



SAFETY STANDARDS CATALOG

December 14, 2017

PRODUCT CODE	STANDARD DESCRIPTION	PRICE
B65 Standards		
1100211	<p>B65-1-2011 Graphic technology – Safety requirements for graphic technology equipment and systems – Part 1: General requirements This standard is a modified national adoption of ISO 12643-1:2009, with changes specific to the U.S. market. It provides safety specification for the design and construction of new equipment used in prepress systems, printing press systems, binding and finishing systems, converting systems and stand-alone platen presses. It is applicable to equipment used in stand-alone mode, or in combination with other machines, including ancillary equipment, in which all themachine actuators (e.g. drives) of the equipment are controlled by the same control system. 92 pp.</p>	\$55
1100311	<p>B65-2-2011 Graphic technology – Safety requirements for graphic technology equipment and systems – Part 2: Prepress and press equipment and systems This standard is a modified national adoption of ISO 12643-2:2010, with changes specific to the U.S. market. It revises and replaces B65.1-2005. It provides safety requirements specific to prepress and press equipment and systems. It is to be used in conjunction with the general requirements given in B65-1. 51 pp.</p>	\$43
1100111	<p>B65-3-2011 Graphic technology – Safety requirements for graphic technology equipment and systems – Part 3: Binding and finishing equipment and systems This standard is a modified national adoption of ISO 12643-3:2010, with changes specific to the U.S. market. It revises and replaces B65.2-2005. It provides safety requirements specific to binding and finishing equipment and systems. It is intended to be used in conjunction with the general requirements given in B65-1. Applies to equipment used to convert printed or blank substrates into cut, folded, collated, assembled, bound, or otherwise finished product. It can also be applied to processes for preparing substrate for the printing process. 60 pp.</p>	\$45
1100411	<p>B65-5-2011 Graphic technology – Safety requirements for graphic technology equipment and systems – Part 5: Stand-alone platen presses This standard is a modified national adoption of ISO 12643-5:2010, with changes specific to the U.S. market. It revises and replaces B65.5-2005. It provides safety requirements specific to stand-alone platen presses. It is intended to be used in conjunction with the general requirements given in B65-1. 18 pp.</p>	\$19
1100117	<p>B65/NAPIM 177.1-2007 (Revised 2017) Safety standard – Three-roll printing ink mills The requirements of this standard apply to all three-roll mills used for the manufacturing of printing inks or similar materials used in the printing ink manufacturing industry. The purpose of this standard is to establish safety requirements with respect to safety controls, operating procedures and design of three-roll mills used for the manufacturing of printing inks.</p>	\$39
1100217	<p>B65/NAPIM 177.2-2006 (Revised 2017) Safety standard – Printing ink vertical post mixers The requirements of this standard apply to vertical post mixers designed to be used in the production and manufacturing of printing inks. The purpose of this standard is to establish safety requirements with respect to the design and operation of vertical post mixers for batches larger than 4 gallons or mixers over 3 HP.</p>	\$39
ISO Standards <i>(These publications are also available from ISO member bodies)</i>		
1401011	<p>ISO 4413:2010 Hydraulic fluid power – General rules and safety requirements for systems and their components This International Standard specifies general rules and safety requirements for hydraulic fluid power systems and components used on machinery. It deals with all significant hazards associated with hydraulic fluid power systems and specifies the principles to apply in order to avoid those hazards when the systems are put to their intended use. 46 pp.</p>	\$200
1401111	<p>ISO 4414:2010 Pneumatic fluid power – General rules and safety requirements for systems and their components The International Standard specifies general rules and safety requirements for pneumatic fluid power systems and components used on machinery. It deals with all significant hazards associated with pneumatic fluid power systems and specifies principles to apply in order to avoid those hazards when the systems are put to their intended use. 37 pp.</p>	\$200
	<p>ISO 7000:2012 Graphical symbols for use on equipment - Registered symbols The ISO 7000 database provides a collection of graphical symbols which are placed on equipment or parts of equipment of any kind in order to instruct the person(s) using the equipment as to its operation. Each graphical symbol is identified by a reference number and contains a title, graphical representations in vectorized and non-vectorized formats, and some additional data as applicable, such as the function or the description of the symbol, the intended use, related symbols or publications. Various search and navigation facilities allow for easy retrieval of graphical symbols.</p>	<i>FREE Download</i>
1400511	<p>ISO 7010:2011 Graphical symbols – Safety colours and safety signs – Registered safety signs This International Standard prescribes safety signs for the purposes of accident prevention, fire protection, health hazard</p>	\$295

PRODUCT CODE	STANDARD DESCRIPTION	PRICE
	information and emergency evacuation. 132 pp.	
1400212	ISO 7010:2011/Amendment 1:2012 Graphical symbols – Safety colours and safety signs – Registered safety signs This amendment includes the addition of 11 new safety signs	\$22
1400412	ISO 7010:2011/Amendment 2:2012 Graphical symbols – Safety colours and safety signs – Registered safety signs This amendment includes the addition of 11 new safety signs	\$22
1401109	ISO 8031:2009 Rubber and plastics hoses and hose assemblies - Determination of electrical resistance This International Standard specifies electrical test methods for rubber and plastics hoses, tubing and hose assemblies to determine the resistance of conductive, antistatic and non-conductive hoses and the electrical continuity or discontinuity between metal end fittings. 15 pp.	\$123
1404299	ISO 9355-1:1999 Ergonomic requirements for the design of displays and control actuators - Part 1: Human interactions with displays and control actuators This International Standard applies to the design of displays and control actuators on machinery. It specifies general principles for human interaction with displays and control actuators, to minimize operator errors and to ensure an efficient interaction between the operator and the equipment. It is particularly important to observe these principles when an operator error may lead to injury or damage to health. 14 pp.	\$123
1404699	ISO 9355-2:1999 Ergonomic requirements for the design of displays and control actuators - Part 2: Displays This International Standard gives guidance on the selection, design and location of displays to avoid potential ergonomic hazards associated with their use. It specifies ergonomics requirements and covers visual, audible and tactile displays, and applies to displays used in machinery (e.g. devices and installations, control panels, operating and monitoring consoles) for occupational and private use. 22 pp.	\$123
1400706	ISO 9355-3:2006 Ergonomic requirements for the design of displays and control actuators - Part 2: Control actuators This International Standard specifies the ergonomic requirements for, and guidance on, the selection, design and location of control actuators adapted to the needs of the operator, suitable for the control task in question and taking account of the circumstances of their use. 34 pp.	\$173
1400805	ISO 11553-1:2005 Safety of machinery - Laser processing machines – Part 1: General safety requirements This International Standard describes hazards generated by laser processing machines and specifies safety requirements relating to radiation hazards and hazards generated by materials and substances. It also specifies information to be supplied by manufacturers of such equipment. Not applicable to laser products or equipment manufactured solely for photo lithography, stereolithography, holography, medical applications or data storage. 16 pp.	\$123
1400495	ISO/TR 11688-1:1995 Acoustics - Recommended practices for the design of low-noise machinery and equipment - Part 1: Planning This International Technical Report is an aid to understanding the basic concepts of noise control in machinery and equipment. The practice presented is intended to assist designers at any design stage to control the noise of the final product. Reference is made to numerous technical publications dealing with acoustical problems. 25 pp.	\$149
1400198	ISO/TR 11688-2:1998 Acoustics - Recommended practice for the design of low-noise machinery and equipment - Part 2: Introduction to the physics of low-noise design This Technical Report provides the physical background for the low-noise design rules and examples given in ISO/TR 11688-11) and supports the use of extensive special literature. It is intended for use by designers of machinery and equipment as well as users and/or buyers of machines and authorities in the field of legislation, supervision or inspection. Equations given herein will improve the general understanding of noise control. In many cases they allow a comparison of different versions of design, but are not useful for the prediction of absolute noise emission values. 51 pp.	\$200
1400111	ISO 12100:2010 Safety of machinery – General principles for design – Risk assessment and risk reduction This International Standard specifies basic terminology, principles and a methodology for achieving safety in the design of machinery. It specifies principles of risk assessment and risk reduction to help designers in achieving this objective. Procedures are described for identifying hazards and estimating and evaluating risks during relevant phases of the machine life cycles, and for the elimination of hazards or the provision of sufficient risk reduction. Guidance is given on the documentation and verification of the risk assessment and risk reduction process. 84 pp.	\$240
1401209	ISO 12643-1:2009 Graphic technology — Safety requirements for graphic technology equipment and systems — Part 1: General requirements (see B65-1-2011 for a modified national adoption - \$55) This part of ISO 12643 provides safety specifications for the design and construction of new equipment used in prepress systems, printing press systems, binding and finishing systems, converting systems and stand-alone platen presses. It is applicable to equipment used in stand-alone mode, or in combination with other machines, including ancillary equipment, in which all the machine actuators (e.g. drives) of the equipment are controlled by the same control system. 81 pp.	\$265

PRODUCT CODE	STANDARD DESCRIPTION	PRICE
1402910	<p>ISO 12643-2:2010 Graphic technology — Safety requirements for graphic technology equipment and systems — Part 2: Prepress and press equipment and systems (see B65-2 for a modified national adoption - \$43) This part of ISO 12643 provides safety requirements specific to prepress and press equipment and systems. It is intended to be used in conjunction with the general requirements given in ISO 12643-1. It provides additional safety requirements for the design and construction of new prepress and press equipment, and the auxiliary equipment integrated into the press control system. 56 pp.</p>	\$200
1403010	<p>ISO 12643-3:2010 Graphic technology — Safety requirements for graphic technology equipment and systems — Part 3: Binding and finishing equipment and systems (see B65-3-2011 for a modified national adoption - \$45) This part of ISO 12643 provides safety requirements specific to binding and finishing equipment and systems. It is intended to be used in conjunction with the general requirements in ISO 12643-1. It provides additional safety requirements for the design and construction of new equipment used to convert printed or blank substrates into cut, folded, collated, assembled, bound, or otherwise finished product. It can also be applicable to processes for preparing substrate for the printing process. 64 pp.</p>	\$240
1400110	<p>ISO 12643-4:2010 Graphic technology – Safety requirements for graphic technology equipment and systems – Part 4: Converting equipment and systems This part of ISO 12643 provides safety requirements for the design and construction of converting equipment used in the package printing, converting and graphic technology industries. It is applicable to converting equipment not covered by other parts of ISO 12643. It is intended to be used in conjunction with the general requirements given in ISO 12643-1. 58 pp.</p>	\$240
1402810	<p>ISO 12643-5:2010 Graphic technology – Safety requirements for graphic technology equipment and systems – Part 5: Stand-alone platen presses (see B65-5 for a modified national adoption - \$19) This part of ISO 12643 provides safety requirements specific to stand-alone platen presses. It is intended to be used in conjunction with the general requirements in ISO 12643-1. It provides additional press design safety requirements for the design and construction of new manually fed or automatic stand-alone platen press systems intended for die-cutting, creasing, embossing, foil stamping and/or the printing of paper, board and other materials processed in a similar manner. 18 pp.</p>	\$88
1400606	<p>ISO 13732-1:2006 Ergonomics of the thermal environment – Methods for the assessment of human responses to contact with surfaces – Part 1: Hot surfaces This International Standard provides temperature threshold values for burns that occur when human skin is in contact with a hot solid surface. It also describes methods for the assessment of the risks of burning, when humans could or might touch hot surfaces with their unprotected skin, and give guidance for cases where it may be necessary to specify temperature limit values for hot surfaces. 37 pp.</p>	\$200
1400201	<p>ISO/TS 13732-2:2001 Ergonomics of the thermal environment - Methods for the assessment of human responses to contact with surfaces - Part 2: Human contact with surfaces at moderate temperature This part of ISO/TS 13732 presents principles and methods for predicting thermal sensation and degree of discomfort in cases where parts of the body contact solid surfaces at moderate temperatures. Also deals with thermal sensation for contacts of hands, feet and for sitting position on the floor. 12 pp.</p>	\$88
1401415	<p>ISO 13849-1:2015 Safety of machinery – Safety-related parts of control systems – Part 1: General principles for design This part of ISO 13849 provides safety requirements and guidance on the principles for the design and integration of safety-related parts of control systems (SRP/CS), including the design of software. For these part of SRP/CS, it specifies characteristics that include the performance level required for carrying out safety functions. It applies to SRP/CS for high demand and continuous mode, regardless of the type of technology and energy used (electrical, hydraulic, pneumatic, mechanical, etc.), for all kinds of machinery. 86 pp.</p>	\$265
1400803	<p>ISO 13849-2:2012 Safety of machinery - Safety-related parts of control systems - Part 2: Validation This International Standard specifies the procedures and conditions to be followed for the validation by analysis and testing of the safety functions provided and the category achieved for the safety-related parts of the control system in compliance with EN 954-1 (ISO 13849-1), using the design rationale provided by the designer. This International Standard does not give complete validation requirements for programmable electronic systems and therefore can require the use of other standards. 50 pp.</p>	\$240
1401115	<p>ISO 13850:2015 Safety of machinery - Emergency stop function - Principles for design This International Standard specifies functional requirements and design principles for the emergency stop function on machinery, independent of the type of energy used.</p>	\$88
1400102	<p>ISO 13851:2002 Safety of machinery - Two-hand control devices - Functional aspects and design principles This International Standard specifies the safety requirements of a two-hand control device and the dependency of the output signal from the input signals. It describes the main characteristics of two-hand control devices for the achievement of safety and sets out combinations of functional characteristics for three types. It provides requirements and guidance on the design and selection of two-hand control devices including their assessment, the prevention of defeat and the avoidance of faults. It also provides requirements and guidance for two-hand control devices containing a programmable electronic system. 23 pp.</p>	\$149
1402496	<p>ISO 13854:1996 Safety of machinery - Minimum gaps to avoid crushing of parts of the human body The object of this International Standard is to enable the user (e.g. standard makers, designers of machinery) to avoid hazards</p>	\$51

PRODUCT CODE	STANDARD DESCRIPTION	PRICE
	from crushing zones. It specifies minimum gaps relative to parts of the human body and is applicable when adequate safety can be achieved by this method. 5 pp.	
1400610	<p>ISO 13855:2010 Safety of machinery – Positioning of safeguards with respect to the approach speeds of parts of the human body This International Standard establishes the positioning of safeguards with respect to the approach speeds of parts of the human body. It specifies parameters based on values for approach speeds of parts of the human body and provides a methodology to determine the minimum distances to a hazard zone from the detection zone or from actuating devices of safeguards. This second edition cancels and replaces the first edition (ISO 13855:2002), which has been technically revised. 48 pp.</p>	\$200
1400213	<p>ISO 13856-1:2013 Safety of machinery – Pressure-sensitive protective device – Part 1: General principles for the design and testing of pressure-sensitive mats and pressure-sensitive floors This part of ISO 13856 establishes general principles and specifies requirements for the design and testing of pressure-sensitive mats and pressure-sensitive floors normally actuated by the feet for use as devices for protecting persons from hazardous machinery. The minimum safety requirements for the performance, marking and documentation are given. This second edition cancels and replaces the first edition (ISO 13856-1:2001) which has been technically revised. 54 pp.</p>	\$200
1400313	<p>ISO 13856-2:2013 Safety of machinery – Pressure-sensitive protective devices – Part 2: General principles for the design and testing of pressure-sensitive edges and pressure-sensitive bars This part of ISO 13856 establishes general principles and specifies requirements for the design and testing of pressure-sensitive edges and pressure-sensitive bars used as safeguards and not as actuating devices for normal operation. It is applicable to pressure-sensitive edges and pressure-sensitive bars, with or without an external reset facility, used to detect persons or body parts that can be exposed to hazards such as those caused by the moving parts of machines. This second edition cancels and replaces the first edition (ISO 13856-2:2005), which has been technically revised. 64 pp.</p>	\$240
1400508	<p>ISO 13857:2008 Safety of machinery – Safety distances to prevent hazard zones being reached by upper and lower limbs This International Standard establishes values for safety distances in both industrial and non-industrial environments to prevent machinery hazard zones being reached. The safety distances are appropriate for protective structures. It also provides information regarding distances to impede free access by lower limbs. (Replaces ISO 13852 and ISO 13853) 17 pp.</p>	\$123
1403297	<p>ISO 14118:2000 Safety of machinery - Prevention of unexpected start-up This International Standard specifies built-in safety measures aimed at preventing unexpected machine start-up to allow safe human interventions in hazard zones. 13 pp.</p>	\$123
1400613	<p>ISO 14119:2013 Safety of machinery - Interlocking devices associated with guards - Principles for design and selection This International Standard specifies principles for the design and selection, independent of the nature of the energy source, of interlocking devices associated with guards. It covers the parts of guards which actuate interlocking devices. 76 pp.</p>	\$240
1401615	<p>ISO 14120:2015 Safety of machinery - Guards - General requirements for the design and construction of fixed and movable guards This International Standard specifies general requirements for the design, construction, and selection of guards provided to protect persons from mechanical hazards. This International Standard indicates other hazards that can influence the design and construction of guards. This International Standard applies to guards for machinery which will be manufactured after it is published. The requirements are applicable if fixed and movable guards are used. This International Standard does not cover interlocking devices. These are covered in ISO 14119. This International Standard does not provide requirements for special systems relating specifically to mobility such as ROPS (rollover protective structures), FOPS (falling-object protective structures), and TOPS (tip over protective structures) or to the ability of machinery to lift loads.</p>	\$173
1400816	<p>ISO 14122-1:2016 Safety of machinery - Permanent means of access to machinery - Part 1: Choice of fixed means and general requirements of access This part of ISO 14122 gives general requirements for access to stationary machines and guidance about the correct choice of means of access when necessary access to the stationary machine is not possible directly from the ground level or from a floor. It is applicable to permanent means of access which are a part of a stationary machine, and also to non-powered adjustable parts (e.g. foldable, slidable) and movable parts of fixed means of access. NOTE 1 "Fixed" means of access are those mounted in such a manner (for example, by screws, nuts, welding) that they can only be removed by the use of tools. This part of ISO 14122 specifies minimum requirements that also apply when the same means of access is required as the part of the building or civil construction (e.g. working platforms, walkways, ladders) where the machine is installed, on condition that the main function of that part of the construction is to provide a means of access to the machine. NOTE 2 Where no local regulation or standards exist, this part of ISO 14122 can be used for means of access which are outside the scope of the standard. It is intended that this part of ISO 14122 be used with a relevant access-specific part of ISO 14122. The ISO 14122 series as a whole is applicable to both stationary and mobile machinery where fixed means of access are necessary. It is not applicable to powered means of access such as lifts, escalators, or other devices specially designed to lift persons between two levels. This part of ISO 14122 is not applicable to machinery manufactured before the date of its publication. For the significant hazards covered by this part of ISO 14122, see Clause 4.</p>	\$88

PRODUCT CODE	STANDARD DESCRIPTION	PRICE
1400916	<p>ISO 14122-2:2016 Safety of machinery - Permanent means of access to machinery - Part 2: Working platforms and walkways This part of ISO 14122 gives requirements for non-powered working platforms and walkways which are a part of a stationary machine, and to the non-powered adjustable parts (e.g. foldable, sliding) and movable parts of those fixed means of access. NOTE 1 "Fixed" means of access are those mounted in such a manner (for example, by screws, nuts, welding) that they can only be removed by the use of tools. This part of ISO 14122 specifies minimum requirements that also apply when the same means of access is required as the part of the building or civil construction (e.g. working platforms, walkways) where the machine is installed, on condition that the main function of that part of the construction is to provide a means of access to the machine. NOTE 2 Where no local regulation or standards exist, this part of ISO 14122 can be used for means of access which are outside the scope of the standard. It is intended that this part of ISO 14122 be used with ISO 14122-1 to give the requirements for walking platforms and walkways. The ISO 14122 series as a whole is applicable to both stationary and mobile machinery where fixed means of access are necessary. It is not applicable to powered means of access such as lifts, escalators, or other devices specially designed to lift persons between two levels. This part of ISO 14122 is not applicable to machinery manufactured before the date of its publication.</p>	\$123
1401016	<p>ISO 14122-3:2016 Safety of machinery - Permanent means of access to machinery - Part 3: Stairs, stepladders and guard-rails This part of ISO 14122 gives requirements for non-powered stairs, stepladders and guard-rails which are a part of a stationary machine, and to the non-powered adjustable parts (e.g. foldable, slidable) and movable parts of those fixed means of access. NOTE 1 "Fixed" means of access are those mounted in such a manner (for example, by screws, nuts, welding) that they can only be removed by the use of tools. This part of ISO 14122 specifies minimum requirements that also apply when the same means of access is required as the part of the building or civil construction (e.g. stairs, stepladders, guard-rails) where the machine is installed, on condition that the main function of that part of the construction is to provide a means of access to the machine. NOTE 2 Where no local regulation or standards exists, this part of ISO 14122 may be used also for means of access which are outside the scope of the standard. It is intended that this part of ISO 14122 be used with ISO 14122-1 to give the requirements for steps, stepladders and guard-rails. The ISO 14122 series as a whole is applicable to both stationary and mobile machinery where fixed means of access are necessary. It is not applicable to powered means of access such as lifts, escalators, or other devices specially designed to lift persons between two levels. This part of ISO 14122 is not applicable to machinery manufactured before the date of its publication.</p>	\$149
1401116	<p>ISO 14122-4:2016 Safety of machinery —Permanent means of access to machinery — Part 4: Fixed ladders This part of ISO 14122 gives requirements for fixed ladders which are a part of a stationary machine, and to the non-powered adjustable parts (e.g. foldable, slidable) and movable parts of fixed ladder systems. NOTE 1 "Fixed" means of access are those mounted in such a manner (for example, by screws, nuts, welding) that they can only be removed by the use of tools. This part of ISO 14122 specifies minimum requirements that also apply when the same means of access is required as the part of the building or civil construction (e.g. fixed ladders) where the machine is installed, on condition that the main function of that part of the construction is to provide a means of access to the machine. NOTE 2 Where no local regulation or standards exists, this part of ISO 14122 may be used also for means of access which are outside the scope of the standard. It is intended that this part of ISO 14122 be used with ISO 14122-1 to give the requirements for fixed ladder systems. The ISO 14122 series as a whole is applicable to both stationary and mobile machinery where fixed means of access are necessary. It is not applicable to powered means of access such as lifts, escalators, or other devices specially designed to lift persons between two levels. This part of ISO 14122 is not applicable to machinery manufactured before the date of its publication.</p>	\$200
1401315	<p>ISO 14123-1:2015 Safety of machinery - Reduction of risks to health resulting from hazardous substances emitted by machinery - Part 1: Principles and specifications for machinery manufacturers This part of ISO 14123 establishes principles for the control of risks to health resulting from hazardous substances emitted by machinery. This part of ISO 14123 is not applicable to substances that are a hazard to health solely because of their explosive, flammable or radioactive properties or their behaviour at extremes of temperature or pressure.</p>	\$88
1401715	<p>ISO 14123-2:2015 Safety of machinery - Reduction of risks to health resulting from hazardous substances emitted by machinery - Part 2: Methodology leading to verification procedures This part of ISO 14123 establishes a methodology that leads to the selection of critical factors relating to emissions of hazardous substances for the purpose of specifying suitable verification procedures. This part of ISO 14123 is intended to be used in conjunction with ISO 14123-1 and relates specifically to ISO 14123-1:2015, Clause 8.</p>	\$51
1400700	<p>ISO 15534-1:2000 Ergonomic design for the safety of machinery - Part 1: Principles for determining the dimensions required for openings for whole-body access into machinery This part of ISO 15534 specifies the dimensions of openings for whole-body access into machinery as defined in ISO/TR 12100-1. It provides the dimensions to which the values given in ISO 15534-3 are applicable. It has been prepared primarily for non-mobile machinery; there may be additional specific requirements for mobile machinery. This part of ISO 15534 shows how to combine the anthropometric data with suitable allowances to take these factors into account. Situations where people are to be prevented from reaching a hazard are dealt with in ISO 13852. 12 pp.</p>	\$88
1400800	<p>ISO 15534-2:2000 Ergonomic design for the safety of machinery - Part 2: Principles for determining the dimensions required for access openings This part of ISO 15534 specifies the dimensions of openings for access into machinery as defined in ISO/TR 12100-1. It provides the dimensions to which the values given in ISO 15534-3 are applicable. It has been prepared primarily for non-mobile machinery; there may be additional specific requirements for mobile machinery. This part of ISO 15534 shows how to combine the anthropometric data with suitable allowances to take these factors into account. Situations where people are to be prevented from reaching a hazard are dealt with in ISO 13852. 23 pp.</p>	\$149

PRODUCT CODE	STANDARD DESCRIPTION	PRICE
1400900	ISO 15534-3:2000 Ergonomic design for the safety of machinery - Part 3: Anthropometric data This part of ISO 15534 specifies current requirements for human body measurements (anthropometric data) that are required by ISO 15534-1 and ISO 15534-2 for the calculation of access-opening dimensions as applied to machinery. The data are based on information from anthropometric surveys representative of population groups within Europe comprising at least three million people; both men and women. Measurements meet the requirements of ISO 15534-1 and ISO 15534-2. 4 pp.	\$51
1401008	ISO/TR 15847:2008 Graphic technology – Graphical symbols for printing press systems and finishing systems, including related auxiliary equipment This Technical Report defines graphical symbols for use on or near equipment in printing systems and finishing systems, including related auxiliary equipment. These graphical symbols are intended for use on equipment controls, including pushbuttons, touchscreens, keypads, etc.	\$240
IEC Standards <i>(These publications are also available from ISO/IEC member bodies)</i>		
1500190	IEC 60050-161:1990, Ed. 1.0 [formerly (IEC 50(161))] International Electrotechnical Vocabulary - Chapter 161: Electromagnetic compatibility This standard contains terms and definitions relating to electro-magnetic compatibility. English/French/Russian. 73 pp.	\$254
1500297	IEC 60050-161, Amd1, Ed 1.0 b: 1997 Update to IEC 60050-161:1990. English/French/Russian. 20 pp.	\$43
1500198	IEC 60050-161, Amd2, Ed 1.0 b: 1998 Second update to IEC 60050-161:1990. English/French/Russian. 20 pp.	\$55
1500287	IEC 60050-845:1987, Ed. 1.0 International Electrotechnical Vocabulary – Lighting	\$411
1500711	IEC 60079-0:2011, Ed. 6.0 Explosive atmospheres - Part 0: Equipment - General Requirements This part of IEC 60079 specifies the general requirements for construction, testing and marking of electrical equipment and Ex Components intended for use in explosive atmospheres. English/French. 210 pp.	\$330
1501107	IEC 60079-1:2007, Ed. 6.0 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d" This part of IEC 60079 contains specific requirements for the construction and testing of electrical apparatus with the type of protection flameproof enclosure "d", intended for use in explosive gas atmospheres. English/French. 147 pp. This package includes a corrigendum. Available as a zip file.	\$363
1500207	IEC 60079-2 Ed. 5.0 b:2007 Electrical apparatus for explosive gas atmospheres - Part 2: Pressurized enclosures "p" This part of IEC 60079 contains the specific requirements for the construction and testing of electrical apparatus with pressurized enclosures, of type of protection "p", intended for use in explosive gas atmospheres. It specifies requirements for pressurized enclosures containing a limited release of a flammable substance. It supplements and modifies the general requirements of IEC 60079-0. Where a requirement of this standard conflicts with a requirement of IEC 60079-0, the requirements of this standard takes precedence. English/French. 111 pp.	\$303
1500807	IEC 60079-5, Ed. 3.0 b:2007 Explosive atmospheres - Part 5: Equipment protection by powder filling "q" This part of IEC 60079 contains specific requirements for the construction, testing and marking of electrical equipment, parts of electrical equipment and Ex components in the type of protection powder filling "q", intended for use in explosive gas atmospheres. Supplement to IEC 60079-0. English/French. 42 pp.	\$157
1500707	IEC 60079-6 Ed. 3.0 b:2007 Explosive atmospheres - Part 6: Equipment protection by oil immersion "o" This part of IEC 60079 specifies the requirements for the construction and testing of oil-immersed electrical equipment, oil-immersed parts of electrical equipment and Ex components in the type of protection oil immersion "o", intended for use in explosive gas atmospheres. It is applicable to electrical apparatus and parts of electrical apparatus, which are not ignition capable in normal operation. It is a supplement to IEC 60079-0. English/French. 31 pp.	\$85
1500311	IEC 60079-7:2006, Ed. 4.0 Explosive Atmospheres – Part 7: Equipment protection by increased safety "e" This part of IEC 60079 specifies the requirements for the design, construction, testing and marking of electrical apparatus with type of protection increased safety "e" intended for use in explosive gas atmospheres. English/French. 168 pp.	\$351
1500111	IEC 60079-10-1:2008, Ed. 1.0 Explosive atmospheres – Part 10-1: Classification of areas – Explosive gas atmospheres This part of IEC 60079 is concerned with the classification of areas where flammable gas or vapour or mist hazards may arise and may then be used as a basis to support the proper selection and installation of equipment for use in a hazardous area. English/French 140 pp.	\$339
1500211	IEC 60079-10-2:2009, Ed. 1.0 Explosive atmospheres – Part 10-2: Classification of areas – Combustible dust atmospheres This part of IEC 60079 is concerned with the identification and classification of areas where explosive dust atmospheres and combustible dust layers are present, in order to permit the proper assessment of ignition sources in such areas. English/French 66 pp.	\$230

PRODUCT CODE	STANDARD DESCRIPTION	PRICE
1500811	<p>IEC 60079-11:2011, Ed. 6.0 Explosive atmospheres – Part 11: Equipment protection by intrinsic safety "i" This part of IEC 60079 specifies the construction and testing of intrinsically safe apparatus intended for use in an explosive atmosphere and for associated apparatus, which is intended for connection to intrinsically safe circuits which enter such atmospheres. This type of protection is applicable to electrical equipment in which the electrical circuits themselves are incapable of causing an explosion in the surrounding explosive atmospheres This package includes a corrigendum. Available as a zip file.</p>	\$399
1501209	<p>IEC 60079-18:2009, Ed. 3.0 Explosive atmospheres -- Electrical apparatus for explosive gas atmospheres – Part 18: Equipment protection by encapsulation "m" This part of IEC 60079 gives the specific requirements for the construction, testing and marking of electrical equipment, parts of electrical equipment and Ex components with the type of protection encapsulation "m" intended for use in explosive gas atmospheres or explosive dust atmospheres. This package includes a corrigendum. Available as a zip file.</p>	\$230
1500309	<p>IEC 60204-1:2009, Ed. 5.1 Safety of machinery-Electrical equipment of machines - Part 1: General requirements This part of IEC 60204 applies to the application of electrical and electronic and programmable electronic equipment and systems to machines not portable by hand while working, including a group of machines working together in a coordinated manner. English/French. 244 pp.</p>	\$484
1500601	<p>IEC 60529:2001, Ed. 2.1 Degrees of protection provided by enclosures (IP Code) This standard applies to the classification of degrees of protection provided by enclosures for electrical equipment with a rated voltage not exceeding 72,5 kV. This package includes 3 corrigendum. Available as a zip file. English/French. 100 pp.</p>	\$339
1500907	<p>IEC 60825-1:2007, Ed. 2.0 Safety of laser products - Part 1: Equipment classification and requirements This standard applies to safety of laser products emitting laser radiation in the wavelength range 180 nm to 1 mm. This package includes a corrigendum. Available as a zip file. English/French. 195 pp.</p>	\$363
1500511	<p>IEC 60947-1:2011, Ed. 5.1b Low-voltage switchgear and controlgear - Part 1: General rules This standard applies, when required by the relevant product standard, to switchgear and controlgear and intended to be connected to circuits, the rated voltage of which does not exceed 1 000 V a.c. or 1 500 V d.c. English/French. 516 pp.</p>	\$847
1500911	<p>IEC 60947-2:2009 Ed 4.1b Low-voltage switchgear and controlgear – Part 2: Circuit-breakers This standard revises IEC 60947-2 Ed. 4.0 b:2006. The main changes introduced in this edition are an amendment to the verification of dielectric properties, the improvement of EMC clauses in Annexes B, F, J and M, and the addition of a new Annex O regarding instantaneous trip circuit-breakers. English/French 462 pp.</p>	\$726
1500512	<p>IEC 60947-3:2012, Ed 3.1b Low-voltage switchgear and controlgear - Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units This part of IEC 60947 applies to switches, disconnectors, switch-disconnectors and fuse-combination units to be used in distribution circuits and motor circuits of which the rated voltage does not exceed 1 000 V a.c. or 1 500 V d.c. 127 pp.</p>	\$424
1501409	<p>IEC 60947-4-1:2009, Ed. 3.0 Low-voltage switchgear and controlgear - Part 4-1: Contactors and motor-starters - Electromechanical contactors and motor-starters This part of IEC 60947 applies to the types of equipment listed in 1.1.1 and 1.1.2 whose main contacts are intended to be connected to circuits the rated voltage of which does not exceed 1 000 V a.c. or 1 500 V d.c. English/French. 250 pp.</p>	\$387
1500611	<p>IEC 60947-4-2:2011, Ed. 3.0 Low-voltage switchgear and controlgear – Part 4-2: Contractors and motor-starters – AC semiconductor motor controllers and starters This standard applies to a.c. semiconductor motor controllers and starters, which may include a series mechanical switching device, intended to be connected to circuits, the rated voltage of which does not exceed 1 000 V a.c. 202 pp.</p>	\$363
1501309	<p>IEC 60947-5-1:2009, Ed. 3.1 Low-voltage switchgear and controlgear – Part 5-1: Control circuit devices and switching elements – Electromechanical control circuit devices This part of IEC 60947 applies to control circuit devices and switching elements intended for controlling, signaling, interlocking, etc., of switchgear and controlgear. English/French 192 pp.</p>	\$484
1501507	<p>IEC 60947-5-2:2007, Ed. 3.0 Low-voltage switchgear and controlgear - Part 5-2: Control circuit devices and switching elements - Proximity switches This standard applies to inductive and capacitive proximity switches that sense the presence of metallic and/or non-metallic objects, ultrasonic proximity switches that sense the presence of sound reflecting objects and photoelectric proximity switches that sense the presence of objects. English/French. 102 pp.</p>	\$363
1500402	<p>IEC 60947-5-4:2002, Ed. 2.0 Low-voltage switchgear and controlgear - Part 5-4: Control circuit devices and switching elements - Methods of assessing the performance of low-energy contacts - Special tests This part of IEC 60947 applies to separable contacts used in the utilization area considered such as switching element for control circuits. English/French. 49 pp.</p>	\$182

PRODUCT CODE	STANDARD DESCRIPTION	PRICE
1500305	<p>IEC 60947-5-5:2005, Ed. 1.1 Low-voltage switchgear and controlgear - Part 5-5: Control circuit devices and switching elements - Electrical emergency stop device with mechanical latching function This part of IEC 60947-5 provides detailed specifications relating to the electrical and mechanical construction of emergency stop devices with mechanical latching function and to their testing. English/French. 29 pp.</p>	\$145
1500605	<p>IEC 60947-6-1:2005, Ed. 2.0 Low-voltage switchgear and controlgear - Part 6-1: Multiple function equipment- Transfer switching equipment This standard applies to Automatic Transfer Switching Equipment (ATSE) to be used in emergency power systems with interruption of the supply to the load during transfer, the rated voltage of which does not exceed 1,000 V a.c. or 1,500 V d.c. It covers ATSE provided with or without an enclosure. English/French. 85 pp.</p>	\$278
1501007	<p>IEC 60947-6-2:2007, Ed. 2.1 Low-voltage switchgear and controlgear - Part 6-2: Multiple function equipment - Control and protective switching devices (or equipment) (CPS) This part of IEC 60947-6 applies to control and protective switching devices (or equipment) (CPS), the main contacts of which are intended to be connected to circuits of rated voltage not exceeding 1 000 V a.c. or 1 500 V d.c. English/French. 251 pp.</p>	\$726
1500809	<p>IEC 60947-7-1:2009, Ed. 3.0 Low-voltage switchgear and controlgear - Part 7-1: Ancillary equipment - Terminal blocks for copper conductors This part of IEC 60947 specifies requirements for terminal blocks with screw-type or screwless-type clamping units primarily intended for industrial or similar use and to be fixed to a support to provide electrical and mechanical connection between copper conductors. English/French. 72 pp.</p>	\$230
1500909	<p>IEC 60947-7-2:2009, Ed. 3.0 Low-voltage switchgear and controlgear - Part 7-2: Ancillary equipment - Protective conductor terminal blocks for copper conductors This part of IEC 60947 specifies requirements for protective conductor terminal blocks with PE function up to 120 mm² (250 kcmil) and for protective conductor terminal blocks with PEN function equal to and above 10 mm² (AWG 8) with screw-type or screwless-type clamping units, primarily intended for industrial applications. English/French. 42 pp.</p>	\$121
1500310	<p>IEC 61010-1:2010, Ed. 3.0 Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements This standard specifies general safety requirements for electrical equipment intended for professional, industrial process, and educational use, which may incorporate computing devices: electrical test and measurement equipment; electrical industrial process-control equipment; electrical laboratory equipment; or accessories intended for use with them, used under specified environmental conditions. English/French. 326 pp. This package includes a corrigendum. Available as a zip file.</p>	\$411
1500703	<p>IEC 61131-1:2003, Ed. 2.0 Programmable controllers –Part 1: General information This Part of IEC 61131 applies to programmable controllers (PLC) and their associated peri-pherals such as programming and debugging tools (PADTs), human-machine interfaces(HMIs), etc., which have as their intended use the control and command of machines and industrial processes. English/French. 24 pp.</p>	\$121
1500411	<p>IEC 61131-2:2007, Ed. 3.0 Programmable controllers –Part 2: Equipment requirements and tests This Part of IEC 61131 specifies requirements and related tests for programmable controllers (PLC) and their associated peripherals (for example., programming and debugging tools (PADTs), human-machine interfaces (HMIs, etc.) which have as their intended use the control and command of machines and industrial processes. English/French. 126 pp.</p>	\$387
1500208	<p>IEC 61131-3:2013, Ed. 3.0 Programmable controllers – Part 3: Programming languages This part of IEC 61131 specifies syntax and semantics of programming languages for <i>programmable controllers</i> as defined in Part 1 of IEC 61131. 226 pp.</p>	\$411
1500504	<p>IEC/TR 61131-4:2004, Ed. 2.0 Programmable controllers – Part 4: User guidelines The object of this Technical report is to introduce the end-users of Programmable Controller (PLC) to the IEC 61131 series, and to assist the end-users in their selection and specification of their PLC equipment according to the IEC 61131 series. This user guideline has as its main audience PLC end-users. English/French. 136 pp.</p>	\$387
1500903	<p>IEC 61131-5:2000, Ed. 1.0 Programmable controllers –Part 5: Communications This part of IEC 61131 specifies communication aspects of a programmable controller. It specifies from the viewpoint of a PC how any device can communicate with a PC as a server and how a PC can communicate with any device. In particular, it specifies the behavior of the PC as it provides services on behalf of other devices and the services the PC application program can request from other devices. English/French. 106 pp.</p>	\$363
1500308	<p>IEC 61131-7:2000, Ed. 1.0 Programmable controllers – Part 7: Fuzzy control programming This part of IEC 61131 defines a language for the programming of Fuzzy Control applications. The object is to offer the manufacturer and the user a well-defined common understanding of the basic means to integrate fuzzy control applications in the Programmable Controller languages according to IEC 61131-3, as well as the ability to exchange portable fuzzy control programs among different programming systems. English/French. 122 pp.</p>	\$303

PRODUCT CODE	STANDARD DESCRIPTION	PRICE
1500408	<p>IEC/TR 61131-8:2003, Ed. 2.0 Programmable controllers – Part 8: Guidelines for the application and implementation of programming languages This part of IEC 61131, which is a technical report, applies to the programming of programmable controller systems using the programming languages defined in IEC 61131-3. It also provides guidelines for the implementation of these languages in programmable controller systems and their programming support environments (PSEs). 112 pp.</p>	\$363
1500407	<p>IEC 61310-1:2007, Ed. 2.0 Safety of Machinery - Indication, Marking and Actuation - Part 1: Requirements for visual, auditory, and tactile signals This part of IEC 61310 specifies requirements for visual, acoustic and tactile methods of indicating safety-related information, at the human-machine interface and to exposed persons. It specifies a system of colours, safety signs, markings and other warnings, intended for use in the indication of hazardous situations and health hazards and for meeting certain emergencies. It also specifies ways of coding visual, acoustic and tactile signals for indicators and actuators to facilitate the safe use and monitoring of the machinery. English/French. 43 pp.</p>	\$157
1500507	<p>IEC 61310-2 Ed. 2007, Ed. 2.0 Safety of Machinery - Indication, Marking and Actuation - Part 2: Requirements for marking This part of IEC 61310 specifies requirements for the marking of machinery. It gives general rules on marking for identification of machinery, for safe use related to mechanical and electrical hazards, and for the avoidance of hazards arising from incorrect connections. English/French. 28 pp.</p>	\$61
1500607	<p>IEC 61310-3:2007, Ed. 2.0 Safety of Machinery - Indication, Marking and Actuation - Part 2: Requirements for the location and operation of actuators This part of IEC 61310 specifies safety-related requirements for actuators, operated by the hand or by other parts of the human body, at the human-machine interface. It gives general requirements for the standard direction of movement for actuators, the arrangement of an actuator in relation to other actuators, and the correlation between an action and its final effects. English/French. 25 pp.</p>	\$61
1500110	<p>IEC/TR 61491:2010, Ed. 1.0 Electrical equipment of industrial machines – Serial data link for real-time communication between controls and drives This Technical Report presents an overview and guidance for IEC 61158, IEC 61784-1, IEC 61784-2 and IEC 61800-7 with respect to a real-time serial interface between the control unit and its associated devices, which is utilized to transmit periodic and non periodic data. English/French. 22 pp.</p>	\$43
1500412	<p>IEC 61496-1:2012, Ed. 3.0 Safety of machinery - Electro-sensitive protective equipment - Part 1: General requirements and tests This part of IEC 61496 specifies general requirements for the design; construction and testing of non-contact electro-sensitive protective equipment (ESPE) designed specifically to detect persons as part of a safety related system. Special attention is directed to functional and design requirements that ensure an appropriate safety-related performance is achieved. An ESPE may include optional safety-related functions, the requirements for which are given in Annex A. English/French. 101 pp.</p>	\$303
1500106	<p>IEC 61496-2:2013, Ed. 3.0 Safety of machinery - Electro-sensitive protective equipment - Part 2: Particular requirements for equipment using active opto-electronic protective devices (AOPDs) This part of IEC 61496 specifies requirements for the design, construction and testing of electro-sensitive protective equipment (ESPE) designed specifically to detect persons as part of safety-related system, employing active opto-electronic protective devices (AOPDs) for the sensing function. English/French. 98 pp.</p>	\$303
1500210	<p>IEC 61508-3:2010, Ed. 2.0 Functional safety of electrical/ electronic/ programmable electronic safety-related systems - Part 3: Software requirements This part of IEC 61508 applies to any software forming part of a safety-related system or used to develop a safety-related system. English/French. 236 pp.</p>	\$375
1500609	<p>IEC/TS 62046:2008, Ed. 2.0 b Safety of machinery – Application of protective equipment to detect the presence of persons This Technical Specification specifies requirements for the selection, positioning, configuration and commissioning, of protective equipment to detect the presence of persons in order to protect those persons from dangerous part(s) of machinery in industrial applications. English /French. 216 pp.</p>	\$375
1500805	<p>IEC 62061:2005, Ed. 1.0 b Safety of machinery – Functional safety of safety-related electrical, electronic and programmable electronic control systems This International Standard specifies requirements and makes recommendations for the design, integration and validation of safety-related electrical, electronic and programmable electronic control systems (SRECS) for machines. It is applicable to control systems used, either singly or in combination, to carry out safety-related control functions on machines that are not portable by hand while working, including a group of machines working together in a coordinated manner. English/French. This package includes 2 corrigenda. Available as a zip file.215 pp.</p>	\$363