ta' barra mfellel mill-ġdid tat-tajer, dawn għandhom jitnehhew kompletament.
- 3.7. Il-marka ta' l-approvazzjoni oriġinali “E” jew “e” u n-numru ta' l-approvazzjoni u kwalunkwe marka jew numru ta' l-approvazzjoni ohrajn li jkunu saru wara mill-faċilità tal-produzzjoni tat-tajers b'wiċċ ġdid, jekk ma jkunux jghoddu aktar, għandhom jitnehhew.

⁽¹⁾ Għal fini ta' dan ir-Regolament, il-marka għandha tkun obligatorja biss għal tipi ta' tajers manifatturati wara d-dhul fis-sehh tas-Supplement 1 għal dan ir-Regolament.

4. L-APPLIKAZZJONI GHALL-APPROVAZZJONI

Il-proċeduri li ġejjin jghoddu għall-approvazzjoni ta' facilità ta' produzzjoni ta' tajers b'wiċċ ġdid:

- 4.1. L-applikazzjoni għall-approvazzjoni ta' facilità ta' produzzjoni għandha tkun sottomessa mill-possessor ta' l-isem kummerċjali jew il-marka tal-fabbrika li tkun se titwahhal fuq it-tajer, jew inkella mir-rappreżentant akkreditat kif suppost. Din għandha tispeċifika:
 - 4.1.1. Deskrizzjoni ġenerali ta' l-istruttura tal-facilità li tipproduċi t-tajers b'wiċċ ġdid.
 - 4.1.2. Deskrizzjoni fil-qosor tas-sistema tat-tmexxija tal-kwalità, li tiżgura li l-kontroll effettiv tal-proċeduri tat-tfelli mill-ġdid tal-wiċċ ta' barra tat-tajers jkunu qed jilhqu tabilhaqq il-kriterji ta' dan ir-Regolament.
 - 4.1.3. L-ismijiet jew il-marki tal-fabbrika li għandhom jitwahhlu fuq it-tajers b'wiċċ ġdid li jiġu manifatturati.
 - 4.1.4. It-tagħrif li ġej dwar il-firxa ta' tajers b'wiċċ ġdid:
 - 4.1.4.1. il-firxa tal-qisien tat-tajers;
 - 4.1.4.2. l-istruttura tat-tajers (djaġnali jew bi hxuna mxaqilba, *bias-belted* jew radjali);
 - 4.1.4.3. il-kategorija ta' l-użu tat-tajers (tajers normali jew tas-silġ eċċ.);
 - 4.1.4.4. is-sistema tat-tfelli mill-ġdid tal-wiċċ ta' barra tat-tajers u l-metodu ta' l-applikazzjoni tal-materjali l-ġodda li għandhom jintużaw, kif definit fil-paragrafi 2.37 u 2.41;
 - 4.1.4.5. is-simbolu ta' l-ogħla velocità tat-tajers b'wiċċ ġdid;
 - 4.1.4.6. l-indiċi ta' l-ogħla tagħbija tat-tajers b'wiċċ ġdid;
 - 4.1.4.7. l-Istandard tat-Tajer Internazzjonali magħżul li għalih tkun tghodd il-firxa tat-tajers.

5. L-APPROVAZZJONI

- 5.1. Għal tajers b'wiċċ ġdid, jehtieg li l-facilità tal-produzzjoni ta' dawn it-tajers tikseb l-approvazzjoni mehtieġa mill-awtoritajiet li japprovaw skond il-kriterji ta' dan ir-Regolament. L-awtorità li tapprova għandha tiehu l-miżuri mehtieġa, kif deskritt f'dan ir-Regolament, biex tiżgura li t-tajers b'wiċċ ġdid fil-facilità tal-produzzjoni rispettiva tabilhaqq tilhaq il-kriterji msemija f'dan ir-Regolament. Il-facilità tal-produzzjoni tat-tajers b'wiċċ ġdid għandha tkun responsabbli kompletament biex tiżgura li dawn it-tajers ikunu jilhqu tabilhaqq il-kriterji ta' dan ir-Regolament u li dawn ikollhom turija xierqa meta jintużaw b'mod normali.
- 5.2. Barra mill-kriterji normali għall-valutazzjoni tal-bidu ta' din il-facilità tal-produzzjoni, l-awtorità li tapprova għandha tkun sodisfatta li d-dokumentazzjoni tal-proċeduri, l-operat, l-istruzzjonijiet u ta' l-ispeċifikazzjonijiet pprovduti mill-fornituri tal-materjal ikunu f'lingwa li tkun tista' tiftiehem mill-ewwel mill-operaturi tal-facilità tal-produzzjoni tat-tajers b'wiċċ ġdid.
- 5.3. L-awtorità li tapprova għandha tiżgura li d-dokumenti tal-proċedura u l-operat għal kull taqsima ta' produzzjoni jkun fihom speċifikazzjonijiet li jkunu xierqa għal materjali tat-tiswija u l-proċessi li jintużaw, dwar il-limiti ta' hsara li tista' tisewwa jew il-penetrazzjonijiet li jistgħu jsiru fil-qafas tat-tajer, dwar jekk din il-hsara tkunx teżisti jew tkunx ikkawżata matul il-proċessi ta' thejija għat-tfelli mill-ġdid tal-wiċċ ta' barra tat-tajer.
- 5.4. Qabel ma tagħti l-approvazzjoni tagħha, l-awtorità għandha tkun sodisfatta li t-tajers b'wiċċ ġdid ikunu konformi ma' dan ir-Regolament u li t-testijiet mehtieġa skond il-paragrafi 6.5 u 6.6 ikunu saru b'suċċess fuq mill-anqas 5 u mhux neċessarjament aktar minn 20 kampjun ta' tajers b'wiċċ ġdid li jkunu jirrappreżentaw il-firxa ta' tajers manifatturati fil-facilità tal-produzzjoni ta' dawn it-tajers.
- 5.5. Fil-każ li jkun hemm żewġ riżultati negattivi matul il-provi, għandhom ikunu ttestjati żewġ kampjuni oħra ta' l-istess speċifikazzjoni ta' tajer.

Jekk wiehed minn dawn il-kampjuni jew inkella t-tnejn ifallu, għandhom ikunu sottomessi għall-aħhar darba u jiġu ttestjati żewġ kampjuni oħra.

Jekk wiehed minn dawn il-kampjuni jew it-tnejn ifallu, l-applikazzjoni għall-approvazzjoni tat-taqsima tal-produzzjoni ta' tajers b'wiċċ ġdid għandha tiġi miċhuda.

- 5.6. Jekk il-kriterji kollha ta' dan ir-Regolament ikunu ntlahqu, l-approvazzjoni għandha tinghata u għandu jinghata numru ta' l-approvazzjoni għal kull facilità ta' produzzjoni ta' dawn it-tajers li tkun giet approvata. L-ewwel żewġ figuri ta' dan in-numru għandhom juru s-serje ta' l-emendi li jinkorporaw l-aktar emendi tekniċi kbar u riċenti għar-Regolament meta tkun harġet l-approvazzjoni. In-numru ta' l-approvazzjoni għandu jkun ippreċedut bis-simbolu "109R", li jfisser li l-approvazzjoni tgħodd għal tajer b'wiċċ ġdid kif preskritt f'dan ir-Regolament.

L-istess awtorità ma tistax tassenja l-istess numru lil taqsima ta' produzzjoni oħra li tkun koperta b'dan ir-Regolament.

- 5.7. L-avviż ta' l-approvazzjoni jew ta' l-estensjoni, ir-rifut jew it-tnehhija ta' l-approvazzjoni jew tal-produzzjoni li ma tkunx baqgħet issir skond dan ir-Regolament għandu jkun komunikat lill-Partijiet tal-Ftehim ta' l-1958 li japplika dan ir-Regolament, permezz ta' formola li tkun konformi mal-mudell li jidher fl-Anness 1 għal dan ir-Regolament.

- 5.8. Fuq kull tajer li jkun konformi ma' dan ir-Regolament, fl-ispazju msemmi fil-paragrafu 3.3, u f'żieda mal-marki preskritti fil-paragrafu 3.2, għandha titwaxx b'mod li jidher sew marka internazzjonali ta' l-approvazzjoni li tkun tikkonsisti minn:

- 5.8.1. Ċirku li jdur ma' l-ittra "E" segwit bin-numru distintiv tal-pajjiż li jkun hareġ l-approvazzjoni ⁽¹⁾; u

- 5.8.2. Numru ta' l-approvazzjoni kif deskritt fil-paragrafu 5.6.

- 5.9. L-Anness 2 għal dan ir-Regolament juri eżempju ta' l-arrangamenti tal-marka ta' l-approvazzjoni.

6. IL-KRITERJI

- 6.1. It-tajers m'għandhomx ikunu aċċettati għall-ewwel tfellil mill-ġdid tal-wiċċ ta' barra sakemm dawn ma jkunux tat-tip approvat u jkollhom il-marka "E" jew "e", iżda dan il-kriterju m'għandux ikun obbligatorju sa mhux aktar tard mill-1 ta' Jannar 2000.

- 6.2. Il-kundizzjonijiet qabel it-tfellil mill-ġdid tal-wiċċ ta' barra tat-tajers:

- 6.2.1. It-tajers għandhom ikunu nodfa u nexfin qabel l-ispezzjoni.

- 6.2.2. Qabel it-tindif, kull tajer għandu jkun eżaminat sew kemm minn ġewwa u kemm minn barra biex ikun żgurat li l-wiċċ ta' barra tat-tajer ikun jista' jtfel mill-ġdid.

- 6.2.3. It-tajers li jkollhom hsara li tidher u li tkun ġeja minhabba tagħbija żejda jew nuqqas ta' nefha m'għandux jerġa' jtfel mill-ġdid.

- 6.2.4. It-tajers li juru kull wiehed minn dawn it-tipi ta' hsa m'għandhomx ikunu aċċettati biex il-wiċċ ta' tagħhom jerġa' jtfel mill-ġdid:

- 6.2.4.1. Ġenerali:

- (a) qsim fil-gomma li ma jistax jissewwa u li jkun jibqa' sejjer ġol-qafas
- (b) ksur fil-qafas
- (ċ) attakk sostanzjali minhabba xi żejt jew kimika
- (d) hsara jew ksur fil-qalba tax-xoffa ta' ġewwa tat-tajer
- (e) tiswijiet ta' qabel barra l-limiti speċifikati ta' hsara – ara l-paragrafu 5.3.

⁽¹⁾ 1 għall-Ġermanja, 2 għal Franza, 3 għall-Italja, 4 għall-Olanda, 5 għall-Iżvezja, 6 għall-Belġju, 7 għall-Ungerija, 8 għar-Repubblika Ċeka, 9 għal Spanja, 10 għall-Jugoslavja, 11 għar-Renju Unit, 12 għall-Awstrija, 13 għal-Lussemburgu, 14 għall-Iżvizzera, 15 (vakanti), 16 għan-Norveġja, 17 għall-Finlandja, 18 għad-Danimarka, 19 għar-Rumanija, 20 għall-Polonja, 21 għall-Portugall, 22 għall-Federazzjoni Russa, 23 għall-Greċja, 24 għall-Irlanda, 25 għall-Kroazja, 26 għas-Slovenja, 27 għas-Slovakja, 28 għall-Belarus, 29 għall-Estonja, 30 (vakanti), 31 għall-Bosnia u Herzegovina, 32 għal-Latvja, 33 (vakanti), 34 għall-Bulgarija, 35 (vakanti), 36 għal-Litwanja, 37 għat-Turkija, 38 (vakanti), 39 għall-Ażerbajġan, 40 għall-ex Repubblika Jugoslava tal-Maċedonja, 41 (vakanti), 42 għall-Komunità Ewropea (l-approvazzjonijiet jinghataw mill-Istati Membri tagħha waqt li jużaw is-simbolu ECE rispettiv tagħhom), 43 għall-Ġappun, 44 (vakanti), 45 għall-Awstralja, 46 għall-Ukraina, 47 għall-Afrika t'Isfel u 48 għan-New Zealand. Numri sussegwenti għandhom jinghataw lil pajjiżi oħra f'ordni kronoloġiku skond kif dawn ikunu rratifikaw jew dahlu jiffurmaw parti mill-Ftehim Dwar l-Adozzjoni tal-Preskrizzjonijiet Tekniċi Uniformi għar-Roti, Tagħmir u Partijiet ta' Vetturi li jkunu jistgħu jitwaxxu u/jew jintużaw fuq Vetturi bir-Roti u l-Kundizzjonijiet għall-Għarfien Reċiproku ta' l-Approvazzjonijiet Mogħtija fuq il-Bażi ta' dawn il-Preskrizzjonijiet. In-numri li jkunu assenjati għandhom ikunu komunikati mis-Segretarju-Ġenerali tan-Nazzjonijiet Uniti lill-Partijiet Kontraenti għal dan il-Ftehim.

6.2.4.2. Kundizzjonijiet barra l-limiti speċifikati ta' grad ta' tiswija – ara l-paragrafu 5.3:

- (a) penetrazzjonijiet fil-qafas jew ħsara wara t-thejjija għat-tiswija
- (b) ħafna ksur qrib xulxin
- (c) deterjorazzjoni sostanzjali fl-inforra ta' ġewwa
- (d) ħsara fix-xoffa ta' ġewwa
- (e) kurduni tal-qafas esposti
- (f) kurduni mahlulin
- (g) is-separazzjoni tal-ħxuna tax-xoffa ta' ġewwa
- (h) kurduni tal-qafas (azzar) li jkunu deformati jew mibruma b'mod permamenti
- (i) qsim fiċ-ċirkonferenza fuq ix-xoffa ta' ġewwa
- (j) kurduni ta' l-azzar jew wajer tax-xoffa ta' ġewwa kkorrodjat

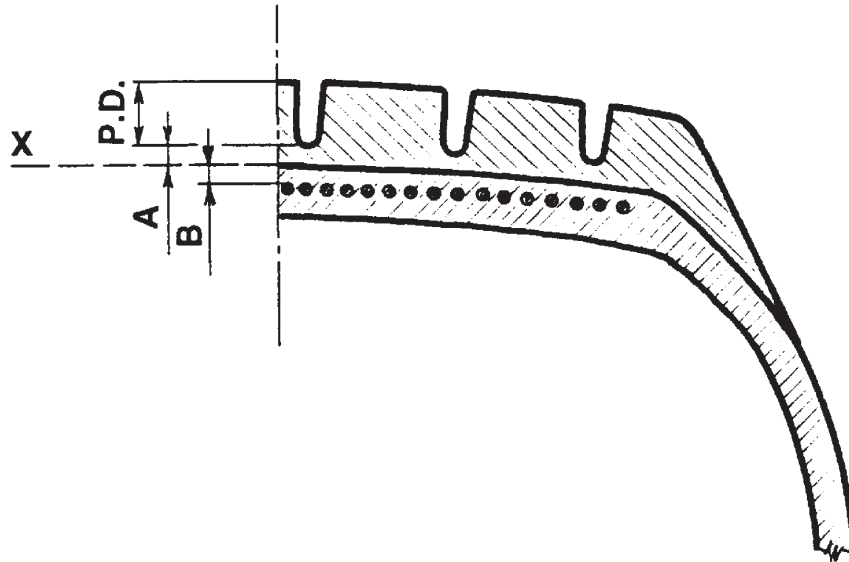
6.3. Preparazzjoni:

- 6.3.1. Wara t-tindif, u qabel l-applikazzjoni tal-materjal il-ġdid, kull tajjer għandu jkun eżaminat mill-ġdid, almenu minn barra, biex ikun żgurat li dan ikun għadu tajjeb biex il-wiċċ ta' barra tiegħu jifell mill-ġdid.
- 6.3.2. Il-wiċċ kollu li fuqu jkun applikat il-materjal il-ġdid għandu jkun thejja mingħajr ebda shana żejda. Il-fibra tal-wiċċ innaddaf m'għandhiex ikollha laċerazzjonijiet fondi ta' tindif jew materjal mahlul.
- 6.3.3. Fejn ikollu jintuza materjal vulkanizzat minn qabel, il-kontorn tal-parti ppreparata għandu jilhaq il-kriterji tal-manifattur tal-materjal.
- 6.3.4. Ħsara li tkun ikkawżata matul it-tindif m'għandhiex tkun aktar mil-limiti definiti ta' tiswija, ara l-paragrafu 5.3, u din għandha tisewwa.
- 6.3.5. Il-ħsara tat-tindif fuq tajers bi ħxuna djaġonali m'għandhiex tkun aktar mill-aktar ħxuna ta' barra tal-qafas fil-parti ewlenija. Wiehed għandu jassumi li l-ewwel ħxuna li jiltaqa' magħha tkun dik tal-qafas, sakemm ma jkunx jista' jiġi identifikat interrutur b'mod pożittiv. Jekk jitwahhal interrutur, ħsara li tkun lokalizzata tkun awtorizzata.
- 6.3.6. Ħsara ta' tindif lokalizzata fuq iċ-ċinturin ta' tajers radjali hija awtorizzata. Għal ħsara akbar, wiehed ikun jista' jibdel iċ-ċinturin kollu jew it-taqsimiet ta' iċ-ċinturin. Fejn jitwahhal interrutur protettiv, u jkun jista' jiġi identifikat b'mod pożittiv bħala tali, u jekk dan ikun bil-ħsara, wiehed ikun jista' jibdlu u mhux bilfors iġeddu.
- 6.3.7. Partijiet ta' l-azzar li jkunu esposti għandhom jiġu ttrattati kemm jista' jkun malajr bil-materjal xieraq, kif definit mill-manifattur ta' dak il-materjal apposta.

6.4. Tfellil mill-ġdid tal-wiċċ ta' barra tat-tajers:

- 6.4.1. Min jagħmel it-tfellil mill-ġdid tal-wiċċ ta' barra tat-tajers għandu jiżgura li jew il-manifattur jew il-fornitur tal-materjali tat-tiswija, inklużi l-irqajja, ikun responsabbli għal dan li ġej:
 - (a) jiddefinixxi metodu(i) ta' applikazzjoni u hażna, jekk ikun mitlub minn min ifell mill-ġdid il-wiċċ ta' barra tat-tajers, fil-lingwa nazzjonali tal-pajjiż li fih il-materjali jkunu se jintużaw;
 - (b) jiddefinixxi l-limiti ta' ħsara li għaliha l-materjali huma mfassla, jekk mitlub minn min ifell mill-ġdid il-wiċċ ta' barra tat-tajers, fil-lingwa nazzjonali tal-pajjiż li fih il-materjali jkunu se jintużaw;
 - (c) jiżgura li l-irqajja rinfurzati tat-tajers, jekk ikunu applikati tajjeb meta jissewwa l-qafas, ikunu tajbin għal dan il-ghan;

- (d) jiżgura li l-irqajja jkunu tajbin biex jifilhu d-doppju ta' l-oghla pressjoni tan-nefha, kif moghti mill-manifattur tat-tajer;
- (e) jiżgura li kwalunkwe materjal iehor tat-tiswija jkun tajjeb għas-servizz maħsub.
- 6.4.2. Min ifellel mill-ġdid il-wiċċ ta' barra tat-tajers għandu jkun responsabbli għall-applikazzjoni tajba tal-materjal tat-tiswija u biex jiżgura li t-tiswija tkun hielsa min kull difett li jista' jaffettwa l-hajja sodisfaċenti tas-servizz tat-tajer.
- 6.4.3. Il-parti li ddawwar tiswija rinforzata fuq ħajt ta' ġenb jew fuq il-ġenb ta' hxuna radjali tista' tintnefah ftit meta t-tajer jitwahhal u jintnefah skond il-pressjoni rakkomandata ta' l-operat. Għandhom jintużaw materjali ta' tiswija rinforzata b'karatteristiċi fiżiċi li jdejqu l-ġholi tan-nefha sa mhux aktar minn 4 mm.
- 6.4.4. Min ifellel mill-ġdid il-wiċċ ta' barra tat-tajers għandu jiżgura li jew il-manifattur jew il-fornitur tal-materjal tat-tfellil mill-ġdid tal-wiċċ ta' barra u tal-hitan tal-ġenb tat-tajers johroġ speċifikazzjonijiet dwar il-kundizzjonijiet tal-ħażna u l-użu biex jiggarantixxi l-kwalitajiet tal-materjal. Jekk ikun mitlub minn min jagħmel it-tfellil mill-ġdid tal-wiċċ ta' barra tat-tajers, dan it-tagħrif għandu jkun fil-lingwa nazzjonali tal-pajjiż li fih il-materjal ikun se jintuża.
- 6.4.5. Min ifellel mill-ġdid il-wiċċ ta' barra tat-tajers għandu jiżgura li l-materjal u/jew il-kompost tat-tiswija jkunu dokumentati f'ċertifikat li johroġ mill-manifattur jew il-fornitur. Il-kompost tal-materjal għandu jkun adatt għall-użu maħsub tat-tajers.
- 6.4.6. It-tajer ipproċessat għandu jkun vulkanizzat kemm jista' jkun malajr wara t-tkomplija tat-tiswijiet kollha u l-operat tal-bini mill-ġdid, u l-aktar skond l-ispeċifikazzjonijiet tal-manifattur tal-materjal.
- 6.4.7. It-tajer għandu jkun vulkanizzat għat-tul ta' hin u skond it-temperatura u l-pressjoni li jkunu xierqa u speċifiċi għall-materjali u t-tagħmir ta' l-ipproċessar li jkunu użati. Il-qisien tal-forma għandhom ikunu tajbin għall-hxuna tal-materjal il-ġdid u l-qies tat-tajer imnaddaf.
- 6.4.8. Il-hxuna tal-materjal oriġinali wara t-tindif u l-hxuna medja ta' kwalunkwe materjal ġdid taht id-disinn tal-wiċċ ta' barra mfellel wara li dan ikun tfellel mill-ġdid, għandu jkun skond kif moghti fil-paragrafi 6.4.8.1 u 6.4.8.2.
- 6.4.8.1. Għal tajers bi hxuna radjali (mm):
- $$3 \leq (A+B) \leq 13 \text{ (minimu 3,0 mm; massimu 13,0 mm)}$$
- $$A \geq 2 \text{ (minimu 2,0 mm)}$$
- $$B \geq 0 \text{ (minimu 0,0 mm)}$$



P.D. = Il-fond tad-disinn

X = Il-linja tat-tindif

A = Hxuna medja tal-materjal il-ġdid taht id-disinn

B = Hxuna minima tal-materjal oriġinali fuq iċ-ċinturin wara t-tindif

6.4.8.2. Għal tajers djagonali (hxuna mxaqilba):

Il-hxuna tal-materjal oriġinali fuq l-interruttur għandha tkun $\geq 0,80$ mm;

Il-hxuna medja tal-materjal il-ġdid fuq il-linja tal-casing imnaddfa għandha tkun $\geq 2,00$ mm;

Maghduda flimkien, il-hxuna tal-materjal oriġinali u ġdid taht il-baži ta' l-iskanalaturi tad-disinn tal-wiċċ ta' barra mfellel tat-tajer għandha tkun $\geq 3,00$ mm u $\leq 13,00$ mm.

6.4.9. Id-deskrizzjoni tas-servizz ta' tajer b'wiċċ ġdid m'għandhiex turi la simbolu ta' veloċità oghla u lanqas indiċi ta' tagħbija oghla minn dak tat-tajer oriġinali, fl-ewwel hajja tiegħu. Dan sakemm ma tkunx inghatat approvazzjoni lill-manifattur tat-tajer oriġinali, fl-ewwel hajja tiegħu, biex dak l-istess qafas jkun jista' jintuża skond id-deskrizzjoni riveduta tas-servizz.

It-tagħrif dwar qafas oriġinali, fl-ewwel hajja tiegħu, li jkun ġie aġġornat b'dan il-mod, għandu jkun disponibbli b'xejn minn awtorità li tapprova lil kwalunkwe facilità ta' produzzjoni ta' tfellil mill-ġdid tal-wiċċ ta' barra tat-tajers, u dan għandu jiġi komunikat lill-partijiet l-oħra tal-Ftehim ta' l-1958 (ara l-Artikolu 5 tal-Ftehim Dwar l-Adozzjoni ta' Preskrizzjonijiet Tekniċi Uniformi għall-Vetturi bir-Roti, Tagħmir u Partijiet li jistgħu Jitwahrhu u/jew Jintużaw fuq Vetturi bir-Roti u l-Kundizzjonijiet għall-Għarfien Reċiproku ta' l-Approvazzjonijiet Mogħtija fuq il-baži ta' dawn il-Preskrizzjonijiet – dokument E/ECE/324 - E/ECE/TRANS/505/Rev. 2).

Il-formola standard murija fl-Anness 1 għar-Regolament Nru. 54 għandha tintuża biex dan it-tagħrif ikun komunikat.

6.4.10. L-aġġornar tad-deskrizzjoni tas-servizz kif mogħti fil-paragrafu 6.4.9. għandu jkun awtorizzat biss għall-ewwel tfellil tal-wiċċ ta' barra ta' tajer oriġinali, fl-ewwel hajja tiegħu.

Tajers li kellhom diġà il-wiċċ ta' barra tagħhom mfellel mill-ġdid m'għandhomx ikollhom la s-simbolu tal-veloċità u lanqas l-indiċi tat-tagħbija oghla minn dak muri fuq il-casing użat.

6.5. Spezzjoni:

6.5.1. Wara li jkun ġie vulkanizzat, waqt li jinżamm grad ta' shana fih, kull tajer b'wiċċ ġdid għandu jiġi eżaminat biex ikun żgurat li dan ikun hieles minn kwalunkwe difett li jkun jidher. Waqt jew wara t-tfellil mill-ġdid tal-wiċċ ta' barra, it-tajer għandu jintnefah għal mill-anqas 1,5 linja għall-eżami. Fejn ikun hemm difett li jidher fil-profil tat-tajer (eż. brix, depressjoni, eċċ.), it-tajer għandu jiġi eżaminat speċifikament biex tkun stabbilita l-kawża ta' dan id-difett.

6.5.2. Qabel, waqt jew wara t-tfellil mill-ġdid tal-wiċċ ta' barra, it-tajer għandu jkun verifikat mill-inqas darba għall-integrità ta' l-istruttura tiegħu permezz ta' metodu ta' spezzjoni.

6.5.3. Għall-ghanijiet tal-kontroll tal-kwalità, numru ta' tajers bil-wiċċ ta' barra tagħhom mfellel mill-ġdid għandhom ikunu sottomessi għal provi jew eżami distruttivi jew non-distruttivi. Il-kwantità ta' tajers verifikati u r-riżultati għandhom jiġu reġistrati.

6.5.4. Wara t-tfellil mill-ġdid tal-wiċċ ta' barra, il-qisien tat-tajer b'wiċċ ġdid, meta dan ikun tkejjel skond l-Anness 6 għal dan ir-Regolament, għandhom ikunu skond jew il-qisien ikkalkulati skond il-proċeduri tal-paragrafu 7 jew għal dawk mogħtija fl-Anness 5 għal dan ir-Regolament.

Wiehed għandu jinnota li d-dijametru massimu ta' barra ta' tajer b'wiċċ ġdid jista' jkun sa 1,5 % akbar mid-dijametru massimu ta' barra ta' tajer ġdid u oriġinali awtorizzat bir-Regolament Nru. 54.

6.6. It-test tat-turija:

6.6.1. Tajers, li l-wiċċ tagħhom ikun tfellel mill-ġdid biex ikunu konformi ma' dan ir-Regolament, għandhom ikunu kapaci jghaddu mit-test tat-tagħbija/veloċità kif speċifikat fl-Anness 7 għal dan ir-Regolament.

6.6.2. Tajer b'wiċċ ġdid, li wara li jkun ġie sottomess għat-test tat-tagħbija/veloċità ma jurix kwalunkwe separazzjoni fil-wiċċ ta' barra jew fil-hxuna jew fil-kurdun, tkissir fi bçejeċ jew inkella xi kurduni miksura, għandu jitqies li jkun għadda mit-test.

6.6.3. Id-dijametru ta' barra tat-tajer, imkejjel sitt sigħat wara li jkun sar fuqu t-test tat-tagħbija/veloċità, m'għandux ivarja b'aktar minn $\pm 3,5$ % mid-dijametru ta' barra meta dan ikun tkejjel qabel it-test.

7. SPECIFIKAZZJONIJIET

7.1. It-tajers, li l-wiċċ ta' barra tagħhom ikunu tfellel mill-ġdid biex ikunu konformi ma' dan ir-Regolament, għandhom ikunu skond il-qisien li ġejjin:

7.1.1. Il-wisa' tas-sezzjoni:

7.1.1.1. Il-wisa' tas-sezzjoni għandha tkun ikkalkulata bil-formula li ġejja:

$$S = S_1 + K (A - A_1)$$

fejn:

S: hija l-wisa' attwali tas-sezzjoni f'millimetri kif imkejla fuq ir-rimm tal-prova;

S₁: huwa l-valur tal-'Wisa' tas-Sezzjoni tad-Disinn', riferut għar-rimm tal-kejl, kif ikkwotat fl-Istandard Internazzjonali tat-Tajers, speċifikat minn min ifellel mill-ġdid il-wiċċ ta' barra tat-tajers għall-qies tat-tajer in kwistjoni;

A: hija l-wisa' tar-rimm tat-test f'millimetri;

A₁: hija l-wisa' f'millimetri tar-rimm tal-kejl, kif ikkwotat fl-Istandard Internazzjonali tat-Tajers, speċifikat minn min ifellel mill-ġdid il-wiċċ ta' barra tat-tajers għall-qies tat-tajer in kwistjoni.

K: huwa fattur u għandu jittiehed bħala uguali għal 0,4.

7.1.2. Id-dijametru ta' barra:

7.1.2.1. Id-dijametru teoretiku ta' barra ta' tajer b'wiċċ ġdid għandu jkun ikkalkulat bil-formula li ġejja:

$$D = d + 2H$$

fejn:

D: huwa d-dijametru teoretiku ta' barra f'millimetri;

d: huwa n-numru konvenzjonali ddefinit fil-paragrafu 2.21.3 f'millimetri;

D: huwa l-għoli nominali tas-sezzjoni f'millimetri u huwa uguali għal S_n immultiplikat b'0,01 Ra

fejn:

S_n: hija l-wisa' nominali tas-sezzjoni f'millimetri;

Ra: huwa l-proporzjon ta' l-aspett nominali.

Is-simboli kollha t'hawn fuq huma skond kif ikkwotati fil-klassifikazzjoni tal-qies tat-tajer, kif muri fuq il-hajt tal-ġenb tat-tajer, skond il-kriterji tal-paragrafu 3.2.2 u definit fil-paragrafu 2.21.

7.1.2.2. Madankollu, għal tajers li il-klassifikazzjoni tidher fl-ewwel kolonna tat-tabelli li hemm fl-Anness 5 għar-Regolament ECE Nru. 54, id-dijametru ta' barra għandu jkun dak mogħti f'dawk it-tabelli.

7.1.3. Il-metodu ta' kif jitkejlu tajers b'wiċċ ġdid:

7.1.3.1. Il-qisien ta' tajers b'wiċċ ġdid għandhom jitkejlu skond il-proċeduri mogħtija fl-Anness 6 għal dan ir-Regolament.

7.1.4. L-ispeċifikazzjonijiet tal-wisa' tas-sezzjoni:

7.1.4.1. Il-wisa' ġenerali attwali tista' tkun anqas mill-wisa' jew il-wisgħat tas-sezzjoni stabbiliti fil-paragrafu 7.1.

7.1.4.2. Il-wisa' ġenerali attwali tista' wkoll tkun aktar mill-valur jew il-valuri stabbiliti fil-paragrafu 7.1 b':

4 % fil-każ ta' tajers bi hxuna radjali u

8 % fil-każ ta' tajers bi hxuna djagonali (hxuna mxaqilba) u *bias belted*.

Madankollu, għal tajers b'sezzjoni li tkun aktar minn 305 mm, u mahsuba biex jitwaxxlu f'formazzjoni doppja, il-valur jew il-valuri nominali m'għandhomx ikunu aktar minn:

2 % fil-każ ta' tajers bil-hxuna radjali u

4 % għal tajers bi hxuna djagonali (hxuna mxaqilba) u *bias belted*.

7.1.5. L-ispeċifikazzjonijiet tad-dijamentru ta' barra:

7.1.5.1. Id-dijamentru attwali ta' barra ta' tajers b'wiċċ ġdid m'għandux ikun barra l-valuri ta' Dmin u Dmass miksuba bil-formuli li ġejjin:

$$D_{min} = d + (2H \times a)$$

$$D_{mass} = 1,015 \times [d + (2H \times b)]$$

fejn:

7.1.5.1.1. Għal qisien mhux mogħtija fit-tabelli fl-Anness 5 għal dan ir-Regolament, "H" u "d" huma kif definit fil-paragrafu 7.1.2.1.

7.1.5.1.2. Għall-qisien imsemmija fil-paragrafu 7.1.2.2 fuq:

$$H = 0,5 (D - d)$$

fejn "D" huwa d-dijamentru ta' barra u "d" id-dijamentru nominali tar-rimm kwotat fit-tabelli msemmija fuq għall-qies in kwistjoni.

7.1.5.1.3. Il-ko-effiċjent "a" = 0,97

7.1.5.1.4. Il-ko-effiċjent "b" huwa:

	Tajers radjali	Tajers bi hxuna djaġonali (hxuna mxaqilba) u <i>bias belted</i>
għal tajers ta' użu normali	1,04	1,07
għal tajers ta' użu speċjali	1,06	1,09

7.1.5.2. Għal tajers tas-silġ, id-dijamentru massimu ta' barra (Dmass), ikkalkulat fil-paragrafu 7.1.5.1, jista' jiżdied sa mhux aktar minn 1 %.

8. MODIFIKAZZJONIJIET FL-APPROVAZZJONI

8.1. Kull modifika dwar facilità ta' produzzjoni ta' tajers b'wiċċ ġdid, li temenda kwalunkwe tagħrif mogħti mill-facilità tal-produzzjoni ta' dawn it-tajers fl-Applikazzjoni għall-Approvazzjoni, ara l-paragrafu 4, għandha tkun notifikata lill-awtorità li tapprova li tkun approvat dik it-taqsimi ta' produzzjoni. Dik l-awtorità, imbagħad, tista' jew:

8.1.1. Tikkunsidra li l-modifikazzjonijiet li jkunu saru x'aktarx ma jkollhomx effett sostanzjalment hażin u li fi kwalunkwe każ il-facilità tal-produzzjoni ta' dawn it-tajers għandha tilhaq il-kriterji; jew

8.1.2. Titlob biex isir aktar sħarriġ ta' l-approvazzjoni.

8.2. Il-konferma jew ir-rifjut ta' approvazzjoni, li tkun tispeċifika l-modifikazzjonijiet, għandha tkun mgħarrfa lill-Partijiet tal-Ftehim li japplikaw dan ir-Regolament skond il-proċedura speċifikata fil-paragrafu 5.7.

9. IL-KONFORMITÀ TAL-PRODUZZJONI

Il-proċeduri ta' produzzjoni għandhom ikunu konformi ma' daww stabbiliti fil-Ftehim, l-Appendiċi 2 (E/ECE/324-E/ECE/TRANS/505/Rev.2), skond il-kriterji li ġejjin:

9.1. Il-facilità tal-produzzjoni ta' tajers b'wiċċ ġdid, approvata skond dan ir-Regolament, għandha tkun konformi mal-kriterji stabbiliti fil-paragrafu 6.

9.2. Id-detentur ta' l-approvazzjoni għandu jiżgura li, matul kull sena ta' produzzjoni, u b'firxa matul is-sena kollha, mill-inqas in-numru ta' tajers li ġejjin, li jkunu rappreżentattivi tal-firxa li tkun qed tiġi manifatturata, ikunu verifikati u ttestjati kif preskritt f'dan ir-Regolament:

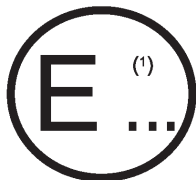
9.2.1. 0,01 % tal-produzzjoni annwali shiha, iżda fi kwalunkwe każ mhux inqas minn 2 u mhux aktar minn 10.

- 9.3. Jekk il-kriterji tal-paragrafu 9.2 jitwettqu minn jew taht il-kontroll ta' l-awtorità li tapprova, ir-riżultati jistgħu jintużaw bħala parti minn, jew minflok, dawk preskritti fil-paragrafu 9.4.
- 9.4. L-awtorità li tkun approvat il-facilità tal-produzzjoni tat-tfellil mill-ġdid tal-wiċċ ta' barra tat-tajers tista', f'kull żmien, tivverifika l-metodi tal-kontroll tal-konformità applikati f'kull facilità tal-produzzjoni. Għal kull facilità tal-produzzjoni, l-awtorità li tapprova t-tip għandha tiġbor kampjuni bl-addoċ matul kull sena ta' produzzjoni, u mill-inqas in-numru ta' tajers li ġejjin, li jkunu rappreżentattivi tal-firxa li tkun qed tiġi manifatturata, għandhom jiġu verifikati u ttestjati kif preskritti f'dan ir-Regolament:
- 9.4.1. 0,01 % tal-produzzjoni annwali shiha, iżda f'kull każ mhux inqas minn 2 u mhux aktar minn 10.
- 9.5. It-testijiet u l-verifiki tal-paragrafu 9.4 jistgħu jiehdu post dawk mehtieġa fil-paragrafu 9.2.
10. PENALI GĦAL NUQQAS TA' KONFORMITÀ FIL-PRODUZZJONI
- 10.1. L-approvazzjoni mogħtija lil facilità ta' produzzjoni ta' tfellil mill-ġdid tal-wiċċ ta' barra tat-tajers skond dan ir-Regolament, tista' titneħħa jekk il-kriterji tal-paragrafu 9 ma jiġux osservati jew jekk din il-facilità tal-produzzjoni jew it-tajers b'wiċċ ġdid manifatturati minnha jkunu naqsu milli jilhqu l-kriterji preskritti fil-paragrafu 9.
- 10.2. Jekk Parti għall-Ftehim li tapplika dan ir-Regolament tirtira approvazzjoni li tkun tat digà, din għandha tavża minnufih lill-Partijiet Kontraenti l-oħra għall-Ftehim ta' l-1958 li jkunu qed japplikaw dan ir-Regolament. Dan għandha tagħmlu permezz ta' formola ta' komunikazzjoni li tkun konformi għall-mudell muri fl-Anness 1 għal dan ir-Regolament.
11. PRODUZZJONI LI TWAQQFET GĦAL KOLLOX
- L-awtorità li tkun tat l-approvazzjoni tal-facilità tal-produzzjoni ta' tajers b'wiċċ ġdid għandha tkun mgħarrfa jekk l-operat u l-manifattura ta' tajers b'wiċċ ġdid, li jkunu ġew approvati fl-iskop ta' dan ir-Regolament, jieqfu. Meta l-awtorità tircievi din l-informazzjoni, din għandha tghaddiha lill-Partijiet l-oħra għall-Ftehim ta' l-1958 li jkunu qed japplikaw dan ir-Regolament. Dan għandha tagħmlu permezz ta' formola ta' komunikazzjoni li tkun konformi mal-mudell muri fl-Anness 1 għal dan ir-Regolament.
12. ISMIJET U INDIRIZZI TA' SERVIZZI TEKNIĊI LI HUMA RESPONSABBLI BIEX IWETTQU TESTIJET TA' L-APPROVAZZJONI, TA' LABORATORJI FEJN ISIRU T-TESTIJET, U TA' DIPARTIMENTI AMMINISTRATTIVI
- 12.1. Il-Partijiet għall-Ftehim ta' l-1958 li japplikaw dan ir-Regolament għandhom jgħaddu lis-Segretarjat tan-Nazzjonijiet Uniti l-ismijiet u l-indirizzi tas-servizzi tekniċi li huma responsabbli li jwettqu testijiet ta' l-approvazzjoni u, fejn ikun jghodd, tal-laboratorji approvati li fihom isiru t-testijiet, kif ukoll ta' dipartimenti amministrattivi li jagħtu l-approvazzjoni u li lilhom għandhom jintbagħtu l-formoli li jiċċertifikaw l-approvazzjoni jew ir-rifjut jew l-irtirar ta' approvazzjoni tal-produzzjoni li żgur tkun twaqqfet, liema approvazzjonijiet ikunu harġu f'pajjiżi oħra.
- 12.2. Il-Partijiet għall-Ftehim ta' l-1958 li japplikaw dan ir-Regolament, jistgħu jużaw laboratorji ta' manifatturi ta' tajers jew ta' facilitàjiet ta' produzzjoni ta' tajers b'wiċċ ġdid u jistgħu jagħzlu, bħala laboratorji approvati tat-test, dawk li jinstabu jew fit-territorju ta' dik il-Parti jew fit-territorju ta' Parti oħra għall-Ftehim ta' l-1958. Dan ikun jiddependi minn jekk id-dipartiment amministrattiv kompetenti ta' dan ta' l-aħħar ikunx aċċetta b'mod preliminari din il-proċedura.
- 12.3. Fejn Parti għall-Ftehim ta' l-1958 tapplika l-paragrafu 12.2, din tista', jekk tkun tixtieq, tkun rappreżentata waqt it-testijiet.

ANNEX 1

KOMUNIKAZZJONI

(format massimu: A4 (210 x 297 mm))



Mahruġa minn: L-isem ta' l-amministrazzjoni:

.....

.....

.....

Dwar: ⁽²⁾

APPROVAZZJONI MOGHTIJA

APPROVAZZJONI ESTIŻA

APPROVAZZJONI RIFJUTATA

APPROVAZZJONI RTIRATA

PRODUZZJONI LI TWAQQFET GHAL KOLLOX

ta' faċilità ta' produzzjoni ta' tajers b'wiċċ ġdid skond ir-Regolament Nru 109

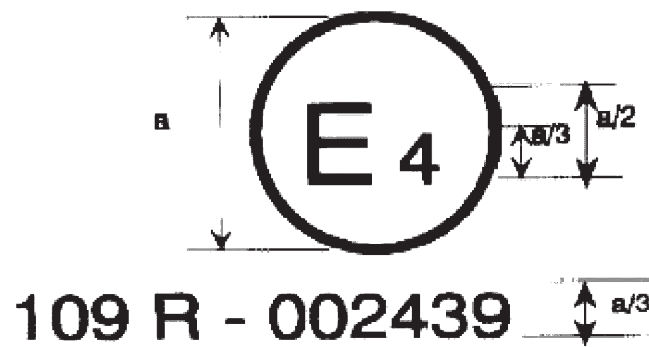
Nru ta' l-Approvazzjoni: Nru ta' l-Estensjoni:

1. L-isem jew il-marka tal-fabbrika ta' min jagħmel it-tajers b'wiċċ ġdid:
2. L-isem u l-indirizz tal-faċilità tal-produzzjoni ta' tajers b'wiċċ ġdid:
.....
3. Jekk jghodd, l-isem u l-indirizz tar-rappreżentant ta' min jagħmel it-tajers b'wiċċ ġdid:
.....
4. Deskrizzjoni fil-qosor bhal fil-paragrafi 4.1.3 u 4.1.4 ta' dan ir-Regolament:
5. Servizz tekniku u, fejn ikun jghodd, il-laboratorju tat-test approvat għall-ghanijiet ta' approvazzjoni jew verifika ta' konformità:
.....
6. Data tar-rapport mahruġ minn dak is-servizz:
7. Numru tar-rapport mahruġ minn dak is-servizz:
8. Raġuni(jiet) għall-estensjoni (jekk jghodd):
9. Rimarki ohra:
10. Post:
11. Data:
12. Firma:
13. Mehmuża ma' din il-komunikazzjoni hemm lista ta' dokumenti fil-fajl ta' l-approvazzjoni li jinstab għand l-Awtorità li tapprova li kienet qieset din l-approvazzjoni, u li jistgħu jinkisbu fuq talba.

⁽¹⁾ In-numru distintiv tal-pajjiż li jkun ta' estenda/irrifjuta/irtira approvazzjoni (ara d-dispożizzjonijiet ta' l-approvazzjoni fir-Regolament).⁽²⁾ Hassar dak li ma japplikax.

ANNEX 2

L-ARRANĠAMENT TAL-MARKA TA' L-APPROVAZZJONI



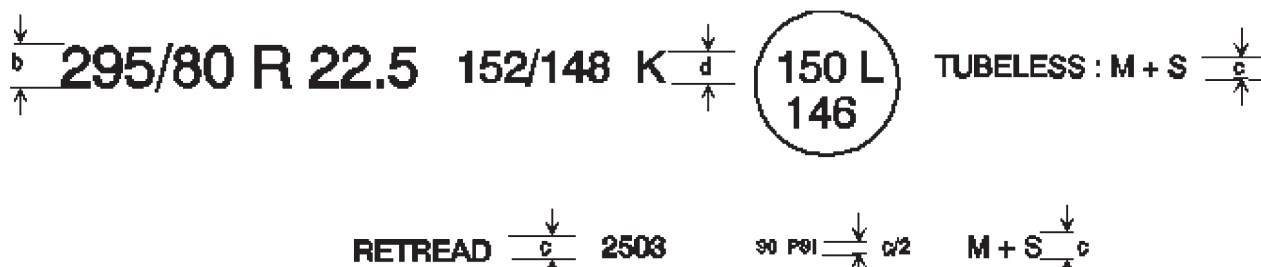
$a = 12 \text{ mm min}$

Il-marka ta' l-approvazzjoni t'hawn fuq li tkun twahhlet fuq tajer b'wiċċ ġdid turi li l-faċilità tal-produzzjoni ta' tajers b'wiċċ ġdid ikkonċernata ngħatat approvazzjoni mill-Olanda (E4) taht in-numru ta' l-approvazzjoni 109R002439; il-kriterji ta' dan ir-Regolament intlahqu fil-forma oriġinali tiegħu (00).

In-numru ta' l-approvazzjoni għandu jitpoġġa qrib iċ-ċirku jew fuq jew taht is-simbolu "E" jew inkella fuq il-lemin jew ix-xellug ta' dik l-ittra. Il-figuri tan-numru ta' l-approvazzjoni għandu jkun fuq l-istess naha ta' l-ittra "E" u jhares fl-istess direzzjoni. L-użu ta' numri Rumani bħala numri ta' approvazzjoni għandhom ikunu evitati biex ikun evitat kull taħwid ma' simboli oħrajn.

ANNEX 3

L-ARRANĠAMENT TAL-MARKI TA' TAJER B' WIĊĊ ĠDID



L-GHOLI MINIMU TAL-MARKI (mm)		
	Tajers b'dijametru ta' rimm ≤ kodiċi 20 jew ≤ 508 mm jew ta' wisa' sezzjonali ≤ 235 mm jew ≤ 9"	Tajers b'dijametru ta' rimm > kodiċi 20 jew > 508 mm jew ta' wisa' sezzjonali > 235 mm jew > 9"
b	6	9
ċ	4	
d	6	

L-eżempju t'hawn fuq jiddefinixxi tajer pneumatiku b'wiċċ ġdid:

Ghandu wisa' nominali tas-sezzjoni ta' 295;

Ghandu ratio ta' l-aspett nominali ta' 80;

Ta' struttura ta' hxuna radjali (R);

Ghandu dijametru nominali tar-rimm ta' 572 mm, li ghalih il-kodiċi huwa 22.5;

Ghandu kapacitajiet tat-taghbija ta' 3 550 kilo (wahdu) u ta' 3 150 kilo (doppju), li jikkorrispondu rispettivament għall-indiċi tat-taghbija 152 u 148 murija fl-Anness 4 għal dan ir-Regolament;

Ghandu s-simbolu tal-veloċità nominali K (veloċità tar-referenza 110 km/s);

Kapaċi jintuża fil-Punt Uniku, is-simbolu tal-veloċità L (veloċità tar-referenza 120 km/s); b'kapacià ta' taghbija ta' 3 350 kilo (wahdu) u 3 000 kilo (doppju), li jikkorrispondu rispettivament għall-indiċi tat-taghbija 150 u 146 murija fl-Anness 4 għal dan ir-Regolament;

Maħsub biex jintuża minghajr it-tubu ta' ġewwa ("TUBELESS") u huwa tajer tas-silġ (M+S);

B'wiċċ ġdid fil-ġimghat 25, 26, 27 jew 28 tas-sena 2003.

Għat-testijiet tal-kapaċità tat-taghbija/veloċità dan jehtieg jintnefah sa 620 kPa, li ghalih is-simbolu PSI huwa 90.

Il-pożizzjoni u l-ordni tal-marki li jsawru il-klassifikazzjoni tat-tajer għandhom ikunu kif ġej:

- Il-klassifikazzjoni tal-qies, li tinkludi l-wisa' nominali tas-sezzjoni, il-proporzjon ta' l-aspett nominali, is-simbolu tat-tip ta' l-istruttura (fejn ikun jgħodd) u d-dijametru nominali tar-rimm, għandhom ikunu fi grupp kif muri fl-eżempju ta' fuq, jiġifieri: 295/80 R 22.5;
- Id-deskrizzjoni tas-servizz, li tinkludi l-indiċi tat-taghbija u s-simbolu tal-veloċità, għandhom jitpoġġew flimkien hdejn il-klassifikazzjoni tal-qies. Din tista' tiġi qabel il-klassifikazzjoni tal-qies jew wara din, jew inkella titpoġġa fuqha jew taħtha;
- Is-simbolu "TUBELESS" u "M+S" jistgħu jkunu xi ftit 'il bogħod mis-simbolu ta' il-klassifikazzjoni tal-qies.
- Il-kelma "RETREAD" tista' tkun ftit 'il bogħod mis-simbolu tal-klassifikazzjoni tal-qies.
- Jekk il-paragrafu 3.2.5 ta' dan ir-Regolament ikun applikat, id-deskrizzjoni addizzjonali tas-servizz (il-Punt Uniku), li tinkludi l-indiċi tat-taghbija u s-simbolu tal-veloċità, għandha tintwera ġewwa ċirku hdejn id-deskrizzjoni nominali tas-servizz li tkun tidher fuq il-hajt tal-ġenb tat-tajer.

ANNEX 4

LISTA TA' L-INDIĊIJET TA' TAGHBIIJA U L-KAPAĊITÀJIET TAT-TAGHBIIJA LI JIKKORRISPONDU MAGHHOM

Indiċi ta' taghbija (LI) u l-kapaċità tat-taghbija – kilo													
LI	kilo	LI	kilo	LI	kilo	LI	kilo	LI	kilo	LI	kilo	LI	kilo
0	45	40	140	80	450	120	1 400	160	4 500	200	14 000	240	45 000
1	46,2	41	145	81	462	121	1 450	161	4 625	201	14 500	241	46 250
2	47,5	42	150	82	475	122	1 500	162	4 750	202	15 000	242	47 500
3	48,7	43	155	83	487	123	1 550	163	4 875	203	15 500	243	48 750
4	50	44	160	84	500	124	1 600	164	5 000	204	16 000	244	50 000
5	51,5	45	165	85	515	125	1 650	165	5 150	205	16 500	245	51 500
6	53	46	170	86	530	126	1 700	166	5 300	206	17 000	246	53 000
7	54,5	47	175	87	545	127	1 750	167	5 450	207	17 500	247	54 500
8	56	48	180	88	560	128	1 800	168	5 600	208	18 000	248	56 000
9	58	49	185	89	580	129	1 850	169	5 800	209	18 500	249	58 000
10	60	50	190	90	600	130	1 900	170	6 000	210	19 000	250	60 000
11	61,5	51	195	91	615	131	1 950	171	6 150	211	19 500	251	61 500
12	63	52	200	92	630	132	2 000	172	6 300	212	20 000	252	63 000
13	65	53	206	93	650	133	2 060	173	6 500	213	20 600	253	65 000
14	67	54	212	94	670	134	2 120	174	6 700	214	21 200	254	67 000
15	69	55	218	95	690	135	2 180	175	6 900	215	21 800	255	69 000
16	71	56	224	96	710	136	2 240	176	7 100	216	22 400	256	71 000
17	73	57	230	97	730	137	2 300	177	7 300	217	23 000	257	73 000
18	75	58	236	98	750	138	2 360	178	7 500	218	23 600	258	75 000
19	77,5	59	243	99	775	139	2 430	179	7 750	219	24 300	259	77 500
20	80	60	250	100	800	140	2 500	180	8 000	220	25 000	260	80 000
21	82,5	61	257	101	825	141	2 575	181	8 250	221	25 750	261	82 500
22	85	62	265	102	850	142	2 650	182	8 500	222	26 500	262	85 000
23	87,5	63	272	103	875	143	2 725	183	8 750	223	27 250	263	87 500
24	90	64	280	104	900	144	2 800	184	9 000	224	28 000	264	90 000
25	92,5	65	290	105	925	145	2 900	185	9 250	225	29 000	265	92 500
26	95	66	300	106	950	146	3 000	186	9 500	226	30 000	266	95 000
27	97,5	67	307	107	975	147	3 075	187	9 750	227	30 750	267	97 500
28	100	68	315	108	1 000	148	3 150	188	10 000	228	31 500	268	100 000
29	103	69	325	109	1 030	149	3 250	189	10 300	229	32 500	269	103 000
30	106	70	335	110	1 060	150	3 350	190	10 600	230	33 500	270	106 000
31	109	71	345	111	1 090	151	3 450	191	10 900	231	34 500	271	109 000
32	112	72	355	112	1 120	152	3 550	192	11 200	232	35 500	272	112 000
33	115	73	365	113	1 150	153	3 650	193	11 500	233	36 500	273	115 000
34	118	74	375	114	1 180	154	3 750	194	11 800	234	37 500	274	118 000
35	121	75	387	115	1 215	155	3 875	195	12 150	235	38 750	275	121 500
36	125	76	400	116	1 250	156	4 000	196	12 500	236	40 000	276	125 000
37	128	77	412	117	1 285	157	4 125	197	12 850	237	41 250	277	128 500
38	132	78	425	118	1 320	158	4 250	198	13 200	238	42 500	278	132 000
39	136	79	437	119	1 360	159	4 375	199	13 600	239	43 750	279	136 000

ANNEX 5

IL-KLASSIFIKAZZJONI TAL-QIES U L-QISIEN TAT-TAJER (SKOND IR-REGOLAMENT ECE Nru 54)**Għal din l-informazzjoni, irreferi għall-anness 5 tar-regolament ECE Nru 54**

Innota li b'referenza għall-paragrafu 6.5.4 ta' dan ir-Regolament, id-dijametru ta' barra ta' tajer b'wiċċ ġdid jista', fil-każijiet kollha, ikun akbar minn dak muri fit-tabelli ta' l-Anness 5 għar-Regolament Nru 54, iżda sa mhux aktar minn 1,5 %.

ANNEX 6

IL-METODU LI BIH JITKEJLU T-TAJERS PNEWMATIĊI

1. It-tajer għandu jitwajjal fuq ir-rimm tat-test speċifikat minn dak li jfellel il-wiċċ ta' barra tat-tajers mill-ġdid u jintnefah skond il-pessjoni nominali tan-nefha kkwotata fl-Istandard tat-Tajers Internazzjonali msemmi (ara l-paragrafu 4.1.4.7 ta' dan ir-Regolament), f'relazzjoni mal-kapaċità massima tal-ġarr tat-tagħbija għal dak il-qies u l-indiċi tat-tagħbija.
2. It-tajer, imwajjal fuq ir-rimm apposta, għandu jkun kundizzjonat għat-temperatura ta' l-ambjent tal-laboratorju għal mill-inqas 24 siegħa, hlief fejn meħtieġ mod iehor mill-paragrafu 6.6.3 ta' dan ir-Regolament.
3. Il-pessjoni għandha tkun aġġustata mill-ġdid għall-valur li hemm fil-paragrafu 1 ta' dan l-Anness.
4. Il-wisa' ġenerali għandha titkejjel f'sitt punti spajzati b'mod ugwali madwar it-tajer, waqt li titqies il-hxuna ta' kwalunkwe strixxi protettivi. L-ogħla qari miksub għandu jitqies bħala l-wisa' ġenerali.
5. Id-dijametru ta' barra għandu jkun ikkalkulat mill-kejl taċ-ċirkonferenza massima tat-tajer minfuh.

ANNEX 7

PROCEDURA GHAT-TESTIJET TAT-TAGHBIIJA/VELOĊITÀ
(fil-prinċipju skond ir-regolament Nru 54)

1. It-thejjija tat-tajer
 - 1.1. Arma tajer b'wiċċ ġdid fuq ir-rimm tat-test speċifikat minn min ifellel il-wiċċ ta' barra tat-tajers mill-ġdid.
 - 1.2. Uża tubu ta' ġewwa ġdid jew kumbinazzjoni ta' tubu ta' ġewwa, valv u perpura (skond kif mehtieg) meta jkunu ttestjati tajers bit-tubu ta' ġewwa.
 - 1.3. Onfoh it-tajer għall-pressjoni li tikkorrispondi għall-indiċi tal-pressjoni kif speċifikat fil-paragrafu 3.2.10 ta' dan ir-Regolament.
 - 1.4. Ikkundizzjona t-tajer u l-assemblaġġ tar-rota fit-temperatura ta' l-ambjent għal mhux inqas minn 3 sigħat.
 - 1.5. Aġġusta mill-ġdid il-pressjoni tat-tajer għal dik speċifikata fil-paragrafu 1.3 ta' dan l-Anness.
2. Il-Proċedura tat-Test
 - 2.1. Arma t-tajer u l-assemblaġġ tar-rota fuq il-fus tat-test u ppressah kontra l-wiċċ lixx ta' barra ta' ċilindru ta' test li jahdem bil-qawwa, b'dijametru ta' $1.70 \text{ m} \pm 1 \%$, u li jkollu mill-inqas wiċċ wiesa' daqs il-wiċċ ta' barra mfellel tat-tajer. F'ċerti każijiet jista' jintuża ċilindru li jkollu dijametru ta' $2.00 \text{ m} \pm 1 \%$.
 - 2.2. Applika għal fuq il-fus tat-test sensiela ta' tagħbijiet tat-test ugwali għal persentaġġ tat-tagħbija murija fl-Anness 4 għal dan ir-Regolament, li tikkorrispondi għall-indiċi tat-tagħbija murija fuq it-tajer, u skond il-programm tat-test hawn taht. Fejn it-tajer ikollu indiċi ta' kapacitajiet ta' tagħbija biex jintuża kemm f'formazzjoni wahidha jew doppja, it-tagħbija li tikkorrispondi għall-indiċi tat-tagħbija f'operat wahdu għandha tintuża għat-test.
 - 2.2.1. Fil-każ ta' tajer li jkollu indiċi ta' tagħbija ≤ 121 u simbolu ta' veloċità $\geq Q$ (160 km/s), il-proċedura tat-test għandha tkun bħal dik speċifikata fil-paragrafu 3 ta' dan l-Anness.
 - 2.2.2. Għat-tajers l-oħra kollha, il-proċedura tat-test hija kif muri fl-Appendiċi 1 għal dan l-Anness.
 - 2.3. Il-Programm tat-Test tal-Kapaċità – Ara wkoll l-Appendiċi 1 għal dan l-Anness.
 - 2.3.1. Il-pressjoni tat-tajer m'għandhiex tkun ikkoreġurta waqt it-test u t-tagħbija tat-test għandha tinzamm l-istess f'kull wiehed mit-tliet taqsimiet tat-test.
 - 2.3.2. Matul it-test it-temperatura tal-kamra fejn isir it-test għandha tinzamm bejn 20°C u 30°C , sakemm il-manifattur tat-tajer jew min infellel mill-ġdid il-wiċċ ta' barra tat-tajers ma jaqbilx li juża temperatura oghla.
 - 2.4. Il-programm tat-test tal-kapaċità għandu jsir mingħajr interruzzjoni.
3. Il-proċedura tat-test tat-Tagħbija/Veloċità għal tajers b'indiċi ta' tagħbija ≤ 121 u simbolu tal-veloċità $\geq Q$ (160 km/s):
 - 3.1. It-tagħbija fuq ir-rota u t-tajer għandhom ikunu tal-persentaġġ li ġej ta' dak li jikkorrispondi għall-indiċi tat-tagħbija tat-tajer:
 - 3.1.1. 90 % meta dan ikun ittestjat fuq ċilindru b'dijametru ta' $1.70 \text{ m} \pm 1 \%$;
 - 3.1.2. 92 % meta dan ikun ittestjat fuq ċilindru b'dijametru ta' $2.00 \text{ m} \pm 1 \%$.
 - 3.2. Il-veloċità tal-faži tal-bidu tat-test għandha tkun 20 km/s inqas minn dik murija bis-simbolu tal-veloċità għat-tajer.
 - 3.2.1. Il-hin mehud biex tintlaħaq il-veloċità inizzjali tat-test għandu jkunu ta' 10 min.
 - 3.2.2. Il-hin ta' l-ewwel faži għandu jkun ta' 10 min.

- 3.3. Il-veloċità tat-tieni fażi tat-test għandha tkun ta' 10 km/s inqas minn dik murija bis-simbolu tal-veloċità għat-tajer.
- 3.3.1. Il-hin tat-tieni fażi għandu jkun ta' 10 min.
- 3.4. Il-veloċità tal-fażi ta' l-aħħar tat-test għandha tkun il-veloċità li tikkorrispondi għal dik murija bis-simbolu tal-veloċità għat-tajer.
- 3.4.1. Il-hin tal-fażi finali għandha tkun ta' 30 min.
- 3.5. Il-hin tat-test kollu għandu jkun ta' siegħa.
4. Metodu ekwivalenti tat-test:

Jekk jintuża metodu ta' test għajr dak deskritt fil-paragrafi 2 jew 3 ta' dan l-Anness, għandha tintwera l-ekwivalenza tiegħu.

ANNEX 7

Appendiċi 1

IL-PROGRAMM TAT-TEST TAL-KAPAĊITÀ

Indiċi tat-Taghbija	Simbolu tal-Veloċità	Il-veloċità taċ-ċilindru tat-test [min ⁻¹]		Taghbija mpogġija fuq ir-rota bhala persentaġġ tat-taghbija li tikkorrispondi għall-indiċi tat-taghbija		
		Hxuna radjali	Hxuna djagonali (hxuna mxaqilba) u <i>bias belted</i>	7 h.	16 h.	24 h.
122 jew aktar	F	100	100	66 %	84 %	101 %
	G	125	100			
	J	150	125			
	K	175	150			
	L	200	—			
	M	225	—			
121 jew inqas	F	100	100	70 %	88 %	106 %
	G	125	125			
	J	150	150			
	K	175	175			
	L	200	175	4 h.	6 h.	114 %
	M	250	200	75 %	97 %	
	N	275	—	75 %	97 %	
	P	300	—	75 %	97 %	114 %

Noti:

“Tajers ta' użu speċjali” (ara l-paragrafu 2.3.2 ta' dan ir-Regolament) għandhom jiġu ttestjati f'veloċità ugwali għal 85 % tal-veloċità preskritta għal tajers normali ekwivalenti.

ANNEX 7

Appendiċi 2

RELAZZJONI BEJN L-INDIČI TAL-PRESSJONI U L-UNITAJIET TAL-PRESSJONI

Indiċi tal-Pressjoni ("PSI")	Linja	kPa
20	1,4	140
25	1,7	170
30	2,1	210
35	2,4	240
40	2,8	280
45	3,1	310
50	3,4	340
55	3,8	380
60	4,1	410
65	4,5	450
70	4,8	480
75	5,2	520
80	5,5	550
85	5,9	590
90	6,2	620
95	6,6	660
100	6,9	690
105	7,2	720
110	7,6	760
115	7,9	790
120	8,3	830
125	8,6	860
130	9,0	900
135	9,3	930
140	9,7	970
145	10,0	1 000
150	10,3	1 030
...	...	...

ANNEX 8

**VARJAZZJONI TAL-KAPAĊITÀ TAT-TAGHBĪJA MAL-VELOĊITÀ: TAJERS TA' VETTURI KUMMERĊJALI BI
HXUNA RADJALI U DJAGONALI**

(Skond ir-regolament tan-nu ece nru. 54)

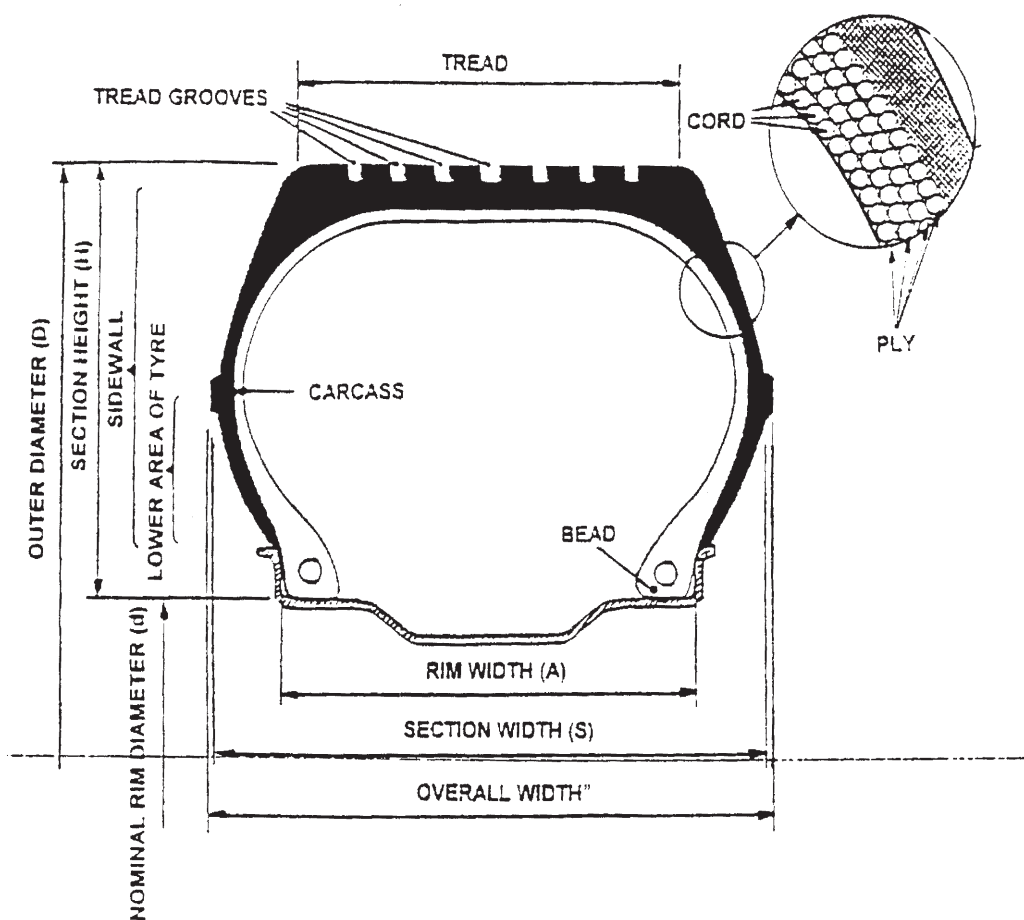
Varjazzjoni tal-Kapaċità tat-Taghbija (%)										
Velocità (km/s)	L-indiċi kollha tat-taghbija				Indiċi tat-taghbija ≥ 122 ⁽¹⁾ /		Indiċi tat-taghbija ≤ 121 ⁽¹⁾ /			
	Simbolu tal-velocità				Simbolu tal-velocità		Simbolu tal-velocità			
	F	G	J	K	L	M	L	M	N	P ⁽²⁾
0	+ 150	+ 150	+ 150	+ 150	+ 150	+ 150	+ 110	+ 110	+ 110	+ 110
5	+ 110	+ 110	+ 110	+ 110	+ 110	+ 110	+ 90	+ 90	+ 90	+ 90
10	+ 80	+ 80	+ 80	+ 80	+ 80	+ 80	+ 75	+ 75	+ 75	+ 75
15	+ 65	+ 65	+ 65	+ 65	+ 65	+ 65	+ 60	+ 60	+ 60	+ 60
20	+ 50	+ 50	+ 50	+ 50	+ 50	+ 50	+ 50	+ 50	+ 50	+ 50
25	+ 35	+ 35	+ 35	+ 35	+ 35	+ 35	+ 42	+ 42	+ 42	+ 42
30	+ 25	+ 25	+ 25	+ 25	+ 25	+ 25	+ 35	+ 35	+ 35	+ 35
35	+ 19	+ 19	+ 19	+ 19	+ 19	+ 19	+ 29	+ 29	+ 29	+ 29
40	+ 15	+ 15	+ 15	+ 15	+ 15	+ 15	+ 25	+ 25	+ 25	+ 25
45	+ 13	+ 13	+ 13	+ 13	+ 13	+ 13	+ 22	+ 22	+ 22	+ 22
50	+ 12	+ 12	+ 12	+ 12	+ 12	+ 12	+ 20	+ 20	+ 20	+ 20
55	+ 11	+ 11	+ 11	+ 11	+ 11	+ 11	+ 17,5	+ 17,5	+ 17,5	+ 17,5
60	+ 10	+ 10	+ 10	+ 10	+ 10	+ 10	+ 15,0	+ 15,0	+ 15,0	+ 15,0
65	+ 7,5	+ 8,5	+ 8,5	+ 8,5	+ 8,5	+ 8,5	+ 13,5	+ 13,5	+ 13,5	+ 13,5
70	+ 5,0	+ 7,0	+ 7,0	+ 7,0	+ 7,0	+ 7,0	+ 12,5	+ 12,5	+ 12,5	+ 12,5
75	+ 2,5	+ 5,5	+ 5,5	+ 5,5	+ 5,5	+ 5,5	+ 11,0	+ 11,0	+ 11,0	+ 11,0
80	0	+ 4,0	+ 4,0	+ 4,0	+ 4,0	+ 4,0	+ 10,0	+ 10,0	+ 10,0	+ 10,0
85	- 3	+ 2,0	+ 3,0	+ 3,0	+ 3,0	+ 3,0	+ 8,5	+ 8,5	+ 8,5	+ 8,5
90	- 6	0	+ 2,0	+ 2,0	+ 2,0	+ 2,0	+ 7,5	+ 7,5	+ 7,5	+ 7,5
95	- 10	- 2,5	+ 1,0	+ 1,0	+ 1,0	+ 1,0	+ 6,5	+ 6,5	+ 6,5	+ 6,5
100	- 15	- 5	0	0	0	0	+ 5,0	+ 5,0	+ 5,0	+ 5,0
105		- 8	- 2	0	0	0	+ 3,75	+ 3,75	+ 3,75	+ 3,75
110		- 13	- 4	0	0	0	+ 2,5	+ 2,5	+ 2,5	+ 2,5
115			- 7	- 3	0	0	+ 1,25	+ 1,25	+ 1,25	+ 1,25
120			- 12	- 7	0	0	0	0	0	0
125						0	- 2,5	0	0	0
130						0	- 5,0	0	0	0
135							- 7,5	- 2,5	0	0
140							- 10	- 5	0	0
145								- 7,5	- 2,5	0
150								- 10,0	- 5,0	0
155									- 7,5	- 2,5
160									- 10,0	- 5,0

⁽¹⁾ / L-indiċi tat-taghbija jirreferu għall-operat fformazzjoni wahidha.

⁽²⁾ / Il-varjazzjonijiet tat-taghbija mhumix awtorizzati għal velocitajiet 'il fuq minn 160 km/s. Għas-simbolu tal-velocità "Q" u 'il fuq mill-velocità li tikkorrispondi għas-simbolu tal-velocità, specifika l-ogħla velocità awtorizzata għat-tajer.

ANNEX 9

FIGURA TA' SPJEGAZZJONI



ANNEX II

"REGOLAMENT NRU 108

DISPOŻIZZJONIJIET UNIFORMI DWAR L-APPROVAZZJONI GHALL-PRODUZZJONI TA' TAJERS PNEWMATIČI B'WIČČ ĠDID GHALL-VETTURI KUMMERČJALI U L-KARRIJET TAGHHOM**(test konsolidat)**

WERREJ

REGOLAMENT

1. Kamp ta' applikazzjoni	30
2. Definizzjonijiet	30
3. Marki	35
4. Applikazzjoni għall-approvazzjoni	36
5. Approvazzjoni	36
6. Kriterji	37
7. Speċifikazzjonijiet	41
8. Modifiki fl-approvazzjoni	43
9. Il-konformità tal-produzzjoni	43
10. Penali għal nuqqas ta' konformità fil-produzzjoni	43
11. Produzzjoni li twaqqfet għal kollox	44
12. Ismijiet u indirizzi ta' servizzi tekniċi responsabbli biex iwettqu testijiet ta' approvazzjoni, ta' laboratorji li fihom isiru t-testijiet, u ta' dipartimenti amministrattivi	44

ANNESI

Anness 1 – Kommunikazzjoni dwar l-approvazzjoni jew l-estensjoni jew ir-rifjut jew it-tneħħija ta' l-approvazzjoni jew dwar il-produzzjoni li twaqqfet għal kollox minn faċilità ta' produzzjoni ta' tajers b'wiċċ ġdid skond ir-Regolament Nru. 108

Anness 2 – Arrangament għall-marki ta' approvazzjoni

Anness 3 – Arrangament ta' mmarkar ta' tajers b'wiċċ ġdid

Anness 4 – Lista ta' indicijiet ta' tagħbija u kapacitajiet ta' tagħbija li jikkorrispondu magħhom

Anness 5 – Il-qisien tat-tajers u l-klassifikazzjoni tagħhom skond il-qies

Anness 6 – Il-metodu li bih jitkejlu tajers pnevmatiċi

Anness 7 – Il-Proċedura għat-testijiet tal-kapaċità tat-tagħbija/veloċità

Annex 8 – Il-Figura ta' spjegazzjoni

1. KAMP TA' APPLIKAZZJONI

Dan ir-Regolament jghodd għall-produzzjoni ta' tajers b'wiċċ ġdid, maħsuba biex jitwāhhl fuq vetturi privati (tal-passiġġieri) u l-karrijiet tagħhom li jintużaw fit-toroq. Dan ma jghoddx iżda għal:

- 1.1. Tajers b'wiċċ ġdid għal karrozzi kummerċjali u l-karrijiet tagħhom.
- 1.2. Tajers b'wiċċ ġdid b'kapacità ta' velocità taht il-120 km/s jew 'il fuq minn 300 km/s.
- 1.3. Tajers għar-roti u l-muturi.
- 1.4. Tajers li oriġinarjament kienu prodotti mingħajr simboli tal-velocità u indicijiet tat-tagħbija.
- 1.5. Tajers li oriġinarjament kienu prodotti mingħajr l-approvazzjoni tat-tip u mingħajr il-marka "E" jew "e".
- 1.6. Tajers iddisinjati għat-tagħmir tal-karrozzi manifatturati qabel l-1939.
- 1.7. Tajers iddisinjati esklussivament għall-kompetizzjonijiet jew għall-użu *off road* u li jkunu mmarkati hekk.
- 1.8. Tajers żejda ta' użu temporanju tat-"tip T".

2. DEFINIZZJONIJIET – Ara wkoll il-figura fl-Anness 8

Għall-fini ta' dan ir-Regolament:

- 2.1. "Firxa ta' tajers pnevmatiċi b'wiċċ ġdid" – tfisser firxa ta' tajers pnevmatiċi b'wiċċ ġdid, kif ikkwotat fil-paragrafu 4.1.4.
- 2.2. "Struttura" ta' tajer pnevmatiku tfisser il-karatteristiċi tekniċi tal-qafas tat-tajer. L-istrutturi li ġejjin jingħarfu b'mod partikolari:
 - 2.2.1. "Djagonali" jew "il-ħxuna Mxaqilba" tiddekrivi struttura ta' tajer pnevmatiku li fih il-kurduni tal-ħxuna jkunu jestendu għax-xoffa ta' ġewwa tat-tajer u jitpoġġew f'angoli alternati sostanzjalment ta' inqas minn 90° għal-linja ċentrali tal-wiċċ ta' barra mfellel tat-tajer.
 - 2.2.2. "Bias-Belted" tiddekrivi struttura ta' tajer pnevmatiku ta' tip djagonali (ħxuna mxaqilba) li fih il-qafas ikun stabilizzat permezz ta' ċinturin, magħmul minn żewġ saffi jew aktar ta' kurdun ta' materjal li ma jkunx jista' jitwessa wisq u li jitpoġġa f'angoli alternati qrib dawg tal-qafas tat-tajer.
 - 2.2.3. "Radjali" tiddekrivi struttura ta' tajer pnevmatiku li fih il-kurduni tal-ħxuna jkunu jestendu għax-xoffa ta' ġewwa tat-tajer u jitqiegħdu b'mod sostanzjali f'angolu ta' 90° għal-linja taċ-ċentru tal-wiċċ ta' barra mfellel tat-tajer. Il-qafas tat-tajer ikun stabilizzat b'ċinturin mad-dawra li essenzjalment ma jkunx jitwessa wisq.
- 2.3. "Kategorija ta' użu"
 - 2.3.1. Tajer normali huwa wiehed maħsub għall-użu normali fuq it-triq biss.
 - 2.3.2. Tajer tas-silġ huwa wiehed li l-għamla tal-wiċċ ta' barra mfellel tiegħu, jew l-għamla tal-wiċċ ta' barra mfellel u l-istruttura tiegħu, tkun iddisinjata primarjament biex tiżgura li, fit-tajn u fis-silġ frisk jew li jkun qed jinhall, jkollu turija aħjar minn wiehed normali. L-għamla tal-wiċċ ta' barra mfellel ta' tajer tas-silġ ġeneralment tikkonsisti minn kanal (strixxa) u elementi ta' materjal solidu li jkunu spazjati b'mod aktar wiesa' milli fuq tajer normali.
 - 2.3.3. Tajer ta' użu temporanju huwa wiehed differenti minn dak li jitwāhhal fuq kwalunkwe vettura għal kundizzjonijiet ta' sewqan normali; dan huwa maħsub biss għal użu temporanju taht kundizzjonijiet ristretti ta' sewqan.
 - 2.3.4. Tajer żejjed ta' użu temporanju tat-tip "T" huwa tip ta' tajer żejjed ta' użu temporanju biex jintuża fi pressjonijiet ta' nefha oghla minn dawg stabbiliti għal tajers standard u rinforzati.

- 2.4. "Ix-xoffa ta' ġewwa tat-tajer" tfisser il-parti ta' tajer pnevmatiku li tkun ta' tali għamla u struttura li tkun toqgħod ġor-rimm u żżomm it-tajer fuqha.
- 2.5. "Kurdun" tfisser il-ħjut li jiffurmaw il-fibra tal-ħxuniet tat-tajer pnevmatiku.
- 2.6. "Hxuna" tfisser saff ta' kurduni paralleli mghottija tal-"gomma".
- 2.7. "Ċinturin" tapplika għal hxuna radjali jew tajer bi hxuna mxaqilba u tfisser saff jew saffi ta' materjal jew materjali taht il-wiċċ ta' barra mfellel tat-tajer, impoġġi b'mod sostanzjali fid-direzzjoni tal-linja taċ-ċentru tal-wiċċ ta' barra mfellel tat-tajer biex jirrestringi l-qafas f'direzzjoni ċirkonferenzjali.
- 2.8. "Interruttur" tapplika għal tajer ta' hxuna djaġonali u tfisser il-hxuna tan-nofs bejn il-qafas u l-wiċċ ta' barra mfellel tat-tajer.
- 2.9. "Chafer" tfisser materjal fil-parti tax-xoffa ta' ġewwa tat-tajer biex tipproteġi l-qafas kontra kull gherik jew brix mir-rimm tar-rota.
- 2.10. "Qafas" tfisser dik il-parti sturturali ta' tajer pnevmatiku, hlief il-wiċċ ta' barra mfellel u l-"gomma" ta' barra nett tal-ħitan tal-ġnub li, meta jintnefah, ikun jiflah għat-tagħbija.
- 2.11. "Il-wiċċ ta' barra mfellel tat-tajer" tfisser dik il-parti ta' tajer pnevmatiku li jkun imfassal biex ikollu kuntatt ma' l-art, jipproteġi l-qafas kontra kull ħsara teknika u jgħin biex it-tajer jaqbad ma' l-art.
- 2.12. "Il-ħajt tal-ġenb" tfisser il-parti ta' tajer pnevmatiku bejn il-wiċċ ta' barra mfellel tat-tajer u l-parti mahsuba biex tgħatti l-flanġ tar-rimm.
- 2.13. "Il-parti t'isfel tat-tajer" tfisser dik il-parti inkluża bejn il-linja tal-wisa' massima tas-sezzjoni tat-tajer u l-parti mfassla biex tkun mghottija bix-xifer tar-rimm.
- 2.14. "Il-kanal tal-wiċċ ta' barra mfellel tat-tajer" tfisser l-ispażju bejn l-istrixxi jew il-blokki hdejn xulxin fid-disinn tal-wiċċ ta' barra mfellel tat-tajer.
- 2.15. "Il-kanali ewlenin" tfisser il-kanali wesgħin li jkunu fil-parti ċentrali tal-wiċċ ta' barra, li jkopri madwar tliet kwarti tal-wisa' tal-wiċċ ta' barra.
- 2.16. "Il-wisa' tas-sezzjoni" tfisser id-distanza lineari bejn il-parti ta' barra tal-ħitan tal-ġenb ta' tajer pnevmatiku minfuħ, meta dan jitwahhal fuq ir-rimm ta' ċertu qies speċifiku, iżda li teskludi l-elevazzjonijiet minhabba t-tikketti (immarkar), id-dekorazzjoni jew l-istrixxi jew kanali protettivi.
- 2.17. "Il-wisa' ġenerali" tfisser id-distanza lineari bejn il-parti ta' barra tal-ħitan tal-ġnub ta' tajer pnevmatiku minfuħ, meta dan jitwahhal fuq rimm ta' qies speċifiku, u tinkludi it-tikketti (immarkar), id-disinn jew l-istrixxi jew kanali protettivi.
- 2.18. "L-gholi tas-sezzjoni" tfisser distanza ugwali għal nofs id-differenza bejn id-dijametru ta' barra tat-tajer u d-dijametru nominali tar-rimm.
- 2.19. "Il-proporzjon ta' l-aspett nominali" ifisser mitt darba aktar min-numru miksub billi tiddividi n-numru li jesprimi l-gholi nominali tas-sezzjoni bin-numru li jesprimi l-wisa' nominali tas-sezzjoni, fejn iż-żewġ figuri jkunu fl-istess unitajiet.
- 2.20. "Id-dijametru ta' barra" tfisser id-dijametru ġenerali ta' tajer minfuħ li jkun għadu kif kellu l-wiċċ ta' barra mfellel mill-ġdid.
- 2.21. "Il-klassifikazzjoni tal-qies tat-tajer" tfisser klassifikazzjoni li turi:
 - 2.21.1. Il-wisa' nominali tas-sezzjoni. Din trid tkun imfissra f'millimetri, hlief fil-kazijiet ta' tajers li l-klassifikazzjoni tal-qies tagħhom tidher fl-ewwel kolonna tat-tabelli li hemm fl-Anness 5 għal dan ir-Regolament.
 - 2.21.2. Il-proporzjon ta' l-aspett nominali, hlief fil-każ ta' tajers li għalihom l-għażla tal-qies tidher fl-ewwel kolonna tat-tabelli li hemm fl-Anness 5 għal dan ir-Regolament.
 - 2.21.3. Numru konvenzjonali "d" (is-simbolu "d") li juri d-dijametru nominali tar-rimm u li jikkorrispondi għad-dijametru ta' dan imfisser jew permezz ta' kodiċi (numri taht il-100) jew f'millimetri (numri aktar minn 100). In-numri li jikkorrispondu għaž-żewġ tipi ta' kejl jistgħu jintużaw fil-klassifikazzjoni.

2.21.3.1. Il-valuri tas-simboli “d” imfissra f'millimetri qed jidhru hawn taht:

Kodiċi tad-Dijametru Nominali tar-Rimm – “d”	Valur tas-simbolu “d” imfisser f'mm
8	203
9	229
10	254
11	279
12	305
13	330
14	356
15	381
16	406
17	432
18	457
19	483
20	508
21	533

- 2.22. “Id-dijametru nominali tar-rimm (d)” ifisser id-dijametru tar-rimm li fuqu tajjer ikun imfassal biex jitwahaħhal.
- 2.23. “Rimm” ifisser l-appoġġ, jew għal assemblaġġ ta' tajjer u tubu jew għal tajjer mingħajr tubu, li fuqu titpoġġa x-xoffa ta' ġewwa tat-tajjer.
- 2.24. “Ir-rimm tal-kejl” ifisser ir-rimm speċifikat bħala 'l-wisa' tal-kejl tar-rimm' jew 'il-wisa' tad-disinn tar-rimm' għal klassifikazzjoni partikolari tal-qies ta' tajjer fi kwalunkwe edizzjoni ta' wiehed mill-Istandards Internazzjonali tat-Tajers jew aktar.
- 2.25. “Ir-rimm tat-test” ifisser kwalunkwe rimm speċifikat bħala approvat jew rakkomandat jew awtorizzat f'xi wiehed mill-Istandards Internazzjonali tat-Tajers għal tajjer ta' dik il-klassifikazzjoni ta' qies u tip.
- 2.26. “Standard Internazzjonali tat-Tajers” ifisser kwalunkwe wiehed mid-dokumenti standard li ġejjin:
- (a) L-Organizzazzjoni Teknika Ewropea tat-Tajers u r-Rimmijiet (ETRTO) ⁽¹⁾: “Il-Manwal ta' l-Istandards”
 - (b) L-Organizzazzjoni Teknika Ewropea tat-Tajers u r-Rimmijiet (ETRTO) ⁽¹⁾: “Tagħrif ta' Inġinerija dwar id-Disinn – data skaduta”
 - (c) The Tire and Rim Association Inc. (l-Assoċjazzjoni tat-Tajers u r-Rimmijiet) (TRA) ⁽²⁾: “Il-Ktieb tas-Sena”
 - (d) L-Assoċjazzjoni tal-Manifatturi tat-Tajers tal-Karrozzi tal-Ġappun (JATMA) ⁽³⁾: “Il-Ktieb tas-Sena”
 - (e) L-Assoċjazzjoni tat-Tajers u r-Rimmijiet ta' l-Awstralja (TRAA) ⁽⁴⁾: “Il-Manwal ta' l-Istandards”
 - (f) L-Associação Brasileira de Pneus e Aros (ABPA) ⁽⁵⁾: “Manual de Normal Técnicas”
 - (g) L-Organizzazzjoni Skandinava tat-Tajers u r-Rimmijiet (STRO) ⁽⁶⁾: “Ktieb ta' Tagħrif”
- 2.27. “Tkissir fi bċejjeċ” tfisser it-tkissir ta' bċejjeċ ta' gomma mill-wiċċ ta' barra mfellel tat-tajjer.
- 2.28. “Is-separazzjoni tal-kurdun” tfisser il-firda tal-kurduni mill-ghâta tal-gomma tagħhom.
- 2.29. “Is-separazzjoni tal-ħxuna” tfisser il-firda ta' ħxuniet minn maġenb xulxin.

L-standards tat-tajjer jistgħu jinkisbu mill-indirizzi li ġejjin:

⁽¹⁾ ETRTO, 32 Av. Brugmann – Bte 2, B-1060 Brussell, Il-Belġju

⁽²⁾ TRA, 175 Montrose West Avenue, Suite 150, Copley, Ohio, 44321 L-Istati Uniti ta' l-Amerika

⁽³⁾ JATMA, 9th Floor, Toranomon Building No. 1-12, 1-Chome Toranomon Minato-ku, Tokyo 105, Il-Ġappun

⁽⁴⁾ TRAA, Suite 1, Hawthorn House, 795 Glenferrie Road, Hawthorn, Victoria, 3122 L-Awstralja

⁽⁵⁾ ABPA, Avenida Paulista 244-12º Andar, CEP, 01310 Sao Paulo, SP Il-Brażil

⁽⁶⁾ STRO, Älggatan 48 A, Nb, S-216 15 Malmö, L-Isvezja

- 2.30. "Is-separazzjoni tal-wiċċ ta' barra mfellel tat-tajer" tfisser it-tnehhija tal-wiċċ ta' barra mfellel mill-qafas tat-tajer.
- 2.31. "Indikaturi ta' l-użu tal-wiċċ ta' barra" tfisser l-isporġenzi fil-kanali tal-wiċċ mfellel ta' barra biex jagħtu indikazzjonijiet li jidhru dwar il-grad ta' użu tal-wiċċ mfellel ta' barra.
- 2.32. "Deskrizzjoni tas-servizz" tfisser l-indiċi tat-tagħbija u s-simbolu tal-veloċità tat-tajer mehudin flimkien b'mod speċifiku.
- 2.33. "L-indiċi tat-tagħbija" tfisser kodiċi numeriku li juri t-tagħbija massima li t-tajer jista' jgħabbi.
- Il-lista ta' indiċijiet tat-tagħbija u t-tagħbijiet li jikkorrispondu magħhom jidhru fl-Anness 4 ta' dan ir-Regolament.
- 2.34. "Simbolu tal-veloċità" ifisser:
- 2.34.1. Simbolu alfabetiku li juri l-veloċità li fiha t-tajer jista' jgħabbi t-tagħbija mogħtija mill-indiċi tat-tagħbija assoċjat miegħu.
- 2.34.2. Is-simboli tal-veloċità u l-veloċitajiet li jikkorrispondu magħhom qed jidhru fit-tabella t'hawn taht:

Simbolu tal-veloċità	L-Oghla Veloċità li tikkorrispondi miegħu (km/s)
L	120
M	130
N	140
P	150
Q	160
R	170
S	180
T	190
U	200
H	210
V	240
W	270
Y	300

- 2.35. "Ir-rata tat-tagħbija massima" tfisser il-massa massima li t-tajer jista' jiflah.
- 2.35.1. Għal veloċitajiet li ma jaqbzux il-210 km/s, ir-rata tat-tagħbija massima m'għandhiex tkun aktar mill-valur li jikkorrispondi għall-indiċi tat-tagħbija tat-tajer.
- 2.35.2. Għal veloċitajiet li jaqzbu il-210 km/s, iżda mhux aktar minn 300 km/s, ir-rata tat-tagħbija massima m'għandhiex tkun aktar mill-persentaġġ tal-valur assoċjat ma' l-indiċi tal-kapaċità tat-tagħbija tat-tajer, muri fit-tabella t'hawn taht, b'referenza għall-kapaċità tal-veloċità tal-vettura li fuqha jitwawhal it-tajer:

Simbolu tal-veloċità tat-tajer	Veloċità massima – km/s	Rata ta' tagħbija massima - %
V	210	100,0
	215	98,5
	220	97,0
	225	95,5
	230	94,0
	235	92,5
	240	91,0
W	240	100
	250	95
	260	90
	270	85

Simbolu tal-veloċità tat-tajer	Velocità massima – km/s	Rata ta' tagħbija massima - %
Y	270	100
	280	95
	290	90
	300	85

Għal veloċitajiet massimi intermedji, interpolazzjoni lineari tar-rata massima tat-tagħbija hija awtorizzata.

- 2.36. "Facilità ta' produzzjoni ta' tajers b'wiċċ ġdid" tfisser post jew grupp ta' siti lokalizzati fejn ikunu manifatturati tajers b'wiċċ ġdid.
- 2.37. "It-tfelli mill-ġdid fuq il-wiċċ ta' barra" tfisser terminu ġeneriku għar-rikundizzjonar ta' tajers użati billi jinbidlulhom il-wiċċ mikul ta' barra b'wiehed ġdid. Dan jista' jinkludi wkoll ir-rinnovament tal-wiċċ l-aktar ta' barra tal-hitan tal-ġnub. Dan ikopri l-metodi ta' proċess li ġejjin:
- 2.37.1. "Il-capping ta' fuq" – il-bdil tal-wiċċ ta' barra;
- 2.37.2. "Il-capping mill-ġdid" – il-bdil tal-wiċċ ta' barra fejn il-materjal il-ġdid jibqa' sejjer għal fuq parti mill-hitan tal-ġenb;
- 2.37.3. "Xoffa għal xoffa" – il-bdil tal-wiċċ ta' barra u t-tiġdid tal-hajt tal-ġenb, inkluża parti min-naha t'isfel, jew in-naha t'isfel kollha, tat-tajer.
- 2.38. "Casing" huwa t-tajer mikul li jinkludi l-qafas u l-wiċċ ta' barra u l-materjal tal-hitan tal-ġnub li jkun għad fadal.
- 2.39. "Tindif" huwa l-proċess biex jitneħħa l-materjal il-qadim mill-casing biex jithejja l-wiċċ għall-materjal il-ġdid.
- 2.40. "Tiswija" huwa x-xogħol rimedjali li jsir fuq casings bil-hsara fil-limiti magħrufa.
- 2.41. "Il-materjal tat-tiflil tal-wiċċ ta' barra" huwa materjal f'kundizzjoni li tkun tajba biex jitqiegħed minflok il-wiċċ mikul. Dan jista' jkun f'diversi forom, bħal per eżempju:
- 2.41.1. "Camel-back" – strixxi ta' materjal maqtugħhin minn qabel li jkunu ngħataw is-sura tal-profil sezzjonali meħtieġ u wara jitwāhlu mingħajr l-użu ta' shana mal-casing imhejji. Il-materjal il-ġdid għandu jkun vulkanizzat.
- 2.41.2. "Mkebbeb bl-istrixxi" – strixxa ta' materjal għat-tiflil tal-wiċċ ta' barra li tingħata s-sura direttament u titkebbeb għal fuq il-casing imhejji u li jinbnew sal-kontorn sezzjonali meħtieġ. Il-materjal il-ġdid irid jiġi vulkanizzat.
- 2.41.3. "L-ġhoti dirett ta' sura" – materjal tat-tiflil tal-wiċċ ta' barra li jitneħħa biex jintlahaq il-profil sezzjonali meħtieġ u li jingħata sura direttament għal fuq il-casing imhejji. Il-materjal il-ġdid għandu jkun vulkanizzat.
- 2.41.4. "Vulkanizzat minn qabel" – wiċċ tat-tiflil ta' barra li gie ffurmat u vulkanizzat minn qabel li jiġi applikat direttament għall-casing imhejji. Il-materjal il-ġdid għandu jingħaqad mal-casing.
- 2.42. "Il-kisja tal-hajt tal-ġenb" huwa materjal użat biex jgħatti l-hitan tal-ġenb tal-casing biex b'hekk ikunu jistgħu jsiru l-marki meħtieġa.
- 2.43. "Gomma tal-kuxxin" huwa materjal użat bħala saff biex jgħaqqad il-wiċċ mfellel ta' barra l-ġdid u l-casing u biex jissewwew hsarat żgħar.
- 2.44. "Siment" huwa sustanza likwida adeżiva biex iżomm materjali godda f'posthom qabel il-proċess ta' vulkanizzar.
- 2.45. "Vulkanizzar" huwa terminu użat biex jiddeskrivi l-bdil fil-karatteristiċi fiżiċi tal-materjal il-ġdid li s-soltu jsir bl-applikazzjoni tas-shana u l-pressjoni għal perijodu stabbilit ta' hin taht kundizzjonijiet kontrollati.
- 2.46. "Differenza radjali" tfisser il-varjazzjoni fir-radju tat-tajer imkejjel madwar iċ-ċirkonferenza esterna tal-wiċċ ta' barra mfellel tat-tajer.

- 2.47. “Żbilanċ” ifisser il-kejl tal-varjazzjoni fil-firxa tal-massa madwar l-assi ċentrali tat-tajer. Dan jista’ jitkejjel jew bhala żbilanċ “Statiku” jew “Dinamiku”.

3. IMMARKAR

- 3.1. Eżempju ta’ l-arrangament ta’ marki fuq tajer b’wiċċ ġdid qed jidher fl-Anness 3 għal dan ir-Regolament.
- 3.2. It-tajers b’wiċċ ġdid għandhom juru fuq iż-żewġ hitan tal-ġenb, fil-każ ta’ tajers simetriċi, u mill-anqas fuq il-hajt tal-ġenb ta’ barra fil-każ ta’ tajers mhux simetriċi:
- 3.2.1. L-isem tad-ditta jew il-marka tal-fabbrika;
- 3.2.2. Il-klassifikazzjoni tal-qies tat-tajer kif definit fil-paragrafu 2.21;
- 3.2.3. Indikazzjoni ta’ l-istruttura kif ġej:
- 3.2.3.1. Fuq tajers djaġonali (hxuna mxaqilba); l-ebda indikazzjoni, jew l-ittra “D” impoġġija fuq quddiem tal-marka fuq id-dijametru tar-rimm;
- 3.2.3.2. Fuq tajers bi hxuna radjali; l-ittra “R” impoġġija fuq quddiem tal-marka fuq id-dijametru tar-rimm, u, jekk mixtieq, il-kelma “RADIAL”;
- 3.2.3.3. Fuq tajers *bias belted*, l-ittra “B” impoġġija fuq quddiem tal-marka fuq id-dijametru tar-rimm flimkien mal-kliem “BIAS-BELTED”;
- 3.2.4. Id-deskrizzjoni tas-servizz li tinkludi:
- 3.2.4.1. Indikazzjoni tal-kapaċità tat-tagħbija nominali tat-tajer fil-forma ta’ l-indiċi tat-tagħbija preskritt fil-paragrafu 2.33;
- 3.2.4.2. Indikazzjoni tal-kapaċità tal-veloċità nominali tat-tajer fil-forma tas-simbolu preskritt fil-paragrafu 2.34.
- 3.2.5. Il-kelma “TUBELESS” jekk it-tajer huwa magħmul għal użu mingħajr it-tubu ta’ ġewwa.
- 3.2.6. Il-kelmiet M+S jew MS jew M.S. jew M & S fil-każ ta’ tajer tas-silġ.
- 3.2.7. Id-data meta l-wiċċ ta’ barra tat-tajer tfellel mill-ġdid, kif ġej:
- 3.2.7.1. Sal-31 ta’ Diċembru 1999; jew kif spjegat fil-paragrafu 3.2.7.2. jew fil-forma ta’ grupp ta’ tliet figuri, l-ewwel tnejn juru n-numru tal-ġimgha, waqt li t-tielet is-sena tad-deċennju tal-manifattura. Il-kodiċi tad-data jista’ jkopri perijodu ta’ produzzjoni li jibda mill-ġimgha murija bin-numru tal-ġimgha sa, u li jinkludi, in-numru tal-ġimgha miżjud bi tlieta. Per eżempju, il-marka “253” tista’ turi tajer b’wiċċ ġdid li sar fil-ġimghat 25, 26, 27 jew 28 tas-sena 1993.
- Il-kodiċi tad-data għandu jkun immarkat fuq wiehed mill-hitan tal-ġenb biss.
- 3.2.7.2. Mill-1 ta’ Jannar 2000; fil-forma ta’ grupp ta’ erba’ figuri, l-ewwel tnejn juru l-ġimgha u t-tieni tnejn juru s-sena li fiha it-tajer kellu l-wiċċ ta’ barra mfellel mill-ġdid. Il-kodiċi tad-data jista’ jkopri perijodu ta’ produzzjoni mill-ġimgha murija bin-numru tal-ġimgha sa, u li jinkludi, il-ġimgha u tlieta ohra. Per eżempju, il-marka “2503” tista’ turi tajer b’wiċċ ġdid li jkun sar fil-ġimghat 25, 26, 27 jew 28 tas-sena 2003.
- Il-kodiċi tad-data għandu jkun immarkat fuq wiehed mill-hitan tal-ġenb biss.
- 3.2.8. It-terminu “RETREAD” jew “REMOULD” (wara l-1 ta’ Jannar 1999 il-kelma “RETREAD” biss għandha tintuża). Fuq it-talba ta’ min jagħmel it-tajers b’wiċċ ġdid, jista’ jiżdied l-istess terminu f’lingwi ohra.
- 3.3. Qabel ma jkunu approvati, it-tajers għandhom juru spazju liberu sostanzjalment kbir, li fih tkun tista’ titpoġġa marka ta’ l-approvazzjoni kif imsemmi fil-paragrafu 5.8. u kif muri fl-Anness 2 għal dan ir-Regolament.
- 3.4. Wara l-approvazzjoni, il-marki msemmija fil-paragrafu 5.8. u murija fl-Anness 2 għal dan ir-Regolament, għandhom jitwahhlu fl-isparzu liberu msemmi fil-paragrafu 3.3. Din il-marka għandha titwahhal fuq wiehed mill-hitan tal-ġenb biss.

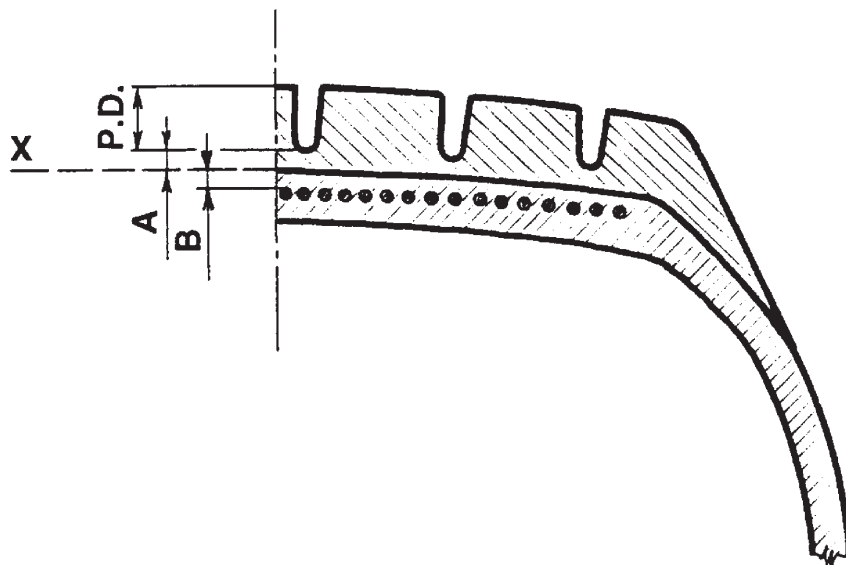
- 3.5. Il-marki msemija fil-paragrafu 3.2. u l-marka ta' l-approvazzjoni preskritta fil-paragrafi 3.4. u 5.8 għandhom ikunu jinqraw b'mod ċar u jkunu ffurmati fuq jew fit-tajer jew inkella jkunu mmarkati b'mod permanenti fuq it-tajer.
 - 3.6. Sakemm kwalunkwe mill-ispeċifikazzjonijiet oriġinali tal-manifattur ikunu għandhom jinqraw wara li jkun sar il-wiċċ ta' barra mfellel mill-ġdid fuq it-tajer, dawn għandhom jibqgħu jiqiesu bħala speċifikazzjonijiet tal-manifattur tat-tajers b'wiċċ ġdid għal dak it-tajer. Jekk dawn l-ispeċifikazzjonijiet oriġinali ma jkunux jghoddu wara li jkun sar il-wiċċ ta' barra mfellel mill-ġdid tat-tajer, dawn għandhom jitnehhew kompletament.
 - 3.7. Il-marka ta' l-approvazzjoni oriġinali "E" jew "e" u n-numru ta' l-approvazzjoni għandhom jitnehhew.
4. L-APPLIKAZZJONI GHALL-APPROVAZZJONI
- Il-proċeduri li ġejjin jghoddu għall-approvazzjoni ta' facilità ta' produzzjoni ta' tajers b'wiċċ ġdid:
- 4.1. L-applikazzjoni għall-approvazzjoni ta' facilità ta' produzzjoni għandha tkun sottomessa mill-possessur ta' l-isem kummerċjali jew tal-marka tal-fabbrika li tkun se titwajjal fuq it-tajer, jew inkella mir-rappreżentant akkreditat kif suppost. Din għandha tispeċifika:
 - 4.1.1. Deskrizzjoni ġenerali ta' l-istruttura tal-facilità li tipproduċi t-tajers b'wiċċ ġdid.
 - 4.1.2. Deskrizzjoni fil-qosor tas-sistema tat-tmexxija tal-kwalità, li tiżgura li l-kontroll effettiv tal-proċeduri tat-tfelli mill-ġdid tal-wiċċ ta' barra tat-tajers jkunu qed jilhqgħu tabilhaqq il-kriterji ta' dan ir-Regolament.
 - 4.1.3. L-ismijiet jew il-marki kummerċjali li għandhom jitwajjalu fuq it-tajers b'wiċċ ġdid li jiġu manifatturati.
 - 4.1.4. It-tagħrif li ġej dwar il-firxa ta' tajers b'wiċċ ġdid:
 - 4.1.4.1. il-firxa tal-qisien tat-tajers;
 - 4.1.4.2. l-istruttura tat-tajers (djagonali jew bi hxuna mxaqilba, *bias-belted* jew radjali);
 - 4.1.4.3. il-kategorija ta' l-użu tat-tajers (tajers normali jew tas-silġ eċċ.);
 - 4.1.4.4. is-sistema tat-tfelli mill-ġdid tal-wiċċ ta' barra tat-tajers u l-metodu ta' l-applikazzjoni tal-materjali l-godda li għandhom jintużaw, kif definit fil-paragrafi 2.37 u 2.41;
 - 4.1.4.5. is-simbolu ta' l-ogħla veloċità tat-tajers li għandu jkollhom il-wiċċ ta' barra mfellel mill-ġdid;
 - 4.1.4.6. l-indiċi ta' l-ogħla tagħbija tat-tajers li għandu jkollhom il-wiċċ ta' barra mfellel mill-ġdid;
 - 4.1.4.7. l-Istandard tat-Tajer Internazzjonali magħżul li għalih tkun tghodd il-firxa tat-tajers.
5. L-APPROVAZZJONI
- 5.1. Għal tajers b'wiċċ ġdid, jehtieg li l-facilità tal-produzzjoni ta' dawn it-tajers tikseb l-approvazzjoni mehtieġa mill-awtoritajiet ta' l-approvazzjoni skond il-kriterji ta' dan ir-Regolament. L-awtorità li tapprova għandha tiehu l-mizuri mehtieġa, kif deskritt f'dan ir-Regolament, biex tiżgura li t-tajers b'wiċċ ġdid fil-facilità tal-produzzjoni rispettiva tabilhaqq tilhaq il-kriterji msemija f'dan ir-Regolament. Il-facilità tal-produzzjoni tat-tajers b'wiċċ ġdid għandha tkun totalment responsabbli biex tiżgura li dawn it-tajers ikunu jilhqgħu tabilhaqq il-kriterji ta' dan ir-Regolament u li dawn ikollhom turija xierqa meta jintużaw b'mod normali.
 - 5.2. Barra mill-kriterji normali għall-valutazzjoni tal-bidu ta' din il-facilità tal-produzzjoni, l-awtorità li tapprova għandha tkun sodisfatta li d-dokumentazzjoni tal-proċeduri, l-operat, l-istruzzjonijiet u ta' l-ispeċifikazzjonijiet pprovduti mill-fornituri tal-materjal ikunu f'lingwa li tkun tista' tiftiehem mill-ewwel mill-operaturi tal-facilità tal-produzzjoni tat-tajers b'wiċċ ġdid.
 - 5.3. L-awtorità li tapprova għandha tiżgura li d-dokumenti tal-proċedura u l-operat għal kull taqsima ta' produzzjoni jkun fihom speċifikazzjonijiet li jkunu xierqa għall-materjali tat-tiswija u l-proċessi li jintużaw, dwar il-limiti ta' hsara li tista' tisewwa jew il-penetrazzjonijiet li jistgħu jsiru fil-qafas tat-tajer, dwar jekk din il-hsara tkunx teżisti jew tkunx ikkawżata matul il-proċessi ta' thejija għat-tfelli mill-ġdid tal-wiċċ ta' barra tat-tajer.

- 5.4. Qabel ma taghti l-approvazzjoni tagħha, l-awtorità għandha tkun sodisfatta li t-tajers b'wiċċ ġdid ikunu konformi ma' dan ir-Regolament u li t-testijiet mehtieġa skond il-paragrafi 6.7. u 6.8 ikunu saru b'suċċess fuq mill-anqas 5 u mhux neċessarjament aktar minn 20 kampjun ta' tajers b'wiċċ ġdid li jkunu jirrappreżentaw il-firxa ta' tajers manifatturati fil-facilità tal-produzzjoni ta' dawn it-tajers.
- 5.5. Fil-każ li jkun hemm riżultat negattiv matul il-provi, għandhom ikunu ttestjati żewġ kampjuni ohra ta' l-istess speċifikazzjoni ta' tajer. Jekk wiehed minn dawn il-kampjuni jew inkella t-tnejn ifallu, għandhom ikunu sottomessi għall-aħħar darba u jiġu ttestjati żewġ kampjuni ohra. Jekk wiehed minn dawn il-kampjuni jew it-tnejn ifallu, l-applikazzjoni għall-approvazzjoni tat-taqsimha tal-produzzjoni ta' tajers b'wiċċ ġdid għandha tiġi miċhuda.
- 5.6. Jekk il-kriterji kollha ta' dan ir-Regolament ikunu ntlahqu, l-approvazzjoni għandha tinghata u għandu jinghata numru ta' l-approvazzjoni għal kull facilità ta' produzzjoni ta' dawn it-tajers li tkun giet approvata. L-ewwel żewġ figuri ta' dan in-numru għandhom juru s-serje ta' l-emendi li jinkorporaw l-aktar emendi tekniċi kbar u riċenti għar-Regolament meta tkun harget l-approvazzjoni. In-numru ta' l-approvazzjoni għandu jkun ippreċedut bis-simbolu "108R", li jfisser li l-approvazzjoni tghodd għal tajer b'wiċċ ġdid kif preskritt f'dan ir-Regolament.
- L-istess awtorità ma tistax tassinja l-istess numru lil taqsimha ta' produzzjoni ohra li tkun koperta b'dan ir-Regolament.
- 5.7. L-avviż ta' l-approvazzjoni jew ta' l-estensjoni, ir-rifjut jew it-tneħħija ta' l-approvazzjoni jew tal-produzzjoni li ma tkunx baqgħet issir skond dan ir-Regolament għandu jkun komunikat lill-Partijiet tal-Ftehim ta' l-1958 li japplika dan ir-Regolament, permezz ta' formula li tkun konformi mal-mudell li jidher fl-Anness 1 għal dan ir-Regolament.
- 5.8. Fuq kull tajer li jkun konformi ma' dan ir-Regolament, fl-ispazju msemmi fil-paragrafu 3.3, u f'żieda mal-marki preskritti fil-paragrafu 3.2, għandha titwaxxal b'mod li jidher sew marka internazzjonali ta' l-approvazzjoni li tkun tikkonsisti minn:
- 5.8.1. Ċirku li jdur ma' l-ittra "E" segwit bin-numru distintiv tal-pajjiż li jkun hareġ l-approvazzjoni ⁽¹⁾; u
- 5.8.2. Numru ta' l-approvazzjoni kif deskritt fil-paragrafu 5.6.
- 5.9. L-Anness 2 għal dan ir-Regolament juri eżempju ta' l-arrangamenti tal-marka ta' l-approvazzjoni.
6. IL-KRITERJI
- 6.1. It-tajers m'għandhomx ikunu aċċettati għall-ewwel tfellil mill-ġdid tal-wiċċ ta' barra sakemm dawn ma jkunux tat-tip approvat u jkollhom il-marka "E" jew "e", hlief li dan il-kriterju m'għandux ikun obbligatorju sa mhux aktar tard mill-1 ta' Jannar 2000.
- 6.1.1. Tajers ta' velocità għolja li jkollhom biss il-marka "ZR" fl-għażla tal-qies tat-tajer u ma jkollhomx deskrizzjoni tas-servizz, ma jistax ikollhom il-wiċċ ta' barra tgħhom imfellel mill-ġdid.
- 6.2. It-tajers bil-wiċċ ta' barra tagħhom diġà mfellel mill-ġdid m'għandhomx ikunu aċċettati għal aktar tfellil mill-ġdid.
- 6.3. L-età tal-casing aċċettat għat-tfellil mill-ġdid m'għandux ikun aktar minn 7 snin; dan għandu jkun ibbażat fuq il-figuri li juru s-sena tal-manifattura tat-tajer oriġinali; eż. tajer immarkat b'kodiċi ta' data "253" jista' jkun aċċettat għat-tfellil mill-ġdid sa l-aħħar tas-sena 2000.
- 6.4. Il-kundizzjonijiet qabel it-tfellil mill-ġdid tal-wiċċ ta' barra tat-tajers:
- 6.4.1. It-tajers għandhom ikunu nodfa u nexfin qabel l-ispezzjoni.
- 6.4.2. Qabel it-tindif, kull tajer għandu jkun eżaminat sew kemm minn gewwa u kemm minn barra biex ikun żgurat li l-wiċċ ta' barra tat-tajer ikun jista' jtfellel mill-ġdid.

⁽¹⁾ 1 għall-Ġermanja, 2 għal Franza, 3 għall-Italja, 4 għall-Olanda, 5 għall-Iżvezja, 6 għall-Belġju, 7 għall-Ungerija, 8 għar-Repubblika Ċeka, 9 għal Spanja, 10 għall-Jugoslavja, 11 għar-Renju Unit, 12 għall-Awstrija, 13 għal-Lussemburgu, 14 għall-Iżvizzera, 15 (vakanti), 16 għan-Norveġja, 17 għall-Finlandja, 18 għad-Danimarka, 19 għar-Rumanija, 20 għall-Polonja, 21 għall-Portugall, 22 għall-Federazzjoni Russa, 23 għall-Greċja, 24 għall-Irlanda, 25 għall-Kroazja, 26 għas-Slovenja, 27 għas-Slovakja, 28 għall-Belarus, 29 għall-Estonja, 30 (vakanti), 31 għall-Bosnia u Herzegovina, 32 għal-Latvja, 33 (vakanti), 34 għall-Bulgarija, 35 (vakanti), 36 għal-Litwanja, 37 għat-Turkija, 38 (vakanti), 39 għall-Ażerbajġan, 40 għall-ex Repubblika Jugoslava tal-Maċedonja, 41 (vakanti), 42 għall-Komunità Ewropea (l-approvazzjonijiet jinghataw mill-Istati Membri tagħha waqt li jużaw is-simbolu ECE rispettiv tagħhom) u 43 għall-Ġappun. Numri sussegwenti għandhom jinghataw lil pajjiżi ohra f'ordni kronoloġiku skond kif dawn ikunu rratifikaw jew dahlu jiffurmaw parti mill-Ftehim Dwar l-Adozzjoni tal-Preskrizzjonijiet Tekniċi Uniformi għar-Roti, Tagħmir u Partijiet ta' Vetturi li jkunu jistgħu jitwaxxlu u/jew jintużaw fuq Vetturi bir-Roti u l-Kundizzjonijiet għall-Għarfien Reċiproku ta' l-Approvazzjonijiet Mogħtija fuq il-Bażi ta' dawn il-Preskrizzjonijiet. In-numri li jkunu assenjati għandhom ikunu komunikati mis-Segretarju-Generali tan-Nazzjonijiet Uniti lill-Partijiet Kontraenti għal dan il-Ftehim.

- 6.4.3. It-tajers li jkollhom hsara li tidher u li tkun ġeġja minhabba taghbija żejda jew nuqqas ta' nefha m'għandux jerga' jiftellel mill-ġdid.
- 6.4.4. It-tajers li juru kull wiehed minn dawn it-tipi ta' hšarat m'għandhomx ikunu aċċettati biex il-wiċċ ta' tagħhom jerga' jiftellel mill-ġdid:
- 6.4.4.1. (a) qsim estensiv li jibqa' sejjer għal ġol-qafas;
- (b) penetrazzjonijiet fil-qafas jew hsara fil-*casing* 'il fuq mis-simbolu tal-veloċità "H", hlief fejn dawn il-*casings* sejin jingħataw simbolu ta' veloċità aktar baxx;
- (c) tiswijiet ta' qabel barra l-limiti speċifikati ta' hsara – ara l-paragrafu 5.3;
- (d) ksur fil-qafas;
- (e) attakk sostanzjali minhabba xi żejt jew kimika;
- (f) ħafna ksur qrib xulxin;
- (g) ix-xoffa ta' ġewwa bil-hsara jew miksur;
- (h) deterjorazzjoni tal- jew hsara fl-inforra li ma tissewwix;
- (i) hsara fix-xoffa ta' ġewwa, hlief hsara żghira fil-*"gomma"* biss;
- (j) kurduni esposti minhabba l-użu żejjed tal-wiċċ imfellel ta' barra jew brix fil-hitan tal-ġenb;
- (k) separazzjoni tal-materjal tal-wiċċ ta' barra mfellel jew tal-hitan tal-ġenb minn mal-qafas b'mod li ma jissewwix;
- (l) hsara strutturali fiż-żona tal-hitan tal-ġenb.
- 6.4.5. Qafas ta' tajer bi ħxuna radjali li jkollu separazzjoni fiċ-ċinturin, hlief għal meta jkun mahlul xi ftit it-tarf taċ-ċinturin, m'għandux ikun aċċettat għat-tfelli mill-ġdid tal-wiċċ ta' barra.
- 6.5. Preparazzjoni:
- 6.5.1. Wara t-tindif, u qabel l-applikazzjoni tal-materjal il-ġdid, kull tajer għandu jkun eżaminat mill-ġdid, almenu minn barra, biex ikun żgurat li dan ikun għadu tajjeb biex il-wiċċ ta' barra tiegħu jiftellel mill-ġdid.
- 6.5.2. Il-wiċċ kollu li fuqu jkun applikat il-materjal il-ġdid għandu jkun thejja mingħjr ebda shana żejda. Il-fibra tal-wiċċ imnaddaf m'għandhiex ikollha laċerazzjonijiet fondi ta' tindif jew materjal mahlul.
- 6.5.3. Fejn ikollu jintuża materjal vulkanizzat minn qabel, il-kontorn tal-parti ppreparata għandu jilhaq il-kriterji tal-manifattur tal-materjal.
- 6.5.4. Truf ta' kurduni mahlula ma jistgħux jintużaw.
- 6.5.5. Il-kurduni tal-*casing* m'għandhom jiġrihom l-ebda hsara waqt il-proċess tal-preparazzjoni.
- 6.5.6. Hsara kkawzata liċ-ċinutrin ta' tajers radjali minhabba t-tindif għandha tkun limitata għal hsara lokalizzata għall-iktar saff ta' barra biss.
- 6.5.7. Il-limiti ta' hsara għal tajers bi ħxuna djaġonali kkawzata mit-tindif għandhom ikunu kif ġej:
- 6.5.7.1. Għal kostruzzjoni ta' ħxuna doppja, m'għandu jkun hemm l-ebda hsara fil-qafas, hlief għal hsara żghira u lokalizzata kkawzata mit-tindif fir-rabta tal-*casing*.
- 6.5.7.2. Għal kostruzzjoni ta' ħxuna doppja u interrutur ta' tajers bla tubu, m'għandu jkun hemm l-ebda hsara fil-qafas u l-interruttur.
- 6.5.7.3. Għal kostruzzjoni ta' ħxuna doppja u interrutur ta' tajers bit-tubu, hsara lokalizzata fl-interruttur hija awtorizzata.

- 6.5.7.4. Għal kostruzzjoni ta' hxuna ta' erba' darbiet jew aktar ta' tajers bla tubu, m'għandu jkun hemm l-ebda hsara fil-qafas jew l-interruttur.
- 6.5.7.5. Għal kostruzzjoni ta' hxuna ta' erba' darbiet jew aktar ta' tajers bit-tubu, il-hsara għandha tkun limitata għall-iktar hxuna ta' barra fil-parti ċentrali biss.
- 6.5.8. Partijiet ta' l-azzar li jkunu esposti għandhom jiġu ttrattati kemm jista' jkun malajr bil-materjal xieraq, kif definit mill-manifattur ta' dak il-materjal apposta.
- 6.6. Tfellil mill-ġdid tal-wiċċ ta' barra tat-tajers:
- 6.6.1. Min jagħmel it-tfellil mill-ġdid tal-wiċċ ta' barra tat-tajers għandu jiżgura li jew il-manifattur jew il-fornitur tal-materjali tat-tiswija, inklużi l-irqajja, ikun responsabbli għal dan li ġej:
- (a) jiddefinixxi metodu(i) ta' applikazzjoni u hażna, jekk ikun mitlub minn min ifellel mill-ġdid il-wiċċ ta' barra tat-tajers, fil-lingwa nazzjonali tal-pajjiż li fih il-materjali jkunu se jintużaw;
 - (b) jiddefinixxi l-limiti ta' hsara li għaliha l-materjali huma mfassla, jekk mitlub minn min ifellel mill-ġdid il-wiċċ ta' barra tat-tajers, fil-lingwa nazzjonali tal-pajjiż li fih il-materjali jkunu se jintużaw;
 - (c) jiżgura li l-irqajja rinfurzati tat-tajers, jekk ikunu applikati tajjeb meta jissewwa l-qafas, ikunu tajbin għal dan il-ghan;
 - (d) jiżgura li l-irqajja jkunu tajbin biex jifilhu d-doppju ta' l-oghla pressjoni tan-nefha, kif mogħti mill-manifattur tat-tajer;
 - (e) jiżgura li kwalunkwe materjal ieħor tat-tiswija jkun tajjeb għas-servizz maħsub.
- 6.6.2. Min ifellel mill-ġdid il-wiċċ ta' barra tat-tajers għandu jkun responsabbli għall-applikazzjoni tajba tal-materjal tat-tiswija u biex jiżgura li t-tiswija tkun hielsa min kull difett li jista' jaffettwa l-hajja sodisfaċenti tas-servizz tat-tajer.
- 6.6.3. Min ifellel mill-ġdid il-wiċċ ta' barra tat-tajers għandu jiżgura li jew il-manifattur jew il-fornitur tal-materjal tat-tfellil mill-ġdid tal-wiċċ ta' barra u tal-hitan tal-genb tat-tajers johroġ speċifikazzjonijiet dwar il-kundizzjonijiet tal-hażna u l-użu biex jiggarantixxi l-kwalitajiet tal-materjal. Jekk ikun mitlub minn min jagħmel it-tfellil mill-ġdid tal-wiċċ ta' barra tat-tajers, dan it-tagħrif għandu jkun fil-lingwa nazzjonali tal-pajjiż li fih il-materjal ikun se jintuża.
- 6.6.4. Min ifellel mill-ġdid il-wiċċ ta' barra tat-tajers għandu jiżgura li l-materjal u/jew il-kompost tat-tiswija jkunu dokumentati f'ċertifikat li johroġ mill-manifattur jew il-fornitur. Il-kompost tal-materjal għandu jkun adatt għall-użu maħsub tat-tajers.
- 6.6.5. It-tajer ipproċessat għandu jkun vulkanizzat kemm jista' jkun malajr wara t-tkomplija tat-tiswijiet kollha u l-operat tal-bini mill-ġdid, u l-aktar skond l-ispeċifikazzjonijiet tal-manifattur tal-materjal.
- 6.6.6. It-tajer għandu jkun vulkanizzat għat-tul ta' hin u skond it-temperatura u l-pressjoni li jkunu xierqa u speċifiċi għall-materjali u t-tagħmir ta' l-ipproċessar li jkunu użati.
- 6.6.7. Il-qisien tal-forma għandhom ikunu tajbin għall-hxuna tal-materjal il-ġdid u l-qies tat-tajer immaddaf. Tajers ta' hxuna radjali, meta jitpoġġew ġol-forma, għandhom ikunu vulkanizzati f'forom radjali jew f'forom maqsumin b'mod radjali biss.
- 6.6.8. Il-hxuna tal-materjal originali wara t-tindif u l-hxuna medja ta' kwalunkwe materjal ġdid taht id-disinn tal-wiċċ ta' barra wara li dan ikun tfellel mill-ġdid, għandu jkun skond kif mogħti fil-paragrafi 6.6.8.1 u 6.6.8.2. Il-hxuna tal-materjal fi kwalunkwe punt, jew tul il-wisa' tal-wiċċ ta' barra mfellel jew madwar iċ-ċirkonferenza tat-tajer, għandha tkun ikkontrollata b'tali mod li jintlahqu d-dispożizzjonijiet tal-paragrafi 6.7.5 u 6.7.6.
- 6.6.8.1. Għal tajers bi hxuna radjali u *bias belted* (mm):
- $$1,5 \leq (A+B) \leq 5 \text{ (minimu 1,5 mm; massimu 5,0 mm)}$$
- $$A \geq 1 \text{ (minimu 1,0 mm)}$$
- $$B \geq 0,5 \text{ (minimu 0,5 mm)}$$



P.D. = Il-fond tad-disinn

X = Il-linja tat-tindif

A = Hxuna medja tal-materjal il-ġdid taht id-disinn

B = Hxuna minima tal-materjal oriġinali fuq iċ-ċinturin wara t-tindif

6.6.8.2. Għal tajers djagonali (hxuna mxaqilba):

Il-hxuna tal-materjal oriġinali fuq l-interruttur għandha tkun $\geq 0,00$ mm.

Il-hxuna medja tal-materjal il-ġdid fuq il-linja tal-casing mnaddfa għandha tkun $\geq 2,00$ mm.

Maghduda flimkien, il-hxuna tal-materjal oriġinali u ġdid taht il-baži ta' l-iskanalaturi tad-disinn tal-wiċċ ta' barra mfellel tat-tajers għandha tkun $\geq 2,00$ u $\leq 5,00$ mm.

- 6.6.9. Id-deskrizzjoni tas-servizz ta' tajer b'wiċċ ġdid m'għandhiex turi la simbolu ta' velocità oghla u lanqas indiċi ta' tagħbija oghla minn dak tat-tajer oriġinali, fl-ewwel hajja tiegħu.
- 6.6.10. Il-kapaċità minima tal-veloċità ta' tajer b'wiċċ ġdid għandha tkun ta' 120 km/s (is-simbolu tal-veloċità "L"), waqt li dik massima għandha tkun ta' 300 km/s (is-simbolu tal-veloċità "Y").
- 6.6.11. L-indikaturi ta' l-użu tal-wiċċ imfellel ta' barra għandhom ikunu inkorporati kif ġej:
- 6.6.11.1. It-tajer pnevmatiku b'wiċċ ġdid għandu jinkludi mhux inqas minn sitt ringieli trasversali ta' indikaturi ta' l-użu, kemm jista' jkun imbegħdin l-istess minn xulxin u mpoġġija fil-kanali ewlenin tal-wiċċ ta' barra. L-indikaturi għandhom ikunu tali li ma jkunux jistgħu jithawdu max-xoffa tal-materjal bejn l-istrixxi jew il-blokki tal-wiċċ ta' barra.
- 6.6.11.2. Madankollu, fil-każ ta' tajers iddisinjati biex jintramaw fuq rimmijiet ta' dijametru nominali tal-kodiċi 12 jew inqas, erba' ringieli ta' indikaturi ta' użu tal-wiċċ ta' barra huma awtorizzati.
- 6.6.11.3. L-indikaturi ta' l-użu tal-wiċċ ta' barra għandu jkollhom mezz biex juru, b'tolleranza ta' $+ 0.60/-0.00$ mm, meta l-kanali tal-wiċċ ta' barra ma jkunux għadhom aktar minn 1,6 mm bħala fond.
- 6.6.11.4. L-gholi ta' l-indikaturi ta' l-użu tal-wiċċ ta' barra għandu jkun stabbilit billi tittejjel id-differenza bejn il-fond mill-wiċċ ta' barra sal-parti ta' fuq ta' l-indikaturi u l-baži tal-kanali tal-wiċċ ta' barra, qrib in-niżla fil-baži ta' l-indikaturi ta' l-użu tal-wiċċ ta' barra.

- 6.7. Spezzjoni:
- 6.7.1. Wara li jkun gie vulkanizzat, waqt li jinżamm grad ta' shana fih, kull tajer b'wiċċ ġdid għandu jiġi eżaminat biex ikun żgurat li dan ikun hieles minn kwalunkwe difett li jkun jidher. Waqt jew wara t-tfelli mill-ġdid tal-wiċċ ta' barra, it-tajer għandu jintnefah għal mill-anqas 1,5 bar għall-eżami. Fejn ikun hemm difett li jidher fil-profil tat-tajer (eż. nuffata, tghawwiġ 'il ġewwa, eċċ.), it-tajer għandu jiġi eżaminat speċifikament biex tkun stabbilita l-kawża ta' dan id-difett.
- 6.7.2. Qabel, waqt jew wara t-tfelli mill-ġdid tal-wiċċ ta' barra, it-tajer għandu jkun verifikat mill-inqas darba għall-integrità ta' l-istruttura tiegħu permezz ta' metodu ta' spezzjoni.
- 6.7.3. Għall-ghanijiet tal-kontroll tal-kwalità, numru ta' tajers bil-wiċċ ta' barra tagħhom imfellel mill-ġdid għandhom ikunu sottomessi għal provi jew eżami distruttivi jew non-distruttivi. Il-kwantità ta' tajers verifikati u r-riżultati għandhom jiġu rreġistrati.
- 6.7.4. Wara t-tfelli mill-ġdid tal-wiċċ ta' barra, il-qisien tat-tajer b'wiċċ ġdid, meta dan ikun tkejjel skond l-Anness 6 għal dan ir-Regolament, għandhom ikunu skond jew il-qisien ikkalkulati skond il-proċeduri tal-paragrafu 7 jew għal dawk mogħtija fl-Anness 5 għal dan ir-Regolament.
- 6.7.5. Id-differenza radjali tat-tajer b'wiċċ ġdid m'għandux ikun ta' aktar minn 1,5 mm (+0,4 mm tolleranza ta' kejl).
- 6.7.6. L-iżbilanċ statiku massimu tat-tajer b'wiċċ ġdid, imkejjel fid-dijametru tar-rimm, m'għandux ikun aktar minn 1,5 % tal-massa tat-tajer.
- 6.7.7. L-indikaturi ta' l-użu tal-wiċċ ta' barra għandhom ikunu konformi mal-kriterji tal-paragrafu 6.6.11.
- 6.8. It-test tat-turija:
- 6.8.1. Tajers, li l-wiċċ tagħhom ikun tfellel mill-ġdid biex ikunu konformi ma' dan ir-Regolament, għandhom ikunu kapaci jghaddu mit-test tat-tagħbija/veloċità kif speċifikat fl-Anness 7 għal dan ir-Regolament.
- 6.8.2. Tajer b'wiċċ ġdid, li wara li jkun gie sottoemss għat-test tat-tagħbija/veloċità ma jurix kwalunkwe separazzjoni fil-wiċċ ta' barra jew fil-hxuna jew fil-kurdun, tkissir fi bċeġjeċ jew inkella xi kurduni miksura, għandu jitqies li jkun għadda mit-test.
- 6.8.3. Id-dijametru ta' barra tat-tajer, imkejjel sitt sghat wara li jkun sar fuqu t-test tat-tagħbija/veloċità, m'għandux ivarja b'aktar minn ± 3.5 % mid-dijametru ta' barra meta dan ikun tkejjel qabel it-test.
7. SPECIFIKAZZJONIJIET
- 7.1. It-tajers, li l-wiċċ ta' barra tagħhom ikunu tfellel mill-ġdid biex ikunu konformi ma' dan ir-Regolament, għandhom ikunu skond il-qisien li ġejjin:
- 7.1.1. Il-wisa' tas-sezzjoni:
- 7.1.1.1. Il-wisa' tas-sezzjoni għandha tkun ikkalkulata bil-formula li ġejja:

$$S = S_1 + K (A - A_1)$$

fejn:

S: hija l-wisa' attwali tas-sezzjoni f'millimetri kif imkejla fuq ir-rimm tal-prova;

S_1 : huwa l-valur tal-"Wisa' tas-Sezzjoni tad-Disinn", riferut għar-rimm tal-kejl, kif ikkwotat fl-Istandard Internazzjonali tat-Tajers, speċifikat minn min ifellel mill-ġdid il-wiċċ ta' barra tat-tajers għall-qies tat-tajer in kwistjoni;

A: hija l-wisa' tar-rimm tat-test f'millimetri;

A_1 : hija l-wisa' f'millimetri tar-rimm tal-kejl, kif ikkwotat fl-Istandard Internazzjonali tat-Tajers, speċifikat minn min ifellel mill-ġdid il-wiċċ ta' barra tat-tajers għall-qies tat-tajer in kwistjoni.

K: huwa fattur u għandu jittiehed bhala uguali għal 0,4.

7.1.2. Id-dijametru ta' barra:

7.1.2.1. Id-dijametru teoretiku ta' barra ta' tajer b'wiċċ ġdid għandu jkun ikkalkulat bil-formula li ġejja:

$$D = d + 2H$$

fejn:

D: huwa d-dijametru teoretiku ta' barra f'millimetri;

d: huwa n-numru konvenzjonali ddefinit fil-paragrafu 2.21.3 f'millimetri;

H: huwa l-gholi nominali tas-sezzjoni f'millimetri u huwa ugwal għal S_n immultiplikat b'0,01 R_a

fejn:

S_n : hija l-wisa' nominali tas-sezzjoni f'millimetri;

R_a : huwa r-ratio ta' l-aspett nominali.

Is-simboli kollha t'hawn fuq huma skond kif ikkwotati fl-għażla tal-qies tat-tajer, kif muri fuq il-hajt tal-ġenb tat-tajer, skond il-kriterji tal-paragrafu 3.2.2 u definit fil-paragrafu 2.21.

7.1.2.2. Madankollu, għal tajers li l-għażla tidher fl-ewwel kolonna tat-tabelli li hemm fl-Anness 5 għar-Regolament ECE Nru. 30, id-dijametru ta' barra għandu jkun dak mogħti f'dawk it-tabelli.

7.1.3. Il-metodu ta' kif jitkejlu tajers b'wiċċ ġdid:

7.1.3.1. Il-qisien ta' tajers b'wiċċ ġdid għandhom jitkejlu skond il-proċeduri mogħtija fl-Anness 6 għal dan ir-Regolament.

7.1.4. L-ispeċifikazzjonijiet tal-wisa' tas-sezzjoni:

7.1.4.1. Il-wisa' ġenerali attwali tista' tkun anqas mill-wisa' jew il-wisghat tas-sezzjoni stabbiliti fil-paragrafu 7.1.

7.1.4.2. Il-wisa' ġenerali attwali tista' wkoll tkun aktar mill-valur jew il-valuri stabbiliti fil-paragrafu 7.1 b':

7.1.4.2.1. 4 % fil-każ ta' tajers bi ħxuna radjali u

7.1.4.2.2. 6 % fil-każ ta' tajers bi ħxuna djaġonali (ħxuna mxaqilba) u *bias belted*.

7.1.4.2.3. Barra minn hekk, jekk it-tajer ikollu strixxa protettiva speċjali, il-wisa' tista' tkun akbar sa 8 mm 'l fuq mit-tolleranzi mogħtija fil-paragrafi 7.1.4.2.1. u 7.1.4.2.2.

7.1.5. L-ispeċifikazzjonijiet tad-dijametru ta' barra:

7.1.5.1. Id-dijametru attwali ta' barra ta' tajer b'wiċċ ġdid m'għandux ikun barra l-valuri ta' D_{min} u D_{mass} miksuba bil-formuli li ġejjin:

$$D_{min} = d + (2H \times a)$$

$$D_{mass} = d + (2H \times b)$$

fejn:

7.1.5.1.1. Għal qisien mhux mogħtija fit-tabelli fl-Anness 5 għal dan ir-Regolament, "H" u "d" huma kif definiti fil-paragrafu 7.1.2.1.

7.1.5.1.2. Għall-qisien imsemmija fil-paragrafu 7.1.2.2 fuq:

$$H = 0,5 (D - d)$$

fejn "D" huwa d-dijametru ta' barra u "d" id-dijametru nominali tar-rimm ikkwotat fit-tabelli msemmija fuq għall-qies in kwistjoni.

7.1.5.1.3. Il-ko-effiċjent "a" = 0,97

7.1.5.1.4. Il-ko-effiċjent "b" huwa:

	Tajers radjali	Tajers bi hxuna djaġonali (hxuna mxaqilba) u <i>bias belted</i>
għal tajers ta' użu normali	1,04	1,08

7.1.5.2. Għal tajers tas-silġ, id-dijametru massimu ta' barra (Dmass), ikkalkulat fil-paragrafu 7.1.5.1, jista' jiżdied sa mhux aktar minn 1 %.

8. MODIFIKA FL-APPROVAZZJONI

8.1. Kull modifika dwar facilità ta' produzzjoni ta' tajers b'wiċċ ġdid, li temenda kwalunkwe tagħrif mogħti mill-facilità tal-produzzjoni ta' dawn it-tajers fl-Applikazzjoni għall-Approvazzjoni, ara l-paragrafu 4, għandha tkun notifikata lill-awtorità li tapprova li tkun approvat dik it-taqsimha ta' produzzjoni. Dik l-awtorità, imbagħad, tista' jew:

8.1.1. Tikkunsidra li l-modifikazzjonijiet li jkunu saru x'aktarx ma jkollhomx effett sostanzjalment hazin u li fi kwalunkwe każ il-facilità tal-produzzjoni ta' dawn it-tajers għadha tilhaq il-kriterji; jew

8.1.2. Titlob biex isir aktar sħarriġ ta' l-approvazzjoni.

8.2. Il-konferma jew ir-rifjut ta' approvazzjoni, li tkun tispeċifika l-modifikazzjonijiet, għandha tkun mgħarrfa lill-Partijiet tal-Ftehim li japplikaw dan ir-Regolament skond il-proċedura speċifikata fil-paragrafu 5.7.

9. IL-KONFORMITÀ TAL-PRODUZZJONI

Il-proċeduri ta' produzzjoni għandhom ikunu konformi ma' daww stabbiliti fil-Ftehim, l-Appendiċi 2 (E/ECE/324-E/ECE/TRANS/505/Rev.2), skond il-kriterji li ġejjin:

9.1. Il-facilità tal-produzzjoni ta' tajers b'wiċċ ġdid, approvata skond dan ir-Regolament, għandha tkun konformi mal-kriterji stabbiliti fil-paragrafu 6.

9.2. Id-detentur ta' l-approvazzjoni għandu jiżgura li, matul kull sena ta' produzzjoni, u b'firxa matul is-sena kollha, mill-inqas in-numru ta' tajers li ġejjin, li jkunu rappreżentattivi ta' il-firxa li tkun qed tiġi manifatturata, ikunu verifikati u ttestjati kif preskritt f'dan ir-Regolament:

9.2.1. 0,01 % tal-produzzjoni annwali shiha, iżda fi kwalunkwe każ mhux inqas minn 5 u mhux aktar minn 20.

9.3. Jekk il-kriterji tal-paragrafu 9.2 jitwettqu minn jew taħt il-kontroll ta' l-awtorità li tapprova, ir-riżultati jistgħu jintużaw bħala parti minn, jew minflok, daww preskritti fil-paragrafu 9.4.

9.4. L-awtorità li tkun approvat il-facilità tal-produzzjoni tat-tfelli mill-ġdid tal-wiċċ ta' barra tat-tajers tista', f'kull żmien, tivverifika l-metodi tal-kontroll tal-konformità applikati f'kull facilità tal-produzzjoni. Għal kull facilità tal-produzzjoni, l-awtorità li tapprova t-tip għandha tiġbor kampjuni bl-addoċċ matul kull sena ta' produzzjoni, u mill-inqas in-numru ta' tajers li ġejjin, li jkunu rappreżentattivi tal-firxa li tkun qed tiġi manifatturata, għandhom jiġu verifikati u ttestjati kif preskritt f'dan ir-Regolament:

9.4.1. 0,01 % tal-produzzjoni annwali shiha, iżda f'kull każ mhux inqas minn 5 u mhux aktar minn 20.

9.5. It-testijiet u l-verifiki tal-paragrafu 9.4 jistgħu jiehdu post daww meħtieġa fil-paragrafu 9.2.

10. PENALI GĦAL NUQQAS TA' KONFORMITÀ FIL-PRODUZZJONI

10.1. L-approvazzjoni mogħtija lil facilità ta' produzzjoni ta' tfelli mill-ġdid tal-wiċċ ta' barra tat-tajers skond dan ir-Regolament, tista' titneħħa jekk il-kriterji tal-paragrafu 9 ma jkunux konformi jew jekk din il-facilità tal-produzzjoni jew it-tajers b'wiċċ ġdid manifatturati minnha jkunu naqsu milli jilhqqu l-kriterji preskritti f'dak il-paragrafu.

10.2. Jekk Parti għall-Ftehim li tapplika dan ir-Regolament tirtira approvazzjoni li tkun tat diġà, din għandha tavża minnufih lill-Partijiet Kontraenti l-oħra għall-Ftehim ta' l-1958 li jkunu qed japplikaw dan ir-Regolament. Dan għandha tagħmlu permezz ta' formola ta' komunikazzjoni li tkun konformi għall-mudell muri fl-Anness 1 għal dan ir-Regolament.

11. PRODUZZJONI LI TWAQQFET GHAL KOLLOX

L-awtorità li tkun tat l-approvazzjoni tal-facilità tal-produzzjoni ta' tajers b'wiċċ ġdid għandha tkun mgħarrfa jekk l-operat u l-manifattura ta' tajers b'wiċċ ġdid, li jkunu ġew approvati fl-iskop ta' dan ir-Regolament, jieqfu. Meta l-awtorità tirċievi din l-informazzjoni, din għandha tgħaddiha lill-Partijiet l-oħra għall-Ftehim ta' l-1958 li jkunu qed japplikaw dan ir-Regolament. Dan għandha tagħmlu permezz ta' formola ta' komunikazzjoni li tkun konformi mal-mudell muri fl-Anness 1 għal dan ir-Regolament.

12. ISMIJJIET U INDIRIZZI TA' SERVIZZI TEKNIĊI LI HUMA RESPONSABBLI BIEX IWETTQU TESTIJJIET TA' L-APPROVAZZJONI, TA' LABORATORJI FEJN ISIRU T-TESTIJJIET, U TA' DIPARTIMENTI AMMINISTRATTIVI

12.1. Il-Partijiet għall-Ftehim ta' l-1958 li japplikaw dan ir-Regolament għandhom jgħaddu lis-Segretarjat tan-Nazzjonijiet Uniti l-ismijiet u l-indirizzi tas-servizzi tekniċi li huma responsabbli li jwettqu testijiet ta' l-approvazzjoni u, fejn ikun jgħodd, tal-laboratorji approvati li fihom isiru t-testijiet, kif ukoll ta' dipartimenti amministrattivi li jagħtu l-approvazzjoni u li lilhom għandhom jintbagħtu l-formoli li jiċċertifikaw l-approvazzjoni jew ir-rifjut jew l-irtirar ta' approvazzjoni tal-produzzjoni li żgur tkun twaqqfet, liema approvazzjonijiet ikunu harġu f'pajjiżi oħra.

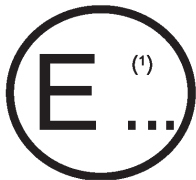
12.2. Il-Partijiet għall-Ftehim ta' l-1958 li japplikaw dan ir-Regolament, jistgħu jużaw laboratorji ta' manifatturi ta' tajers jew ta' facilitàjiet ta' produzzjoni ta' tajers b'wiċċ ġdid u jistgħu jagħzlu, bhala laboratorji approvati tat-test, dawk li jinstabu jew fit-territorju ta' dik il-Parti jew fit-territorju ta' Parti oħra għall-Ftehim ta' l-1958. Dan ikun jiddependi minn jekk id-dipartiment amministrattiv kompetenti ta' dan ta' l-aħħar ikunx aċċetta b'mod preliminari din il-proċedura.

12.3. Fejn Parti għall-Ftehim ta' l-1958 tapplika l-paragrafu 12.2, din tista', jekk tkun tixtieq, tkun rappreżentata waqt it-testijiet.

ANNEX 1

KOMUNIKAZZJONI

(format massimu: A4 (210 x 297 mm))



Mahruġa minn: L-isem ta' l-amministrazzjoni:

.....

.....

.....

Dwar: ⁽²⁾

APPROVAZZJONI MOGHTIJA

APPROVAZZJONI ESTIŻA

APPROVAZZJONI RIFJUTATA

APPROVAZZJONI RTIRATA

PRODUZZJONI LI TWAQQFET GHAL KOLLOX

ta' faċilità ta' produzzjoni ta' tajers b'wiċċ ġdid skond ir-Regolament Nru. 108

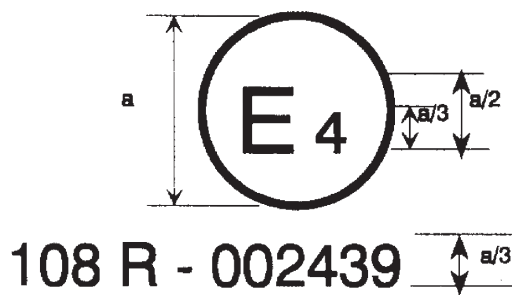
Nru ta' l-Approvazzjoni: Nru ta' l-Estensjoni:

1. L-isem jew il-marka tal-fabbrika ta' min jagħmel it-tajers b'wiċċ ġdid:
2. L-isem u l-indirizz tal-faċilità tal-produzzjoni ta' tajers b'wiċċ ġdid:
.....
3. Jekk jgħodd, l-isem u l-indirizz tar-rappreżentant ta' min jagħmel it-tajers b'wiċċ ġdid:
.....
4. Deskrizzjoni fil-qosor bhal fil-paragrafi 4.1.3 u 4.1.4 ta' dan ir-Regolament:
5. Servizz tekniku u, fejn ikun jgħodd, il-laboratorju tat-test approvat għall-ghanijiet ta' approvazzjoni jew verifika ta' konformità:
.....
6. Data tar-rapport mahruġ minn dak is-servizz:
7. Numru tar-rapport mahruġ minn dak is-servizz:
8. Raġuni(jiet) għall-estensjoni (jekk jgħodd):
9. Rimarki oħra:
10. Post:
11. Data:
12. Firma:
13. Mehmuża ma' din il-komunikazzjoni hemm lista ta' dokumenti fil-fajl ta' l-approvazzjoni li jinstab għand l-Awtorità li tapprova li kienet qieset din l-approvazzjoni, u li jistgħu jinkisbu fuq talba.

⁽¹⁾ In-numru distintiv tal-pajjiż li jkun ta'estenda/irrifjuta/irtira approvazzjoni (ara d-dispożizzjonijiet ta' l-approvazzjoni fir-Regolament).⁽²⁾ Hassar dak li ma japplikax.

ANNEX 2

L-ARRANĠAMENT TAL-MARKA TA' L-APPROVAZZJONI



$a = 12 \text{ mm min}$

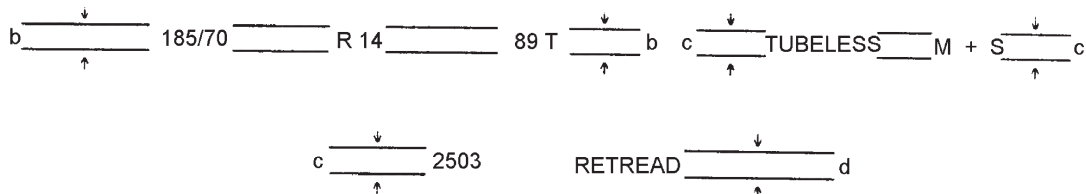
Il-marka ta' l-approvazzjoni t'hawn fuq li tkun twahhlet fuq tajer b'wiċċ ġdid turi li l-faciltà tal-produzzjoni ta' tajers b'wiċċ ġdid ikkonċernata nġhatat approvazzjoni mill-Olanda (E4) taht in-numru ta' l-approvazzjoni 108R002439; il-kriterji ta' dan ir-Regolament intlahqu fil-forma oriġinali tiegħu (00).

In-numru ta' l-approvazzjoni għandu jitpoġġa qrib iċ-ċirku jew fuq jew taht is-simbolu "E" jew inkella fuq il-lemin jew ix-xellug ta' dik l-ittra. Il-figuri tan-numru ta' l-approvazzjoni għandu jkun fuq l-istess naha ta' l-ittra "E" u jħares fl-istess direzzjoni. L-użu ta' numri Rumani bħala numri ta' approvazzjoni għandhom ikunu evitati biex ikun evitat kull taħwid ma' simboli oħrajn.

ANNEX 3

L-ARRANĠAMENT TAL-MARKI TA' TAJER BIL-WIĊĊ TA' BARRA ĠDID

Eżempju ta' marki li għandu jkun hemm fuq tajers b'wiċċ ġdid li jitpoġġew fuq is-suq wara d-dhul fis-sehh ta'dan ir-Regolament



b : 6 mm (min.)
 c : 4 mm (min.)
 d : 3 mm (min.)
 u mill-1998, 4 mm (min.)

Dawn il-marki jiddefinixxu tajer bil-wiċĊ ta' barra mfellel li għandu:

- wisa' nominali tas-sezzjoni ta' 185;
- *ratio* ta' l-aspett nominali ta' 70;
- struttura ta' ħxuna radjali (R);
- dijametru nominali tar-rimm tal-kodiċi 14;
- għandu deskrizzjoni tas-servizz "89T", li turi li dan għandu kapacià tat-tagħbija ta' 580 kilo li tikkorrispondi għall-indiċi tat-tagħbija "89", u kapacià ta' veloċità massima ta' 190 km/s li tikkorrispondi għas-simbolu tal-veloċità "T";
- jitwahhal mingħajr it-tubu ta' ġewwa ("TUBELESS");
- huwa tajer tas-silġ (M+S);
- il-wiċĊ ta' barra ġie mfellel mill-ġdid fil-ġimħat 25, 26, 27 jew 28 tas-sena 2003.

Il-pożizzjoni u l-ordni tal-marki li jsawru l-għażla tat-tajer għandhom ikunu kif ġej:

- (a) L-għażla tal-qies, li tinkludi l-wisa' nominali tas-sezzjoni, il-proporzjon ta' l-aspett nominali, is-simbolu tat-tip ta' l-istruttura (fejn ikun jgħodd) u d-dijametru nominali tar-rimm, għandhom ikunu fi grupp kif muri fl-eżempju ta' fuq, jiġifieri: 185/70 R 14;
- (b) Id-deskrizzjoni tas-servizz, li tinkludi l-indiċi tat-tagħbija u s-simbolu tal-veloċità, għandhom jitpoġġew flimkien hdejn l-għażla tal-qies. Din tista' tiġi qabel l-għażla tal-qies jew wara din, jew inkella titpoġġa fuqha jew taħtha;
- (c) Is-simboli "TUBELESS", "REINFORCED" u "M+S" jistgħu jkunu xi ftit 'il bogħod mis-simbolu ta' l-għażla tal-qies.
- (d) Il-kelma "RETREAD" tista' tkun ftit 'il bogħod mis-simbolu ta' l-għażla tal-qies.

ANNEX 4

LISTA TA' L-INDIĊIJET TA' TAGHBIIJA U L-KAPAĊITAJIET TAT-TAGHBIIJA KORRISPONDENTI

indiċijiet ta' taghbija (li) u l-kapaċitajiet tat-taghbija - kg													
LI	kg	LI	kg	LI	kg	LI	kg	LI	kg	LI	kg	LI	kg
0	45	40	140	80	450	120	1 400	160	4 500	200	14 000	240	45 000
1	46,2	41	145	81	462	121	1 450	161	4 625	201	14 500	241	46 250
2	47,5	42	150	82	475	122	1 500	162	4 750	202	15 000	242	47 500
3	48,7	43	155	83	487	123	1 550	163	4 875	203	15 500	243	48 750
4	50	44	160	84	500	124	1 600	164	5 000	204	16 000	244	50 000
5	51,5	45	165	85	515	125	1 650	165	5 150	205	16 500	245	51 500
6	53	46	170	86	530	126	1 700	166	5 300	206	17 000	246	53 000
7	54,5	47	175	87	545	127	1 750	167	5 450	207	17 500	247	54 500
8	56	48	180	88	560	128	1 800	168	5 600	208	18 000	248	56 000
9	58	49	185	89	580	129	1 850	169	5 800	209	18 500	249	58 000
10	60	50	190	90	600	130	1 900	170	6 000	210	19 000	250	60 000
11	61,5	51	195	91	615	131	1 950	171	6 150	211	19 500	251	61 500
12	63	52	200	92	630	132	2 000	172	6 300	212	20 000	252	63 000
13	65	53	206	93	650	133	2 060	173	6 500	213	20 600	253	65 000
14	67	54	212	94	670	134	2 120	174	6 700	214	21 200	254	67 000
15	69	55	218	95	690	135	2 180	175	6 900	215	21 800	255	69 000
16	71	56	224	96	710	136	2 240	176	7 100	216	22 400	256	71 000
17	73	57	230	97	730	137	2 300	177	7 300	217	23 000	257	73 000
18	75	58	236	98	750	138	2 360	178	7 500	218	23 600	258	75 000
19	77,5	59	243	99	775	139	2 430	179	7 750	219	24 300	259	77 500
20	80	60	250	100	800	140	2 500	180	8 000	220	25 000	260	80 000
21	82,5	61	257	101	825	141	2 575	181	8 250	221	25 750	261	82 500
22	85	62	265	102	850	142	2 650	182	8 500	222	26 500	262	85 000
23	87,5	63	272	103	875	143	2 725	183	8 750	223	27 250	263	87 500
24	90	64	280	104	900	144	2 800	184	9 000	224	28 000	264	90 000
25	92,5	65	290	105	925	145	2 900	185	9 250	225	29 000	265	92 500
26	95	66	300	106	950	146	3 000	186	9 500	226	30 000	266	95 000
27	97,5	67	307	107	975	147	3 075	187	9 750	227	30 750	267	97 500
28	100	68	315	108	1 000	148	3 150	188	10 000	228	31 500	268	100 000
29	103	69	325	109	1 030	149	3 250	189	10 300	229	32 500	269	103 000
30	106	70	335	110	1 060	150	3 350	190	10 600	230	33 500	270	106 000
31	109	71	345	111	1 090	151	3 450	191	10 900	231	34 500	271	109 000
32	112	72	355	112	1 120	152	3 550	192	11 200	232	35 500	272	112 000
33	115	73	365	113	1 150	153	3 650	193	11 500	233	36 500	273	115 000
34	118	74	375	114	1 180	154	3 750	194	11 800	234	37 500	274	118 000
35	121	75	387	115	1 215	155	3 875	195	12 150	235	38 750	275	121 500
36	125	76	400	116	1 250	156	4 000	196	12 500	236	40 000	276	125 000
37	128	77	412	117	1 285	157	4 125	197	12 850	237	41 250	277	128 500
38	132	78	425	118	1 320	158	4 250	198	13 200	238	42 500	278	132 000
39	136	79	437	119	1 360	159	4 375	199	13 600	239	43 750	279	136 000

ANNEX 5

L-GHAŻLA TAL-QIES U L-QISIEN TAT-TAJER

(skond ir-regolament ECE Nru. 30)

ghal din l-informazzjoni, irreferi għall-anness 5 tar-regolament ECE Nru. 30

ANNEX 6

IL-METODU LI BIH JITKEJLU T-TAJERS PNEWMATIĊI

1. Il-preparazzjoni tat-tajer
 - 1.1. It-tajer għandu jitwajjal fuq ir-rimm tat-test speċifikat minn min ifellel il-wiċċ tat-tajers mill-ġdid u jintnefah għall-pressjoni minn 3 sa 3,5 bar.
 - 1.2. Il-pressjoni tat-tajer għandha tkun aġġustata kif ġej:
 - 1.2.1. għal tajers standard li jkunu *bias belted* – sa 1,7 bar;
 - 1.2.2 għal tajers bi hxuna djagonali (hxuna mxaqilba) – sa:

Rata tal-hxuna	Pressjoni (bar) għas-simbolu tal-velocità		
	L, M, N	P, Q, R, S	T, U, H, V
4	1,7	2,0	—
6	2,1	2,4	2,6
8	2,5	2,8	3,0

- 1.2.3. għal tajers radjali standard – sa 1,8 bar;
- 1.2.4. għal tajers rinfurzati – sa 2,3 bar.
2. Il-Proċedura tat-Test
 - 2.1. It-tajer, armat fuq ir-rimm tiegħu, għandu jkun trattat fit-temperatura ta' l-ambjent tal-kamra għal mhux inqas minn 24 siegħa, hlief fejn ikun mehtieg mod ieħor bil-paragrafu 6.8.3 ta' dan ir-Regolament.
 - 2.2. Il-pressjoni tat-tajer għandha tkun aġġustata mill-ġdid sal-livell speċifikat fil-paragrafu 1.2 ta' dan l-Anness.
 - 2.3. Il-wisa' ġenerali għandha titkejjel f'sitt punti spazjati l-istess bejniethom madwar it-tajer, waqt li titqies il-hxuna ta' kwalunkwe strixxi protettivi. L-ogħla qari li jinkiseb għandu jitqies bhala l-wisa' ġenerali.
 - 2.4. Id-dijametru ta' barra għandu jkun kalkulat minn kejl ta' l-ogħla ċirkonferenza tat-tajer minfuh.

ANNEX 7

IL-PROCEDURA GHAT-TESTIJET TAL-KAPAĊITÀ TAT-TAGHBİJA/VELOĊITÀ

(Fil-prinċipju skond l-anness 7 tar-regolament Nru. 30)

1. It-tnejn tat-tajer

1.1. Arma t-tajer b'wiċċ ġdid fuq ir-rimm tat-test speċifikat minn min ifellel il-wiċċ ta' barra mill-ġdid tat-tajers.

1.2. Onfoh it-tajer għall-pressjoni xierqa kif muri (f'bars) fit-tabella t'hawn taht:

Kategorija tal-veloċità	Tajers djagonali (hxuna mxaqilba)			Tajers radjali		Tajers Bias-belted
	Rata tal-hxuna			Standard	Rinfurzati	Standard
	4	6	8			
L, M, N	2,3	2,7	3,0	2,4	—	—
P, Q, R, S	2,6	3,0	3,3	2,6	3,0	2,6
T, U, H	2,8	3,2	3,5	2,8	3,2	2,8
V	3,0	3,4	3,7	3,0	3,4	—
W u Y				3,2	3,6	

1.3. L-unità tal-produzzjoni tat-tajers b'wiċċ ġdid tista' titlob, u taghti r-raġunijiet, biex tintuża pressjoni ta' l-infih fit-test illi tkun differenti minn daww mogħtija fil-paragrafu 1.2 ta' dan l-anness. F'każ bħal dan, it-tajer għandu jitnefah sal-pressjoni mitluba.

1.4. Itratta t-tajer u l-assemblaġġ tar-rota fit-temperatura ta' l-ambjent għal mhux inqas minn 3 sghat.

1.5. Aġġusta mill-ġdid il-pressjoni tat-tajer għal dik speċifikata fil-paragrafu 1.2 jew 1.3 ta' dan l-Annex.

2. Il-Proċedura tat-Test

2.1. Arma t-tajer u l-assemblaġġ tar-rota fuq il-fus tat-test u ppressah kontra l-wiċċ lixx ta' barra ta' ċilindru ta' test li jahdem bil-qawwa, b'dijametru ta' $1,70 \text{ m} \pm 1 \%$ jew $2,00 \text{ m} \pm 1 \%$.

2.2. Applika għall-fus tat-test tagħbija ugwali għal 80 % ta':

2.2.1. ir-rata massima tat-tagħbija li tikkorrispondi għall-Indiċi tat-Tagħbija għal tajers bis-Simboli tal-Veloċità L sa H, it-tnejn inkluzi,

2.2.2. ir-rata massima tat-tagħbija assoċjata mal-veloċità massima (ara l-paragrafu 2.35.2 ta' dan ir-Regolament) ta':

— 240 km/s fil-każ ta' tajers bis-Simbolu tal-Veloċità "V",

— 270 km/s fil-każ ta' tajers bis-Simbolu tal-Veloċità "W",

— 300 km/s fil-każ ta' tajers bis-Simbolu tal-Veloċità "Y".

2.3. Matul it-test il-pressjoni m'għandix tkun ikkoreġuta, waqt li t-tagħbija tat-test għandha tinżamm kostanti.

2.4. Matul it-test it-temperatura tal-kamra fejn isir it-test għandha tinżamm bejn 20 °C u 30 °C, sakemm il-manifattur tat-tajer jew min infellel mill-ġdid il-wiċċ ta' barra tat-tajers ma jaqbilx li juża temperatura oghla.

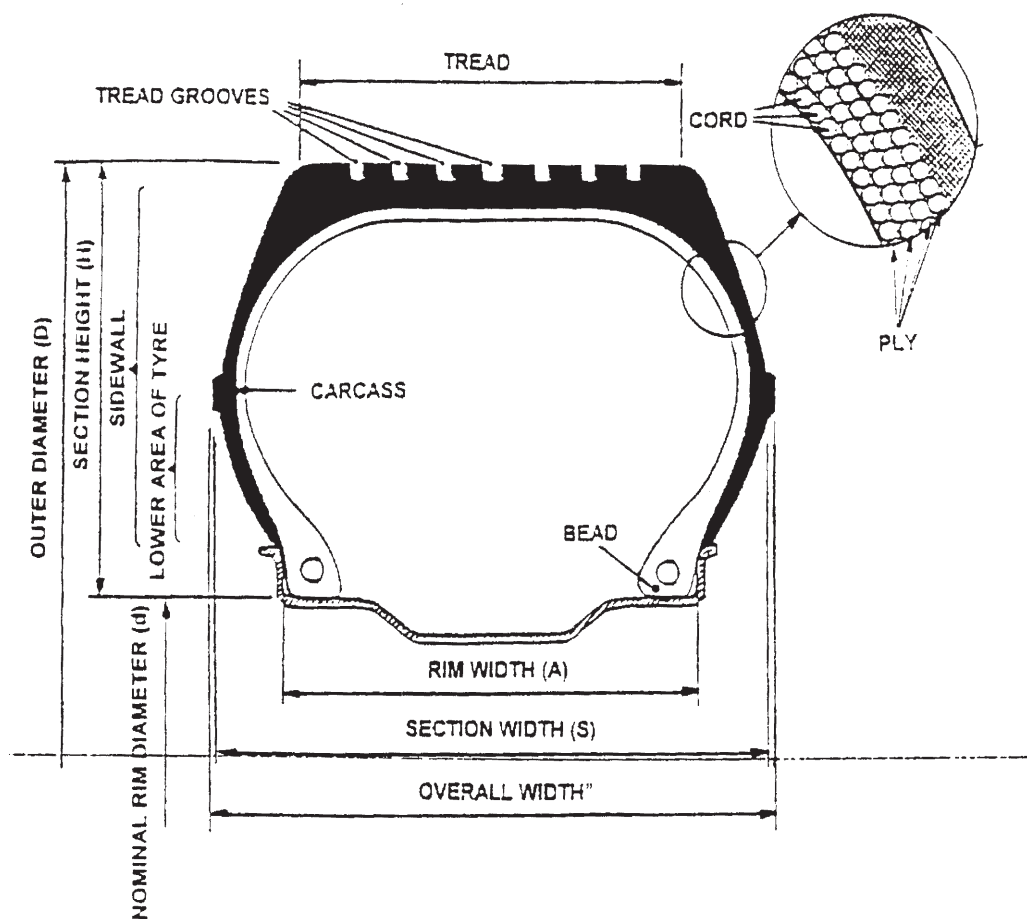
- 2.5. Il-programm tat-test tal-kapaċità għandu jsir minghajr interruzzjoni u għandu jsir kif ġej:
- 2.5.1 il-hin mehud minn veloċità zero sa dik tal-bidu: 10 minuti;
- 2.5.2. il-veloċità tal-bidu tat-test: l-oghla veloċità preskritta għat-tajer ikkonċernat, inqas minn 40 km/s fil-każ ta' ċilindru tat-test b'dijametru ta' 1,70 m $\pm$ 1 %, jew inqas minn 30 km/s fil-każ ta' ċilindru tat-test b'dijametru ta' 2,00 m $\pm$ 1 %;
- 2.5.3. zieda suċċessiva fil-veloċità: 10 km/s sa l-oghla veloċità;
- 2.5.4. il-perijodu tat-test f'kull stadju tal-veloċità hlief ta' l-aħhar: 10 minuti;
- 2.5.5. il-perijodu tat-test fl-aħhar parti: 20 minuta;
- 2.5.6. it-test ta' l-oghla veloċità: l-oghla veloċità preskritta għat-tajer ikkonċernat, inqas minn 10 km/s fil-każ ta' ċilindru tat-test b'dijametru ta' 1,70 m $\pm$ 1 %, jew l-oghla veloċità preskritta fil-każ ta' ċilindru tat-test b'dijametru ta' 2,00 m $\pm$ 1 %.
3. Metodi ekwivalenti tat-test

Jekk jintuża metodu ta' test għajr dak deskritt fil-paragrafi 2 jew 3 ta' dan l-Anness, għandha tintwera l-ekwivalenza tiegħu.

ANNEX 8

FIGURA TA' SPJEGAZZJONI

Ara l-paragrafu 2 ta' dan ir-Regolament"



DEĊIŻJONI TAL-KUNSILL

tat-13 ta Marzu 2006

dwar l-adeżjoni tal-Komunità għar-Regolament Nru 55 tal-Kummissjoni Ekonomika għall-Ewropa tan-Nazzjonijiet Uniti dwar dispożizzjonijiet dwar l-approvazzjoni ta' komponenti ta' igganċjar mekkaniċi ta' tahlit ta' vetturi

(Test b'relevanza għaž-ŻEE)

(2006/444/KE)

IL-KUNSILL TA' L-UNJONI EWROPEA,

Wara li kkunsidra t-Trattat li jstabbilixxi il-Komunità Ewropea,

Wara li kkunsidra d-Deċiżjoni tal-Kunsill 97/836/KE tas-27 ta' Novembru 1997 bil-ksieb ta' l-adeżjoni tal-Komunità Ewropea mal-Ftehim tal-Kummissjoni Ekonomika għall-Ewropa tan-Nazzjonijiet Uniti dwar l-adozzjoni ta' preskrizzjonijiet tekniċi uniformi għall-vetturi bir-roti, tagħmir u partijiet li jistgħu jitqgħiedu u/jew jintużaw fuq vetturi bir-roti u l-kundizzjonijiet għat-tagħrif reċiproku ta' l-approvazzjonijiet mogħtija fuq il-bażi ta' dawn il-preskrizzjonijiet ("Ftehim ta' l-1958 Rivedut")⁽¹⁾, u b'mod partikulari l-Artikolu 3(3) u t-tieni inċiż ta' l-Artikolu 4 (2) tiegħu,

Wara li kkunsidra l-proposta mill-Kummissjoni,

Wara li kkunsidra l-kunsens tal-Parlament Ewropew⁽²⁾,

Billi:

- (1) Ir-rekwiżiti standardizzati tar-Regolament nru 55⁽³⁾ dwar dispożizzjonijiet dwar l-approvazzjoni ta' komponenti ta' igganċjar mekkaniċi ta' tahlit ta' vetturi għandhom l-għan, li jneħħu l-ostakli tekniċi fil-kummerċ f'vetturi bejn il-Partijiet Kontraenti filwaqt li jiżgura livell għoli ta' sigurtà fit-thaddim tal-vetturi.
- (2) Ir-Regolament Nru 55 ma kienx inkluż fl-Anness II tad-Deċiżjoni 97/836/KE għaliex ma kienx konformi mat-talbiet u speċifikazzjonijiet tekniċi Komunitarji waqt l-adeżjoni tal-Komunità mal-Ftehim Rivedut ta' 1958.

- (3) Fid-dawl ta' l-emendi li saru wara, ir-Regolament Nru 55 għandu jkun inkorporat fis-sistema Komunitarja għall-approvazzjoni tat-tip ta' vetturi b'mutur.

IDDEĊIEDA KIF GEJ:

Artikolu 1

1. Il-Komunità għandha tapplika r-Regolament Nru 55 tal-Kummissjoni Ekonomika għall-Ewropa tan-Nazzjonijiet Uniti dwar dispożizzjonijiet dwar l-approvazzjoni ta' komponenti ta' igganċjar mekkaniċi ta' tahlit ta' vetturi.

2. It-test tal-Ftehim huwa meħmuż ma' din id-Deċiżjoni.

Artikolu 2

Ir-Regolament Nru 55 għandu jiġi nkorporat fis-sistema Komunitarja ta' l-approvazzjoni tat-tip tal-vetturi bil-muturi.

Artikolu 3

Il-Kummissjoni għandha tinnotifika lis-Segretarju Ġenerali tan-Nazzjonijiet Uniti b'din id-Deċiżjoni.

Magħmula fi Brussel, it-13 ta' Marzu 2006.

*Għall-Kunsill**Il-President*

M. BARTENSTEIN

⁽¹⁾ ĠU L 346, 17.12.1997, p. 78.

⁽²⁾ Għadu mhux ippubblikat fil-Ġurnal Uffiċjali.

⁽³⁾ Dokument tan-NU E/ECE/324, E/ECE/TRANS/505, Rev. 1/Add. 54/Rev.1, u Corrigendum nru 1.

AGREEMENT

Concerning the adoption of uniform technical prescriptions for wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions (*)

(Revision 2, including the amendments which entered into force on 16 October 1995)

Addendum 54:

REGULATION No 55

Revised version providing Revision 1 consolidated with Corrigendum 1 ()**

Uniform provisions concerning the approval of mechanical coupling components of combinations of vehicles

(*) Former title of the Agreement.

(**) Corrigendum 1 to the 01 series of amendments, subject of depositary notification C.N.602.2002.TREATIES-1 dated 13 June 2002.

(Acts whose publication is obligatory)

**Regulation No 55
of the Economic Commission for Europe of the United Nations (UN/ECE).**

Uniform provisions concerning the approval of mechanical coupling components of combinations of vehicles.

1. SCOPE

- 1.1. This Regulation lays down the requirements which mechanical coupling devices and components shall meet in order to be regarded internationally as being mutually compatible.
- 1.2. This Regulation applies to devices and components intended for:
 - 1.2.1. motor vehicles and trailers intended to form a combination of vehicles ⁽¹⁾;
 - 1.2.2. motor vehicles and trailers intended to form articulated vehicles ⁽¹⁾, where the vertical load imposed on the motor vehicle by the trailer does not exceed 200 kN.
- 1.3. This Regulation applies to:
 - 1.3.1. standard devices and components as defined in paragraph 2.3.;
 - 1.3.2. non-standard devices and components as defined in paragraph 2.4.;
 - 1.3.3. non-standard miscellaneous devices and components as defined in paragraph 2.5.

2. DEFINITIONS

For the purposes of this Regulation:

- 2.1. „mechanical coupling devices and components means” all those items on the frame, load-bearing parts of the bodywork and the chassis of the motor vehicle and trailer by means of which they are connected together to form the combination of vehicles or the articulated vehicles. Fixed or detachable parts for the attachment or operation of the mechanical coupling device or component are included.
- 2.2. automatic coupling requirement is achieved if reversing the towing vehicle against the trailer is sufficient to engage the coupling completely, to lock it automatically and to indicate proper engagement of the locking devices without any external intervention.

In the case of hook type couplings automatic coupling requirement is achieved if opening and closing of the coupling locking device takes place without any external intervention when the drawbar eye is inserted into the hook.
- 2.3. standard mechanical coupling devices and components conform to standard dimensions and characteristic values as given in this Regulation. They are interchangeable within their class, independent of manufacturer.
- 2.4. non-standard mechanical coupling devices and components do not conform in all respects to the standard dimensions and characteristic values given in this Regulation but can be connected to standard coupling devices and components in the relevant class.
- 2.5. non-standard miscellaneous mechanical coupling devices and components do not conform to standard dimensions and characteristic values as given in this Regulation and cannot be connected to standard coupling devices and components. They include, for example, devices which do not correspond with any of the Classes A to L and T listed in paragraph 2.6. such as those intended for special, heavy transport use and miscellaneous devices conforming to existing national standards.

⁽¹⁾ Within the meaning of the Convention on Road Traffic (Vienna, 1968, Article 1, sub-paragraphs (t) and (u)).

- 2.6. mechanical coupling devices and components are classified according to type as follows:
- 2.6.1. Class A Coupling balls and towing brackets employing a 50 mm diameter spherical device and brackets on the towing vehicle for connecting to the trailer by means of a coupling head — see annex 5, paragraph 1.
- 2.6.1.1. Class A50-1 to 50-5 Standard 50 mm diameter coupling balls with flange type bolted fixing.
- 2.6.1.2. Class A50-X Non-standard 50 mm diameter coupling balls and brackets.
- 2.6.2. Class B Coupling heads fitted to the drawbar of trailers for connecting to the 50 mm diameter coupling ball on the towing vehicle — see annex 5, paragraph 2.
- 2.6.2.1. Class B50-X Non-standard 50 mm diameter coupling heads.
- 2.6.3. Class C Drawbar couplings with a 50 mm diameter pin and with a jaw and an automatic closing and locking pin on the towing vehicle for connecting to the trailer by means of a drawbar eye — see annex 5, paragraph 3.
- 2.6.3.1. Class C50-1 to 50-7 Standard 50 mm pin diameter drawbar couplings.
- 2.6.3.2. Class C50-X Non-standard 50 mm pin diameter drawbar couplings.
- 2.6.4. Class D Drawbar eyes having a parallel hole suitable for a 50 mm diameter pin and fitted to the drawbar of trailers for connecting to automatic drawbar couplings — see annex 5, paragraph 4.
- 2.6.4.1. Class D50-A Standard 50 mm pin diameter drawbar eyes for welded attachment.
- 2.6.4.2. Class D50-B Standard 50 mm pin diameter drawbar eyes for threaded attachment.
- 2.6.4.3. Class D50-C& 50-D Standard 50 mm pin diameter drawbar eyes for bolted attachment.
- 2.6.4.4. Class D50-X Non-standard 50 mm pin diameter drawbar eyes.
- 2.6.5. Class E Non-standard drawbars comprising overrun devices and similar items of equipment mounted on the front of the towed vehicle, or to the vehicle chassis, which are suitable for coupling to the towing vehicle by means of drawbar eyes, coupling heads or similar coupling devices — see annex 5, paragraph 5.
- Drawbars may be hinged to move freely in a vertical plane and not support any vertical load or be fixed in a vertical plane so as to support a vertical load (Rigid drawbars). Rigid drawbars can be entirely rigid or be flexibly mounted.
- Drawbars may comprise more than one component and may be adjustable or cranked.
- This Regulation applies to drawbars which are separate units, not an integral part of the chassis of the towed vehicle.
- 2.6.6. Class F Non-standard drawbeams comprising all components and devices between the coupling devices, such as coupling balls and drawbar couplings, and the frame (for example the rear cross member), the load-bearing bodywork or the chassis of the towing vehicle — see annex 5, paragraph 6.
- 2.6.7. Class G Fifth wheel couplings are plate type couplings having an automatic coupling lock and are fitted to the towing vehicle for connecting with a 50 mm diameter fifth wheel coupling pin fitted to a semitrailer — see annex 5, paragraph 7.
- 2.6.7.1. Class G50 Standard 50 mm pin diameter fifth wheel couplings.
- 2.6.7.2. Class G50-X Non-standard 50 mm pin diameter fifth wheel couplings.
- 2.6.8. Class H Fifth wheel coupling pins, 50 mm diameter, are devices fitted to a semitrailer to connect with the fifth wheel coupling of the towing vehicle — see annex 5, paragraph 8.
- 2.6.8.1. Class H50-X Non-standard 50 mm pin diameter fifth wheel coupling pins.
- 2.6.9. Class J Non-standard mounting plates comprising all components and devices for attaching fifth wheel couplings to the frame or chassis of the towing vehicle. The mounting plate may have provision for moving horizontally, that is to form a sliding fifth wheel — see annex 5, paragraph 9.

- 2.6.10. Class K Standard, hook type couplings intended for use with appropriate Class L type toroidal drawbar eyes — see annex 5, paragraph 10.
- 2.6.11. Class L Standard toroidal drawbar eyes for use with appropriate Class K hook type couplings — see annex 5, paragraph 4.
- 2.6.12. Class S Devices and components which do not conform to any of the Classes A to L or T above and which are used, for example, for special heavy transport or are devices unique to some countries and covered by existing national standards.
- 2.6.13. Class T Non-standard, non-automatic dedicated drawbar type couplings which are able to be separated only by the use of tools and are typically used for trailers of car transporters. They shall be approved as a matched pair.
- 2.7. Steering wedges are devices or components mounted on semitrailers which control positive steering of the trailer in conjunction with the fifth wheel coupling.
- 2.8. Remote control systems are devices and components which enable the coupling device to be operated from the side of the vehicle or from the driving cab of the vehicle.
- 2.9. Remote indicators are devices and components which give an indication in the vehicle cab that coupling has been effected and that the locking devices have engaged.
- 2.10. „type of coupling device or component” means a device or component which does not differ in such essential respects as:
- 2.10.1. the manufacturer's or supplier's trade name or mark;
- 2.10.2. the class of coupling as defined in paragraph 2.6.;
- 2.10.3. the external shape, principal dimensions or fundamental difference in design including materials used; and
- 2.10.4. the characteristic values D, D_c, S, V and U as defined in paragraph 2.11.
- 2.11. The characteristic values D, D_c, S, V and U are defined or determined as:
- 2.11.1. The D or D_c value is the theoretical reference value for the horizontal forces in the towing vehicle and the trailer and is used as the basis for horizontal loads in the dynamic tests. For mechanical coupling devices and components not designed to support imposed vertical loads, the value is:

$$D = g ((T \cdot R)/(T + R)) \text{ kN}$$

For mechanical coupling devices and components for centre axle trailers as defined in 2.13, the value is:

$$D_c = g ((T \cdot C)/(T + C)) \text{ kN}$$

For fifth wheel couplings of Class G, fifth wheel coupling pins of Class H and mounting plates of Class J, as defined in paragraph 2.6., the value is:

$$D = g ((0,6 \cdot T \cdot R)/(T + R - U)) \text{ kN}$$

where:

- T is the technically permissible maximum mass of the towing vehicle, in tonnes. Where relevant, this includes the vertical load imposed by a centre axle trailer. ⁽¹⁾
- R is the technically permissible maximum mass, in tonnes, of a trailer with drawbar free to move in a vertical plane, or of a semitrailer. ⁽¹⁾
- C is the mass, in tonnes, transmitted to the ground by the axle or axles of the centre axle trailer, as defined in paragraph 2.13., when coupled to the towing vehicle and loaded to the technically permissible maximum mass ⁽¹⁾. For Category O₁ and O₂ centre axle trailers ⁽²⁾ the technically permissible maximum mass will be that declared by the manufacturer of the towing vehicle.

⁽¹⁾ The mass T and R and the technically permissible maximum mass, may be greater than the permissible maximum mass prescribed by national legislation.

⁽²⁾ See definitions in Regulation No 13 annexed to the 1958 Agreement concerning the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these Prescriptions. The definition is also contained in annex 7 of the Consolidated Resolution on the Construction of Vehicles (R.E.3) (document TRANS/WP.29/78/Rev.1/Amend.2).

g is the acceleration due to gravity (assumed to be 9,81 m/s²)
 U is as defined in paragraph 2.11.2.
 S is as defined in paragraph 2.11.3.

- 2.11.2. The U value is the vertical mass, in tonnes, imposed on the fifth wheel coupling by the semitrailer of technically permissible maximum mass ⁽¹⁾
- 2.11.3. The S value is the vertical mass, in kilograms, imposed on the coupling, under static conditions, by the centre axle trailer, as defined in paragraph 2.13., of technically permissible maximum mass ⁽¹⁾
- 2.11.4. The V value is the theoretical reference value of the amplitude of the vertical force imposed on the coupling by the centre axle trailer of technically permissible maximum mass greater than 3,5 tonnes. The V value is used as the basis for vertical forces in the dynamic tests.

$$V = (a \cdot C \cdot X^2) / L^2 \text{ (See the Note below)}$$

where:

a is an equivalent vertical acceleration at the coupling depending on the type of suspension system of the rear axle of the towing vehicle.

For air suspension (or suspension systems with equivalent damping characteristics)

$$a = 1n8 \text{ m/s}^2$$

For other types of suspension:

$$a = 2n4 \text{ m/s}^2$$

X is the length of the loading area of the trailer, in metres (see Figure 1)

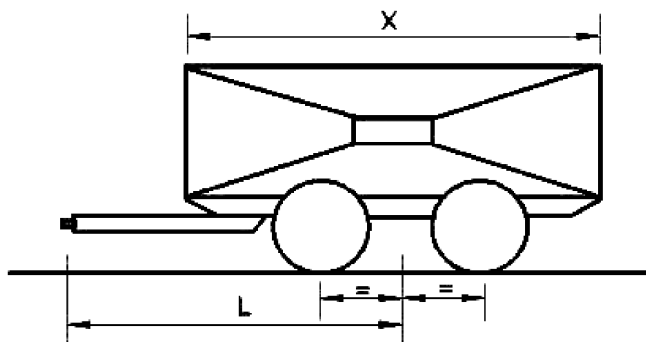
L is the distance from the centre of the drawbar eye to the centre of the axle assembly, in metres (see Figure 1)

Note: $(X^2 / L^2) \geq 1,0$

(If less than 1,0, the value of 1,0 shall be used)

Figure 1

Dimensions of the centre axle trailer



- 2.12. Symbols and definitions used in annex 6 of this Regulation.

A_v = maximum permitted axle mass of the steered axle in tonnes.

C = mass of centre axle trailer in tonnes — see paragraph 2.11.1. of this Regulation.

D = D value in kN — see paragraph 2.11.1. of this Regulation.

D_c = D_c value in kN for centre axle trailers — see paragraph 2.11.1. of this Regulation.

⁽¹⁾ The mass T and R and the technically permissible maximum mass, may be greater than the permissible maximum mass prescribed by national legislation.

- R = mass of towed vehicle in tonnes — see paragraph 2.11.1. of this Regulation.
 T = mass of towing vehicle in tonnes — see paragraph 2.11.1. of this Regulation.
 Fa = static lifting force in kN.
 F_h = horizontal component of test force in longitudinal axis of vehicle in kN.
 F_s = vertical component of test force in kN.
 S = static vertical mass in kg.
 U = fifth wheel imposed vertical mass in tonnes.
 V = V-value in kN — see paragraph 2.11.4. of this Regulation.
 a = equivalent vertical acceleration factor at the coupling point of centre axle trailers depending on the type of suspension of the rear axle(s) of the towing vehicle — see paragraph 2.11.4. of this Regulation.
 e = longitudinal distance between the coupling point of coupling balls which can be dismantled and the vertical plane of the fixing points (see Figures 20c to 20f) in mm.
 f = vertical distance between the coupling point of coupling balls which can be dismantled and the horizontal plane of the fixing points (see Figures 20c to 20f) in mm.
 g = acceleration due to gravity, assumed as 9,81 m/s².
 L = theoretical drawbar length between the centre of the drawbar eye and the centre of the axle assembly in metres.
 X = length of the loading area of a centre axle trailer in metres.

Subscripts:

- O = maximum test force
 U = minimum test force
 a = static force
 h = horizontal
 p = pulsating
 res = resultant
 s = vertical
 w = alternating force

- 2.13. „Centre axle trailer” means a trailer having a drawbar which cannot move in a vertical plane independent of the trailer and having an axle or axles positioned close to the centre of gravity of the trailer, when uniformly loaded. The vertical load imposed on the coupling of the towing vehicle shall not exceed 10 per cent of the maximum mass of the trailer, or 1 000 kg, whichever is the lesser. The maximum mass of the centre axle trailer means the total mass transmitted to the ground by the axle or axles of the trailer when coupled to a towing vehicle and when loaded to the technically permissible maximum mass ⁽¹⁾.
- 2.14. „Positive mechanical engagement” means that the design and geometry of a device and its component parts shall be such that it will not open or disengage under the action of any forces or components of forces to which it is subject during normal use or testing.
- 2.15. „Vehicle type” means vehicles which do not differ in such essential respects as the structure, dimensions, shape and materials in areas to which the mechanical coupling device or component is affixed. This applies to both the towing vehicle and trailer.
3. APPLICATION FOR APPROVAL OF A MECHANICAL COUPLING DEVICE OR COMPONENT
- 3.1. The application for approval shall be submitted by the holder of the trade name or mark or by his duly accredited representative.
- 3.2. For each type of mechanical coupling device or component the application shall be accompanied by the following information, for example, by means of the Communication form given in annex 1:
- 3.2.1. details of all manufacturer's or supplier's trade names or marks to be applied to the coupling device or component;
- 3.2.2. three sets of drawings which are sufficiently detailed to define the device or component and which specify how it is to be fitted to the vehicle; the drawings shall show the position and space provided for the approval number and other marking as given in paragraph 7.;

⁽¹⁾ The technically permissible mass may be greater than the maximum permissible mass prescribed by national legislation.

- 3.2.3. a statement of the values of D, Dc, S, V and U as applicable and as defined in paragraph 2.11.

For Class A towing brackets a statement of the maximum permissible towing vehicle and trailer masses and the maximum permissible static vertical imposed load on the tow ball as advised by the manufacturer of the towing vehicle;

- 3.2.3.1. The characteristic values shall be at least equal to those applicable to the maximum permissible towing vehicle, trailer and combination masses.
- 3.2.4. a detailed technical description of the device or component, specifying, in particular, the type and the materials used;
- 3.2.5. restrictions on the vehicles to which the coupling may be fitted — see annex 1, paragraph 12 and annex 5, paragraph 3.4.;
- 3.2.6. one sample, plus additional samples as requested by the type approval authority or technical service;
- 3.2.7. all samples shall be fully finished with the final surface treatment applied. However, if the final treatment is by painting or epoxy powder coating, this should be omitted;
- 3.2.8. in the case of a mechanical coupling device or component designed for a specific vehicle type, the manufacturer of the device or component shall also submit the installation data given by the vehicle manufacturer. The approval authority or technical service may also request that a vehicle representative of the type be submitted.

4. GENERAL REQUIREMENTS FOR MECHANICAL COUPLING DEVICES OR COMPONENTS

- 4.1. Each sample shall conform to the dimensional and strength specifications set out in annexes 5 and 6. Following the tests specified in annex 6 there shall not be any cracks, fractures or any excessive permanent distortion which would be detrimental to the satisfactory operation of the device or component.
- 4.2. All parts of the mechanical coupling device or component whose failure could result in separation of the vehicle and trailer shall be made of steel. Other materials may be used provided that equivalence has been demonstrated by the manufacturer to the satisfaction of the type approval authority or technical service of the Contracting Party applying this Regulation.
- 4.3. The mechanical coupling devices or components shall be safe to operate and coupling and uncoupling shall be possible by one person without the use of tools. With the exception of Class T couplings only devices which allow automatic coupling shall be allowed for the coupling of trailers having a maximum technically permissible mass greater than 3,5 tonnes.
- 4.4. The mechanical coupling devices or components shall be designed and manufactured such that in normal use and with correct maintenance and replacement of wearing parts they will continue to function satisfactorily and retain the characteristics prescribed by this Regulation.
- 4.5. All mechanical coupling devices or components shall be designed to have positive mechanical engagement and the closed position shall be locked at least once by further positive mechanical engagement unless further requirements are stated in annex 5. Alternatively there may be two or more separate arrangements to ensure the integrity of the device but each arrangement shall be designed to have positive mechanical engagement and shall be tested individually to any requirements given in annex 6. Positive mechanical engagement shall be as defined in paragraph 2.14.

Spring forces may be used only to close the device and to prevent the effects of vibration from causing component parts of the device to move to positions where it may open or disengage.

The failure or omission of any one single spring shall not allow the complete device to open or disengage.

- 4.6. Every device or component shall be accompanied by installation and operating instructions giving sufficient information for any competent person to install it correctly on the vehicle and operate it properly — see also annex 7. The instructions shall be in at least the language of the country in which it will be offered for sale. In the case of devices and components supplied for original equipment fitting by a vehicle manufacturer or bodybuilder, installation instructions may be dispensed with but the vehicle manufacturer or bodybuilder will be responsible for ensuring that the vehicle operator is supplied with the necessary instructions for correct operation of the coupling device or component.

- 4.7. For devices and components of Class A, or Class S, if applicable, for use with trailers of maximum permissible mass not exceeding 3,5 tonnes, and which are produced by manufacturers not having any association with the vehicle manufacturer and where the devices and components are intended for fitting in the after-market, the height and other installation features of the coupling shall, in all cases, be verified by the type approval authority or technical service in accordance with annex 7, paragraph 1.
- 4.8. For heavy duty and other non-standard miscellaneous coupling devices or components, Class S and Class T, the relevant requirements in annexes 5, 6 and 7 for the closest standard or non-standard device or component shall be used.
5. APPLICATION FOR APPROVAL OF A VEHICLE FITTED WITH A MECHANICAL COUPLING DEVICE OR COMPONENT
- 5.1. Where a vehicle manufacturer applies for approval of a vehicle fitted with a mechanical coupling device or component or authorises the use of a vehicle for towing any form of trailer, then, at the request of a bona fide applicant for possible type approval for a mechanical coupling device or component, or of the type approval authority or technical service of a Contracting Party, the vehicle manufacturer shall readily make available to that inquirer or authority or technical service, such information as required in paragraph 5.3. below, to enable a manufacturer of a coupling device or component to properly design and manufacture a mechanical coupling device or component for that vehicle. At the request of a bona fide applicant for possible type approval for a mechanical coupling device or component, any information given in paragraph 5.3. below which is held by the type approval authority shall be released to that applicant.
- 5.2. The application for approval of a vehicle type with regard to the fitting of a mechanical coupling device or component shall be submitted by the vehicle manufacturer or by his duly accredited representative.
- 5.3. It shall be accompanied by the following information to enable the type approval authority to complete the communication form given in annex 2.
- 5.3.1. a detailed description of the vehicle type and of the mechanical coupling device or component and, at the request of the type approval authority or technical service, a copy of the approval form for the device or component;
- 5.3.2. The information shall also include the maximum permissible masses of the towing and towed vehicles, the distribution of the maximum permissible mass of the towing vehicle between the axles, the maximum permissible axle masses, the maximum permissible vertical loading to be imposed on the rear of the towing vehicle and details and/or drawings of the installation mounting points for the device or component and of any additional reinforcing plates, support brackets and so on, necessary for safe attachment of the mechanical coupling device or component to the towing vehicle;
- 5.3.2.1. the loading condition at which the height of the tow ball of M1 category vehicles is to be measured — see paragraph 2 of annex 7, appendix 1.
- 5.3.3. three sets of drawings which are sufficiently detailed to identify the device or component and which specify how it is to be fitted to the vehicle; the drawings shall show the position and space provided for the approval number and other marking as given in paragraph 7.;
- 5.3.4. a detailed technical description of the device or component, specifying, in particular, the type and the materials used;
- 5.3.5. a statement of the values of D, D_c, S, V and U as applicable and as defined in paragraph 2.11.;
- 5.3.5.1. The characteristic values shall be at least equal to those applicable to the maximum permissible towing vehicle, trailer and combination masses.
- 5.3.6. a vehicle, representative of the type to be approved and fitted with a mechanical coupling device, shall be submitted to the type approval authority or technical service which may also request additional samples of the device or component;
- 5.3.7. a vehicle not having all of the components appropriate to the type may be accepted provided that the applicant can show, to the satisfaction of the type approval authority or technical service, that the absence of the components does not have any effect on the results of the inspection as far as the requirements of this Regulation are concerned.

6. GENERAL REQUIREMENTS FOR VEHICLES FITTED WITH A MECHANICAL COUPLING DEVICE OR COMPONENT

- 6.1. The mechanical coupling device or component fitted to the vehicle shall be approved in accordance with the requirements of paragraphs 3 and 4 and annexes 5 and 6 of this Regulation.
- 6.2. The installation of the mechanical coupling device or component shall meet the requirements of annex 7 to this Regulation.
- 6.3. Operating instructions shall be provided for use of the coupling device or component which shall contain any special instructions for operations which are different from those normally associated with the type of coupling device or component and instructions for coupling and uncoupling with different modes of operation, for example, at various angles between the towing and towed vehicles. Each vehicle shall be accompanied by these operating instructions which shall be at least in the language of the country in which it will be offered for sale.

7. MARKINGS

- 7.1. Types of mechanical coupling devices and components submitted for approval shall bear the trade name or mark of the manufacturer, supplier or applicant.
- 7.2. There shall be a sufficiently large space for application of the approval mark referred to in paragraph 8.5 and shown in annex 3. This space shall be shown on the drawings referred to in paragraph 3.2.2.
- 7.3. Adjacent to the approval mark referred to in paragraphs 7.2 and 8.5, the mechanical coupling device or component shall be marked with the class of coupling, as defined in paragraph 2.6 and the relevant characteristic values as defined in paragraph 2.11 and shown in annex 4. The position for these markings shall be shown on the drawings referred to in paragraph 3.2.2.

The characteristic values need not be marked in cases where those values are defined in the classification given in this Regulation, for example, Classes A50-1 to A50-5.

- 7.4. Where the mechanical coupling device or component is approved for alternative characteristic values within the same class of coupling or device, a maximum of two alternatives shall be marked on the device or component.
- 7.5. If the application of the mechanical coupling device or component is restricted in any way, for example, if it is not to be used with steering wedges, then that restriction shall be marked on the device or component.
- 7.6. All markings shall be permanent and legible when the device or component is installed on the vehicle.

8. APPROVAL

- 8.1. If the sample(s) of a type of mechanical coupling device or component meets (meet) the requirements of this Regulation, approval shall be granted subject to the requirements of paragraph 10 being satisfactorily met.
- 8.2. An approval number shall be assigned to each type approved. Its first two digits (at present 01) shall indicate the series of amendments incorporating the most recent major technical amendments made to the Regulation at the time of issue of the approval. The same Contracting Party may not assign the same number to another type of device or component referred to in this Regulation.
- 8.3. Notice of approval or of extension, refusal or withdrawal of approval or of production definitely discontinued, relating to a type of mechanical coupling device or component approved pursuant to this Regulation, shall be communicated to the Parties to the 1958 Agreement applying this Regulation, by means of a communication form conforming to the model in either annex 1 or annex 2 to this Regulation.
- 8.4. In addition to the mark prescribed in paragraph 7.1., there shall be affixed to every mechanical coupling device or component approved under this Regulation, in the space referred to in paragraph 7.2., an approval mark as described in paragraph 8.5.

- 8.5. The approval mark shall be an international mark comprising:
- 8.5.1. a circle surrounding the letter „E” followed by the distinguishing number of the country which has granted approval ⁽¹⁾;
 - 8.5.2. the approval number prescribed in paragraph 8.2.;
 - 8.5.3. the approval mark and number shall be arranged as shown in the example in annex 3.
9. MODIFICATIONS OF THE MECHANICAL COUPLING DEVICE OR COMPONENT, OR OF THE VEHICLE AND EXTENSION OF APPROVAL
- 9.1. Any modification to the type of mechanical coupling device or component, or of the vehicle as defined in paragraph 2.10 shall be notified to the type approval authority or technical service which granted the approval. The type approval authority or technical service may then either:
 - 9.1.1. consider that the modifications are unlikely to have any appreciable adverse effect and that in any case the device, component or vehicle still conforms to requirements; or
 - 9.1.2. require a further test report.
 - 9.2. Confirmation of, or refusal of approval, specifying the modification, shall be communicated by the procedure prescribed in paragraph 8.3 to the Contracting Parties applying this Regulation.
 - 9.3. The type approval authority or technical service issuing an extension of approval shall assign a series number for such an extension and shall inform the other Contracting Parties applying this Regulation by the procedure prescribed in paragraph 8.3.
10. CONFORMITY OF PRODUCTION PROCEDURES
- The conformity of production procedures shall comply with those set out in the Agreement, Appendix 2 (E/ECE/324 — E/ECE/TRANS/505/Rev.2), with the following requirements:
- 10.1. The holder of the approval must ensure that results of the conformity of production tests are recorded and that the annexed documents remain available for a period determined in agreement with the approval authority or technical service. This period must not exceed 10 years counted from the time when production is definitely discontinued.
 - 10.2. The type approval authority or technical service which has granted type approval may at any time verify the conformity control methods applied in each production facility. The normal frequency of these verifications shall be once every two years.
11. PENALTIES FOR NON-CONFORMITY OF PRODUCTION
- 11.1. The approval granted in respect of a type of mechanical coupling device or component pursuant to this Regulation may be withdrawn if the requirements are not complied with or if a device or component bearing the approval mark does not conform to the type approved.
 - 11.2. If a Contracting Party to the Agreement applying this Regulation withdraws an approval it has previously granted, it shall forthwith so notify the other Contracting Parties applying this Regulation by means of a communication form conforming to the model in either annex 1 or annex 2 to this Regulation.

⁽¹⁾ 1 for Germany, 2 for France, 3 for Italy, 4 for the Netherlands, 5 for Sweden, 6 for Belgium, 7 for Hungary, 8 for the Czech Republic, 9 for Spain, 10 for Yugoslavia, 11 for the United Kingdom, 12 for Austria, 13 for Luxembourg, 14 for Switzerland, 15 (vacant), 16 for Norway, 17 for Finland, 18 for Denmark, 19 for Romania, 20 for Poland, 21 for Portugal, 22 for the Russian Federation, 23 for Greece, 24 for Ireland, 25 for Croatia, 26 for Slovenia, 27 for Slovakia, 28 for Belarus, 29 for Estonia, 30 (vacant), 31 for Bosnia and Herzegovina, 32 for Latvia, 33 (vacant), 34 for Bulgaria, 35-36 (vacant), 37 for Turkey, 38-39 (vacant), 40 for The former Yugoslav Republic of Macedonia, 41 (vacant), 42 for the European Community (Approvals are granted by its Member States using their respective ECE symbol), 43 for Japan, 44 (vacant), 45 for Australia, 46 for Ukraine and 47 for South Africa. Subsequent numbers shall be assigned in the chronological order in which they ratify or accede to the Agreement concerning the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these Prescriptions, or in which they accede to the Agreement, and the numbers thus assigned shall be communicated by the Secretary-General of the United Nations to the Contracting Parties to the Agreement.

12. PRODUCTION DEFINITELY DISCONTINUED

If the holder of the approval completely ceases to manufacture a type of mechanical coupling device or component approved in accordance with this Regulation, he shall so inform the type approval authority or technical service which granted the approval. Upon receiving the relevant communication, that type approval authority or technical service shall inform thereof the other Contracting Parties to the 1958 Agreement applying this Regulation by means of a communication form conforming to the model in either annex 1 or annex 2 to this Regulation.

13. TRANSITIONAL PROVISIONS

Until the United Nations Secretary-General is notified otherwise, Contracting Parties applying this Regulation that are Member States of the European Community (at the time of adoption of the 01 series of amendments, Italy, Netherlands, Belgium, United Kingdom, Luxembourg, Finland and Greece) declare that, in relation to mechanical coupling devices and components, they will only be bound by the obligations of the Agreement to which this Regulation is annexed with respect to such devices and components intended for vehicles of categories other than M₁.

14. NAMES AND ADDRESSES OF TECHNICAL SERVICES RESPONSIBLE FOR APPROVAL TESTS AND OF ADMINISTRATIVE DEPARTMENTS

- 14.1. The Contracting Parties to the 1958 Agreement applying this Regulation shall communicate to the United Nations Secretariat the names and addresses of the technical services responsible for conducting approval tests and of the administrative departments which grant approval and to which forms certifying approval or extension or refusal or withdrawal of approval, or production definitely discontinued, issued in other countries, are to be sent.
-

ANNEX 1

COMMUNICATION

(maximum format: A4 (210 × 297 mm))



issued by: Name of administration:

.....

.....

.....

concerning:

APPROVAL GRANTED

APPROVAL EXTENDED

APPROVAL REFUSED

APPROVAL WITHDRAWN

PRODUCTION DEFINITELY DISCONTINUED

of a type of mechanical coupling device or component pursuant to Regulation No 55

Approval No Extension No

1. name or mark of the device or component:
2. Manufacturer's name for the type of device or component:
3. Manufacturer's name and address:
4. If applicable, name and address of the manufacturer's representative:
5. Alternative supplier's names or trade marks applied to the device or component:
6. Name and address of company or body taking responsibility for the conformity of production:
7. Submitted for approval on:
8. Technical service responsible for conducting approval tests:
9. Brief description:
- 9.1. Type and class of device or component:
- 9.2. Characteristic values:
- 9.2.1. Primary values:
- D..... kN Dc..... kN S..... kg U tonnes V..... kN
- Alternative values:
- D..... kN Dc..... kN S..... kg U tonnes V..... kN
- 9.3. For Class A mechanical coupling devices or components, including towing brackets:
- Vehicle manufacturer's maximum permissible vehicle mass: kg
- Distribution of maximum permissible vehicle mass between the axles:
- Vehicle manufacturer's maximum permissible towable trailer mass: kg
- Vehicle manufacturer's maximum permissible static mass on coupling ball: kg.

- Maximum mass of the vehicle, with bodywork, in running order, including coolant, oils, fuel, tools and spare wheel (if supplied) but not including driver: kg
- Loading condition under which the tow ball height of a mechanical coupling device fitted to category M1 vehicles is to be measured — see paragraph 2 of annex 7, appendix 1:
10. Instructions for the attachment of the coupling device or component type to the vehicle and photographs or drawings of the mounting points given by the vehicle manufacturer:
11. Information on the fitting of any special reinforcing brackets or plates or spacing components necessary for the attachment of the coupling device or component:
12. Additional information where the use of the coupling device or component is restricted to special types of vehicles — see annex 5, paragraph 3.4.
13. For Class K hook type couplings, details of the drawbar eyes suitable for use with the particular hook type.
14. Date of test report:
15. Number of test report:
16. Approval mark position:
17. Reason(s) for extension of approval:
18. Approval granted/extended/refused/withdrawn: 2/
19. Place:
20. Date:
21. Signature:
22. The list of documents deposited with the Administration Service which has granted approval is annexed to this communication and may be obtained on request.
-
-

ANNEX 2

COMMUNICATION

(maximum format: A4 (210 × 297 mm))



issued by: Name of administration:

.....

.....

.....

concerning:

APPROVAL GRANTED

APPROVAL EXTENDED

APPROVAL REFUSED

APPROVAL WITHDRAWN

PRODUCTION DEFINITELY DISCONTINUED

of a vehicle type with regard to the fitting of a mechanical coupling device or component pursuant to Regulation No 55

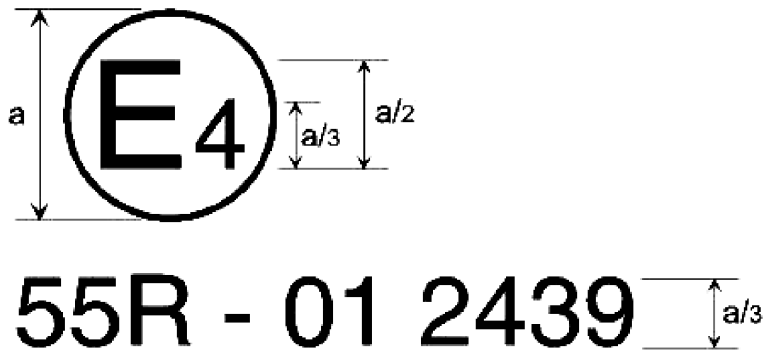
Approval No Extension No

1. Trade name or mark of vehicle:
2. Vehicle type:
3. Manufacturer's name and address:
4. If applicable, name and address of the manufacturer's representative:
5. Vehicle category, for example, M₁, N₁:
6. Maximum permissible vehicle mass: kg
 Distribution of maximum permissible vehicle mass between the axles:
 Maximum permissible towable trailer mass: kg
 Maximum permissible static mass on coupling ball: kg
 Maximum mass of the vehicle, with bodywork, in running order, including coolant, oils, fuel, tools and spare wheel (if supplied) but not including driver: kg
7. D kN Dc..... kN S kg U tonnes V kN
8. Instructions for the attachment of the coupling device or component type to the vehicle and photographs or drawings of the mounting points:
9. Information on the fitting of any special reinforcing brackets or plates or spacing components necessary for the attachment of the coupling device or component:
10. Trade name or mark of the mechanical coupling device or component and the approval number:
11. Class of coupling device or component:
12. Submitted for approval on:
13. Technical service responsible for conducting approval tests:
14. Date of test report:

- 15. Number of test report:
- 16. Approval mark position:
- 17. Reason(s) for extension of approval:
- 18. Approval granted/extended/refused/withdrawn:
- 19. Place:
- 20. Date:
- 21. Signature:
- 22. The list of documents deposited with the Administration Service which has granted approval is annexed to this communication and may be obtained on request.
.....
.....

ANNEX 3

EXAMPLE OF AN ARRANGEMENT OF THE APPROVAL MARK



$a = 8 \text{ mm minimum}$

The mechanical coupling device or component or vehicle bearing the approval mark shown above is a device or component approved in the Netherlands (E4), under approval number 2439, meeting the requirements of the 01 series of amendments to this Regulation.

Note: The approval number and additional symbols shall be placed close to the circle and either above or below the letter 'E' or to the right or left of that letter. The digits of the approval number shall be on the same side of the letter 'E' and face in the same direction. The use of Roman numerals as approval numbers should be avoided so as to prevent any confusion with other symbols.

ANNEX 4

EXAMPLES OF ARRANGEMENTS OF MARKING OF THE CHARACTERISTIC VALUES

1. All mechanical coupling devices or components shall be marked with the class of the device or component. In addition there shall be marking to indicate the capacity in terms of characteristic values as defined in paragraph 2.11 of this Regulation.
 - 1.1. The height of all letters and numbers shall be not less than those of the approval number, that is $a/3$ where a is 8 mm.
 - 1.2. The characteristic values applicable to each device or component which are to be marked are as shown in the table below — see also paragraph 7.3 of this Regulation:

TABLE 1

Relevant characteristics values to be marked on coupling devices or components

Description of mechanical coupling device or component	Relevant characteristic values to be marked					
	Class	D	D _c	S	U	V
Coupling balls and towing brackets — see annex 5, para. 1 of this Regulation	★	★		★		
Coupling heads	★	★		★		
Drawbar couplings	★	★	★	★		★
Drawbar eyes	★	★	★	★		★
Drawbars	★	★	★	★		★
Drawbeams	★	★	★	★		★
Fifth wheel couplings	★	★			★	
Fifth wheel pins	★	★				
Fifth wheel mounting plates	★	★			★	
Hook type couplings	★	★	★	★		★

Examples: C50—X D130 D_c90 S1000 V35 would identify a non-standard drawbar coupling of Class C50—X with a maximum D value of 130 kN, a maximum permitted D_c value of 90 kN, a maximum permitted static vertical imposed mass of 1 000 kg and a maximum permitted V value of 35 kN.

A50—X D20 S120 would identify a standard towing bracket with ball coupling of Class A50—X with a maximum D value of 20 kN and a maximum permitted static vertical imposed mass of 120 kg.

ANNEX 5

REQUIREMENTS FOR MECHANICAL COUPLING DEVICES OR COMPONENTS

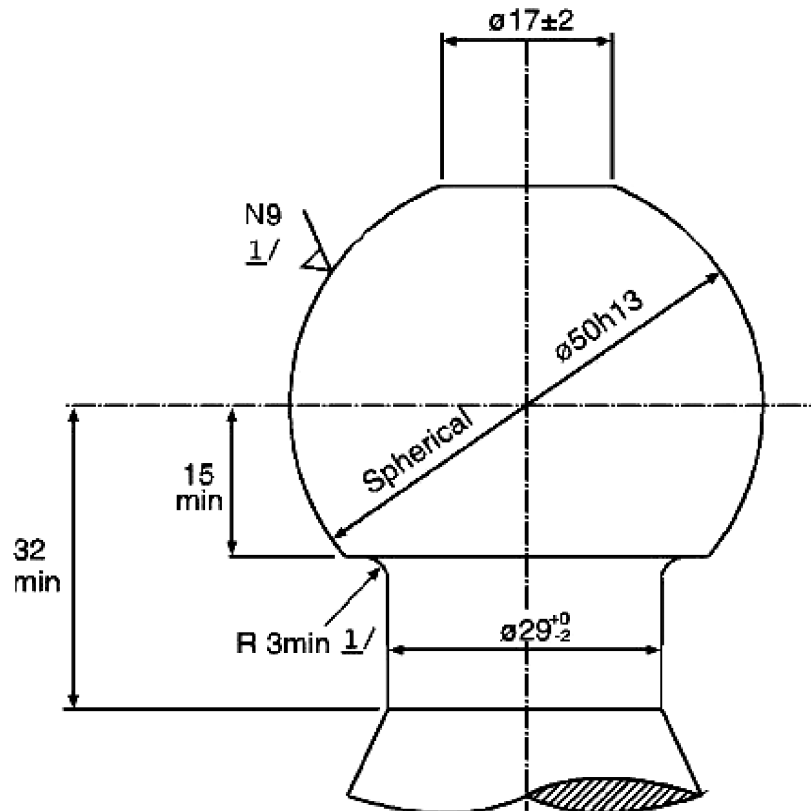
1. COUPLING BALLS AND TOWING BRACKETS

The requirements stated in paragraphs 1.1 to 1.5 of this annex are applicable to all coupling balls and towing brackets of Class A. Paragraph 1.6 details additional requirements which must be fulfilled by standard 50 mm diameter coupling balls with flange type bolted fixings.

1.1. Coupling balls of Class A shall conform to Figure 2 in external shape and external dimensions.

Figure 2

Coupling ball of Class A



- (1) The connecting radius between the ball and the neck should be tangential both to the neck and to the lower horizontal surface of the coupling ball.
- (2) See ISO/R 468 and ISO 1302, the roughness number N9 refers to a Ra value of 6,3 µm.

1.2. The shape and dimensions of towing brackets shall meet the requirements of the vehicle manufacturer concerning the attachment points and additional mounting devices or components if necessary.

1.3. Removable coupling balls:

1.3.1. In the case of removable coupling balls or components which are not fixed by bolts, for example Class A50-X, the point of connection and the locking arrangement shall be designed for positive mechanical engagement.

1.3.2. In the case of a removable coupling ball or component which may be separately approved for use with a variety of towing brackets for different vehicle applications, for example Class A50-X, the clearance space when such a coupling ball is fitted to the towing bracket shall be that prescribed in annex 7, Figure 25.

1.4. Coupling balls and towing devices shall be able to satisfy the tests given in annex 6, paragraph 3.1.

- 1.5. Manufacturers of towing brackets shall incorporate attachment points to which either secondary couplings or devices necessary to enable the trailer to be stopped automatically in the event of separation of the main coupling, may be attached. This requirement is necessary to enable the vehicle to comply with the requirements of paragraph 5.2.2.9 of UNECE Regulation No 13 — Uniform Provisions concerning the approval of vehicles of categories M, N and O with regard to braking.
- 1.5.1. The attachment points for a secondary coupling and/or breakaway cable shall be positioned such that when in use, the secondary coupling or breakaway cable does not restrict the normal articulation of the coupling or interfere with the normal inertia braking system operation. A single attachment point shall be positioned within 100 mm of a vertical plane passing through the centre of articulation of the coupling. If this is not practicable, two attachment points shall be provided, one on each side of the vertical centre line and equidistant from the centre line by a maximum of 250 mm. The attachment point(s) shall be as rearward and as high as practicable.
- 1.6. Special requirements for standard coupling balls and flange type towing brackets of Classes A50-1 to A50-5 inclusive:
- 1.6.1. Dimensions of Class A50-1 coupling balls and flange type towing brackets shall be as given in Figure 3 and Table 2.
- 1.6.2. Dimensions of Class A50-2, A50-3, A50-4 and A50-5 coupling balls and flange type towing brackets shall be as given in Figure 4 and Table 2.
- 1.6.3. Coupling balls and flange type towing brackets of the classes A50-1 to A50-5 inclusive, shall be suitable and tested for the characteristic values given in Table 3.

Figure 3

Dimensions of standard flange type ball couplings of Class A50-1

(see Table 2)

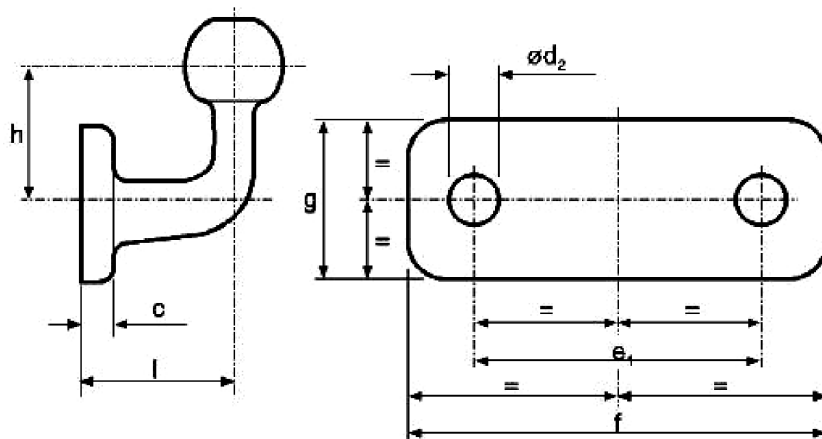


Figure 4

Dimensions of standard flange type ball couplings of Class A50-2 to A50-5

(see Table 2)

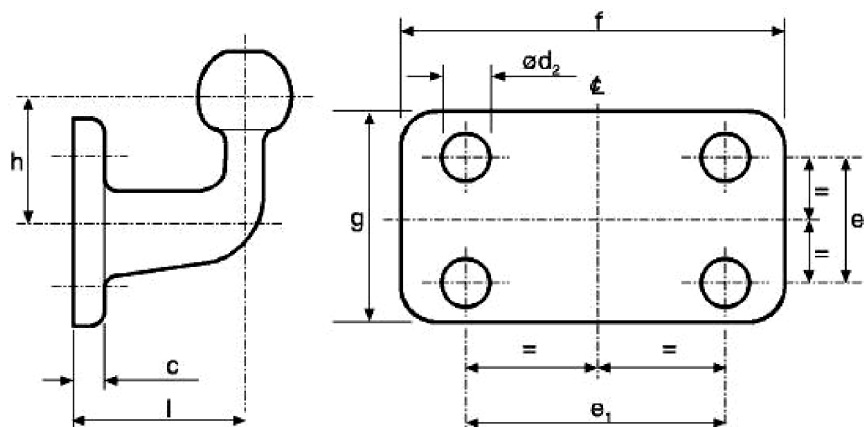


Table 2
Dimensions of standard flange type ball couplings (mm), see Figures 3 and 4.

Class	A50-1	A50-2, A50-4	A50-3, A50-5	Comments
e ₁	90	83	120	±0,5
e ₂		56	55	±0,5
d ₂	17	10,5	15	H13
f	130	110	155	+6,0 -0
g	50	85	90	+6,0 -0
c	15	15	15	Maximum
l	55	110	120	±5,0
h	70	80	80	±5,0

Table 3
Characteristic values for standard flange type ball couplings

Class	A50-1	A50-2	A50-3	A50-3	A50-5
D	17	20	30	20	30
S	120	120	120	150	150

D = Maximum D value (kN)

S = Maximum static mass (kg)

- 1.7. Manufacturers of coupling balls and towing brackets intended for fitment in the after-market and which do not have any association with the relevant vehicle manufacturer shall be aware of the requirements for articulation of the coupling given in paragraph 2 of this annex and shall comply with the appropriate requirements in annex 7 to this Regulation.

2. COUPLING HEADS

- 2.1. Coupling heads of Class B50 shall be designed so that they can be used safely with the coupling balls described in paragraph 1 of this annex and thereby retain the prescribed characteristics.

Coupling heads shall be designed in such a way that safe coupling is ensured, also taking into account the wear of the coupling devices.

- 2.2. Coupling heads shall be able to satisfy the tests laid down in annex 6, paragraph 3.2.
- 2.3. Any additional device (e.g. braking, stabiliser, etc.) shall not have any adverse effect on the mechanical connection.
- 2.4. When not attached to the vehicle, horizontal rotation of the coupling head shall be at least 90° to each side of the centre line of the coupling ball and mounting described in paragraph 1 of this annex. Simultaneously, there shall be an angle of free vertical movement 20° above and below the horizontal. Also, in conjunction with the horizontal angle of rotation of 90° it shall be possible for there to be 25° of roll in both directions about the horizontal axis. The following articulation shall be possible at all angles of horizontal rotation:
- (i) vertical pitch ±15° with axial roll ±25°
 - (ii) axial roll ±10° with vertical pitch ±20°

3. DRAWBAR COUPLINGS

The requirements of paragraphs 3.1 to 3.6 of this annex are applicable to all drawbar couplings of Class C50. Additional requirements which must be fulfilled by standard drawbar couplings of Classes C50-1 to C50-6 are given in paragraph 3.7.

3.1. Performance requirements — All drawbar couplings shall be able to satisfy the tests stated in annex 6, paragraph 3.3.

3.2. Suitable drawbar eyes — Class C50 drawbar couplings shall be compatible with all Class D50 drawbar eyes and couplings with the specified characteristics.

3.3. Jaw

Class C50 drawbar couplings shall have a jaw which is designed such that the appropriate drawbar eye is guided into the coupling.

If the jaw, or a part supporting the jaw, can pivot about the vertical axis, it shall establish itself automatically in the normal position and with the coupling pin open, be effectively restrained in this position to give satisfactory guidance for the drawbar eye during the coupling procedure.

If the jaw, or a part supporting the jaw, can pivot about the horizontal transverse axis, the joint providing the rotation capability shall be restrained in its normal position by a locking torque. The torque shall be sufficient to prevent a force of 200 N acting vertically upwards on the top of the jaw producing any deflection of the joint from its normal position. The locking torque shall be greater than that created by operation of the hand lever described in paragraph 3.6 of this annex. It shall be possible to bring the jaw to its normal position manually. A jaw that pivots about the horizontal transverse axis is only approved for bearing mass, S, of up to 50 kg and a V-value of up to 5 kN.

If the jaw, or a part supporting the jaw, is pivoted about the longitudinal axis, the rotation shall be restrained by a locking torque of at least 100 Nm.

The minimum required size of the jaw depends on the D value of the coupling:

D value $\leq$ 18 kN — width 150 mm, height 100 mm

D value $>$ 18 kN $\leq$ 25 kN — width 280 mm, height 170 mm

D value $>$ 25 kN — width 360 mm, height 200 mm

The external corners of the jaw may be radiused.

Smaller jaws are permitted for Class C50-X drawbar couplings if their use is restricted to centre axle trailers up to 3,5 tonnes maximum permissible mass or if the use of a jaw from the above table is impossible due to technical reasons and if, furthermore, there are special circumstances such as visual aids for ensuring safe execution of the automatic coupling procedure and if the field of application is restricted in the approval according to information given by the coupling manufacturer in the communication form shown in annex 1.

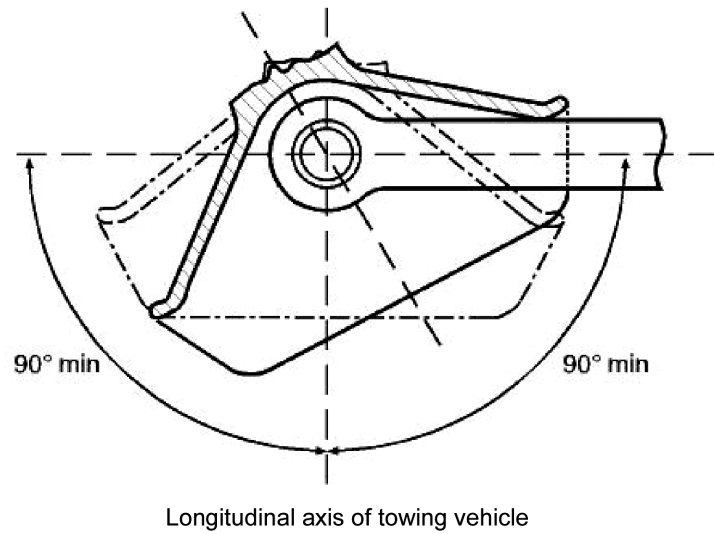
3.4. Minimum articulation of the coupled drawbar eye

The drawbar eye, when coupled to a drawbar coupling but not fitted to a vehicle, shall have the degrees of articulation given below. If part of the articulation is provided by a special joint (Class C50-X drawbar couplings only), the field of application, given in the communication form shown in annex 1, shall be restricted to the cases stated in annex 7, paragraph 1.3.8.

3.4.1. $\pm 90^\circ$ horizontally about the vertical axis from the longitudinal axis of the vehicle — see Figure 5.

Figure 5

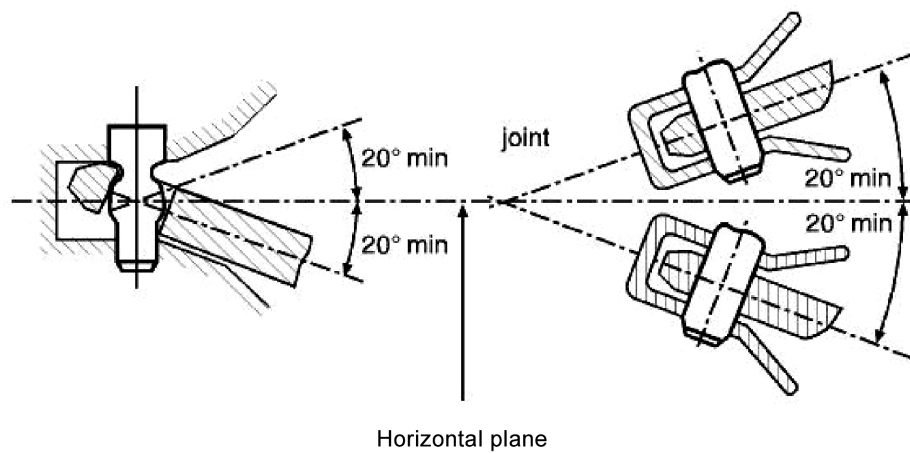
Horizontal rotation of the coupled drawbar eye



- 3.4.2. $\pm 20^\circ$ vertically about the transverse axis from the horizontal plane of the vehicle — see Figure 6.

Figure 6

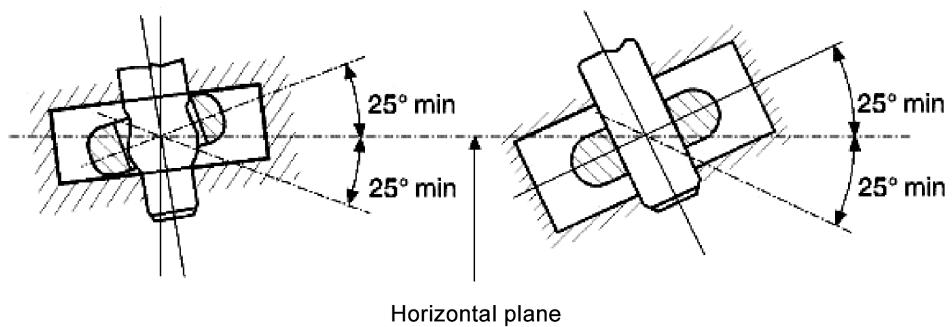
Vertical rotation of the coupled drawbar eye



- 3.4.3. $\pm 25^\circ$ axial rotation about the longitudinal axis from the horizontal plane of the vehicle — see Figure 7.

Figure 7

Axial rotation of the coupled drawbar eye



3.5. Locking to prevent inadvertent uncoupling:

In the closed position the coupling pin shall be locked by two positive mechanical engagement locking devices each of which shall remain effective should the other fail.

The closed and locked position of the coupling shall be clearly indicated externally by a mechanical device. It shall be possible to verify the position of the indicator by feel, for example, in the dark.

The mechanical indication device shall indicate the engagement of both locking devices (an AND condition).

However, it is sufficient for the engagement of only one locking device to be indicated if, in this situation, engagement of the second locking device is an inherent feature of the design.

3.6. Hand levers

Hand levers shall be of a design suitable for easy use with the end rounded off. The coupling shall not have any sharp edges or points of possible pinching near the hand lever which could result in injury during operation of the coupling. The force needed to release the coupling, measured without the drawbar eye, shall not exceed 250 N perpendicular to the hand lever along the line of operation.

3.7. Special requirements for standard drawbar couplings of Class C50-1 to C50-6:

3.7.1. The swivel motion of the drawbar eye about the transverse axis must be achieved through the spherical shape of the coupling pin (and not by means of a joint);

3.7.2. Tensile and compressive shock loads along the longitudinal axis due to the clearance between the coupling pin and the drawbar eye shall be attenuated by spring and/or damping devices (except C50-1).

3.7.3. The dimensions shall be as given in Figure 8 and Table 4.

3.7.4. The couplings shall be suitable and tested for the characteristic values given in Table 5.

3.7.5. The coupling shall be opened by means of a hand lever at the coupling (no remote control).

Figure 8
Dimensions of standard drawbar couplings (mm),
(see Table 4)

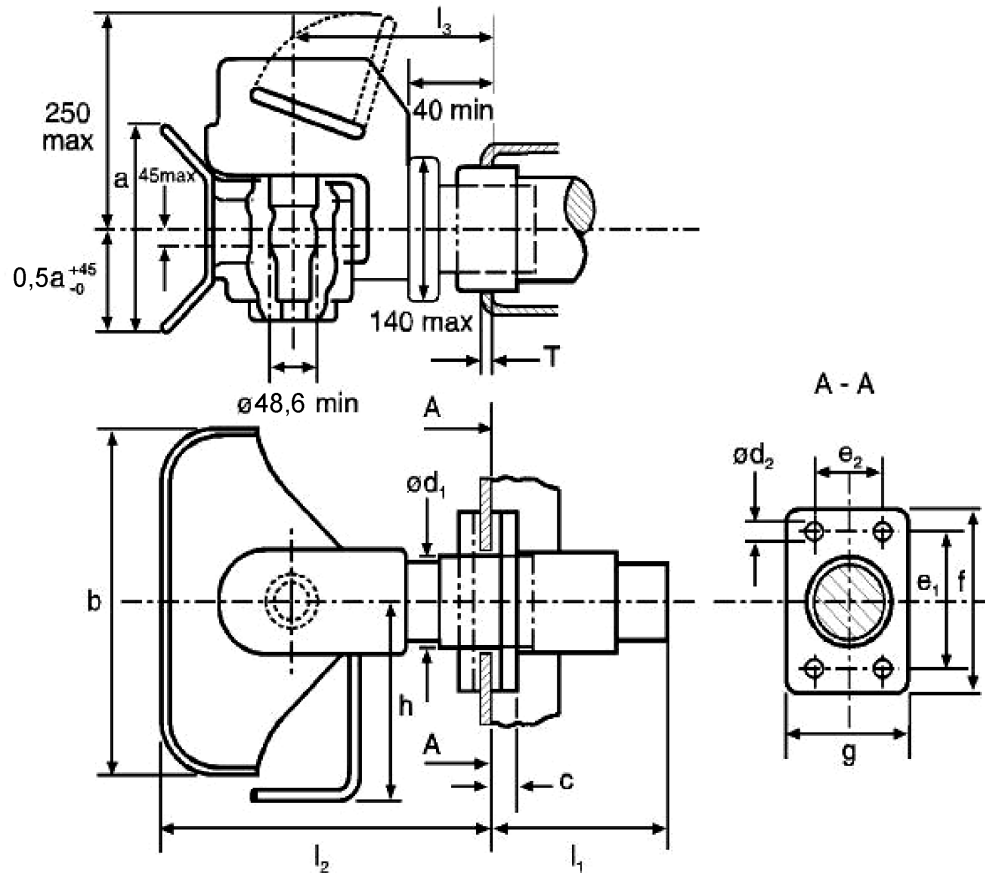


Table 4
Dimensions of standard drawbar couplings (mm), see Figure 8

Class	C50-1	C50-2	C50-3	C50-4	C50-5	C50-6, C50-7	Remarks
e_1	83	83	120	140	160	160	$\pm 0,5$
e_2	56	56	55	80	100	100	$\pm 0,5$
d_1		54	74	84	94	94	max.
d_2	10,5	10,5	15	17	21	21	H13
f	110	110	155	180	140	140	$\pm 3,0$
g	85	85	90	120	140	140	$\pm 3,0$
a	100	170	200	200	200	200	$\pm 20,0 - 0$
b	150	280	360	360	360	360	$\pm 20,0 - 0$
c	20	20	24	30	30	30	max.
h	150	190	265	265	265	265	max.
l_1		150	250	300	300	300	max.
l_2	150	300	330	330	330	330	max.
l_3	100	160	180	180	180	180	$\pm 20,0$
T		15	20	35	35	35	max.

Table 5
Characteristic values for standard drawbar couplings

Class	C50-1	C50-2	C50-3	C50-4	C50-5	C50-6	C50-7
D	18	25	70	100	130	190	190
D _c	18	25	50	70	90	120	130
S	200	250	650	900	1000	1000	1000
V	12	10	18	25	35	50	75

D = maximum D value (kN)

D_c = maximum D value (kN) for centre axle trailer applications

S = maximum static vertical load on coupling (kg)

V = maximum V value (kN)

4. DRAWBAR EYES

4.1. General requirements for drawbar eyes of Class D50:

All drawbar eyes of Class D50 shall be able to satisfy the test stated in annex 6, paragraph 3.4.

Class D50 drawbar eyes are intended for use with C50 drawbar couplings. Drawbar eyes shall not be able to rotate axially (because the respective couplings can rotate).

If Class D50 drawbar eyes are fitted with sleeves, they shall comply with the dimensions shown in Figure 9 (not permitted for Class D50-C) or Figure 10.

The sleeves must not be welded into the drawbar eyes.

Class D50 drawbar eyes shall have the dimensions given in paragraph 4.2. The form of shank for drawbar eyes of Class D50-X is not specified but for a distance of 210 mm from the centre of the eye the height “h” and the width “b” shall be within the limits given in Table 6.

Figure 9

Slotted sleeve for Class D50 drawbar eyes

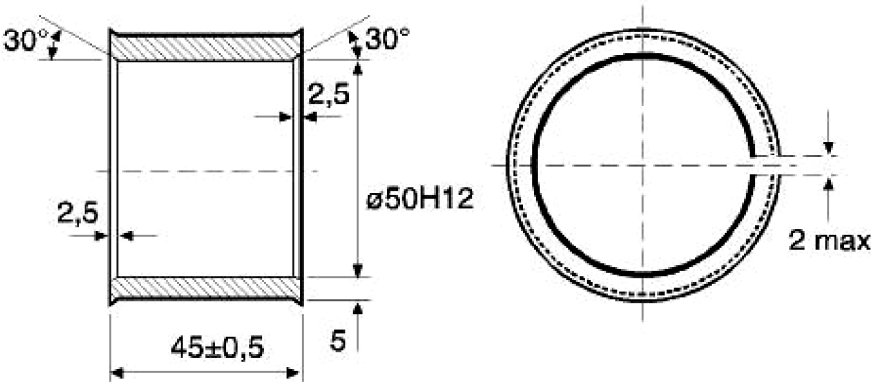


Figure 10

Non-slotted sleeve for Class D50-C drawbar eyes

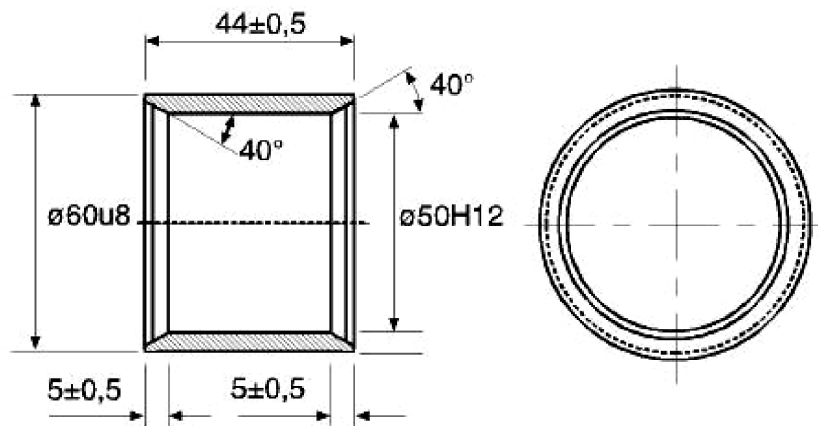


Table 6

Dimensions for drawbar eyes D50-A and D50-X, see Figure 11

Class	h (mm)	b (mm)
D50-A	65 +2/-1	60 +2/-1
D50-X	80 max.	62 max.

Table 7

Characteristic values for standard drawbar eyes

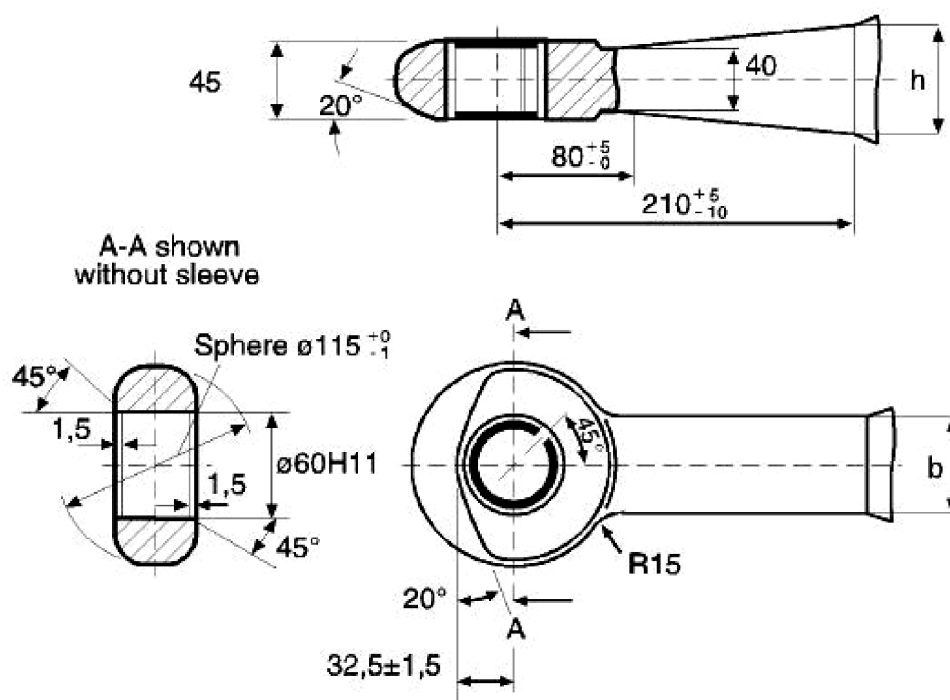
Class	D	D _c	S	V
D50-A	130	90	1 000	30
D50-B	130	90	1 000	25
D50-C	190	120	1 000	50
D50-D	190	130	1 000	75

4.2. Special requirements for Class D50 drawbar eyes:

4.2.1. Class D50-A and D50-X drawbar eyes shall have the dimensions illustrated in Figure 11.

Figure 11

Dimensions of Classes D50-A and D50-X drawbar eyes,
(see Table 6)

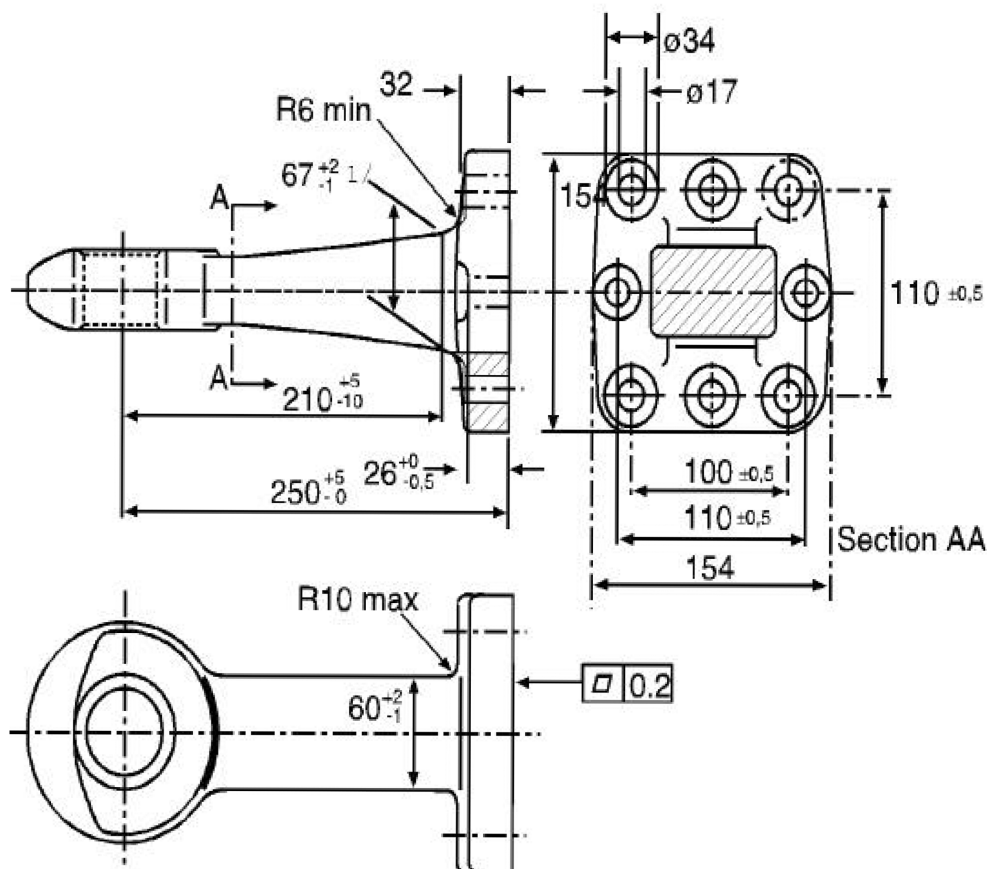


4.2.3. Classes D50-C and D50-D drawbar eyes shall have the dimensions illustrated in Figure 13.

Figure 13

Dimensions of Classes D50-C and D50-D drawbar eyes,

(see other dimensions in Figure 11)



1 For Class D50-D drawbar eyes this dimension shall be '80 max.'

4.2.4. Classes D50-C and D50-D drawbar eyes shall be fitted with non slotted sleeves shown in Figure 10.

4.3. Load values for standard drawbar eyes.

Standard drawbar eyes and the means of attachment shall be suitable for, and tested for, the load values stated in Table 7.

4.4. General requirements for Class L toroidal drawbar eyes:

4.4.1. Class L toroidal drawbar eyes are intended for use with Class K hook type couplings

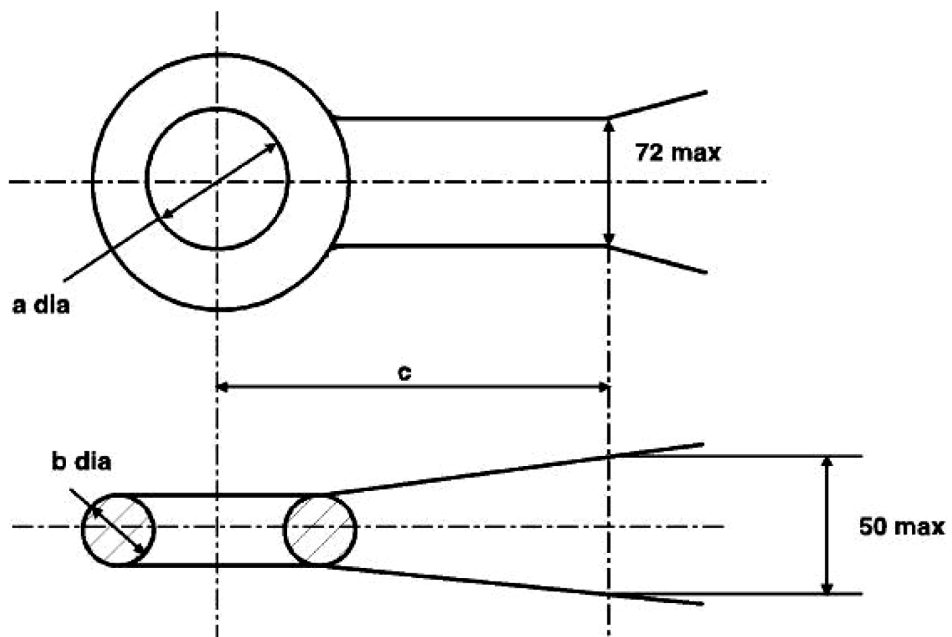
4.4.2. When used with a Class K hook type coupling they shall meet the requirements for articulation given in paragraph 10.2 of this annex.

4.4.3. Class L toroidal drawbar eyes shall have the dimensions given in Figure 14 and Table 8

Figure 14

Dimensions of Class L toroidal drawbar eyes

(see Table 8)



- 4.4.4. Class L toroidal drawbar eyes shall satisfy the tests given in annex 6, paragraph 3.4 and shall be suitable for the characteristic values given in Table 9.

Table 8

Dimensions of Class L toroidal drawbar eyes — see Figure 14 (Dimensions in mm)

Class	L1	L2	L3	L4	L5	remarks
a	68 +1,6/-0,0	76,2 ±0,8	76,2 ±0,8	76,2 ±0,8	1 000	
b	41,2 ±0,8	41,2 ±0,8	41,2 ±0,8	41,2 ±0,8	41,2 ±0,8	
c	70	65	65	65	70	min.

Table 9

Characteristic values for Class L toroidal drawbar eyes

Class	L1	L2	L3	L4	L5
D kN	30	70	100	130	180
D _c kN	27	54	70	90	120
S kg	200	700	950	1 000	1 000
V kN	12	18	25	35	50

5. DRAWBARS

- 5.1. Drawbars of class E shall satisfy the tests prescribed in annex 6, paragraph 3.3.
- 5.2. In order to provide a connection to the towing vehicle, the drawbars can be fitted either with coupling heads as in paragraph 2 or drawbar eyes as in paragraph 4 of this annex. The coupling heads and drawbar eyes can be attached by screwing, bolting or welding.
- 5.3. Height adjusting devices for hinged drawbars.
- 5.3.1. Hinged drawbars shall be fitted with devices for adjusting the drawbar to the height of the coupling device or jaw. These devices shall be designed so that the drawbar can be adjusted by one person without tools or any other aids.
- 5.3.2. Height adjusting devices shall be able to adjust the drawbar eyes or ball couplings from the horizontal above the ground at least 300 mm upwards and downwards. Within this range the drawbar shall be adjustable steplessly, or in maximum steps of 50 mm measured at the drawbar eye or ball coupling.
- 5.3.3. Height adjusting devices shall not interfere with the easy movement of the drawbar after coupling.
- 5.3.4. The height adjusting devices shall not interfere with the action of any inertia, overrun type, brake.
- 5.4. In the case of drawbars combined with inertia, overrun, brakes, the distance between the centre of the drawbar eye and the end of the free shank of the drawbar eye shall not be less than 200 mm in the brake application position. With the shank of the drawbar eye fully inserted the distance shall not be less than 150 mm.
- 5.5. Drawbars for use on centre axle trailers shall possess at least half the moment of resistance against lateral forces as against vertical forces.

6. DRAWBEAMS

- 6.1. Drawbeams of Class F shall satisfy the tests prescribed in annex 6, paragraph 3.3.
- 6.2. The drilling pattern for mounting of Class C standard drawbar couplings shall be in accordance with Figure 15 and Table 10 below.
- 6.3. Drawbeams shall not be welded to the chassis, bodywork or other part of the vehicle.

Figure 15

Mounting dimensions for standard drawbar couplings

(see Table 10)

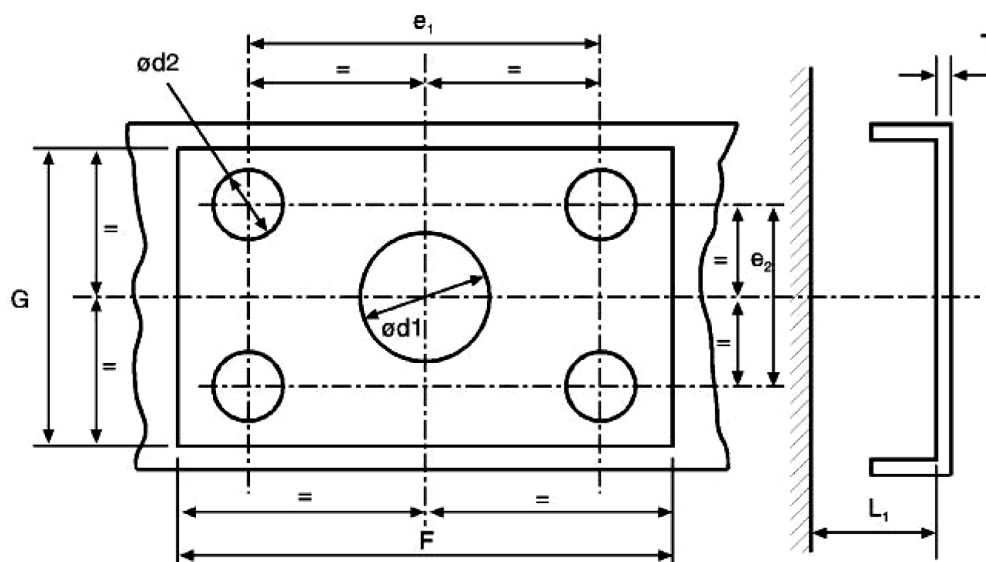


Table 10

Mounting dimensions for standard drawbar couplings (mm) — see Figure 15

Class	C50-1	C50-2	C50-3	C50-4	C50-5	C50-6, C50-7	Remarks
e_1	83	83	120	140	160	160	$\pm 0,5$
e_2	56	56	55	80	100	100	$\pm 0,5$
d_1		55	75	85	95	95	$+1,0/-0,5$
d_2	10,5	10,5	15	17	21	21	H13
T		15	20	35	35	35	max.
F	120	120	165	190	210	210	min.
G	195	95	100	130	150	150	min.
L_1		200	300	400	400	400	min.

7. FIFTH WHEEL COUPLINGS AND STEERING WEDGES

The requirements of paragraphs 7.1 to 7.7 are applicable to all fifth wheel couplings of Class G50.

Additional requirements which shall be fulfilled by standard coupling devices are given in paragraph 7.9.

Steering wedges shall satisfy the requirements listed in paragraph 7.8.

7.1. Suitable fifth wheel coupling pins

Class G50 fifth wheel couplings shall be designed so that they can be used with Class H50 coupling pins and, together, provide the specified characteristics.

7.2. Guides

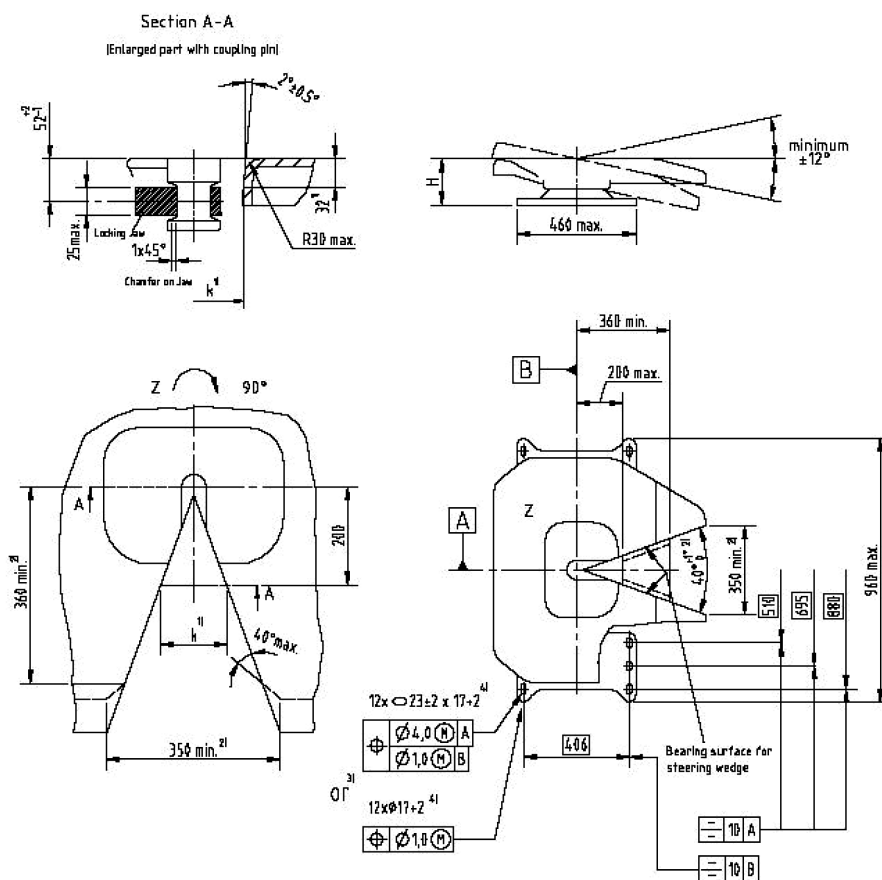
Fifth wheel couplings shall be equipped with a guide which ensures safe and correct engagement of the coupling pin. The entry width of the guide for standard 50 mm diameter fifth wheel couplings shall be at least 350 mm (see Figure 16).

For small, non-standard, fifth wheel couplings of Class G50-X and having a maximum "D" value of 25 kN, the entry width shall be at least 250 mm.

Figure 16

Dimensions of standard fifth wheel couplings

(see Table 11)



Notes

1. To provide for the use of steering wedges, measure the reference dimension $k = 137 \pm 3$ mm at 32 mm below the top surface and at a distance of 200 mm from the transverse centre line of the coupling.
2. The $40^\circ \pm 1^\circ/-0^\circ E$ throat angle must be maintained over a distance of 360 mm minimum from the transverse centre line of the coupling. The entry width of 350 mm minimum may be obtained outside this distance by increasing the entry angle up to an included angle of 120° maximum as shown in dotted line.
3. Elongated mounting holes 23 ± 2 mm x 17 ± 2 mm or round mounting holes Diameter 17 ± 2 mm could be used.
4. When using elongated holes or holes > 18 mm diameter, washers 40 mm diameter, 6 mm thick, or means of equal strength, e.g. flat steel plate, are to be used.

Figure 16a

Mounting holes tolerances for class J mounting plates for fifth wheel couplings

(see para. 9.1. of this annex)

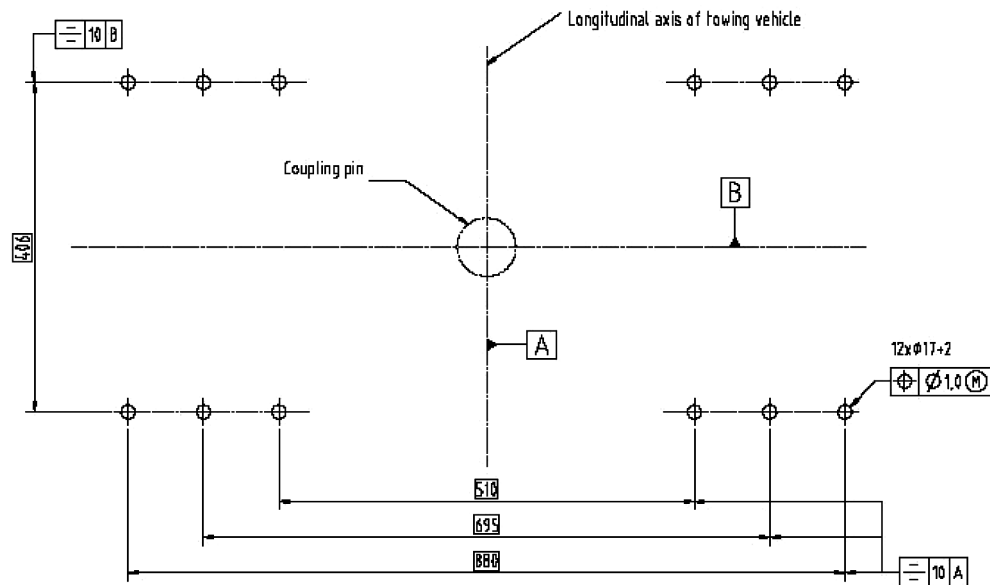


Table 11

Dimensions of standard fifth wheel couplings (mm)

(see Figure 16)

Class	G50-1	G50-2	G50-3	G50-4	G50-5	G50-6
H	140-159	160-179	180-199	200-219	220-239	240-260

7.3. Minimum articulation of the fifth wheel coupling

With the coupling pin engaged, without the fifth wheel coupling being attached to a vehicle or mounting plate, but taking into account the effect of the mounting bolts, the coupling shall permit, simultaneously, the following minimum values of articulation of the coupling pin:

- 7.3.1. $\pm 90^\circ$ about the vertical axis (not applicable to fifth wheel couplings with positive steering);
- 7.3.2. $\pm 12^\circ$ about the horizontal axis transverse to the direction of travel. This angle does not necessarily cover off-road use.
- 7.3.3. Axial rotation about the longitudinal axis of up to $\pm 3^\circ$ is permitted. However, on a fully oscillating fifth wheel coupling, this angle may be exceeded, providing that the locking mechanism enables the restriction of the rotation to $\pm 3^\circ$ maximum.

7.4. Locking devices to prevent uncoupling of fifth wheel couplings

The fifth wheel coupling shall be locked in the coupled position by two positive mechanical locking devices each of which shall remain effective should the other fail.

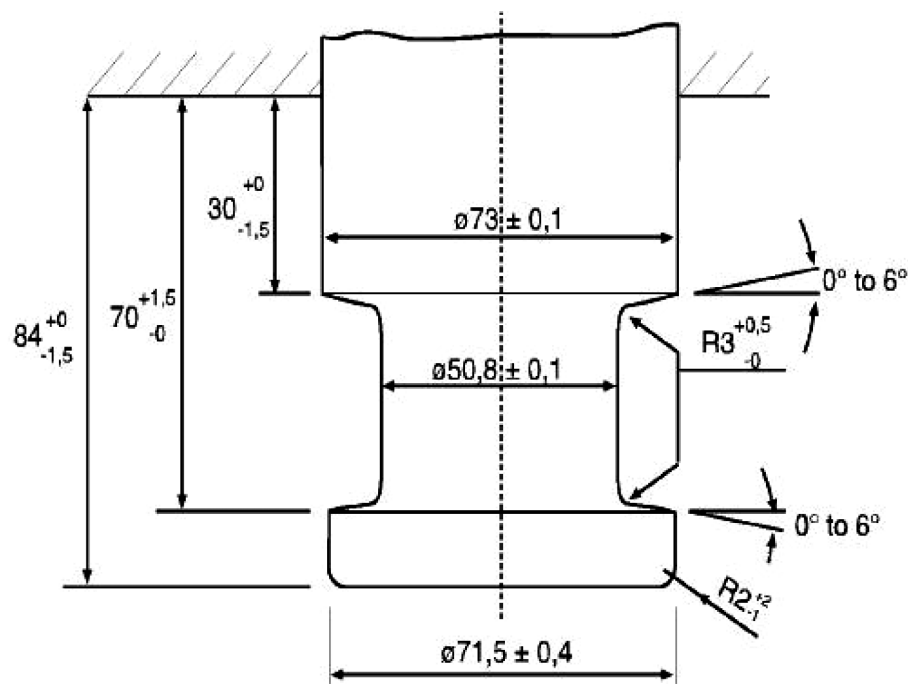
The primary locking device shall operate automatically but the secondary locking device may either be automatic or be engaged manually. The secondary locking device may be designed to work in conjunction with the primary device and provide an additional positive mechanical lock for the primary device. It shall only be possible to engage the secondary locking device if the primary device is properly engaged.

It shall not be possible for the locking devices to be released inadvertently. Release shall require intentional action by the driver or operator of the vehicle.

- 7.8.2. The steering wedge shall allow safe and correct coupling and shall be spring-mounted. The strength of the spring shall be selected so that it is possible to couple an unloaded semitrailer and so that, with the semitrailer fully loaded the steering wedge is firmly in contact with the flanks of the coupling during use. Uncoupling of the fifth wheel shall be possible with the semitrailer both loaded and unloaded.
- 7.9. Special requirements for standard fifth wheel couplings:
- 7.9.1. the dimensions shall be as shown in Figure 16 and Table 11.
- 7.9.2. they shall be suitable for, and tested for, a D value of 150 kN and a U value of 20 tonnes.
- 7.9.3. release shall be possible by a hand lever mounted directly on the coupling.
- 7.9.4. they shall be suitable for the positive steering of semitrailers by means of steering wedges — see paragraph 7.8.
8. FIFTH WHEEL COUPLING PINS
- 8.1. Fifth wheel coupling pins of Class H50 (ISO 337) shall have the dimensions shown in Figure 18

Figure 18

Dimensions of Class H50 fifth wheel coupling pins



*** correct the dimension '30 +0/-1.5' to read '35 +0/1.5' ***

- 8.2. The coupling pins shall be able to satisfy the tests described in annex 6, paragraph 3.9.
9. MOUNTING PLATES
- 9.1. Class J mounting plates for fifth wheel couplings shall have circular mounting holes positioned as shown in Figure 16a if they are intended for standard fifth wheel couplings. However, the mounting holes shall be 17 mm + 2,0 mm/-0,0 mm diameter. The holes shall be circular, NOT slotted (see Figure 16a).
- 9.2. Mounting plates for standard fifth wheel couplings shall be suitable for the positive steering of semitrailers (with steering wedges). Mounting plates for non-standard fifth wheel couplings which are unsuitable for positive steering shall be marked appropriately.
- 9.3. Mounting plates for fifth wheel couplings shall be able to satisfy the tests described in annex 6, paragraph 3.8.

10. HOOK TYPE COUPLINGS

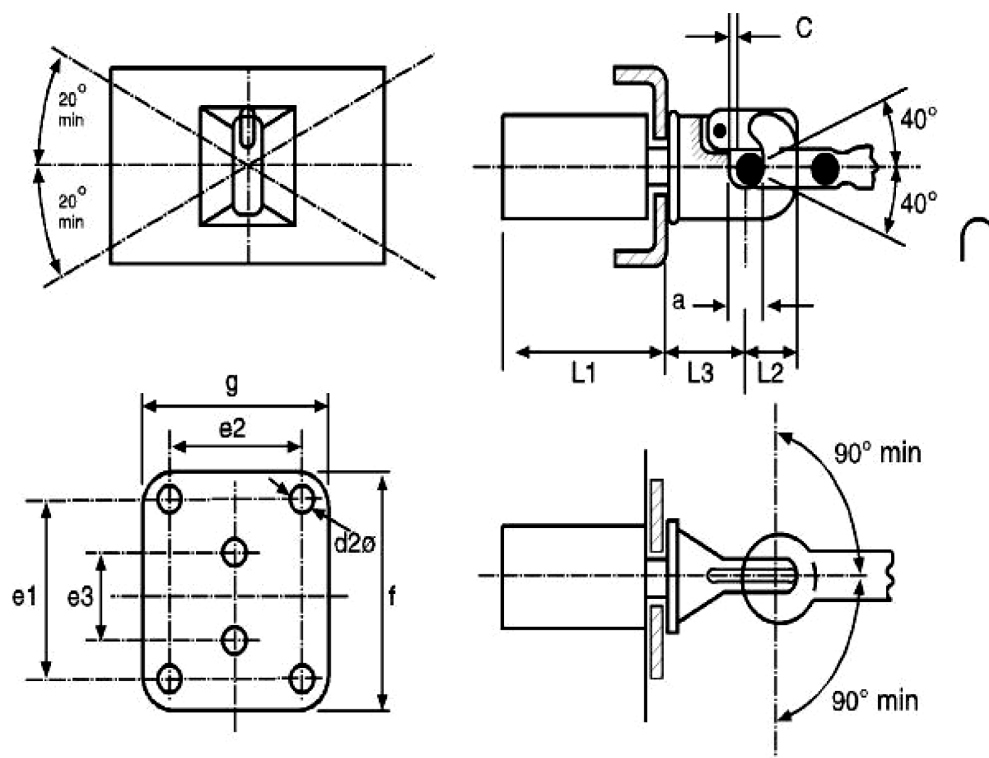
10.1. General requirements for Class K hook type couplings:

10.1.1. All Class K hook type couplings shall satisfy the tests given in annex 6, paragraph 3.5 and shall be suitable for the characteristic values given in Table 13

10.1.2. Class K hook type couplings shall have the dimensions given in Figure 19 and Table 12. Class K1 to K4 are non-automatic couplings for use only on trailers not exceeding 3,5 tonnes maximum permissible mass and Class KA1 to KA3 are automatic couplings.

Figure 19

Dimensions and articulation of Class K hook type couplings



10.1.3. A hook type coupling shall only be used with a toroidal drawbar eye and when used with a Class L toroidal drawbar eye the Class K coupling shall have the degrees of articulation given in paragraph 10.2 of this annex.

10.1.4. A Class K hook type coupling shall be used with a toroidal eye giving a minimum clearance, or free movement, of 3 mm and a maximum clearance of 5 mm when new. Suitable drawbar eyes shall be declared by the coupling manufacturer on the Communication form shown in annex 1.

10.2. A Class K coupling when used with a Class L toroidal eye, but not fitted to a vehicle, shall have the following non-simultaneous angles of articulation — see also Figure 19:

10.2.1. $\pm 90^\circ$ horizontally about the vertical axis of the coupling;

10.2.2. $\pm 40^\circ$ vertically about the horizontal transverse axis of the coupling;

10.2.3. $\pm 20^\circ$ axial rotation about the horizontal longitudinal centre line of the coupling.

10.3. Automatic Class K hook type couplings shall have a jaw designed such that the drawbar eye is guided into the coupling.

10.4. Locking to prevent inadvertent uncoupling:

In the closed position the coupling shall be locked by two positive mechanical engagement locking devices each of which shall remain effective should the other fail.

The closed and locked position of the coupling shall be clearly indicated externally by a mechanical device. It shall be possible to verify the position of the indicator by feel, for example, in the dark.

The mechanical indication device shall indicate the engagement of both locking devices (an AND condition).

However, it is sufficient for the engagement of only one locking device to be indicated if, in this situation, engagement of the second locking device is an inherent feature of the design.

10.5. Hand levers

Hand levers shall be of a design suitable for easy use with the end rounded off. The coupling shall not have any sharp edges or points of possible pinching near the hand lever which could result in injury during operation of the coupling. The force needed to release the coupling, measured without the drawbar eye, shall not exceed 250 N perpendicular to the hand lever along the line of operation.

Table 12

Dimensions for Class K hook type couplings — see Figure 19

Class	K1	K2	K3	K4	KA1	KA2	KA3	Remarks
e ₁		83	83	120	120	140	160	±0,5
e ₂		56	56	55	55	80	100	±0,5
e ₃	90							±0,5
d ₂	17	10,5	10,5	15	15	17	21	H13
c	3	3	3	3	3	3	3	min.
f	130	175	175	180	180	200	200	max.
g	100	100	100	120	120	140	200	max.
a	45	45	45	45	45	45	45	±1,6 - 0
L ₁	120	120	120	120	250	300	300	max.
L ₂	74	74	63	74	90	90	90	max.
L ₃	110	130	130	150	150	200	200	max.

Table 13

Characteristic values for Class K hook type couplings

Class	K1	K2	K3	K4	KA1	KA2	KA3
D kN	17	20	20	25	70	100	130
D _c kN			17	20	54	70	90
S kg	120	120	200	250	700	900	1000
V kN			10	10	18	25	35

11. DEDICATED DRAWBAR TYPE COUPLINGS — CLASS T

11.1. Class T dedicated drawbar type couplings are intended for use on specific vehicle combinations, for example, car transporters. These vehicles have special structures and may need particular and unusual location of the coupling.

- 11.2. Class T couplings shall be restricted to use with centre axle trailers and this restriction shall be notified on the Communication form shown in annex 1.
- 11.3. Class T couplings shall be approved as a matched pair and it shall not be possible to separate the coupling other than in a workshop using tools which are not normally carried on the vehicle.
- 11.4. Class T couplings shall not be automatic in operation.
- 11.5. Class T couplings shall satisfy the relevant test requirements given in annex 6, paragraph 3.3., except paragraph 3.3.4.
- 11.6. The following minimum and simultaneous angles of articulation shall be possible with the coupling not fitted to a vehicle but assembled, and in the same normal position as when fitted to a vehicle;
 - 11.6.1. $\pm 90^\circ$ horizontally about the vertical axis;
 - 11.6.2. $\pm 8^\circ$ vertically about the horizontal transverse axis;
 - 11.6.3. $\pm 3^\circ$ axial rotation about the horizontal longitudinal axis.
12. DEVICES FOR REMOTE INDICATION AND REMOTE CONTROL
 - 12.1. General requirements

Devices for remote indication and remote control are permitted only on automatic coupling devices of Classes C50-X and G50-X.

Devices for remote indication and remote control shall not interfere with the minimum free movement of the coupled drawbar eye or coupled semitrailer. They shall be permanently fitted to the vehicle.

All the devices for remote indication or remote control fall within the scope of testing and approval of the coupling device together with all parts of the operating devices and transmission devices.
 - 12.2. Remote indication
 - 12.2.1. For an automatic coupling procedure, remote indication devices shall indicate the closed and doubly locked position of the coupling in an optical manner according to paragraph 12.2.2. Additionally the open position may be indicated as in paragraph 12.2.3.

The remote indication device shall be automatically activated and reset during every opening and closing of the coupling.
 - 12.2.2. The change from the open to the closed and doubly locked position shall be indicated by a green optical signal.
 - 12.2.3. If the open and/or unlocked position is indicated, a red optical signal shall be used.
 - 12.2.4. In the case of indicating the completion of the automatic coupling procedure, the remote indicator shall ensure that the coupling pin has reached the doubly locked end position.
 - 12.2.5. The appearance of any fault in the remote indication system shall not indicate a closed and locked position during the coupling procedure if the end position has not been reached.
 - 12.2.6. The disengagement of one of the two locking devices shall cause the green optical signal to extinguish and the red optical signal (if fitted) to show.
 - 12.2.7. The mechanical indicators fitted directly to the coupling device shall be retained.
 - 12.2.8. In order to avoid distracting the driver during normal driving, there shall be a provision for switching off the remote indication device but this shall be automatically reactivated when the coupling is next opened and closed — see paragraph 12.2.1.
 - 12.2.9. The operating controls and indicators of the remote indication devices shall be mounted within the driver's field of vision and be permanently and clearly identified.

12.3. Remote control

12.3.1. If a remote control device, as defined in paragraph 2.8 of this Regulation, is employed, there shall also be a remote indication device as described in paragraph 12.2 which shall at least indicate the open condition of the coupling.

12.3.2. There shall be a dedicated switch (i.e. master switch, lever or valve) to enable the coupling to be opened or closed by means of the remote control device. If this master switch is not located in the driving cab it shall not be in a position where it is freely accessible to unauthorised persons or it shall be lockable. The actual operation of the coupling from the driving cab may only be possible when inadvertent operation has been precluded, for example by an operation requiring the use of two hands.

It shall be possible to ascertain whether opening of the coupling under remote control has been completed or not.

12.3.3. If remote control involves the coupling being opened by external force, the condition under which the external force acts on the coupling shall be indicated appropriately to the driver. This is not necessary if the external force is only operative while the remote control is operating.

12.3.4. If the actuating device for opening the coupling under remote control is mounted externally on the vehicle it shall be possible to oversee the area between the coupled vehicles, but it shall not be necessary, however, to enter this area in order to operate it.

12.3.5. Any single error in operation or the occurrence of any single fault in the system shall not result in accidental opening of the coupling during normal road use. Any faults in the system shall be indicated directly or be immediately obvious at the next operation e.g. by a malfunction.

12.3.6. In the event of a failure of the remote control it shall be possible, in an emergency, to open the coupling in at least one other way. If this requires the use of a tool then this shall be included in vehicle's tool kit. The requirements of paragraph 3.6 of this annex are not applicable to hand levers used exclusively for opening the coupling in an emergency.

12.3.7. The operating controls and indicators for the remote control devices shall be permanently and clearly identified.

ANNEX 6

TESTING OF MECHANICAL COUPLING DEVICES OR COMPONENTS

1. GENERAL TESTING REQUIREMENTS

- 1.1. Samples of coupling devices shall be tested for both strength and function. Physical testing shall be carried out wherever possible but unless stated otherwise the type approval authority or technical service may waive a physical strength test if the simple design of a component makes a theoretical check possible. Theoretical checks may be carried out to determine worst case conditions. In all cases, theoretical checks shall ensure the same quality of results as with dynamic or static testing. In cases of doubt it is the results of physical testing that are overriding.

See also paragraph 4.8 of this Regulation.

- 1.2. With coupling devices the strength shall be verified by a dynamic test (endurance test). In certain cases additional static tests may be necessary (see paragraph 3 of this annex).
- 1.3. The dynamic test shall be performed with approximately sinusoidal load (alternating and/or pulsating) with a number of stress cycles appropriate to the material. No cracks or fractures shall occur.
- 1.4. Only slight permanent deformation is permitted with the static tests prescribed. Unless stated otherwise the permanent, plastic, deformation after releasing shall not be more than 10 % of the maximum deformation measured during the test. In the case where measurement of deformation during the test puts the tester at risk then, provided that the same parameter is checked during other tests, such as the dynamic test, then this part of the static test may be omitted.
- 1.5. The loading assumptions in the dynamic tests are based on the horizontal force component in the longitudinal axis of the vehicle and the vertical force component. Horizontal force components transverse to the longitudinal axis of the vehicle, and moments, are not taken into account provided they are of only minor significance.

If the design of the coupling device or its attachment to the vehicle or the attachment of additional systems (such as stabilisers, close coupling devices, etc.) generate additional forces or moments, additional tests may be required by the type approval authority or technical service.

The horizontal force component in the longitudinal axis of the vehicle is represented by a theoretically determined reference force, the D or D_c value. The vertical force component, where applicable, is represented by the static vertical bearing load, S , at the point of coupling and the assumed vertical load, V , or by the static vertical bearing load, U , in the case of fifth wheel couplings.

- 1.6. The characteristic values D , D_c , S , V and U , on which the tests are based and which are defined in paragraph 2.11. of this Regulation, shall be taken from the manufacturer's information given in the application for type approval — see communication form shown in annexes 1 and 2.
- 1.7. Any positive locking device, which is retained in position by spring force, shall remain in its secured position when subjected to a force applied in the least favourable direction and equivalent to three times the mass of the locking mechanism.

2. TEST PROCEDURES

- 2.1. For the dynamic tests and static tests, the sample shall be placed in a suitable rig with a means of force application, such that it is not subjected to any additional forces or moments apart from the specified test force. In the case of alternating tests, the direction of force application shall not deviate by more than $\pm 1^\circ$ from the specified direction. In the case of pulsating and static tests, the angle shall be set for the maximum test force. This will normally require a joint at the point of force application (i.e. the point of coupling) and a second joint an adequate distance away.

- 2.2. The test frequency shall not exceed 35 Hz. The selected frequency shall be well separated from resonance frequencies of the test set up including the tested device. With asynchronous testing the frequencies of the two force components shall be between approximately 1 per cent and a maximum of 3 per cent apart. For coupling devices made from steel the number of stress cycles is 2×10^6 . For devices made from materials other than steel a higher number of cycles may be necessary. The dye-penetration method of crack testing or an equivalent method shall be used to determine any cracking during test.
- 2.3. With pulsating tests, the test force varies between the maximum test force and a lower, minimum, test force, which may not be greater than 5 per cent of the maximum test force unless otherwise stated in the specific testing procedure.
- 2.4. With static tests, other than the special tests required by paragraph 3.2.3 of this annex, the test force shall be applied smoothly and quickly and be maintained for at least 60 seconds.
- 2.5. The coupling devices or component on test should normally be mounted as rigidly as possible on a test rig in the actual position in which they will be used on the vehicle. The fixing devices should be those specified by the manufacturer or applicant and should be those intended for the attachment of the coupling device or component to the vehicle and/or shall have identical mechanical characteristics.
- 2.6. Coupling devices or components shall be tested in the form used on the road. However, at the discretion of the manufacturer, and in agreement with the technical service, flexible components may be neutralised if this is necessary for the test procedure and if this will not have any unrealistic influence on the test result.

Flexible components which are overheated during these accelerated test procedures may be replaced during the test. The test loads may be applied by means of special slack-free devices.

3. SPECIFIC TESTING REQUIREMENTS

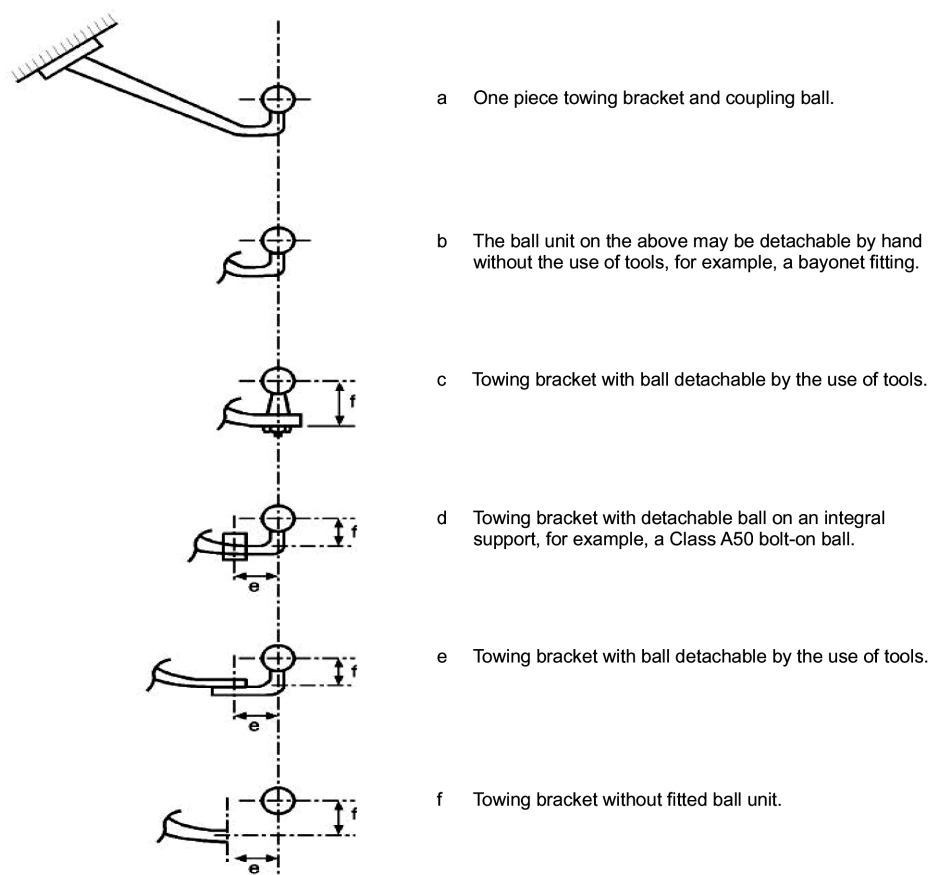
3.1. Coupling balls and towing brackets

3.1.1. Mechanical coupling devices with coupling balls may be of the following types:

- (i) one-piece coupling balls including devices with noninterchangeable detachable balls (see Figures 20a and 20b),
- (ii) coupling balls, comprising a number of parts which can be dismantled (see Figures 20c, 20d and 20e),
- (iii) towing brackets without ball fitted (see Figure 20f).

Figure 20

Arrangements of ball type towing brackets



- 3.1.2. The basic test is a dynamic endurance test. The test sample comprises the coupling ball, the ball neck and the mountings necessary for attaching the assembly to the vehicle. The coupling ball and towing bracket shall be rigidly mounted to a test rig, capable of producing an alternating force, in the actual position in which it is intended for use.
- 3.1.3. The positions of the fixing points for attaching the coupling ball and towing bracket are specified by the vehicle manufacturer (see paragraph 5.3.2 of this Regulation).
- 3.1.4. The devices submitted for test shall be provided with all parts and design details which may have an influence on the strength criteria (for example electrical socket plate, any marking, etc.). The test sample shall include all parts up to the anchorage points or fitting points to the vehicle. The geometric location of the coupling ball and the fixing points of the coupling device related to the reference line shall be provided by the vehicle manufacturer and shall be shown in the test report. All relative positions of the anchorage points with respect to the reference line, for which the towing vehicle manufacturer shall provide all the necessary information to the towing device manufacturer, shall be repeated on the test bed.
- 3.1.5. The sample mounted on the test rig shall be subjected to an alternating stress test applied at an angle to the ball as shown in Figure 21 or 22.

The direction of the angle of test shall be determined by the vertical relationship between a horizontal reference line passing through the centre of the ball and a horizontal line passing through the fixing point of the coupling device which is the highest of the nearest, when measured in a horizontal plane, to a transverse vertical plane passing through the centre of the ball. If the fixing point line is above the horizontal reference line, the test shall be carried out at an angle of $\alpha = +15^\circ \pm 1^\circ$ and if it is below then the test shall be carried out at an angle of $\alpha = -15^\circ \pm 1^\circ$ (see Figure 21). The fixing points to be considered in determining the angle of test shall be those declared by the vehicle manufacturer and which transmit the major towing forces to the structure of the towing vehicle.

This angle is chosen in order to take account of the vertical static and dynamic load and is only applicable for a permitted static vertical load not exceeding:

$$S = 120 \times D \text{ [N]}$$

Where the static vertical load exceeds that calculated above, the angle shall, in both conditions, be increased to 20°.

The dynamic test shall be performed with the following test force:

$$F_{hs \text{ res}} = \pm 0.6 D$$

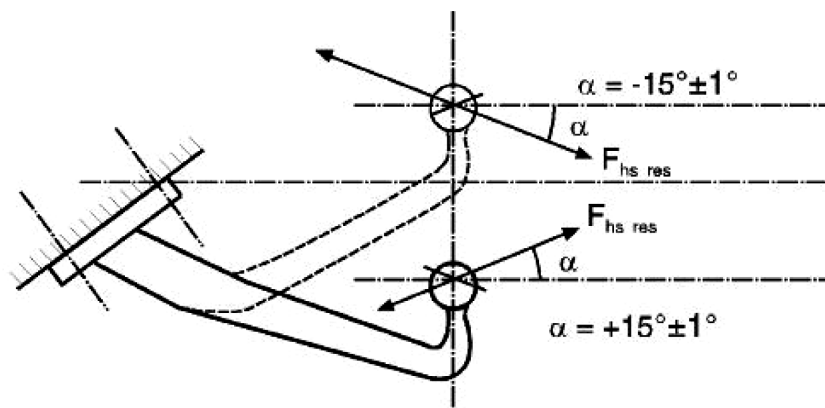
3.1.6. The test procedure is applicable to the different types of coupling devices (see paragraph 3.1.1 of this annex) as follows:

3.1.6.1. one piece coupling balls including devices with non-interchangeable detachable balls (see Figures 20a and 20b).

3.1.6.1.1. the strength test for the devices shown in Figures 20a and 20b shall be carried out according to the requirements of paragraph 3.1.5;

Figure 21

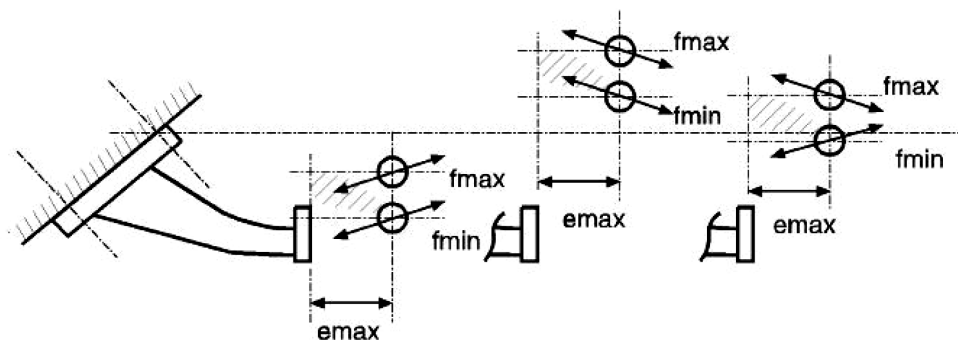
Angles of application of test force



Note: The line parallel to the reference line passes through the centre of the highest and nearest point for mounting the towing bracket to the vehicle - see Annex 6, paragraph 3.1.5.

Figure 22

Angles of application of test force



Note: Direction of alternating test force, $F_{hs \text{ res}}$, depending on the location of the ball centre horizontal reference line in relation to the line parallel to this reference line - see Figure 21.

3.1.6.2. coupling balls, comprising parts which can be dismantled.

The following categories are defined:

- (a) towing bracket and ball (see Figure 20c),
- (b) towing bracket and ball on integral support (see Figure 20d),
- (c) towing bracket with detachable ball (see Figure 20e),
- (d) towing bracket without ball (see Figure 20f).

3.1.6.2.1. The strength test for the devices shown in Figures 20c to 20f shall be carried out according to the requirements of paragraph 3.1.5. Dimensions e and f, shall have a manufacturing tolerance of ± 5 mm, and shall be stated in the test report.

The test of the towing bracket (see Figure 20f) shall be carried out with a mounted ball (on support). Account will be taken only of the result of the test on the towing bracket between the fixing points and the mounting surface of the ball support.

The dimensions e and f shall have a manufacturing tolerance of ± 5 mm and shall be specified by the coupling device manufacturer.

3.1.6.3. Coupling devices with variable dimensions e and f for demountable and interchangeable coupling balls — see Figure 22.

3.1.6.3.1. The strength tests for such towing brackets shall be carried out to the requirements of paragraph 3.1.5.

3.1.6.3.2. If a worst case configuration can be defined by agreement between the manufacturer and the type approval authority or technical service, then testing of this one configuration alone shall be sufficient.

Otherwise, several ball positions shall be tested in a simplified test programme according to paragraph 3.1.6.3.3.

3.1.6.3.3. In a simplified test programme, the value for f shall be between a defined value of $f_{\min}$ and a value of $f_{\max}$ which does not exceed 100 mm. The ball shall be at a distance, $e_{\max}$, of 130 mm from the support. To cover all possible positions of the ball, in the field given by the horizontal distance from the mounting surface and the vertical range of f ($f_{\min}$ to $f_{\max}$), two devices are to be tested:

- (i) one with a ball in the upper ($f_{\max}$) position, and
- (ii) one with a ball in the lower ($f_{\min}$) position.

The angle of application of the test force will vary, positive or negative, depending on the relationship of the ball centre horizontal reference line to the parallel line passing through the highest and nearest coupling device fixing point. The angles to be used are shown in Figure 22.

3.1.7. In the case where detachable ball units are retained using fixing arrangements other than screwed fittings, for example, spring clips, and where the positive mechanical engagement aspect of the arrangement is not tested during the dynamic test, then the arrangement shall be subject to a static test applied to the ball or to the positive mechanical engagement arrangement in an appropriate direction. Where the positive mechanical engagement arrangement retains the ball unit vertically, the static test shall be to apply an upwards vertical force to the ball equivalent to the "D" value. Where the positive mechanical engagement arrangement retains the ball unit by means of a transverse horizontal design, the static test shall be to apply a force in this direction equivalent to 0,25 D. There shall not be any failure of the positive mechanical engagement device or any distortion likely to have an adverse effect on its function.

3.1.8. The attachment points for the secondary coupling referred to in annex 5, paragraph 1.5 shall withstand a horizontal static force equivalent to 2D with a maximum of 15 kN. Where there is a separate attachment point for a breakaway cable this shall withstand a horizontal static force equivalent to D.

3.2. Coupling heads

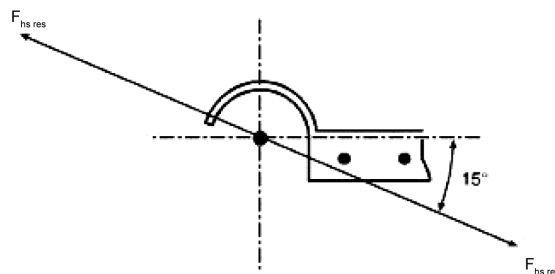
- 3.2.1. The basic test is an endurance test using an alternating test force followed by a static test (lifting test) on the same test sample.
- 3.2.2. The dynamic test shall be performed with a Class A coupling ball of appropriate strength. On the test rig the coupling ball and coupling head shall be arranged as instructed by the manufacturer and orientated in a way corresponding to the relative positions in normal use. There should be no possibility of extra forces in addition to the test force acting on the specimen. The test force shall be applied along a line passing through the centre of the ball and inclined downwards to the rear at 15° (see Figure 23). An endurance test must be performed on a test specimen with the following test force:

$$F_{hs\ res\ w} = \pm 0,6\ D$$

Where the maximum permissible static vertical mass, S, exceeds 120 D, then the angle of test shall be increased to 20°.

Figure 23

Dynamic test



- 3.2.3. A static separation test shall also be performed. The coupling ball used for the test shall have a diameter of 49,00 to 49,13 mm in order to represent a worn coupling ball. The separation force, F_a , shall be applied perpendicular to both the transverse and longitudinal centre line axes of the coupling head and shall be increased smoothly and quickly to a value of:

$$F_a = g(C + S/1\ 000)\text{kN}$$

and be held for 10 seconds.

The coupling head shall not separate from the ball nor shall any component of the coupling head exhibit any permanent distortion which could have an adverse effect on its functional capability.

3.3. Drawbar couplings and drawbeams

- 3.3.1. An endurance test shall be performed on a test sample. The coupling device shall be equipped with all the fixings needed to attach it to the vehicle. Any intermediate devices fitted between the drawbar couplings and the vehicle frame (i.e. drawbeams) shall be tested with the same forces as the coupling. When testing drawbeams intended for standard drawbar couplings, the vertical load shall be applied at a longitudinal distance from the vertical plane of the fixing points that is equal to the position of the corresponding standard coupling.

3.3.2. Drawbar couplings for hinged drawbars (S=0)

The dynamic test shall be performed with a horizontal alternating force of $F_{hw} = \pm 0,6\ D$ acting in a line parallel to the ground and in the longitudinal median plane of the towing vehicle passing through the centre of the coupling pin.

3.3.3. Drawbar couplings for use with centre-axle trailers (S>0).

3.3.3.1. Centre axle trailer masses up to and including 3,5 tonnes:

Drawbar couplings for use with centre axle trailers up to and including a mass of 3,5 tonnes shall be tested in the same way as coupling balls and towing brackets described in 3.1 of this annex.

3.3.3.2. Centre axle trailer masses exceeding 3,5 tonnes:

The test forces are applied to the specimen in both horizontal and vertical directions in an asynchronous endurance test. The horizontal line of action shall be equivalent to being parallel to the ground and along the longitudinal median plane of the towing vehicle and pass through the centre of the coupling pin. The vertical line of action shall be perpendicular to the horizontal line of action and shall act along the longitudinal centre line of the coupling pin.

The fixing arrangements for the drawbar coupling and the drawbar eye on the test rig shall be those intended for its attachment to the vehicle in accordance with the manufacturer's fitting instructions.

The following test forces shall be applied:

Table 14

Test forces

Test Force	Mean value (kN)	Amplitude (kN)
Horizontal Force	0	$\pm 0,6 D_c$ (see note)
Vertical Force	$S \times g/1\ 000$	$\pm 0,6 V$ (see note)

Note: In the case of Class T dedicated drawbar couplings these values shall be reduced to $\pm 0,5D_c$ and $\pm 0,5V$.

The vertical and the horizontal components shall be sinusoidal in shape and shall be applied asynchronously, where the difference of their frequencies shall be between 1 per cent and 3 per cent.

3.3.4. Static test on coupling pin locking device

With drawbar couplings it is also necessary to test the closure and any locking devices by means of a static force of $0,25 D$ acting in the direction of opening. The test shall not cause the closure to open and it shall not cause any damage. A test force of $0,1 D$ is sufficient in the case of cylindrical coupling pins.

3.4. Drawbar eyes

3.4.1. Drawbar eyes shall be subjected to the same dynamic testing as drawbar couplings. Drawbar eyes used solely for trailers having hinged drawbars allowing free vertical movement shall be subjected to an alternating force as described in paragraph 3.3.2. Drawbar eyes also intended for use on centre axle trailers shall be tested in the same way as ball coupling heads (paragraph 3.2) for trailer masses C up to and including 3,5 tonnes and in the same way as drawbar couplings (paragraph 3.3.3.2.) for centre axle trailers with a mass, C , exceeding 3,5 tonnes.

3.4.2. Toroidal eyes of Class L shall be tested in the same manner as standard drawbar eyes.

3.4.3. The testing of drawbar eyes shall be conducted in such a manner that the alternating force also acts on the parts used for attaching the drawbar eye to the drawbar. All flexible intermediate components shall be clamped.

3.5. Hook type couplings

3.5.1. Class K hook type couplings shall satisfy the dynamic test given in paragraph 3.5.2 of this annex.

3.5.2. Dynamic test:

3.5.2.1. The dynamic test shall be a pulsating test using a Class L toroidal eye and with the coupling mounted as it would be on a vehicle and with all of the necessary parts for vehicle installation. However, any flexible components may be neutralised with the agreement of the type approval authority or technical service;

3.5.2.2. For hook type couplings intended for use with hinged drawbar trailers, where the imposed vertical load on the coupling, S , is zero, the test force shall be applied in a horizontal direction simulating a tensile force on the hook and varying between $0,05 D$ and $1,00 D$;

- 3.5.2.3. For hook type couplings intended for use with centre axle trailers the test force shall represent the resultant of the horizontal and vertical forces on the coupling and shall be applied along an angle, $-\alpha$, that is, from top front to bottom rear (see Figure 21), and equivalent to the calculated angle of the resultant between the horizontal and vertical forces on the coupling.

The force, $F_{hs\ res}$ shall be calculated as:

$$F_{hs\ res} = \text{sq. rt}(F_h^2 + F_s^2) ,$$

$$\text{where } F_h = D_c \text{ and } F_s = (9,81S)/1\ 000 + 0,8V$$

- 3.5.2.4. The applied force shall vary between and . $0,05F_{hs\ res}$ $1,00F_{hs\ res}$

- 3.5.3. Static test on coupling locking device With hook type couplings it is also necessary to test the closure and any locking devices by means of a static force of $0,25\ D$ acting in the direction of opening. The test shall not cause the closure to open and it shall not cause any damage.

3.6. Drawbars

- 3.6.1. Drawbars shall be tested in the same way as drawbar eyes (see paragraph 3.4.). The type approval authority or technical service may waive an endurance test if the simple design of a component makes a theoretical check of its strength possible. The design forces for the theoretical verification of the drawbar of centre axle trailers with a mass, C , of up to and including 3,5 tonnes shall be taken from ISO 7641/1: 1983. The design forces for the theoretical verification of drawbars for centre axle trailers having a mass, C , over 3,5 tonnes shall be calculated as follows:

$$F_{sp} = (g \times S/1\ 000) + V$$

where the force amplitude V is that given in paragraph 2.11.4 of this Regulation.

The permissible stresses based on the design masses for trailers having a total mass, C , over 3,5 tonnes shall be in accordance with paragraph 5.3 of ISO 7641/1: 1983. For bent drawbars (e.g. swan neck) and for the drawbars of full trailers, the horizontal force component $F_{hp} = 1,0 \times D$ shall be taken into consideration.

- 3.6.2. For drawbars for full trailers with free movement in the vertical plane, in addition to the endurance test or theoretical verification of strength, the resistance to buckling shall be verified either by a theoretical calculation with a design force of $3,0 \times D$ or by a buckling test with a force of $3,0 \times D$. The permissible stresses in the case of calculation shall be in accordance with paragraph 5.3 of ISO 7641/1: 1983.
- 3.6.3. In the case of steered axles, the resistance to bending shall be verified by theoretical calculations or by a bending test. A horizontal, lateral static force shall be applied in the centre of the coupling point. The magnitude of this force shall be chosen so that a moment of $0,6 \times A_v \times g$ (kNm) is exerted about the front axle centre. The permissible stresses shall be in accordance with paragraph 5.3 of ISO 7641/1: 1983.

However, in the case where the steered axles form a twin, tandem, axle front carriage (steered bogie) the moment shall be increased to $0,95 \times A_v \times g$ (kNm)

3.7. Fifth wheel couplings

- 3.7.1. The basic strength tests are a dynamic test and a static test (lifting test). Fifth wheel couplings intended for the positive steering of semitrailers shall be subject to an additional static test (bending test). For the purpose of the tests the fifth wheel coupling shall be equipped with all the fixings needed to attach it to the vehicle. The method of mounting shall be identical to that employed on the vehicle itself. It is not permissible to use a calculation method as an alternative to physical testing.

3.7.2. Static tests

- 3.7.2.1. Standard fifth wheel couplings designed for a steering wedge or similar device for the positive steering of semitrailers (see paragraph 2.7 of this Regulation) shall be tested for adequate strength by means of a static bending test within the working range of the steering device with the simultaneous application of fifth wheel load. The maximum permitted imposed vertical load, U , for the fifth wheel shall be applied vertically to the coupling in its operating position by means of a rigid plate of sufficient size to cover the coupling completely.

The resultant of the applied load shall pass through the centre of the horizontal joint of the fifth wheel coupling.

Simultaneously, a horizontal lateral force, representing the force needed for positive steering of the semitrailer, shall be applied to the flanks of the guide for the coupling pin. The magnitude of this force and the direction in which it acts shall be chosen so that a moment of $0,75m \times D$ is exerted about the centre of the coupling pin by means of a force acting on a lever arm $0,5 m \pm 0,1 m$ long. Permanent, plastic deformation up to 0,5 per cent of all nominal dimensions is permitted. There shall not be any cracking.

- 3.7.2.2. A static lifting test shall be performed on all fifth wheel couplings. Up to a lifting force of $F_a = g \cdot U$ there shall not be any major permanent bending of the coupling plate over more than 0,2 per cent of its width.

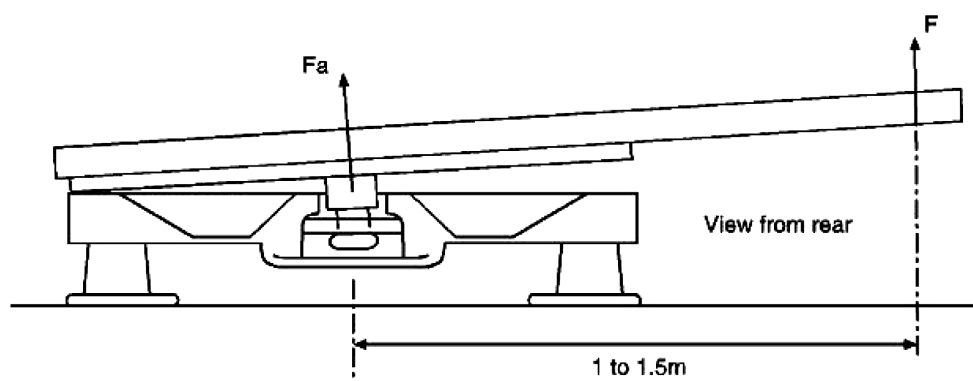
In the case of Class G50 standard fifth wheel couplings and comparable couplings for the same coupling pin diameter, there shall not be any separation of the coupling pin from the coupling with a lifting force of $F_a = g \times 2,5 U$. In the case of non-standard couplings using a pin diameter greater than 50 mm, for example 90 mm pin diameter couplings, the lifting force shall be: $F_a = g \times 1,6 U$ with a minimum value of 500 kN.

The force shall be applied by means of a lever bearing on the coupling plate at one end and being raised at the other end at a distance of 1,0 to 1,5 m from the centre of the coupling pin — see Figure 24.

The lever arm shall be at 90° to the direction of entry of the coupling pin into the coupling. If the worst case is obvious, this worst case has to be tested. If the worst case is not easy to determine, the type approval authority or technical service shall decide which side to test. Only one test is necessary.

Figure 24

Lifting test on fifth wheel couplings



- 3.7.3. Dynamic test

The fifth wheel coupling shall be subjected to alternating stress on a test rig (asynchronous dynamic test) with horizontal alternating and vertical pulsating forces acting simultaneously.

- 3.7.3.1. In the case of fifth wheel couplings not intended for the positive steering of semitrailers, the following forces shall be used:

Horizontal: $F_{hw} = \pm 0,6 \times D$

Vertical: $F_{so} = g \times 1,2 U$

$F_{su} = g \times 0,4 U$

These two forces shall be applied in the longitudinal median plane of the vehicle with the lines of action of both forces F_{so} and F_{su} passing through the centre of the joint of the coupling.

The vertical force F_s alternates between the limits $+g \times 1,2 U$ and $+g \times 0,4 U$ and the horizontal force between $\pm 0,6 D$.

- 3.7.3.2. In the case of fifth wheel couplings intended for the positive steering of semitrailers the following forces shall be used:

Horizontal: $F_{hw} = \pm 0,675 D$

Vertical: F_{so} and F_{su} as in paragraph 3.7.3.1.

The lines of action of the forces are as given in paragraph 3.7.3.1.

- 3.7.3.3. For the dynamic test of fifth wheel couplings, a suitable lubricating material shall be placed between the coupling plate and the trailer plate so that the maximum coefficient of friction, $\mu \leq 0,15$.

3.8. Mounting plates for fifth wheel couplings

The dynamic test for fifth wheel couplings described in paragraph 3.7.3 and the static tests described in paragraph 3.7.2 shall also be applied to mounting plates. With mounting plates, it is sufficient to perform the lifting test on one side only. The test shall be based on the maximum designated installation height for the coupling, the maximum designated width and the minimum designated length of the mounting plate design. It is not necessary to carry out this test if the mounting plate in question is identical to one which has already undergone this test except that it is narrower and/or longer and the total height is lower. It is not permissible to use a calculation method as an alternative to physical testing.

3.9. Fifth wheel coupling pins of semitrailers

- 3.9.1. A dynamic test with alternating stress shall be performed on a sample mounted on a test rig. The testing of the coupling pin shall not be combined with the testing of the fifth wheel coupling. The test shall be conducted so that the force is also applied to the fixings needed for attaching the coupling pin to the semitrailer. It is not permissible to use a calculation method as an alternative to physical testing.

- 3.9.2. A dynamic test with an alternating horizontal force of $F_{hw} = \pm 0,6 D$ shall be applied to the coupling pin in the operating position.

The line of action of the force shall pass through the centre of the smallest diameter of the cylindrical part of the coupling pin having a diameter of 50,8 mm for Class H50 (see annex 5, Figure 18).

ANNEX 7

INSTALLATION AND SPECIAL REQUIREMENTS

1. INSTALLATION AND SPECIAL REQUIREMENTS

1.1. Attachment of coupling balls and towing brackets

- 1.1.1. Coupling balls and towing brackets shall be attached to vehicles of categories M_1 , M_2 (below 3,5 t maximum permissible mass) and N_1 ⁽¹⁾ in a manner which conforms to the clearance and height dimensions given in Figure 25. The height shall be measured at the vehicle loading conditions given in appendix 1 to this annex.

The height requirement shall not apply in the case of category G off-road vehicles as defined in annex 7 of the Consolidated Resolution on the Construction of Vehicles (R.E.3)(document TRANS/WP.29/78/Rev.1/Amend.2).

- 1.1.1.1. The clearance space shown in Figures 25a and 25b may be occupied by non-demountable equipment, such as a spare wheel, provided that the distance from the centre of the ball to a vertical plane at the extreme rearmost point of the equipment does not exceed 300 mm. The equipment shall be mounted to allow adequate access for coupling and uncoupling without risk of injury to the user and without affecting articulation of the coupling.

- 1.1.2. For coupling balls and towing brackets the vehicle manufacturer shall supply mounting instructions and state whether any reinforcement of the fixing area is necessary.

- 1.1.3. It shall be possible to couple and uncouple ball couplings when the longitudinal axis of the ball coupling in relation to the centre line of the coupling ball and mounting:

is rotated horizontally 60° to right or left, ($\beta = 60^\circ$, see Figure 25);

is rotated vertically 10° up or down ($\alpha = 10^\circ$, see Figure 25);

is rotated axially 10° to right or left.

⁽¹⁾ See definitions in Regulation No 13 annexed to the 1958 Agreement concerning the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of these Prescriptions. The definition is also contained in annex 7 of the Consolidated Resolution on the Construction of Vehicles (R.E.3) (document TRANS/WP.29/78/Rev.1/Amend.2).

Figure 25(a)

Clearance space for, and height of, coupling ball — side view

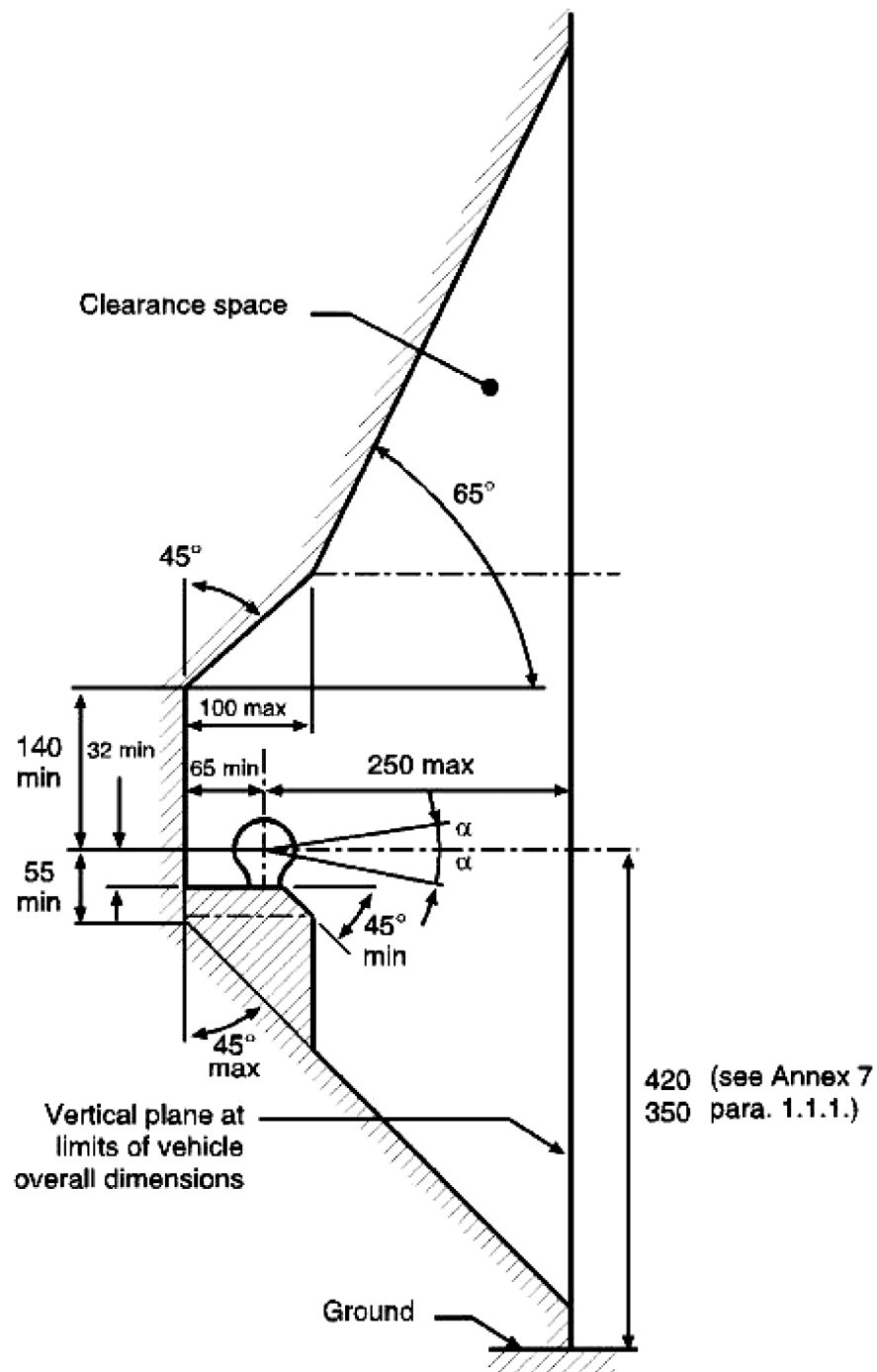
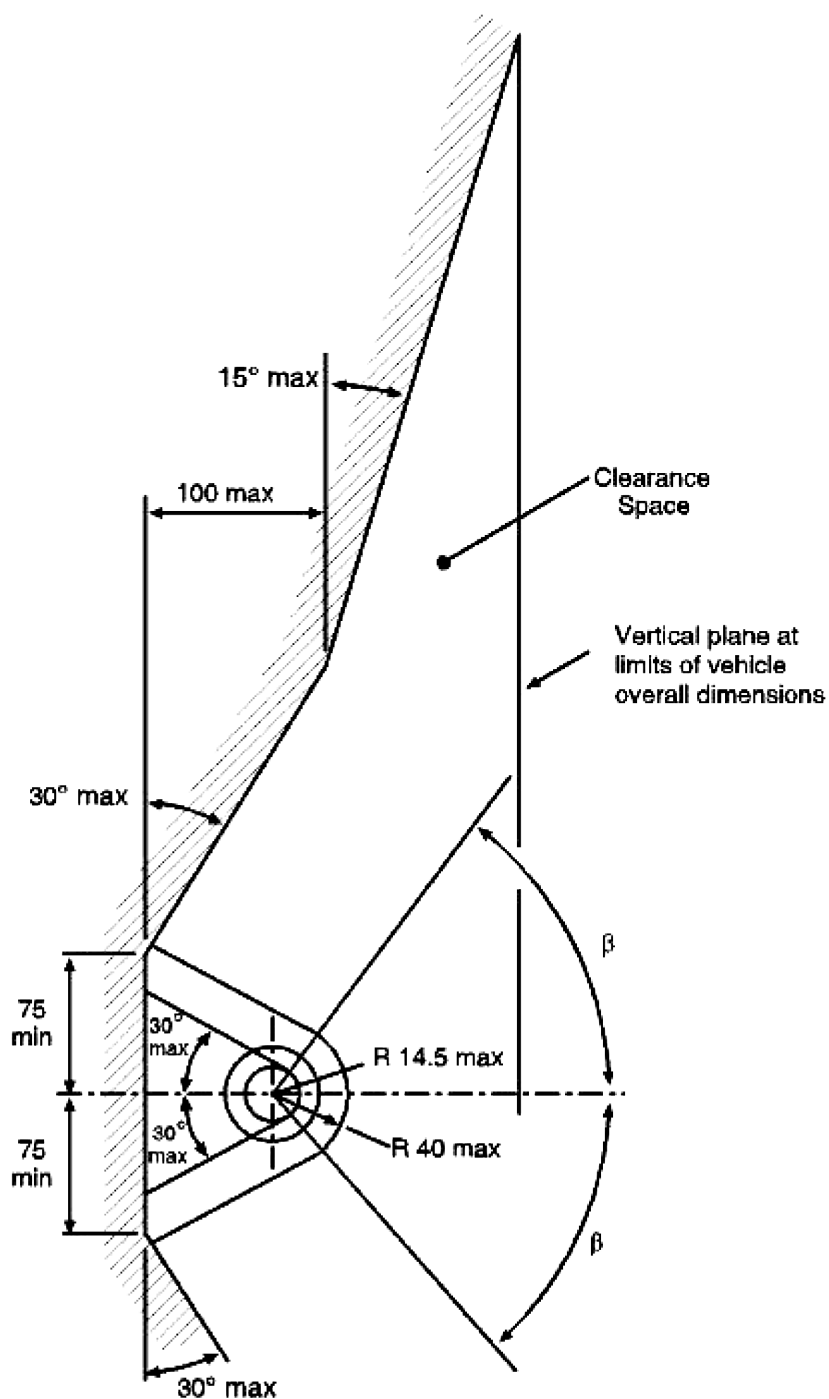


Figure 25(b)

Clearance space for coupling ball — plan view



- 1.1.4. When the trailer is not coupled to the towing vehicle, the mounted towing bracket and coupling ball shall not obscure the mounting space provided for the rear registration plate or affect the visibility of the rear registration/licence plate of the towing vehicle. If the coupling ball or other items do obscure the rear registration plate they shall be removable or repositionable without the use of tools except, for example, an easily operated (i.e. an effort not exceeding 20 Nm) release key which is carried in the vehicle.

1.2. Attachment of coupling heads

- 1.2.1. Class B coupling heads are permitted for trailers of maximum mass up to and including 3,5 tonnes. With the trailer horizontal and carrying the maximum permitted axle load, coupling heads shall be fitted so that the centre line of the spherical area into which the ball fits is 430 ± 35 mm above the horizontal plane on which the wheels of the trailer rest.

In the case of caravans and goods trailers, the horizontal position is regarded as when the floor or loading surface is horizontal. In the case of trailers without such a reference surface (e.g. boat trailers or similar) the trailer manufacturer shall give an appropriate reference line defining the horizontal position. The height requirement shall apply only to trailers intended to be attached to vehicles mentioned in paragraph 1.1.1. of this annex.

In all cases the horizontal position shall be determined to within $\pm 1^\circ$.

- 1.2.2. It shall be possible to operate the coupling heads safely within the free space of the coupling ball given in Figures 25a and 25b, up to angles of $\alpha = 25^\circ$ and $\beta = 60^\circ$.

1.3. Attachment of drawbar couplings and mounting blocks

- 1.3.1. Mounting dimensions for standard drawbar couplings:

In the case of types of standard drawbar couplings the mounting dimensions on the vehicle given in Figure 15 and Table 10 must be met.

- 1.3.2. Need for remote controlled couplings

If one or more of the following requirements regarding easy and safe operation (paragraph 1.3.3.), accessibility (paragraph 1.3.5.) or clearance for the hand lever (paragraph 1.3.6.) cannot be met, a coupling with a remote control device as described in annex 5, paragraph 12.3. shall be used.

- 1.3.3. Easy and safe coupling operation

Drawbar couplings shall be mounted on the vehicle in such a manner that they are easy and safe to operate.

In addition to the functions of opening (and closing, if applicable) this also includes checking the position of the indicator for the closed and locked positions of the coupling pin (by sight and touch).

In the area in which the person operating the coupling has to stand, there shall not be any points of possible danger such as sharp edges, corners, etc. inherent in the design unless these are protected so that injury is unlikely.

The way of escape from this area shall not be restricted or barred on either side by any objects attached to either the coupling or the vehicles.

Any underrun protection device shall not prevent the person adopting a suitable position to operate the coupling.

- 1.3.4. Minimum angle for coupling up and uncoupling

Coupling and uncoupling of the drawbar eye shall be possible when the longitudinal axis of the drawbar eye in relation to the centre line of the jaw is simultaneously rotated:

50° horizontally to right or left;

6° vertically up or down.

6° axially to right or left.

This requirement shall also apply to Class K hook type couplings.

- 1.3.5. Accessibility

The distance between the centre of the coupling pin and the edge of the bodywork of the vehicle shall not exceed 550 mm. Where the distance exceeds 420 mm, the coupling shall be fitted with an actuation mechanism which will allow safe operation at a maximum distance of 420 mm from the outer board of the bodywork.

The distance of 550 mm may be exceeded as follows, provided that technical necessity can be demonstrated and that easy and safe actuation of the drawbar coupling is not adversely affected:

- (i) to a distance of up to 650 mm for vehicles with tipping bodies or rear-mounted equipment;
- (ii) to a distance of up to 1,320 mm if the unobstructed height is at least 1,150 mm;
- (iii) in the case of car transporters with at least two loading levels when the trailer vehicle is not separated from the towing vehicle in normal transport operation.

1.3.6. Clearance for the hand lever

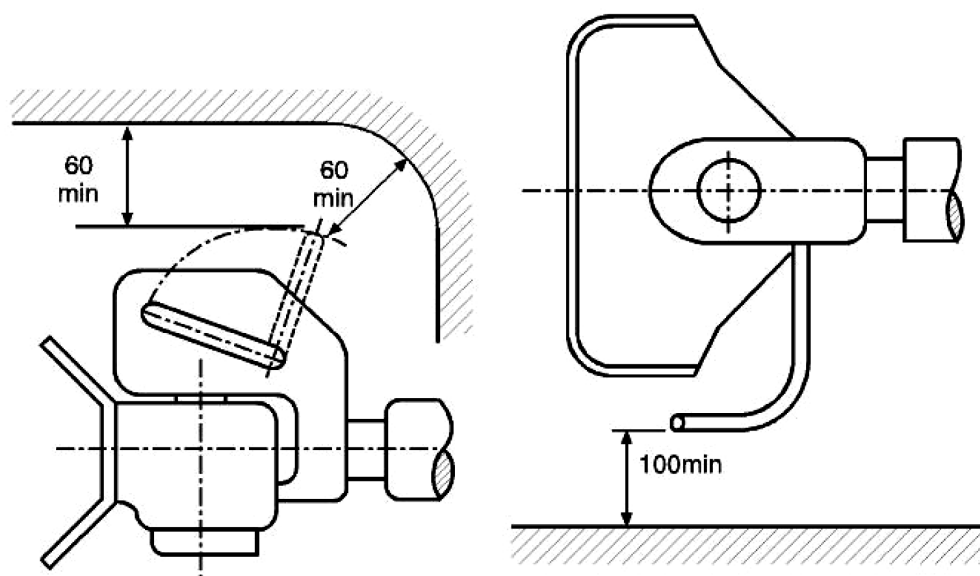
In order to permit safe operation of drawbar couplings there shall be adequate free space around the hand lever.

The clearance illustrated in Figure 26 is regarded as sufficient.

If different types of standard drawbar couplings are intended to be fitted to the vehicle, the clearance shall be such that the conditions are also satisfied for the largest size of coupling of the appropriate class given in annex 5, paragraph 3.

Figure 26

Hand lever clearance



The clearance dimensions are also applicable as appropriate for drawbar couplings having hand levers pointing downwards or of a different design.

The clearance shall also be maintained within the specified minimum angle for coupling up and uncoupling given in paragraph 1.3.4 of this annex.

1.3.7. Clearance for free movement of drawbar coupling

The drawbar coupling attached to the vehicle shall have a minimum clear gap of 10 mm from every other part of the vehicle taking into account all possible geometrical positions given in annex 5, paragraph 3.

If different types of standard drawbar couplings are intended to be fitted to the vehicle type, the clearance shall be such that the conditions are also satisfied for the largest possible coupling of the appropriate class stated in annex 5, paragraph 3.

1.3.8. Acceptability of drawbar couplings with a special joint for vertical rotation — see annex 5, paragraph 3.4.

Couplings having a cylindrical pin and which achieve vertical rotation for the coupled drawbar eye by means of a special joint will only be permitted when technical necessity can be demonstrated. This may be the case, for example, on rear tippers when the coupling head shall be hinged, or with the couplings of heavy transporters when for strength reasons the use of a cylindrical coupling pin is necessary.

- 1.4. Attachment of drawbar eyes and drawbars on trailers.
- 1.4.1. Drawbars for centre axle trailers shall have a support device which is adjustable in height if bearing mass at the drawbar eye on the trailer exceeds 50 kg, when the trailer is uniformly loaded to its technically permissible maximum mass.
- 1.4.2. When attaching drawbar eyes and drawbar to centre-axle trailers with a maximum mass, C, of more than 3,5 tonnes and more than one axle, the trailers shall be equipped with device for axle load sharing.
- 1.4.3. Hinged drawbars shall be clear of the ground. They shall not fall below a height of 200 mm from the ground when released from the horizontal position. See also annex 5, paragraphs 5.3 and 5.4.
- 1.5. Attachment of fifth wheel couplings, mounting plates and coupling pins on vehicles.
- 1.5.1. Class G50 fifth wheel couplings shall not be mounted directly on the vehicle frame unless permitted by the vehicle manufacturer. They shall be fixed to the frame by means of a mounting plate and the installation instructions provided by the vehicle manufacturer and coupling manufacturer shall be followed.
- 1.5.2. Semitrailers shall be equipped with landing gear or any other equipment which allows uncoupling and parking of the semitrailer. If semitrailers are equipped so that the connection of the coupling devices, the electrical systems and braking systems can be effected automatically, the trailer shall have landing gear which retracts from the ground automatically after the semitrailer has been coupled up.

These requirements shall not apply in the case of semitrailers designed for special operations where they are normally only separated in a workshop or when loading and unloading in specifically designed operating areas.

- 1.5.3. The fixing of the fifth wheel coupling pin to the mounting plate on the semitrailer shall be as instructed by the vehicle manufacturer or the manufacturer of the fifth wheel coupling pin.
- 1.5.4. If a semitrailer is equipped with a steering wedge it shall meet the requirements as described in annex 5, paragraph 7.8.

2. REMOTE INDICATION AND CONTROL

- 2.1. When installing remote indication and control devices any relevant requirements given in annex 5, paragraph 12 shall be taken into account.

ANNEX 7

Appendix 1

LOADING CONDITIONS FOR MEASUREMENT OF COUPLING BALL HEIGHT

1. The height shall be as specified in annex 7, paragraph 1.1.1.
2. In the case of M1 category vehicles ⁽¹⁾ the vehicle mass at which this height shall be measured shall be declared by the vehicle manufacturer and shall be given in the Communication form (annex 2). The mass shall be either the maximum permissible mass, distributed between the axles as declared by the vehicle manufacturer or the mass given by loading the vehicle in accordance with paragraph 2.1 of this appendix.
 - 2.1. The maximum figure for the mass in running order as declared by the towing vehicle manufacturer (see paragraph 6. of the Communication form, annex 2); plus
 - 2.1.1. two masses, each of 68 kg, positioned in the outer seating position of each row of seats, with the seats in the rearmost adjustable position for normal driving and travel, and with the masses located:
 - 2.1.1.1. for original equipment coupling devices and components submitted for approval by the vehicle manufacturer, approximately at a point located at 100 mm in front of the "R" point for adjustable seats and 50 mm in front of the "R" point for other seats, the "R" point being determined according to Regulation No 14 paragraph 5.1.1.2.; or
 - 2.1.1.2. for coupling devices and components submitted for approval by an independent manufacturer and intended for replacement market fitting, approximately at the position of a seated person;
 - 2.1.2. In addition, for each mass of 68 kg, an additional mass of 7 kg allowance for personal luggage shall be distributed evenly in the luggage area of the vehicle;
 3. In the case of N1 category vehicles ⁽²⁾, the vehicle mass at which this height shall be measured shall be:
 - 3.1. The maximum permissible mass, distributed between the axles as declared by the towing vehicle manufacturer (see paragraph 6. of the Communication form, annex 2).

⁽¹⁾ As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3), annex 7 (Document TRANS/WP.29/78/Rev.1/Amend.2).

⁽²⁾ As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3), annex 7 (Document TRANS/WP.29/78/Rev.1/Amend.2).

RETTIFIKA

Rettifika għar-Regolament tal-Kunsill (KE) Nru 1175/2005 tat-18 ta' Lulju li jimponi dazju *anti-dumping* definittiv u jiġbor definittivament id-dazju provviżorju impost fuq importazzjonijiet tal-karbonju tal-barju li joriġinaw mir-Repubblika tal-Poplu taċ-Ċina

(ĠU L 189, 21 ta' Lulju 2005)

(Edizzjoni Speċjali L 164 M, 16 ta' Ġunju, p. 249)

Pàġna 17, premessa 20, pàġna 21, premessa 47 u pàġna 22, Artikolu 1 (2)

Flok: "Zaozhuang Yongli Chemical Co."

Aqra: "Zaozhuang Yongli Chemical Co. Ltd."
