

**Commission Communication in the framework of the implementation of Directive 98/37/EC of the European Parliament and of the Council of 22 June 1998 in relation to machinery <sup>(1)</sup> amended by Directive 98/79/EC <sup>(2)</sup>**

(2000/C 252/03)

**(Text with EEA relevance)**

*(Publication of titles and references of European harmonised standards under the Directive)*

ESO <sup>(1)</sup>	Reference	Title of the harmonised standards	First publication (OJ) <sup>(2)</sup>
CEN	EN 115:1995	Safety rules for the construction and installation of escalators and passenger conveyors	1.7.1995
CEN	EN 115/A1:1998	Safety rules for the construction and installation of escalators and passenger conveyors	15.10.1998
CEN	EN 201:1997	Rubber and plastics machines — Injection moulding machines — Safety requirements	4.6.1997
CEN	EN 201/A1:2000	Rubber and plastics machines — Injection moulding machines — Safety requirements	20.5.2000
CEN	EN 289:1993	Rubber and plastics machinery — Compression and transfer moulding presses — Safety requirements for the design	27.7.1994
CEN	EN 292-1:1991	Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology	24.6.1992
CEN	EN 292-2:1991	Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles and specifications	24.6.1992
CEN	EN 292-2/A1:1995	Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles and specifications	14.2.1996
CEN	EN 294:1992	Safety of machinery — Safety distance to prevent danger zones being reached by the upper limbs	25.8.1993
CEN	EN 349:1993	Safety of machinery — Minimum gaps to avoid crushing of parts of the human body	25.8.1993
CEN	EN 415-2:1999	Packaging machines — Safety — Part 2: Pre-formed rigid container packaging machines	20.5.2000
CEN	EN 415-4:1997	Safety of packaging machines — Part 4: Palletisers and depalletisers	4.6.1997
CEN	EN 418:1992	Safety of machinery — Emergency stop equipment, functional aspects — Principles for design	25.8.1993
CEN	EN 422:1995	Rubber and plastics machines — Safety — Blow moulding machines intended for the production of hollow articles — Requirements for the design and construction	8.8.1996
CEN	EN 457:1992	Safety of machinery — Auditory danger signals — General requirements, design and testing (ISO 7731:1986, modified)	25.8.1993
CEN	EN 474-1:1994	Earth-moving machinery — Safety — Part 1: General requirements	31.12.1994

<sup>(1)</sup> OJ L 207, 23.7.1998, p. 1.

<sup>(2)</sup> OJ L 331, 7.12.1998, p. 1.

ESO <sup>(1)</sup>	Reference	Title of the harmonised standards	First publication (OJ) <sup>(2)</sup>
CEN	EN 474-1/A1:1998	Earth-moving machinery — Safety — Part 1: General requirements	15.10.1998
CEN	EN 474-2:1996	Earth-moving machinery — Safety — Part 2: Requirements for tractor-dozers	15.10.1996
CEN	EN 474-3:1996	Earth-moving machinery — Safety — Part 3: Requirements for loaders	15.10.1996
CEN	EN 474-4:1996	Earth-moving machinery — Safety — Part 4: Requirements for backhoe loaders	15.10.1996
CEN	EN 474-5:1996	Earth-moving machinery — Safety — Part 5: Requirements for hydraulic excavators	15.10.1996
CEN	EN 474-6:1996	Earth-moving machinery — Safety — Part 6: Requirements for dumpers	15.10.1996
CEN	EN 474-7:1998	Earth-moving machinery — Safety — Part 7: Requirements for scrapers	15.10.1998
CEN	EN 474-8:1998	Earth-moving machinery — Safety — Part 8: Requirements for graders	15.10.1998
CEN	EN 474-9:1998	Earth-moving machinery — Safety — Part 9: Requirements for pipelayers	15.10.1998
CEN	EN 474-10:1998	Earth-moving machinery — Safety — Part 10: Requirements for trenchers	15.10.1998
CEN	EN 474-11:1998	Earth-moving machinery — Safety — Part 11: Requirements for earth and landfill compactors	15.10.1998
CEN	EN 500-1:1995	Mobile road construction machinery — Safety — Part 1: Common requirements	14.2.1996
CEN	EN 500-2:1995	Mobile road construction machinery — Safety — Part 2: Specific requirements for road-milling machines	14.2.1996
CEN	EN 500-3:1995	Mobile road construction machinery — Safety — Part 3: Specific requirements for soil stabilisation machines	14.2.1996
CEN	EN 500-4:1995	Mobile road construction machinery — Safety — Part 4: Specific requirements for compaction machines	14.2.1996
CEN	EN 500-5:1995	Mobile road construction machinery — Safety — Part 5: Specific requirements for joint cutters	14.2.1996
CEN	EN 528:1996	Rail dependent storage and retrieval equipment — Safety	28.11.1996
CEN	EN 536:1999	Road construction machines — Asphalt mixing plants — Safety requirements	5.11.1999
CEN	EN 547-1:1996	Safety of machinery — Human body measurements — Part 1: Principles for determining the dimensions required for openings for the whole body access into machinery	22.3.1997
CEN	EN 547-2:1996	Safety of machinery — Human body measurements — Part 2: Principles for determining the dimensions required for access openings	22.3.1997
CEN	EN 547-3:1996	Safety of machinery — Human body measurements — Part 3: Anthropometric data	22.3.1997

ESO (1)	Reference	Title of the harmonised standards	First publication (O) (2)
CEN	EN 563:1994	Safety of machinery — Temperatures of touchable surfaces — Ergonomics data to establish temperature limit values for hot surfaces	31.12.1994
CEN	EN 563/A1:1999	Safety of machinery — Temperatures of touchable surfaces — Ergonomics data to establish temperature limit values for hot surfaces	15.4.2000
CEN	EN 574:1996	Safety of machinery — Two-hand control devices — Functional aspects — Principles for design	22.3.1997
CEN	EN 608:1994	Agricultural and forestry machinery — Portable chain saws — Safety	31.12.1994
CEN	EN 609-1:1999	Agricultural and forestry machinery — Safety of log splitters — Part 1: Wedge splitters	11.6.1999
CEN	EN 609-2:1999	Agricultural and forestry machinery — Safety of log splitters — Part 2: Screw splitters	15.4.2000
CEN	EN 614-1:1995	Safety of machinery — Ergonomic design principles — Part 1: Terminology and general principles	14.2.1996
CEN	EN 626-1:1994	Safety of machinery — Reduction of risks to health from hazardous substances emitted by machinery — Part 1: Principles and specifications for machinery manufacturers	14.2.1996
CEN	EN 626-2:1996	Safety of machinery — Reduction of risk to health from hazardous substances emitted by machinery — Part 2: Methodology leading to verification procedures	28.11.1996
CEN	EN 627:1995	Specification for data logging and monitoring of lifts, escalators and passenger conveyors	28.11.1996
CEN	EN 632:1995	Agricultural machinery — Combine harvesters and forage harvesters — Safety	8.8.1996
CEN	EN 690:1994	Agricultural machinery — Manure spreaders — Safety	1.7.1995
CEN	EN 692:1996	Mechanical presses — Safety	5.2.1998

*Warning:* This publication does not concern presses with full-revolution clutches referred to in standard EN 692, in paragraphs 5.2.3, 5.3.2, 5.4.6 and 5.5.2, tables 2, 3, 4 and 5 and Annexes A and B1, in respect of which it grants no presumption of conformity to the provisions of Directive 89/392/EEC.

CEN	EN 703:1995	Agricultural machinery — Silage cutters — Safety	8.8.1996
CEN	EN 704:1999	Agricultural machinery — Pick-up balers — Safety	11.6.1999
CEN	EN 706:1996	Safety requirements for agricultural and forestry machinery — Vine shoot tipping machines	22.3.1997
CEN	EN 707:1999	Agricultural machinery — Slurry tankers — Safety	5.11.1999
CEN	EN 708:1996	Agricultural machinery — Soil working machines with powered tools — Safety	8.5.1997

ESO <sup>(1)</sup>	Reference	Title of the harmonised standards	First publication (OJ) <sup>(2)</sup>
CEN	EN 708/A1:2000	Agricultural machinery — Soil working machines with powered tools — Safety	16.6.2000
CEN	EN 709:1997	Agricultural and forestry machinery — Pedestrian controlled tractors with mounted rotary cultivators, motor hoes, motor hoes with drive wheel(s) — Safety	23.10.1997
CEN	EN 709/A1:1999	Machinery for agriculture and forestry — Pedestrian controlled tractors with mounted rotary cultivators, motor hoes, motor hoes with drive wheel(s) — Safety	15.4.2000
CEN	EN 710:1997	Safety requirements for foundry moulding and coremaking machinery and plant and associated equipment	13.3.1998
CEN	EN 745:1999	Agricultural machinery — Rotary mowers and flail-mowers — Safety	11.6.1999
CEN	EN 746-1:1997	Industrial thermoprocessing equipment — Part 1: Common safety requirements for industrial thermoprocessing equipment	4.6.1997
CEN	EN 746-2:1997	Industrial thermoprocessing equipment — Part 2: Safety requirements for combustion and fuel-handling systems	4.6.1997
CEN	EN 746-3:1997	Industrial thermoprocessing equipment — Part 3: Safety requirements for the generation and use of atmosphere gases	4.6.1997
CEN	EN 746-4:2000	Industrial thermoprocessing equipment — Part 4: Particular safety requirements for hot-dip galvanising thermoprocessing equipment	16.6.2000
CEN	EN 774:1996	Garden equipment — Hand-held, integrally powered hedge trimmers — Safety	15.10.1996
CEN	EN 774/A1:1997	Garden equipment — Hand-held, integrally powered hedge trimmers — Safety	8.5.1997
CEN	EN 774/A2:1997	Garden equipment — Hand-held, integrally powered hedge trimmers — Safety	23.10.1997
CEN	EN 775:1992	Manipulating industrial robots — Safety (ISO 10218:1992, modified)	25.8.1993
CEN	EN 786:1996	Garden equipment — Electrically powered walk-behind and lawn edge trimmers — Mechanical safety	15.10.1996
CEN	EN 791:1995	Drill rigs — Safety	8.8.1996
CEN	EN 809:1998	Pumps and pump units for liquids — Common safety requirements	15.10.1998
CEN	EN 811:1996	Safety of machinery — Safety distances to prevent danger zones being reached by the lower limbs	8.5.1997
CEN	EN 815:1996	Safety of unshielded tunnel boring machines and rodless shaft boring machines for rock	22.3.1997
CEN	EN 818-1:1996	Short-link chain for lifting purposes — Safety — Part 1: General conditions of acceptance	15.10.1996

ESO (*)	Reference	Title of the harmonised standards	First publication (O) (?)
CEN	EN 818-2:1996	Shot-link chain for lifting purposes — Safety — Part 2: Medium tolerance chain for chain slings — Grade 8	28.11.1996
CEN	EN 818-4:1996	Short-link chain for lifting purposes — Safety — Part 4: Chain slings — Grade 8	28.11.1996
CEN	EN 836:1997	Garden equipment — Powered lawnmowers — Safety	4.6.1997
CEN	EN 836/A1:1997	Garden equipment — Powered lawnmowers — Safety	13.3.1998
CEN	EN 842:1996	Safety of machinery — Visual danger signals — General requirements, design and testing	28.11.1996
CEN	EN 848-1:1998	Safety of woodworking machines — One-side moulding machines with rotating tool — Part 1: Single-spindle vertical moulding machines	15.10.1998
CEN	EN 848-2:1998	Safety of woodworking machines — One-side moulding machines with rotating tool — Part 2: Single-spindle hand-fed/integrated fed routing machines	15.10.1998
CEN	EN 848-3:1999	Safety of woodworking machines — One-side moulding machines with rotating tool — Part 3: Numerical control (NC) boring machines and routing machines	15.4.2000
CEN	EN 859:1997	Safety of woodworking machines — Hand-fed surface planing machines	13.3.1998
CEN	EN 860:1997	Safety of woodworking machines — One-side thickness planing machines	23.10.1997
CEN	EN 861:1997	Safety of woodworking machines — Surface planing and thickening machines	13.3.1998
CEN	EN 869:1997	Safety requirements for high-pressure metal diecasting units	13.3.1998
CEN	EN 894-1:1997	Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 1: General principles for human interactions with displays and control actuators	13.3.1998
CEN	EN 894-2:1997	Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 2: Displays	13.3.1998
CEN	EN 907:1997	Agricultural and forestry machinery — Sprayers and liquid fertiliser distributors — Safety	23.10.1997
CEN	EN 908:1999	Agricultural and forestry machinery — Reel machines for irrigation — Safety	11.6.1999
CEN	EN 909:1998	Agricultural and forestry machinery — Centre pivot and moving lateral types irrigation machines — Safety	11.6.1999
CEN	EN 930:1997	Footwear, leather and imitation leather goods manufacturing machines — Roughing, scouring, polishing and trimming machines — Safety requirements	13.3.1998
CEN	EN 931:1997	Footwear manufacturing machines — Lasting machines — Safety requirements	13.3.1998

ESO <sup>(1)</sup>	Reference	Title of the harmonised standards	First publication (O) <sup>(2)</sup>
CEN	EN 940:1997	Safety of woodworking machines — Combined wood-working machines	23.10.1997
CEN	EN 953:1997	Safety of machinery — Guards — General requirements for the design and construction of fixed and movable guards	13.3.1998
CEN	EN 954-1:1996	Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design	8.5.1997
CEN	EN 972:1998	Tannery machines — Reciprocating roller machines — Safety requirements	15.10.1998
CEN	EN 981:1996	Safety of machinery — System of auditory and visual danger and information signals	8.5.1997
CEN	EN 982:1996	Safety of machinery — Safety requirements for fluid power systems and their components — Hydraulics	15.10.1996
CEN	EN 983:1996	Safety of machinery — Safety requirements for fluid power systems and their components — Pneumatics	15.10.1996
CEN	EN 996:1995	Piling equipment — Safety requirements	15.10.1996
CEN	EN 996/A1:1999	Piling equipment — Safety requirements	11.6.1999
CEN	EN 999:1998	Safety of machinery — The positioning of protective equipment in respect of approach speeds of parts of the human body	11.6.1999
CEN	EN 1012-1:1996	Compressors and vacuum pumps — Safety requirements — Part 1: Compressors	15.10.1996
CEN	EN 1012-2:1996	Compressors and vacuum pumps — Safety requirements — Part 2: Vacuum pumps	15.10.1996
CEN	EN 1032:1996	Mechanical vibration — Testing of mobile machinery in order to determine the whole-body vibration emission value — General	22.3.1997
CEN	EN 1032/A1:1998	Mechanical vibration — Testing of mobile machinery in order to determine the whole-body vibration emission value — General — Amendment 1	11.6.1999
CEN	EN 1033:1995	Hand-arm vibration — Laboratory measurement of vibration at the grip surface of hand-guided machinery — General	14.2.1996
CEN	EN 1034-3:1999	Safety of machinery — Safety requirements for the design and construction of papermaking and finishing machines — Part 3: Winders and slitters, plying machines	20.5.2000
CEN	EN 1037:1995	Safety of machinery — Prevention of unexpected start-up	15.10.1996
CEN	EN 1050:1996	Safety of machinery — principles for risk assessment	23.10.1997

ESO (1)	Reference	Title of the harmonised standards	First publication (OJ) (2)
CEN	EN 1088:1995	Safety of machinery — Interlocking devices associated with guards — Principles for design and selection	15.10.1996
CEN	EN 1093-1:1998	Safety of machinery — Evaluation of the emission of airborne hazardous substances — Part 1: Selection of test methods	14.11.1998
CEN	EN 1093-3:1996	Safety of machinery — Evaluation of the emission of airborne hazardous substances — Part 3: Emission rate of a specified pollutant — Bench test method using the real pollutant	15.10.1996
CEN	EN 1093-4:1996	Safety of machinery — Evaluation of the emission of airborne hazardous substances — Part 4: Capture efficiency of an exhaust system — Tracer method	15.10.1996
CEN	EN 1093-6:1998	Safety of machinery — Evaluation of the emission of airborne hazardous substances — Part 6: Separation efficiency by mass, unducted outlet	14.11.1998
CEN	EN 1093-7:1998	Safety of machinery — Evaluation of the emission of airborne hazardous substances — Part 7: Separation efficiency by mass, ducted outlet	14.11.1998
CEN	EN 1093-8:1998	Safety of machinery — Evaluation of the emission of airborne hazardous substances — Part 8: Pollutant concentration parameter, bench test method	14.11.1998
CEN	EN 1093-9:1998	Safety of machinery — Evaluation of the emission of airborne hazardous substances — Part 9: Pollutant concentration parameter, room method	14.11.1998
CEN	EN 1114-1:1996	Rubber and plastics machines — Extruders and extrusion lines — Part 1: Safety requirements for extruders	8.5.1997
CEN	EN 1114-2:1998	Rubber and plastics machines — Extruders and extrusion lines — Part 2: Safety requirements for die-face pelletisers	15.10.1998
CEN	EN 1127-1:1997	Explosive atmospheres — Explosion prevention and protection — Part 1: Basic concepts and methodology	13.3.1998
CEN	EN 1152:1994	Tractors and machinery for agriculture and forestry — Guards for power take-off (PTO) driveshafts — Wear and strength tests	1.7.1995
CEN	EN 1175-1:1998	Safety of industrial trucks — Electrical requirements — Part 1: General requirements for battery-powered trucks	15.10.1998
CEN	EN 1175-2:1998	Safety of industrial trucks — Electrical requirements — Part 2: General requirements of internal combustion engine-powered trucks	13.6.1998
CEN	EN 1175-3:1998	Safety of industrial trucks — Electrical requirements — Part 3: Specific requirements for the electric power transmission systems of internal combustion engine-powered trucks	15.10.1998
CEN	EN 1265:1999	Noise test code for foundry machines and equipment	15.4.2000

ESO <sup>(1)</sup>	Reference	Title of the harmonised standards	First publication (O) <sup>(2)</sup>
CEN	EN 1299:1997	Mechanical vibration and shock — Vibration isolation of machines — Information for the application of source isolation	4.6.1997
CEN	EN 1398:1997	Dock levellers	13.3.1998
CEN	EN 1417:1996	Rubber and plastics machines — Two roll mills — Safety requirements	22.3.1997
CEN	EN 1454:1997	Portable, hand-held, internal combustion cutting-off machines — Safety	13.3.1998
CEN	EN 1459:1999	Safety of industrial trucks — Self-propelled variable reach trucks	30.5.2000

*Warning:* Users of the standard EN 1459 are informed that the standard does not cover the risks to which the operator is exposed in the event of the truck accidentally tipping over. The standard does not give a presumption of conformity in that respect.

CEN	EN 1493:1998	Vehicle lifts	11.6.1999
CEN	EN 1495:1997	Lifting platforms — Mast climbing work platforms	13.3.1998
CEN	EN 1501-1:1998	Refuse collection vehicles and their associated lifting devices — General requirements and safety requirements — Part 1: Rear-end loaded refuse collection vehicles	15.10.1998
CEN	EN 1525:1997	Safety of industrial trucks — Driverless trucks and their systems	13.3.1998
CEN	EN 1526:1997	Safety of industrial trucks — Additional requirements for automated functions on trucks	13.3.1998
CEN	EN 1550:1997	Machine-tools safety — Safety requirements for the design and construction of work holding chucks	13.3.1998
CEN	EN 1553:1999	Agricultural machinery — Agricultural self-propelled, mounted, semi-mounted and trailed machines — Common safety requirements	15.4.2000
CEN	EN 1570:1998	Safety requirements for lifting tables	15.10.1998
CEN	EN 1612-1:1997	Rubber and plastics machines — Reaction moulding machines — Part 1: Safety requirements for metering and mixing units	13.3.1998
CEN	EN 1672-2:1997	Food-processing machinery — Basic concepts — Part 2: Hygiene requirements	23.10.1997
CEN	EN 1678:1998	Food-processing machinery — Vegetable-cutting machines — Safety and hygiene requirements	15.10.1998
CEN	EN 1679-1:1998	Reciprocating internal combustion engines — Safety — Part 1: Compression ignition engines	13.6.1998
CEN	EN 1726-1:1999	Safety of industrial trucks — Self-propelled trucks up to and including 10 000 kg capacity and industrial tractors with a drawbar pull up to and including 20 000 N — Part 1: General requirements	30.5.2000

*Warning:* Users of the standard EN 1726-1 are informed that the standard does not cover the risks to which the operator is exposed in the event of the truck accidentally tipping over. The standard does not give a presumption of conformity in that respect.



ESO (*)	Reference	Title of the harmonised standards	First publication (O) (?)
CEN	EN 1760-1:1997	Safety of machinery — Pressure-sensitive protective devices — Part 1: General principles for the design and testing of pressure-sensitive mats and pressure-sensitive floors	13.3.1998
CEN	EN 1808:1999	Safety requirements on suspended access equipment — Design calculations, stability criteria, construction — Tests	5.11.1999
CEN	EN 1837:1999	Safety of machinery — Integral lighting of machines	11.6.1999
CEN	EN 1845:1998	Footwear manufacturing machines — Footwear moulding machines — Safety requirements	11.6.1999
CEN	EN 1853:1999	Agricultural machinery — Trailers with tipping body — Safety	5.11.1999
CEN	EN 1953:1998	Atomising and spraying equipment for coating materials — Safety requirements	14.11.1998
CEN	EN 1974:1998	Food-processing machinery — Slicing machines — Safety and hygiene requirements	15.10.1998
CEN	EN ISO 2860:1999	Earth-moving machinery — Minimum access dimensions (ISO 2860:1992)	5.11.1999
CEN	EN ISO 2867:1998	Earth-moving machinery — Access systems (ISO 2867:1994)	14.11.1998
CEN	EN ISO 3164:1999	Earth-moving machinery — Laboratory evaluations of protective structures — Specifications for deflection-limiting volume (ISO 3164:1995)	5.11.1999
CEN	EN ISO 3411:1999	Earth-moving machinery — Human physical dimensions of operators and minimum operator space envelope (ISO 3411:1995)	5.11.1999
CEN	EN ISO 3450:1996	Earth-moving machinery — Braking systems of rubber-tyred machines — Performance requirements and test procedures (ISO 3450:1995)	15.10.1996
CEN	EN ISO 3457:1995	Earth-moving machinery — Guards and shields — Definitions and specifications (ISO 3457:1986)	8.8.1996
CEN	EN ISO 3743-1:1995	Acoustics — Determination of sound power levels of noise sources — Engineering methods for small, movable sources in reverberant fields — Part 1: Comparison method for hard-walled test rooms (ISO 3743-1:1994)	8.8.1996
CEN	EN ISO 3743-2:1996	Acoustics — Determination of sound power levels of noise sources using sound pressure — Engineering methods for small, movable sources in reverberant fields — Part 2: Methods for special reverberation test rooms (ISO 3743-2:1994)	28.11.1996
CEN	EN ISO 3744:1995	Acoustics — Determination of sound power levels of noise sources using sound pressure — Engineering method in an essentially free field over a reflecting plane (ISO 3744:1994)	14.2.1996
CEN	EN ISO 3746:1995	Acoustics — Determination of sound power levels of noise sources using sound pressure — Survey method using an enveloping measurement surface over a reflecting plane (ISO 3746:1995)	14.2.1996
CEN	EN ISO 3767-1:1995	Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Symbols for operator controls and other displays — Part 1: Common symbols (ISO 3767-1:1991)	13.3.1998

ESO <sup>(1)</sup>	Reference	Title of the harmonised standards	First publication (O) <sup>(2)</sup>
CEN	EN ISO 3767-2:1995	Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Symbols for operator controls and other displays — Part 2: Symbols for agricultural tractors and machinery (ISO 3767-2:1991)	13.3.1998
CEN	EN ISO 3767-3:1996	Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Symbols for operator controls and other displays — Part 3: Symbols for powered lawn and garden equipment (ISO 3767-3:1995)	8.5.1997
CEN	EN ISO 3767-4:1995	Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Symbols for operator controls and other displays — Part 4: Symbols for forestry machinery (ISO 3767-4:1993)	13.3.1998
CEN	EN ISO 3767-5:1995	Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Symbols for operator controls and other displays — Part 5: Symbols for manual portable forestry machinery (ISO 3767-5:1992)	13.3.1998
CEN	EN ISO 4871:1996	Acoustics — Declaration and verification of noise emission values of machinery and equipment (ISO 4871:1996)	8.5.1997
CEN	EN ISO 6682:1995	Earth-moving machinery — Zones of comfort and reach for controls (ISO 6682:1986 including Amendment 1:1989)	8.8.1996
CEN	EN ISO 6683:1999	Earth-moving machinery — Seat belts and seat belt anchorages (ISO 6683:1981 including Amendment 1:1990)	5.11.1999
CEN	EN ISO 7235:1995	Acoustics — Measurement procedures for ducted silencers — Insertion loss, flow noise and total pressure loss (ISO 7235:1991)	15.10.1996
CEN	EN ISO 7250:1997	Basic human body measurements for technological design (ISO 7250:1996)	13.3.1998
CEN	EN ISO 8230:1997	Safety requirements for dry-cleaning machines using perchloroethylene (ISO 8230:1997)	13.6.1998
CEN	EN ISO 8662-4:1995	Hand-held portable power tools — Measurement of vibrations at the handle — Part 4: Grinders (ISO 8662-4:1994)	8.8.1996
CEN	EN ISO 8662-6:1995	Hand-held portable power tools — Measurement of vibrations at the handle — Part 6: Impact drills (ISO 8662-6:1994)	14.2.1996
CEN	EN ISO 8662-7:1997	Hand-held portable power tools — Measurement of vibrations at the handle — Part 7: Wrenches, screwdrivers and nut runners with impact, impulse or ratchet action (ISO 8662-7:1997)	13.3.1998
CEN	EN ISO 8662-8:1997	Hand-held portable power tools — Measurement of vibrations at the handle — Part 8: Polishers and rotary, orbital and random orbital sanders (ISO 8662-8:1997)	13.3.1998
CEN	EN ISO 8662-9:1996	Hand-held portable power tools — Measurement of vibrations at the handle — Part 9: Rammers (ISO 8662-9:1996)	8.5.1997

ESO (1)	Reference	Title of the harmonised standards	First publication (O) (2)
CEN	EN ISO 8662-12:1997	Hand-held portable power tools — Measurement of vibrations at the handle — Part 12: Saws and files with reciprocating action and saws with oscillating or rotating action (ISO 8662-12:1997)	13.3.1998
CEN	EN ISO 8662-13:1997	Hand-held portable power tools — Measurement of vibrations at the handle — Part 13: Die-grinders (ISO 8662-13:1997)	13.3.1998
CEN	EN ISO 8662-14:1996	Hand-held portable power tools — Measurement of vibrations at the handle — Part 14: Stone-working tools and needle scalars (ISO 8662-14:1996)	8.5.1997
CEN	EN ISO 9614-1:1995	Acoustics — Determination of sound power levels of noise sources using sound intensity — Part 1: Measurement at discrete points (ISO 9614-1:1993)	8.8.1996
CEN	EN ISO 10472-1:1997	Safety requirements for industrial laundry machinery — Part 1: Common requirements (ISO 10472-1:1997)	13.6.1998
CEN	EN ISO 10472-2:1997	Safety requirements for industrial laundry machinery — Part 2: Washing machines and washer-extractors (ISO 10472-2:1997)	13.6.1998
CEN	EN ISO 10472-3:1997	Safety requirements for industrial laundry machinery — Part 3: Washing tunnel lines including component machines (ISO 10472-3:1997)	13.6.1998
CEN	EN ISO 10472-4:1997	Safety requirements for industrial laundry machinery — Part 4: Air dryers (ISO 10472-4:1997)	13.6.1998
CEN	EN ISO 10472-5:1997	Safety requirements for industrial laundry machinery — Part 5: Flatwork ironers, feeders and folders (ISO 10472-5:1997)	13.6.1998
CEN	EN ISO 10472-6:1997	Safety requirements for industrial laundry machinery — Part 6: Ironing and fusing presses (ISO 10472-6:1997)	13.6.1998
CEN	EN ISO 11102-1:1997	Reciprocating internal combustion engines — Handle starting equipment — Part 1: Safety requirements and tests (ISO 11102-1:1997)	13.3.1998
CEN	EN ISO 11102-2:1997	Reciprocating internal combustion engines — Handle starting equipment — Part 2: Method of testing the angle of disengagement (ISO 11102-2:1997)	13.3.1998
CEN	EN ISO 11111:1995	Safety requirements for textile machinery (ISO 11111:1995)	8.8.1996
CEN	EN ISO 11145:1994	Optic and optical instruments — Lasers and laser related equipment — Vocabulary and symbols (ISO 11145:1994)	14.2.1996
CEN	EN ISO 11200:1995	Acoustics — Noise emitted by machinery and equipment — Guidelines for the use of basic standards for the determination of emission sound pressure levels at a work station and at other specified positions (ISO 11200:1995)	15.10.1996
CEN	EN ISO 11201:1995	Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at a work station and at other specified positions — Engineering method in an essentially free field over a reflecting plane (ISO 11201:1995)	15.10.1996

ESO <sup>(1)</sup>	Reference	Title of the harmonised standards	First publication (O) <sup>(2)</sup>
CEN	EN ISO 11202:1995	Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at a work station and at other specified positions — Survey method <i>in situ</i> (ISO 11202:1995)	15.10.1996
CEN	EN ISO 11203:1995	Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions from the sound power level (ISO 11203:1995)	15.10.1996
CEN	EN ISO 11204:1995	Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at a work station and at other specified positions — Method requiring environmental corrections (ISO 11204:1995)	15.10.1996
CEN	EN ISO 11546-1:1995	Acoustics — Determination of sound insulation performances of enclosures — Part 1: Measurements under laboratory conditions (for declaration purposes) (ISO 11546-1:1995)	15.10.1996
CEN	EN ISO 11546-2:1995	Acoustics — Determination of sound insulation performances of enclosures — Part 2: Measurements <i>in situ</i> (for acceptance and verification purposes) (ISO 11546-2:1995)	15.10.1996
CEN	EN ISO 11554:1998	Optics and optical instruments — Lasers and laser-related equipment — Test methods for laser beam power, energy and temporal characteristics (ISO 11554:1998)	11.6.1999
CEN	EN ISO 11681-2:1998	Machinery for forestry — Portable chain-saws — Safety requirements and testing — Part 2: Chain-saws for tree service (ISO 11681-2:1998)	15.10.1998
CEN	EN ISO 11688-1:1998	Acoustics — Recommended practice for the design of low-noise machinery and equipment — Part 1: Planning (ISO/TR 11688-1:1995)	15.10.1998
CEN	EN ISO 11691:1995	Acoustics — Measurement of insertion loss of ducted silencers without flow — Laboratory survey method (ISO 11691:1995)	14.2.1996
CEN	EN ISO 11806:1997	Agricultural and forestry machinery — Portable hand-held combustion engine driven brush cutters and grass trimmers — Safety (ISO 11806:1997)	23.10.1997
CEN	EN ISO 11957:1996	Acoustics — Determination of sound insulation performance of cabins — Laboratory and <i>in situ</i> measurements (ISO 11957:1996)	8.5.1997
CEN	EN ISO 12001:1996	Acoustics — Noise emitted by machinery and equipment — Rules for the drafting and presentation of a noise test code (ISO 12001:1996)	8.5.1997
CEN	EN 12077-2:1998	Crane safety — Requirements for health and safety — Part 2: Limiting and indicating devices	11.6.1999
CEN	EN 12409:1999	Rubber and plastics machines — Thermoforming machines — Safety requirements	15.4.2000
CEN	EN 12525:2000	Agricultural machinery — Front loaders — Safety	20.5.2000
CEN	EN 12547:1999	Centrifuges — Common safety requirements	11.6.1999

ESO (1)	Reference	Title of the harmonised standards	First publication (OJ) (2)
CEN	EN 12549:1999	Acoustics — Noise test code for fastener driving tools — Engineering method	15.4.2000
CEN	EN 12626:1997	Safety of machinery — Laser processing machines — Safety requirements (ISO 11553:1996 modified)	4.6.1997
CEN	EN 12643:1997	Earth-moving machinery — Rubber-tyred machines — Steering requirements (ISO 5010:1992 modified)	13.3.1998
CEN	EN 12644-2:2000	Cranes — Information for use and testing — Part 2: Marking	20.5.2000
CEN	EN 13510:2000	Earth-moving machinery — Roll-over protective structures — Laboratory tests and performance requirements (ISO 3471:1994, including Amendment 1:1997 modified)	16.6.2000
CEN	EN ISO 13753:1998	Mechanical vibration and shock — Hand-arm vibration — Method for measuring the vibration transmissibility of resilient materials when loaded by the hand-arm system (ISO 13753:1998)	15.10.1998
CEN	EN ISO 14982:1998	Agricultural and forestry machines — Electromagnetic compatibility — Test methods and acceptance criteria (ISO 14982:1998)	15.10.1998
CEN	EN 23741:1991	Acoustics — Determination of sound power levels of noise sources — Precision methods for broad-band sources in reverberation rooms (ISO 3741:1988)	25.8.1993
CEN	EN 23742:1991	Acoustics — Determination of sound power levels of noise sources — Precision method for discrete-frequency and narrow-band sources in reverberation rooms (ISO 3742:1988)	25.8.1993
CEN	EN 25136:1993	Acoustics — Determination of sound power radiated into a duct by fans — In-duct method (ISO 5136:1990 and Technical Corrigendum 1:1993)	31.12.1994
CEN	EN 28662-1:1992	Hand-held portable power tools — Measurement of vibrations at the handle — Part 1: General (ISO 8662-1:1998)	31.12.1994
CEN	EN 28662-2:1994	Hand-held portable power tools — Measurement of vibrations at the handle — Part 2: Chipping hammers and riveting hammers (ISO 8662-2:1992)	14.2.1996
CEN	EN 28662-2/A1:1995	Hand-held portable tools — Measurement of vibrations at the handle — Part 2: Chipping hammers and riveting hammers (ISO 8662-2:1992)	14.2.1996
CEN	EN 28662-3:1994	Hand-held portable tools — Measurement of vibrations at the handle — Part 3: Rock drills and rotary hammers (ISO 8662-3:1992)	14.2.1996
CEN	EN 28662-3/A1:1995	Hand-held portable tools — Measurement of vibrations at the handle — Part 3: Rock drills and rotary hammers (ISO 8662-3:1992)	14.2.1996
CEN	EN 28662-5:1994	Hand-held portable tools — Measurement of vibrations at the handle — Part 5: Pavement breakers and hammers for construction work (ISO 8662-5:1992)	14.2.1996

ESO <sup>(1)</sup>	Reference	Title of the harmonised standards	First publication (O) <sup>(2)</sup>
CEN	EN 28662-5/A1:1995	Hand-held portable tools — Measurement of vibrations at the handle — Part 5: Pavement breakers and hammers for construction work (ISO 8662-5:1992)	14.2.1996
CEN	EN 30326-1:1994	Mechanical vibration — Laboratory method for evaluating vehicle seat vibration — Part 1: Basic requirements (ISO 10326-1:1992)	14.2.1996
CEN	EN 31252:1994	Lasers and laser-related equipment — Laser device — Minimum requirements for documentation (ISO 11252:1993)	31.12.1994
CEN	EN 31253:1994	Laser and laser-related equipment — Laser device — Mechanical interfaces (ISO 11253:1993)	31.12.1994
Cenelec	EN 50144-1:1998	Safety of hand-held electric motor-operated tools — Part 1: General requirements	15.4.2000
Cenelec	EN 50144-2-1:1999	Safety of hand-held electric motor-operated tools — Part 2-1: Particular requirements for drills	20.5.2000
Cenelec	EN 50144-2-2:1999	Safety of hand-held electric motor-operated tools — Part 2-2: Particular requirements for screwdrivers and impact wrenches	20.5.2000
Cenelec	EN 50144-2-4:1999	Safety of hand-held electric motor-operated tools — Part 2-4: Particular requirements for sanders	20.5.2000
Cenelec	EN 50144-2-5:1999	Safety of hand-held electric motor-operated tools — Part 2-5: Particular requirements for circular saws and circular knives	20.5.2000
Cenelec	EN 50144-2-17:2000	Safety of hand-held electric motor-operated tools — Part 2-17: Particular requirements for routers	20.5.2000
Cenelec	EN 50144-2-18:2000	Safety of hand-held electric motor-operated tools — Part 2-18: Particular requirements for laminate trimmers	20.5.2000
Cenelec	EN 60204-1:1992	Safety of machinery — Electrical equipment of machines — Part 1: General requirements	27.7.1994
Cenelec	EN 60204-1:1997	Safety of machinery — Electrical equipment of machines — Part 1: General requirements n (IEC 60204-1:1997)	20.5.2000

Warning: The presumption of conformity, conferred by standard EN 60204-1 of 1992 ends on 1 July 2001.

Cenelec	EN 60204-31:1998	Safety of machinery — Electrical equipment of machines — Part 31: Particular requirements for sewing machines, units and systems (IEC 60204-31:1996 — Modified)	15.4.2000
Cenelec	EN 60204-32:1998	Safety of machinery — Electrical equipment of machines — Part 32: Requirements for hoisting machines (IEC 60204-32:1998)	15.4.2000
Cenelec	EN 60335-1:1994	Safety of household and similar electrical appliances — Part 1: General requirements (IEC 60335-1:1991 — Modified)	15.4.2000

ESO <sup>(1)</sup>	Reference	Title of the harmonised standards	First publication (OJ) <sup>(2)</sup>
Cenelec	EN 60335-1/A1:1996	Safety of household and similar electrical appliances — Part 1: General requirements (IEC 60335-1:1991/A1:1994 — Modified)	15.4.2000
Cenelec	EN 60335-1/A11:1995	Safety of household and similar electrical appliances — Part 1: General requirements	15.4.2000
Cenelec	EN 60335-1/A12:1996	Safety of household and similar electrical appliances — Part 1: General requirements	15.4.2000
Cenelec	EN 60335-1/A13:1998	Safety of household and similar electrical appliances — Part 1: General requirements	15.4.2000
Cenelec	EN 60335-1/A14:1998	Safety of household and similar electrical appliances — Part 1: General requirements	15.4.2000
Cenelec	EN 60335-2-64:2000	Safety of household and similar electrical appliances — Part 2-64: Particular requirements for commercial electric kitchen machines (IEC 60335-2-64:1997 — Modified)	20.5.2000
Cenelec	EN 60335-2-72:1998	Safety of household and similar electrical appliances — Part 2-72: Particular requirements for automatic machines for floor treatment for commercial and industrial use (IEC 60335-2-72:1995 — Modified)	15.4.2000
Cenelec	EN 61310-1:1995	Safety of machinery — Indication, marking and actuation — Part 1: Requirements for visual, auditory and tactile signals (IEC 61310-1:1995)	15.4.2000
Cenelec	EN 61310-2:1995	Safety of machinery — Indication, marking and actuation — Part 2: Requirements for marking (IEC 61310-2:1995)	15.4.2000
Cenelec	EN 61310-3:1999	Safety of machinery — Indication, marking and actuation — Part 3: Requirements for the location and operation of actuators (IEC 61310-3:1999)	15.4.2000
Cenelec	EN 61496-1:1997	Safety of machinery — Electro-sensitive protective equipment — Part 1: General requirements and tests (IEC 61496-1:1997)	15.4.2000

<sup>(1)</sup> ESO: (European standardisation organisation):

- CEN: rue de Stassart/Stassartstraat 36, B-1050 Brussels; tel. (32-2) 550 08 11; fax (32-2) 550 08 19 ([www.cenorm.be](http://www.cenorm.be));
- Cenelec: rue de Stassart/Stassartstraat 35, B-1050 Brussels; tel. (32-2) 519 68 71, fax (32-2) 519 69 19 ([www.cenelec.be](http://www.cenelec.be));
- ETSI: BP 152, F-06561 Valbonne Cedex, tel. (33-4) 92 94 42 12, fax (33-4) 93 65 47 16 ([www.etsi.org](http://www.etsi.org)).

<sup>(2)</sup> Date from which the use of this standard guarantees a presumption of conformity to the essential requirements it covers.

NOTE:

- any information concerning the availability of the standards can be obtained either from the European standardisation organisations or from the national standardisation bodies of which the list <sup>(1)</sup> is annexed to the Directive 98/34/EC <sup>(2)</sup> of the European Parliament and Council amended by Directive 98/48/EC <sup>(3)</sup>.
- publication of the references in the *Official Journal of the European Communities* does not imply that the standards are available in all the Community languages.
- this list replaces all the previous lists published in the *Official Journal of the European Communities*.
- the Commission ensures the updating of this list.

<sup>(1)</sup> OJ L 32, 10.2.1996, p. 32.

<sup>(2)</sup> OJ L 204, 21.7.1998, p. 37.

<sup>(3)</sup> OJ L 217, 5.8.1998, p. 18.