



« Welding and allied processes »

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Assistant:

Patricia DARRAS

Direct line: + 33 (0)1 41 62 84 46

patricia.darras@afnor.org

Your contact:

Nathalie GESLIN-LEVASSEUR

Direct line : + 33 (0)1 41 62 84 29

nathalie.geslin@afnor.org

Comparison of ISO and national standards

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SOURCE

Andrew DAVIS, Boyoung LEE, Kazuo OMATA,
Craig MARTIN, Dongguang PARK

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1. Brazing materials and processes

Brazing materials and processes					
ISO 3677:1992	Filler metal for soft soldering, brazing and braze welding – Designation (revision of ISO 3677:1976)				
Europe	Canada	China	Japan	Korea	US
EN ISO 3677:1995			JIS Z3261 : 1998 JIS Z3262 : 1998 JIS Z3264 : 1998 JIS Z3265 : 1998 JIS Z3266 : 1998 JIS Z3267 : 1998 JIS Z3268 : 1998 ISO 3677 : 1992 (MOD & separated)	KSBISO 3677 (ISO IDT)	AWS A5.8/A5.8M:2004 A5.31-92(R2003) AMS specifications
ISO 10564:1993	Soldering and brazing materials - Methods for the sampling of soft solders for analysis				
Europe	Canada	China	Japan	Korea	US
EN ISO 10564:1997				KSBISO 10564 (ISO IDT)	AWS A5.8/A5.8M:2004
ISO/FDIS 13585	Brazing – Brazer qualification				
Europe	Canada	China	Japan	Korea	US
FprEN ISO 13585 (revision of EN 13133:2000) CEN lead					AWS B2.2/B2.2M:2010 (brazing) AWS B2.3/B2.3M:2008 (soldering)
ISO 17672:2010	Brazing - Filler metals				
Europe	Canada	China	Japan	Korea	US
EN ISO 17672:2010 (replace EN 1044:1999)					AWS A5.8/A5.8M:2004 AWS A5.31-92(R2003) AMS specifications

	Brazing materials and processes				
ISO/PWI 17779	Brazing -- Qualification for brazing procedures				
Europe	Canada	China	Japan	Korea	US
ISO 18279:2003	Brazing - Imperfections in brazed joints				
Europe	Canada	China	Japan	Korea	US
EN ISO 18279:2003				KSBISO 18279 (ISO IDT)	Brazing Handbook

Europe	Canada	China	Japan	Korea	US
EN 1045:1997 Brazing - Fluxes for brazing - Classification and technical delivery conditions					AWS A5.31-92(R2003)

Europe	Canada	China	Japan	Korea	US
prEN 13134 (preliminary) Brazing – Procedure approval (revision of EN 13134:2000)					AWS B2.2/B2.2M:2010 AWS C3.4M/C3.4:2007 AWS C3.7M/3.7:2005 AWS C3.9M/C3.9:2009

Europe	Canada	China	Japan	Korea	US
EN 12797:2000 EN 12797:2000/A1:2003 Brazing - Destructive					AWS C3.2M/C3.2:2008

	Brazing materials and processes				
tests of brazed joints (confirmed in 2010)					

Europe	Canada	China	Japan	Korea	US
EN 12799:2000 EN 12799:2000/A1:2003 Brazing - Non- destructive examination of brazed joints					AWS C3.3:2008 AWS C3.4M/C3.4:2007 AWS C3.7M/3.7:2005 AWS C3.8M/C3.8:2005 AWS C3.9M/C3.9:2009

Europe	Canada	China	Japan	Korea	US
EN 14324:2004 Brazing - Guidance on the application of brazed joints					AWS C3.3:2008 AWS D10.13/D10.13M:2001

2. Welding and brazing in aerospace

Welding and brazing in aerospace					
ISO 11745:2010	Brazing for aerospace applications – Qualification test of brazers and brazing operators – Brazing of metallic components				
Europe	Canada	China	Japan	Korea	US
					None yet, AWS B2.2/B2.2M:2010
ISO 24394:2008 ISO 24394:2008/DAm1	Welding for aerospace applications – Qualification test for welders and welding operators – Fusion welding of metallic components				
Europe	Canada	China	Japan	Korea	US
					AWS D17.1/D17.1M:2010
ISO/NP 17533	Welding for aerospace applications – Welding data in design documents				
Europe	Canada	China	Japan	Korea	US
					None yet
ISO/DIS 16338	Welding for aerospace applications – Resistance welding				
Europe	Canada	China	Japan	Korea	US
					AWS D17.2/D17.2M:2007

NOTE : in the US There are many company brazing specifications, especially in government areas, aerospace, etc

3. Welding consumables

Welding consumables					
ISO 544 :2011	Welding consumables - Technical delivery conditions for welding filler materials - Type of product, dimensions, tolerances and markings (revision of ISO 544:2003)				
Europe	Canada	China	Japan	Korea	US
EN ISO 544:2011 (revision of EN ISO 544:2003)		GB/T 25775-2010	JIS Z3200:2005 ISO 544:2003 (MOD)	KSB0952 (ISO MOD)	AWS A5.02/A5.02M:2007
ISO 636:2004	Welding consumables - Rods, wires and deposits for tungsten inert gas welding of non-alloy and fine-grain steels – Classification (revision of ISO 636 : 1989)				
Europe	Canada	China	Japan	Korea	US
EN ISO 636 :2008			JIS Z3316 : 2011 (ISO 636 : 2004 MOD)	KSD7005	AWS A5.18/A5.18M:2005
ISO 1071:2003	Welding consumables - Covered electrodes, wires, rods and tubular cored electrodes for fusion welding of cast iron – Classification (revision of ISO 1071:1983)				
Europe	Canada	China	Japan	Korea	US
EN ISO 1071 : 2003		GB/T 10044-2006	JIS Z3252 : 2001 under revision (ISO 1071:1983 MOD)	KS B ISO 1071:2008	AWS A5.15/A5.15M:2006
ISO 2401:1972	Covered electrodes - Determination of the efficiency, metal recovery and deposition coefficient				
Europe	Canada	China	Japan	Korea	US
EN 22401:1994	AWS A5 series of standards				none

Welding consumables					
ISO 2560:2009	Welding consumables - Covered electrodes for manual metal arc welding of non-alloy and fine grain steels – Classification (revision of ISO 2560:2002)				
Europe	Canada	China	Japan	Korea	US
EN ISO 2560:2009		GB/T 5117-1995	JIS Z3211 : 2008 ISO 2560 system B:2002 ISO 18275:2005 (MOD)	KSD7004	AWS A5.1/A5.1M:2004 AWS A5.5/A5.5M:2006
ISO 3580:2010	Welding consumables - Covered electrodes for manual metal arc welding of creep-resisting steels – Classification (revision of ISO 3580 : 2004)				
Europe	Canada	China	Japan	Korea	US
EN ISO 3580 : 2011 (revision of EN ISO 3580:2008)		GB/T 5118-1995	JIS Z3223 : 2010 ISO 3580 system B : 2004 (IDT)		AWS A5.5/A5.5M:2006
ISO 3581:2003 ISO 3581:2003/Amd1:2011	Welding consumables - Covered electrodes for manual metal arc welding of stainless and heat-resisting steels – Classification				
Europe	Canada	China	Japan	Korea	US
FprEN ISO 3581 (UAP) (revision of EN 1600 : 1997)	CSA Standard W48 -06	GB/T 985-1995	JIS Z3221 : 2008 ISO 3581 system B : 2003 (MOD)	KSD7014	AWS A5.4/A5.4M:2006
ISO 6848:2004	Arc welding and cutting – Non consumable tungsten electrodes – Classification				
Europe	Canada	China	Japan	Korea	US
EN ISO 6848:2004 (replaces EN 26848:1991)			JIS Z3233 : 2001 ISO 6848:1984 (MOD)	KSBISO 6848 (ISO IDT)	AWS A5.12/A5.12M:2009 (ISO 6848:2004 MOD)

Welding consumables					
ISO 12153:2011	Welding consumables – Tubular cored electrodes for gas shielded and non-gas shielded metal arc welding of nickel and nickel alloys – Classification				
Europe	Canada	China	Japan	Korea	US
FprEN ISO 12153 (UAP)					AWS A5.34/A5.34M:2007
ISO 14171: 2010	Welding consumables - Wire electrodes and wire-flux combinations for submerged arc welding of non alloy and fine grain steels – Classification (revision of ISO 14171:2002)				
Europe	Canada	China	Japan	Korea	US
EN ISO 14171: 2010 (revision of EN 756 : 2004)	AWS A5.11:2010	GB/T 5293-2008		KSBISO 14171 (ISO IDT)	AWS A5.17/A5.17M- 97(R2007) AWS A5.23/A5.23M:2007
ISO 14172:2008	Welding consumables - Covered electrodes for manual metal arc welding of nickel and nickel alloys – Classification				
Europe	Canada	China	Japan	Korea	US
EN ISO 14172 :2008	AWS A5.11:2010	GB/T 13814-2008	JIS Z3224 : 2010 ISO 14172 : 2008 (MOD)	KS B ISO 14172	AWS A5.11/A5.11M:2010
ISO/FDIS 14174	Welding consumables - Fluxes for submerged arc welding – Classification (revision of ISO 14174:2004)				
Europe	Canada	China	Japan	Korea	US
FprEN ISO 14174 ISO lead	CSA Standard W48 -06 “Filler metals and allied materials for metal arc welding”		JIS Z3352:2010 ISO 14174:2004 (MOD)	KSBISO 14174 (ISO IDT)	none
ISO 14175:2008	Welding consumables - Gases and gas mixtures for fusion welding and allied processes				
Europe	Canada	China	Japan	Korea	US
EN ISO 14175 : 2008			JIS Z3253: 2011 ISO 14175:2008 (MOD)	KS B ISO 14175	AWS A5.32M/A5.32:2011 (ISO 14175 MOD)

Welding consumables					
ISO 14341:2010	Welding consumables - Wire electrodes and deposits for gas shielded metal arc welding of non alloy and fine grain steels – Classification (revision of ISO 14341:2002)				
Europe	Canada	China	Japan	Korea	US
EN ISO 14341:2011 (revision of EN 440 :1994)	CAN/CSA ISO 14341 (Adopted by CSA Standard W48 -06“Filler metals and allied materials for metal arc welding”)	GB/T 8110-2008	JIS Z3312 : 2009 ISO 14341:2002 (MOD) ISO 16834:2006 (MOD)	KS B ISO 14341	AWS A5.18/A5.18M:2005 AWS A5.28/A5.28M:2005
ISO 14343 :2009	Welding consumables - Wire electrodes, strip electrodes, wires and rods for arc welding of stainless and heat resisting steels – Classification (revision of ISO 14343:2002)				
Europe	Canada	China	Japan	Korea	US
EN ISO 14343 : 2009	AWS A5.9:2006		JIS Z3321 : 2010 ISO 14343 :2002 (MOD)	KSBISO 14343 (ISO IDT)	AWS A5.9/A5.9M:2006
ISO 14344:2010	Welding consumables - Procurement of filler materials and fluxes (revision of ISO 14344:2002)				
Europe	Canada	China	Japan	Korea	US
EN ISO 14344:2010		GB/T 25778-2010	JIS Z3423 : 2006) ISO 14344:2002 (MOD)	KS B ISO 14344	AWS A5.01/A5.01M:2008 (ISO 14344:2002 MOD)
ISO 15792-1:2000 ISO 15792- 1:2000/DFAmD 1	Welding consumables - Test methods - Part 1: Test methods for all-weld metal test specimens in steel, nickel and nickel alloys				
Europe	Canada	China	Japan	Korea	US
EN ISO 15792-1 : 2008 EN ISO 15792-1/prA1	AWS A5.11:2010 AWS A5.14:2009	GB/T 25774.1-2010	JIS Z3111 : 2005 ISO 15792-1:2000 (MOD)	KSBISO 15792-1 (ISO IDT) MOD KSB0821	none

Welding consumables					
ISO 15792-2:2000	Welding consumables - Test methods - Part 2: Preparation of single-run and two-run technique test specimens in steel				
Europe	Canada	China	Japan	Korea	US
EN ISO 15792-2 : 2008	CSA W48 or applicable AWS A5 series of standards	GB/T 25774.2-201X	JIS Z3129 : 2005 ISO 15792-2:2000 (MOD)	KSBISO 15792-2 (ISO IDT)	none
ISO 15792-3:2011	Welding consumables - Test methods - Part 3: Classification testing of positional capacity and root penetration of welding consumables in a fillet weld (revision of ISO 15792-3:2000)				
Europe	Canada	China	Japan	Korea	US
EN ISO 15792-3 :2011 (revision of EN ISO 15792-3 : 2008)	CSA W48 or applicable AWS A5 series of standards	GB/T 25774.3-2010	JIS Z3181 : 2005 ISO 15792-3:2000 (MOD)	KSBISO 15792-3 (ISO IDT)	none
ISO/FDIS 16834	Welding consumables – Wire electrodes, wires, rods and deposits for gas-shielded arc welding of high strength steels – Classification (revision of ISO 16834:2006)				
Europe	Canada	China	Japan	Korea	US
FprEN ISO 16834 (EN ISO 16834:2006) ISO lead				KSBISO16834	AWS A5.28/A5.28M:2005
ISO 17632:2004	Welding consumables - Tubular cored electrodes for gas shielded and non-gas shielded metal arc welding of non-alloy and fine grain steels – Classification				
Europe	Canada	China	Japan	Korea	US
EN ISO 17632 : 2008 (replaces EN 758:1997)	CSA Standard W48 -06 “Filler metals and allied materials for metal arc welding”	GB/T 10045-2001	JIS Z3313 : 2009 ISO 17632:2004 (MOD) ISO 18276:2005 (MOD)		AWS A5.20/A5.20M:2005 AWS A5.29/A5.29M:2010

Welding consumables					
ISO 17633:2010	Welding consumables - Tubular cored electrodes and rods for gas shielded and non-gas shielded metal arc welding of stainless and heat-resisting steels – Classification (revision of ISO 17633:2004)				
Europe	Canada	China	Japan	Korea	US
EN ISO 17633:2010 (revision of EN ISO 17633:2006)	AWS A5.22:2010	GB/T 17853-1999	JIS Z3323 : 2007 ISO 17633:2004 (MOD)		AWS A5.22/A5.22M:2010
ISO 17634:2004	Welding consumables - Tubular cored electrodes for gas shielded metal arc welding of creep-resisting steels – Classification				
Europe	Canada	China	Japan	Korea	US
EN ISO 17634 : 2006 (replaces EN 12071:1999)		GB/T 17493-2008	JIS Z3318 : 2010 ISO 17634:2004 (MOD)		AWS A5.29/A5.29M:2010
ISO/PWI 1777	Welding consumables -- Covered electrodes for manual metal arc welding of copper and copper alloys -- Classification				
Europe	Canada	China	Japan	Korea	US
ISO 18273:2004	Welding consumables - Wire electrodes, wires and rods for welding of aluminium and aluminium alloys – Classification				
Europe	Canada	China	Japan	Korea	US
EN ISO 18273 : 2004	AWS A5.10:2007	GB/T 10858-2008	JIS Z3232 : 2009 ISO 18273:2004 (MOD)	KSBISO 18273 (ISO IDT)	AWS A5.10/A5.10M:2007
ISO 18274:2010	Welding consumables - Wire and strip electrodes, wires and rods for fusion welding of nickel and nickel alloys – Classification (revision of ISO 18274:2004)				
Europe	Canada	China	Japan	Korea	US
EN ISO 18274:2010 (revision of EN ISO 18274:2004)	AWS A5.14:2009	GB/T 15620-2008	JIS Z3334 : 2011 ISO 18274:2004 (MOD)	KS B ISO 18274	AWS A5.14/A5.14M:2009

Welding consumables					
ISO 18275:2011	Welding consumables - Covered electrodes for manual metal arc welding of high-strength steels – Classification (revision of ISO 18275:2005)				
Europe	Canada	China	Japan	Korea	US
FprEN ISO 18275 (UAP) (revision of EN 757 : 1997)	CSA Standard W48 -06 “Filler metals and allied materials for metal arc welding”	GB/T 5118-1995	JIS Z3211 : 2008 ISO 18275:2005 (MOD) ISO 2560:2002 (MOD)	KSBISO 18275 (ISO IDT)	AWS A5.5/A5.5M:2006
ISO 18276:2005	Welding consumables - Tubular cored electrodes for gas-shielded and non-gas-shielded metal arc welding of high-strength steels – Classification				
Europe	Canada	China	Japan	Korea	US
EN ISO 18276:2006 (revision of EN 12535:2000)	AWS A5.29:2010	GB/T 17493-2008	JIS Z3313 : 2009 ISO 18276:2005 (MOD) ISO 17632:2004 (MOD)	KS B ISO 18276	AWS A5.29/A5.29M:2010
ISO/FDIS 21952	Welding consumables - Wire electrodes, wires, rods and deposits for gas-shielded arc welding of creep-resisting steels – Classification (revision of ISO 21952:2007)				
Europe	Canada	China	Japan	Korea	US
FprEN ISO 21952 (revision of EN ISO 21952 : 2007) ISO lead		GB/T 8110-2008	JIS Z3317 : 2011 ISO 21952:2007 (MOD)	KSBISO 21952 (ISO IDT)	AWS A5.28/A5.28M:2005
ISO 24034:2010	Welding consumables - Solid wires and rods for fusion welding of titanium and titanium alloys – Classification (revision of ISO 24034:2005 and Amd 1 : 2008)				
Europe	Canada	China	Japan	Korea	US
EN ISO 24034:2010 (revision of EN ISO 24034:2005 + EN ISO 24034:2005/A1:2008)			JIS Z3331 : 2011 ISO 24034:2005 and Amd 1 : 2008 (MOD)	KSBISO 24034 (ISO IDT)	AWS A5.16/A5.16M:2007

Welding consumables					
ISO 24373:2008	Welding consumables - Solid wires and rods for fusion welding of copper and copper alloys – Classification				
Europe	Canada	China	Japan	Korea	US
EN ISO 24373 : 2009 (replaces EN 14640:2005)	AWS A5.7:2007	GB/T 9460-2008	JIS Z3341 : 2007 under revision		AWS A5.7/A5.7M:2007
ISO/FDIS 24598	Welding consumables - Solid wire electrodes, tubular cored electrodes and electrode/flux combinations for submerged arc welding of creep-resisting steels – Classification (revision of ISO 24598:2007)				
Europe	Canada	China	Japan	Korea	US
FprEN ISO 24598 (revision of EN ISO 24598 : 2007) ISO lead		GB/T 12470-2003		KSBISO 24598 (ISO IDT)	AWS A5.23/A5.23M:2007
ISO 26304:2011	Welding consumables - Solid wire electrodes, tubular cored electrodes and electrode-flux combinations for submerged arc welding of high strength steels – Classification (revision of ISO 26304:2008)				
Europe	Canada	China	Japan	Korea	US
EN ISO 26304:2011 (revision of EN ISO 26304:2009 (replaces EN 14295:2003)) ISO lead	AWS A5.23:2007	GB/T 12470-2003			AWS A5.23/A5.23M:2007

Europe	Canada	China	Japan	Korea	US
EN 760:1996 Welding consumables - Fluxes for submerged arc welding - Classification	CSA Standard W48 -06 “Filler metals and allied materials for metal arc welding”				none

	Welding consumables				

Europe	Canada	China	Japan	Korea	US
EN 12074:2000 Welding consumables - Quality requirements for manufacture, supply and distribution of consumables for welding and allied processes (confirmed in 2010)					none

Europe	Canada	China	Japan	Korea	US
EN 12536:2000 Welding consumables - Rods for gas welding of non alloy and creep- resisting steels – Classification (confirmed in 2010)					AWS A5.2/A5.2M:2007

Europe	Canada	China	Japan	Korea	US
EN 13479:2004 Welding consumables - General product standard for filler metals and fluxes for fusion welding of metallic material					none

Welding consumables					

Europe	Canada	China	Japan	Korea	US
EN 14532-1:2004 Welding consumables - Test methods and quality requirements - Part 1: Primary methods and conformity assessment of consumables for steel, nickel and nickel alloy	AWS A5.11:2010 AWS A5.14:2009				none

Europe	Canada	China	Japan	Korea	US
EN 14532-2:2004 Welding consumables - Test methods and quality requirements - Part 2: Supplementary methods and conformity assessment of consumables for steel, nickel and nickel alloys	AWS A5.11:2010 AWS A5.14:2009				none

Europe	Canada	China	Japan	Korea	US
EN 14532-3:2004 Welding consumables - Test methods and quality requirements - Part 3: Conformity assessment of wire electrodes, wires and rods for welding of aluminium alloy	AWS A5.10:2007				none

Welding consumables					

Europe	Canada	China	Japan	Korea	US
prEN 14700 (revision of EN 14700::2005) Welding consumables - Welding consumables for hard-facing					AWS A5.13/A5.13M:2010 AWS A5.21/A5.21M:2011

4. Testing and inspection of welds

Testing and inspection of welds					
ISO 10675-1:2008	Non-destructive testing of welds - Acceptance levels for radiographic testing - Part 1: Steel, nickel, titanium and their alloys				
Europe	Canada	China	Japan	Korea	US
EN 12517-1 : 2006	CSA Standard W59-03 "Welded Steel Construction"				No Equivalent; many product-specific quality level Codes.
ISO 10675-2:2010	Non-destructive testing of welds - Part 2: Evaluation of welded joints in aluminium and its alloys by radiography - Acceptance levels				
Europe	Canada	China	Japan	Korea	US
EN 12517-2:2008	CSA W59.2-91 "Welded Aluminium Construction"				No Equivalent; many product-specific quality level Codes.
ISO 10863:2011	Welding - Use of time-of-flight diffraction technique (TOFD) for examination of weld				
Europe	Canada	China	Japan	Korea	US
EN ISO 10863:2011 (revision of CEN/TS 14751:2004) CEN lead	No Canadian equivalent Will be in 2011 version of CSA W59				None
ISO 11666:2010	Non-destructive testing of welds - Non-destructive testing of welds - Ultrasonic testing of welded joints - Acceptance levels				
Europe	Canada	China	Japan	Korea	US
EN ISO 11666:2010 (revision of EN 1712 : 1997)	CSA Standard W59-03 "Welded Steel Construction"				AWS B1.10M/B1.10:2009

Testing and inspection of welds					
ISO/DIS 13588	Welding - Use of (semi-) automated phased array technology for examination of welds				
Europe	Canada	China	Japan	Korea	US
prEN ISO 13588 CEN lead	No Canadian equivalent Will be in 2011 version of CSA W59				ASTM E2700:2009
ISO 15626:2011	Non-destructive testing of welds - Time-of-flight diffraction technique (TOFD) - Acceptance levels				
Europe	Canada	China	Japan	Korea	US
EN 15617:2009	No Canadian Equivalent. Will be in 2011 version of CSA W59.				none
ISO 17635:2010	Non-destructive testing of welds - General rules for fusion welds in metallic materials (revision of ISO 17635:2003)				
Europe	Canada	China	Japan	Korea	US
EN ISO 17635:2010 (revision of EN 12062 : 1997)	CSA Standard W59-03 "Welded Steel Construction"				Welding inspection handbook, AWS B1.10 and B1.11
ISO/FDIS 17636	Non-destructive testing of welds – Radiographic testing of welded joints Part 1: X- and gamma rays techniques with film Part 2: Computed testing (revision of ISO 17636 : 2003)				
Europe	Canada	China	Japan	Korea	US
FprEN ISO 17636 (revision of EN 1435:1997, EN 1435:1997/A1:2002) CEN lead	GB/T 3323-2005		JIS Z3104 : 1995 ISO 1106-1:1984 (NEQ) ISO 1106-2:1985 (NEQ) ISO 1106-3:1984 (NEQ) ISO 5579:1984 (NEQ)		AWS B1.10M/B1.10:2009

	Testing and inspection of welds				
ISO 17637:2003	Non-destructive testing of welds - Visual testing of fusion-welded joints				
Europe	Canada	China	Japan	Korea	US
EN ISO 17637:2011 (revision of EN 970 : 1997)	CSA Standard W59-03 "Welded Steel Construction"		JIS Z3090 : 2005 ISO 17637:2003 (MOD)		AWS B1.11:2000 AWS D1.1/D1.1M:2010
ISO 17638:2003	Non-destructive testing of welds - Magnetic particle testing				
Europe	Canada	China	Japan	Korea	US
EN ISO 17638:2009 (revision of EN 1290: 1998)	ASTM E709:2008 (NEQ)	GB/T 26951-2011	JB/T 6061-2007 (under preparation)		AWS B1.10M/B1.10:2009 ASTM E709:2008
ISO 17640 : 2010	Non-destructive testing of welds - Ultrasonic testing of welded joints (revision of ISO 17640:2005)				
Europe	Canada	China	Japan	Korea	US
EN ISO 17640:2010		GB/T 11345-201X	JIS Z3060 : 2002 (NEQ)		AWS B1.10M/B1.10:2009
ISO 17643:2005	Non-destructive testing of welds - Eddy current testing of welds by complex-plane analysis				
Europe	Canada	China	Japan	Korea	US
EN 1711:2000 EN 1711/1A1:2003		GB/T 26954-2011			none
ISO/FDIS 22825	Non-destructive testing of welds - Ultrasonic testing - Testing of welds in austenitic steels and nickel-based alloys (revision of ISO 22825 : 2006)				
Europe	Canada	China	Japan	Korea	US
FprEN ISO 22825 (revision of EN ISO 22825:2006) CEN lead	AWS D1.6:2007			KSBISO 22825 (ISO IDT)	AWS D1.6/D1.6M:2007 AWS B1.10M/B1.10:2009

Testing and inspection of welds					
ISO 23277:2006	Non-destructive testing of welds - Penetrant testing of welds - Acceptance levels (revision of ISO 23277:2006)				
Europe	Canada	China	Japan	Korea	US
EN ISO 23277:2009 (revision of EN 1289 : 1998)	CSA Standard W59-03 "Welded Steel Construction"	GB/T 26953-2011	JB/T 6062-2007 (UP)	KSBISO 23277 (ISO IDT)	No Equivalent; many product-specific quality level Codes e.g. AWS D1.1/D1.1M:2010
ISO 23278:2006	Non-destructive testing of welds - Magnetic particle testing of welds - Acceptance levels (revision of ISO 23278:2006)				
Europe	Canada	China	Japan	Korea	US
EN ISO 23278:2009 (revision of EN 1291 : 1998)	CSA Standard W59-03 "Welded Steel Construction"	GB/T 26952-2011		KS B ISO 23278 (ISO IDT)	No Equivalent; many product-specific quality level Codes e.g. AWS D1.1/D1.1M:2010
ISO 23279:2010	Non-destructive testing of welds - Ultrasonic testing - Characterization of indications in welds (revision of ISO 23279:2007)				
Europe	Canada	China	Japan	Korea	US
EN ISO 23279:2010 (replaces EN 1713 : 1998)				KS B ISO 23279 (ISO IDT)	none

Europe	Canada	China	Japan	Korea	US
CEN/TR 15135:2005 Welding - Design and non-destructive testing of welds					none

Testing and inspection of welds					
ISO 4136:2001					
Destructive tests on welds in metallic materials - Transverse tensile test (revision of ISO 4136 : 1989)					
Europe	Canada	China	Japan	Korea	US
EN ISO 4136:2011 (replaces EN 895:1995)	CSA W47.1 "Certification of Companies for the fusion welding of steel" CSA W47.2 "Certification of companies for the fusion welding of aluminum" ASTM A370 - 09ae1 "Standard Test Methods and Definitions for Mechanical Testing of Steel Products"	GB/T 2651-2008	JIS Z3121 : 1993 under revision ISO 4136 : 1989 (EQ)	KS B ISO 4136	AWS B4.0:2007 AWS B4.0M:2000(R2010)
ISO 5173 : 2009 ISO 5173 : 2009/FDAmd 1					
Destructive tests on welds in metallic materials - Bend tests (revision of ISO 5173:2000)					
Europe	Canada	China	Japan	Korea	US
EN ISO 5173:2010 (replaces EN 910:1996) EN ISO 5173/FprA1	CSA W47.1 "Certification of Companies for the fusion welding of steel" CSA W47.2 "Certification of companies for the fusion welding of aluminum" ASTM A370 - 09ae1 "Standard Test Methods and Definitions for Mechanical Testing of Steel Products"	GB/T 2653-2008	JIS Z3122 : 1990 (NEQ) Under developing in accordance with ISO 5173 : 2009	KS B 0832	AWS B4.0:2007 AWS B4.0M:2000(R2010)

Testing and inspection of welds					
ISO 5178:2001		Destructive tests on welds in metallic materials - Longitudinal tensile test on weld metal in fusion welded joints			
Europe	Canada	China	Japan	Korea	US
EN ISO 5178:2011 (replaces EN 876:1995)	CSA W47.1 "Certification of Companies for the fusion welding of steel" CSA W47.2 "Certification of companies for the fusion welding of aluminum" ASTM A370 - 09ae1 "Standard Test Methods and Definitions for Mechanical Testing of Steel Products"	GB/T 2652-2008		KS B ISO 5178	AWS B4.0:2007 AWS B4.0M:2000(R2010)
ISO 9015-1:2001		Destructive tests on welds in metallic materials - Hardness testing - Part 1: Hardness test on arc welded joints			
Europe	Canada	China	Japan	Korea	US
EN ISO 9015-1:2011 (replaces EN 1043-1:1996)	CSA W47.1-09 "Certification of companies for the fusion welding of steel" ASTM E10-70a "Standard Test method for Brinell Hardness of metallic materials" ASTM A370 - 09ae1 "Standard Test Methods and Definitions for Mechanical Testing of Steel Products"	GB/T 2654-2008	JIS Z3101:1990 (NEQ) JIS Z3114:1990 (NEQ)		AWS B4.0:2007 AWS B4.0M:2000(R2010) ASTM E3:2007 (NEQ) ASTM E10 (NEQ) ASTM E18 (NEQ) ASTM E384:2010 (NEQ) ASTM E110:2010 (NEQ)

Testing and inspection of welds					
ISO 9015-2:2003	Destructive tests on welds in metallic materials - Hardness testing - Part 2: Microhardness testing of welded joints				
Europe	Canada	China	Japan	Korea	US
EN ISO 9015-2:2011 (replaces EN 1043-2:1996)	CSA W47.1-09 “Certification of companies for the fusion welding of steel”	Under prepare		KS B ISO 9015-2	ASTM E384:2010 (NEQ)
ISO 9016:2001	Destructive tests on welds in metallic materials - Impact tests - Test specimen location, notch orientation and examination				
Europe	Canada	China	Japan	Korea	US
EN ISO 9016:2011 (replaces EN 875:1995)	CSA W47.1-09 “Certification of companies for the fusion welding of steel” ASTM E23:2007 (NEQ) Standard test methods for notched bar impact testing of metallic materials	GB/T 2650-2008	JIS Z3128 : 1996 (NEQ)	KS B ISO 9016	AWS B4.0:2007 AWS B4.0M:2000(R2010) ASTM E23:2007 (NEQ)
ISO 9017:2001	Destructive tests on welds in metallic materials - Fracture test				
Europe	Canada	China	Japan	Korea	US
EN 1320:1996	CSA W47.1-09 “Certification of companies for the fusion welding of steel” CSA W47.2 “Certification of companies for the fusion welding of aluminum”	Under prepare		KS B ISO 9017	AWS B4.0:2007 AWS B4.0M:2000(R2010) ASTM E 208:2006 (NEQ) ASTM E370 (NEQ) ASTM E399:2009 (NEQ) ASTM E604:2008(NEQ) ASTM E616:1989(NEQ)
ISO 9018:2003	Destructive tests on welds in metallic materials - Tensile test on cruciform and lapped joints				
Europe	Canada	China	Japan	Korea	US
EN ISO 9018 : 2003		GB/T 26957-2011		KS B 0841	none

Testing and inspection of welds					
ISO/TR 16060:2003	Destructive tests on welds in metallic materials - Etchants for macroscopic and microscopic examination				
Europe	Canada	China	Japan	Korea	US
CR 12361:1996		GB/T 26956-2011			ASTM E340 ASM and Welding handbooks
ISO 17639:2003	Destructive tests on welds in metallic materials - Macroscopic and microscopic examination of welds				
Europe	Canada	China	Japan	Korea	US
EN 1321:1996	CSA W47.1-09 "Certification of companies for the fusion welding of steel"	GB/T 26955-2011			ASM and Welding handbooks
ISO 17641-1:2004	Destructive tests on welds in metallic materials - Hot cracking tests for weldments - Arc welding processes - Part 1: General				
Europe	Canada	China	Japan	Korea	US
EN ISO 17641-1 : 2004				KS B ISO 17642-1	AWS B4.0:2007 AWS B4.0M:2000(R2010)
ISO 17641-2:2005	Destructive tests on welds in metallic materials - Hot cracking tests for weldments - Arc welding processes - Part 2: Self-restraint tests				
Europe	Canada	China	Japan	Korea	US
EN ISO 17641-2 : 2005				KS B ISO 17642-2	AWS B4.0:2007 AWS B4.0M:2000(R2010)
ISO/TR 17641-3:2005	Destructive tests on welds in metallic materials - Hot cracking tests for weldments - Arc welding processes - Part 3: Externally loaded tests				
Europe	Canada	China	Japan	Korea	US
CEN ISO/TR 17641-3 : 2005				KS B ISO 17642-3	AWS B4.0:2007 AWS B4.0M:2000(R2010)

Testing and inspection of welds					
ISO 17642-1:2004	Destructive tests on welds in metallic materials - Cold cracking tests for weldments - Arc welding processes - Part 1: General				
Europe	Canada	China	Japan	Korea	US
EN ISO 17642-1:2004			JIS Z3157 (NEQ) JIS Z3158 (NEQ) JIS Z3159 (NEQ)	KS B ISO17642-1	AWS B4.0:2007 AWS B4.0M:2000(R2010)
ISO 17642-2:2005	Destructive tests on welds in metallic materials - Cold cracking tests for weldments - Arc welding processes - Part 2: Self-restraint tests				
Europe	Canada	China	Japan	Korea	US
EN ISO 17642-2:2005			JIS Z3157 (NEQ) JIS Z3158 (NEQ) JIS Z3159 (NEQ)	KS B ISO17642-2	AWS B4.0:2007 AWS B4.0M:2000(R2010)
ISO 17642-3:2005	Destructive tests on welds in metallic materials - Cold cracking tests for weldments - Arc welding processes - Part 3: Externally loaded tests				
Europe	Canada	China	Japan	Korea	US
EN ISO 17642-3:2005			JIS Z3157 (NEQ)	KS B ISO17642-3	AWS B4.0:2007 AWS B4.0M:2000(R2010)
ISO 17655:2003	Destructive tests on welds in metallic materials - Method for taking samples for delta ferrite measurement				
Europe	Canada	China	Japan	Korea	US
EN ISO 17655 : 2003					A4.2M:2006 (ISO 8249: 2000 MOD)
ISO 22826:2005	Destructive tests on welds in metallic materials - Hardness testing of narrow joints welded by laser and electron beam (Vickers and Knoop hardness tests)				
Europe	Canada	China	Japan	Korea	US
				KS B ISO 22826	ASTM standards

Testing and inspection of welds					

Europe	Canada	China	Japan	Korea	US
EN 1321:1996 Destructive tests on welds in metallic materials – Macroscopic and microscopic examination of welds					ASTM standards Various application standards

Europe	Canada	China	Japan	Korea	US
CEN/TR 15235:2005 Welding - Methods for assessing imperfections in metallic structures					none

5. Resistance welding and allied mechanical joining

Resistance welding and allied mechanical joining					
ISO/CD 669	Resistance welding - Resistance welding equipment - Mechanical and electrical requirements (revision of ISO 669 : 2000)				
Europe	Canada	China	Japan	Korea	US
	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16	GB/T 8366-2004	JIS C9305 : 2011 ISO/FDIS 669 : 2000 (MOD)	KS B ISO 669	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16
ISO 693:1982	Dimensions of seam welding wheel blanks				
Europe	Canada	China	Japan	Korea	US
EN 20693:1991			JB/T 4158 : 1999	KS C ISO 693	
ISO/NP 865 (revision ISO865:1981)	Slots in platens for projection welding machines				
Europe	Canada	China	Japan	Korea	US
prEN ISO 865 (revision EN 20865 : 1992) ISO lead	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16	JB/T 10257-2001	JIS C9305 : 2011 ISO 865 : 1981 (MOD)	KS C ISO 865	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16
ISO 1089:1980	Electrode taper fits for spot welding equipment – Dimensions				
Europe	Canada	China	Japan	Korea	US
EN 21089:1991	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16	JB/T 3954-1999	JIS C9304 : 1999 ISO 1089:1980 (MOD)	KS B ISO 1089	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16
ISO 5182:2008	Resistance welding - Materials for electrodes and ancillary equipment				
Europe	Canada	China	Japan	Korea	US
EN ISO 5182 : 2009	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16		JIS CZ3234 : 1999 ISO 5182 : 1991 (MOD)	KS D ISO 5182	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16

Resistance welding and allied mechanical joining					
ISO 5183-1:1998	Resistance welding equipment - Electrode adaptors, male taper 1:10 - Part 1: Conical fixing, taper 1:10				
Europe	Canada	China	Japan	Korea	US
EN ISO 5183-1: 2000	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16	JB/T 10255-2001	JIS C 9304 : 1999 ISO 5183-1 : 1988 (MOD)	KS B ISO 5183-1	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16
ISO 5183-2:2000	Resistance spot welding - Electrode adaptors, male taper 1:10 - Part 2: Parallel shank fixing for end-thrust electrodes				
Europe	Canada	China	Japan	Korea	US
EN ISO 5183-2 : 2001	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16		JIS C9304 : 1999 ISO 5183-2 : 1988 (MOD)	KS B ISO 5183-2	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16
ISO/NP 5184	Straight resistance spot welding electrodes (revision of ISO 5184:1979)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 5184 (revision of EN 25184:1994)	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16	JB/T 3158-1999	JIS C9304 : 1999 ISO 5184:1979 (MOD)	KS B ISO 5184	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16
ISO 5821:2009	Resistance spot welding electrode caps				
Europe	Canada	China	Japan	Korea	US
EN ISO 5821:2009 (replaces EN 25821:1991)	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16	JB/T 3948-1999	JIS C9304 : 1999 ISO 5821:1979 (MOD)		Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16
ISO 5822:1988	Spot welding equipment - Taper plug gauges and taper ring gauges				
Europe	Canada	China	Japan	Korea	US
EN 25822:1991	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16	JB /T 9527-1999		KS C ISO 5822	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16

Resistance welding and allied mechanical joining					
ISO/CD 5826	Resistance welding equipment - Transformers - General specifications applicable to all transformers (revision of ISO 5826:1999)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 5826 (revision of EN ISO 5826:2003) ISO lead		JB /T 9529-1999	JIS C9323 ISO/FDIS 5826:1998 (MOD)	KS C ISO 5826	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16
ISO 5827:1983	Spot welding - Electrode back-ups and clamps				
Europe	Canada	China	Japan	Korea	US
EN ISO 25827 : 1992		JB /T 9531-1999		KS C ISO 5827	
ISO 5828:2001	Resistance welding equipment - Secondary connecting cables with terminals connected to water-cooled lugs - Dimensions and characteristics				
Europe	Canada	China	Japan	Korea	US
EN ISO 5828 : 2001	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16	JB /T 10113-2002		KS C ISO 5828	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16
ISO 5829:1984	Resistance spot welding - Electrode adaptors, female taper 1 : 10				
Europe	Canada	China	Japan	Korea	US
	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16	JB /T 9959-1999	JIS C9304 : 1999 ISO 5829 : 1984 (MOD)	KS B ISO 5829	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16
ISO 5830:1984	Resistance spot welding - Male electrode caps				
Europe	Canada	China	Japan	Korea	US
	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16		JIS C9304 : 1999 ISO 5830 : 1984 (MOD)	KS C ISO 5830	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16

Resistance welding and allied mechanical joining					
ISO 6210-1:1991	Cylinders for robot resistance welding guns - Part 1: General requirements				
Europe	Canada	China	Japan	Korea	US
				KS C ISO 6210-1	
ISO 7285:1995	Pneumatic cylinders for mechanized multiple spot welding				
Europe	Canada	China	Japan	Korea	US
				KS B ISO 7285	
ISO 7286:1986	Graphical symbols for resistance welding equipment				
Europe	Canada	China	Japan	Korea	US
EN 27286:1991	AWS A3.0	JB/T 5252-1991		KS B ISO 7286	A3.0M/A3.0:2010
ISO/NP 7931	Insulation caps and bushes for resistance welding equipment (revision of ISO 7931:1985)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 7931 (revision of EN 27931:1992) ISO lead		JB/T9530-1999		KS C ISO 7931	
ISO/PWI 8166	Resistance welding – Procedure for the evaluation of the life of spot welding electrodes using constant machine settings (revision of ISO 8166 : 2003)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 8166 (preliminary) (revision of EN ISO 8166:2003) ISO lead					

Resistance welding and allied mechanical joining					
ISO 8167:1989	Projections for resistance welding				
Europe	Canada	China	Japan	Korea	US
EN 28167 : 1992		JB/T 10258-200		KS C ISO 8167	AWS C1.1M/C1.1:2000 (R2006), RWMA Manual
ISO 8205-1:2002	Water-cooled secondary connection cables for resistance welding - Part 1: Dimensions and requirements for double-conductor connection cables				
Europe	Canada	China	Japan	Korea	US
EN ISO 8205-1 : 2002	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16		JIS C9318:1999 ISO 8205-1,-2,-3 :1993 (MOD)	KS C ISO 8205-1	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16
ISO 8205-2:2002	Water-cooled secondary connection cables for resistance welding - Part 2: Dimensions and requirements for single-conductor connection cables				
Europe	Canada	China	Japan	Korea	US
EN ISO 8205-2 : 2002	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16		JIS C9318:1999 ISO 8205-1,-2,-3 :1993 (MOD)	KS C ISO 8205-2	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16
ISO/NP 8205-3	Water-cooled secondary connection cables for resistance welding - Part 3: Test requirements (ISO 8205-3:1993)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 8205-3 (revision of EN ISO 8205-3:1996) ISO lead	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16		JIS C9318:1999 ISO 8205-1,-2,-3 :1993 (MOD)	KS C ISO 8205-3	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16
ISO 8430-1:1988	Resistance spot welding - Electrode holders - Part 1: Taper fixing 1:10				
Europe	Canada	China	Japan	Korea	US
EN 28430-1 : 1992		JB/T 10256.1-2001		KS C ISO 8430-1	None

	Resistance welding and allied mechanical joining				
ISO 8430-2:1988	Resistance spot welding - Electrode holders - Part 2: Morse taper fixing				
Europe	Canada	China	Japan	Korea	US
EN 28430-2 : 1992		JB/T 10256.2-2001		KS C ISO 8430-2	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16
ISO 8430-3:1988	Resistance spot welding - Electrode holders - Part 3: Parallel shank fixing for end thrust				
Europe	Canada	China	Japan	Korea	US
EN 28430-3 : 1992		JB/T 10256.3-2001		KS C ISO 8430-3	
ISO/NP 9312	Resistance welding equipment - Insulated pins for use in electrode back-ups (revision of ISO 9312:1990)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 9312 (revision of EN ISO 9312 : 1994) ISO lead		JB/T 10257-2001		KS C ISO 9312	
ISO 9313:1989	Resistance spot welding equipment - Cooling tubes				
Europe	Canada	China	Japan	Korea	US
EN 29313 : 1992	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16			KS C ISO 9313	Resistance Welding Manufacturing Alliance (RWMA) Bulletin #16
ISO 10656:1996	Electric resistance welding - Integrated transformers for welding guns				
Europe	Canada	China	Japan	Korea	US
		GB/T 18495-2001		KS B ISO 10656	
ISO/DIS 12932	Welding – Laser-arc hybrid welding of steels, nickel and nickel alloys – Quality levels for imperfections				
Europe	Canada	China	Japan	Korea	US
prEN ISO 12932 ISO lead					

Resistance welding and allied mechanical joining					
ISO/DIS 12996	Mechanical joining - Quasistatic tensile shear testing of single joint specimens				
Europe	Canada	China	Japan	Korea	US
prEN ISO 12996 ISO lead					
ISO/PWI 12998	Mechanical joining – Fatigue testing of multi joint specimens				
Europe	Canada	China	Japan	Korea	US
prEN ISO 12998 (preliminary) ISO lead					
ISO/NP 13469	Mechanical joining - Form-fit blind rivets and (lock) bolt joints - Specifications and qualification of testing procedures				
Europe	Canada	China	Japan	Korea	US
ISO/PWI 14327	Resistance welding - Procedures for determining the weldability lobe for resistance spot, projection and seam welding (revision of ISO 14327 : 2004)				
Europe	Canada	China	Japan	Korea	US
EN ISO 14327:2004				KS B ISO 14327	
ISO 14554-1:2000	Quality requirements for welding - Resistance welding of metallic materials - Part 1: Comprehensive quality requirements				
Europe	Canada	China	Japan	Korea	US
EN ISO 14554-1 : 2000	CSA W55.3-08 “Certification of companies for resistance welding of steel and aluminium” AWS C1 & AWS D8 series RWMA Manual			KS B 0906	AWS C1 & D8 group of standards, RWMA Manual

Resistance welding and allied mechanical joining					
ISO 14554-2:2000	Quality requirements for welding - Resistance welding of metallic materials - Part 2: Elementary quality requirements				
Europe	Canada	China	Japan	Korea	US
EN ISO 14554-2 : 2000	CSA W55.3-08 “Certification of companies for resistance welding of steel and aluminium” AWS C1 & AWS D8 series RWMA Manual			KS B 0907	AWS C1 & D8 group of standards, RWMA Manual
ISO/DIS 14732	Welding personnel - Qualification testing of welding operators for fully mechanized welding and weld setters for fully mechanized welding and automatic welding of metallic materials				
Europe	Canada	China	Japan	Korea	US
prEN ISO 14732 ISO lead				KS B ISO 14327	
ISO 15609-5	Specification and qualification of welding procedures for metallic materials - Welding procedure specification –Part 5: Resistance welding (revision of ISO 15609-5:2004)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 15609-5 (revision of EN ISO 15609-5:2004) ISO lead	CSA W55.3-08 “Certification of companies for resistance welding of steel and aluminium” AWS C1 & AWS D8 series			KS B ISO 15609-5	AWS C1 & D8 group of standards

Resistance welding and allied mechanical joining					
ISO 15614-12:2004	Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 12: Spot, seam and projection welding				
Europe	Canada	China	Japan	Korea	US
EN ISO 15614-12 : 2004	CSA W55.3-08 "Certification of companies for resistance welding of steel and aluminium" AWS C1 & AWS D8 series RWMA Manual			KS B ISO 15614-12	AWS C1 & D8 group of standards, RWMA Manual
ISO/FDIS 15614-13	Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 13: Resistance butt and flash welding (revision of ISO 15614-13:2004)				
Europe	Canada	China	Japan	Korea	US
FprEN ISO 15614-13 (revision of EN ISO 15614-13:2005) ISO lead	CSA W55.3-08 "Certification of companies for resistance welding of steel and aluminium" AWS C1 series RWMA Manual			KS B ISO 15614-13	AWS C1 group of standards, RWMA Manual
ISO/NP 16237	Mechanical joining - Cross-tension testing of single joint specimens - Specimen dimensions and test procedure				
Europe	Canada	China	Japan	Korea	US
ISO/FDIS 17653	Destructive tests on welds in metallic materials - Torsion test of resistance spot welds (revision of ISO 17653 : 2003)				
Europe	Canada	China	Japan	Korea	US
FprEN ISO 17653 (revision of EN ISO 17653:2003) ISO lead	AWS C1 & AWS D8 series RWMA Manual			KS B ISO 17653	AWS C1 & D8 group of standards, RWMA Manual

	Resistance welding and allied mechanical joining				
ISO 17654:2011	Destructive tests on welds in metallic materials - Resistance welding - Pressure test on resistance seam welds (revision of ISO 17654 : 2003)				
Europe	Canada	China	Japan	Korea	US
FprEN ISO 17654 (revision of EN ISO 17654:2003) ISO lead	AWS C1 & AWS D8 series RWMA Manual			KS B ISO 17654	AWS C1 group of standards, RWMA Manual
ISO 17657-1:2005	Resistance welding - Welding current measurement for resistance welding - Part 1: Guidelines for measurement				
Europe	Canada	China	Japan	Korea	US
EN ISO 17657-1:2007					
ISO 17657-2:2005	Resistance welding - Welding current measurement for resistance welding - Part 2: Welding current meter with current sensing coil				
Europe	Canada	China	Japan	Korea	US
EN ISO 17657-2 : 2007					
ISO 17657-3:2005	Resistance welding - Welding current measurement for resistance welding - Part 3: Current sensing coil				
Europe	Canada	China	Japan	Korea	US
EN ISO 17657-3 : 2007				KS B ISO 17657-3	
ISO 17657-4:2005	Resistance welding - Welding current measurement for resistance welding - Part 4: Calibration system				
Europe	Canada	China	Japan	Korea	US
EN ISO 17657-4 : 2007				KS B ISO 17657-4	
ISO 17657-5:2005	Resistance welding - Welding current measurement for resistance welding - Part 5: Verification of welding current measuring system				
Europe	Canada	China	Japan	Korea	US
EN ISO 17657-5 : 2007					
ISO 17677-1 : 2009	Resistance welding - Vocabulary - Part 1: Spot, projection and seam welding				
Europe	Canada	China	Japan	Korea	US

	Resistance welding and allied mechanical joining				
EN ISO 17677-1:2009	AWS A3.0 & RWMA Bulletin #5				AWS A3.0M/A3.0:2010, RWMA Bulletin #5
ISO/PWI 17677-2	Resistance welding - Vocabulary - Part 2: Flash and butt welding				
Europe	Canada	China	Japan	Korea	US
prEN ISO 17677-2	CSA W55.3-08 “Certification of companies for resistance welding of steel and aluminium” AWS A3.0				AWS A3.0M/A3.0:2010
ISO/PWI 18278-1	Resistance welding - Weldability - Part 1: Assessment of weldability for resistance spot, seam and projection welding of metallic materials (revision of ISO 18278-1:2004)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 18278-1 (revision of EN ISO 18278-1:2004) ISO lead					
ISO/PWI 18278-2	Resistance welding - Weldability - Part 2: Alternative procedures for the assessment of sheet steels for spot welding (revision of ISO 18278-2:2004)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 18278-2 (revision of EN ISO 18278-2:2004) ISO lead				KS B ISO 18278-2	
ISO 18592:2009	Resistance welding - Destructive test of welds - Method for the fatigue testing of multi-spot-welded specimens				
Europe	Canada	China	Japan	Korea	US
EN ISO 18592:2009	AWS C1 & AWS D8 series RWMA Manual				AWS C1 & D8 group of standards, RWMA Manual

Resistance welding and allied mechanical joining					
ISO 18594:2007	Resistance spot-, projection- and seam-welding - Method for determining the transition resistance on aluminium and steel material				
Europe	Canada	China	Japan	Korea	US
EN ISO 18594 : 2007				KS C ISO 18594	
ISO 18595:2007	Resistance welding - Spot welding of aluminium and aluminium alloys - Weldability, welding and testing				
Europe	Canada	China	Japan	Korea	US
EN ISO 18595 : 2007	AWS D8 series			KS B ISO 18595	AWS D8 group of standards
ISO 22829:2007	Electric resistance welding – Method for the assessment of coated and uncoated weld bonded sheet materials				
Europe	Canada	China	Japan	Korea	US
EN ISO 22829 : 2008	AWS C1 & AWS D8 series RWMA Manual			KS C ISO 22829	AWS C1 & D8 group of standards, RWMA Manual
ISO/PWI 27508	Electric resistance welding – Method for the assessment of coated and uncoated weld bonded sheet materials				
Europe	Canada	China	Japan	Korea	US
prEN ISO 27508	AWS C1 & AWS D8 series RWMA Manual				AWS C1 & D8 group of standards, RWMA Manual

6. Representation and terms

	Representation and terms				
ISO/TR 581:2005	Weldability - Metallic materials - General principles (revision of ISO/TR 581 : 1980)				
Europe	Canada	China	Japan	Korea	US
				KS B 0106 (NEQ)	None
ISO/PWI 857-1	Welding and allied processes - Vocabulary - Part 1: Metal welding processes (revision of ISO 857-1:1998)				
Europe	Canada	China	Japan	Korea	US
	CSA Standard W59-03 "Welded Steel Construction"	GB/T 3375-1994	JIS Z3001-2 : 2008 ISO 857-1:1998 (MOD)	KS B 0106 (NEQ)	AWS A3.0M/A3.0:2010
ISO 857-2:2005	Welding and allied processes - Vocabulary - Part 2: Soldering and brazing processes and related terms (revision of ISO 857-2:1990)				
Europe	Canada	China	Japan	Korea	US
			JISZ 3001-3 :2008 ISO 857-2:1998 (MOD)	KS B ISO 857-2	AWS A3.0M/A3.0:2010
ISO/DIS 2553	Welding and allied processes– Symbolic representation on drawings - Welded, brazed and soldered joints (revision of ISO 2553:1992)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 2553 (revision of EN 22553:1994) ISO lead	CSA Standard W59-03 "Welded Steel Construction"	GB/T 324-2008	JIS Z3021 : 2010 ISO 2553-1:1992 (MOD)	KS B 0052	AWS A2.4:2007 (2011 expected)
ISO 4063:2009	Welding and allied processes - Nomenclature of processes and reference numbers (revision of ISO 4063:1998)				
Europe	Canada	China	Japan	Korea	US
EN ISO 4063:2011	CSA Standard W59-03 "Welded Steel Construction"	GB/T 5185-2005		KS B ISO 4063	AWS A3.0M/A3.0:2010 (no reference numbers)

Representation and terms					
ISO 6947:2011	Welds - Welding positions (revision of ISO 6947 : 1990)				
Europe	Canada	China	Japan	Korea	US
EN ISO 6947:2011 (revision of EN ISO 6947:1997) ISO lead	CSA Standard W59-03 "Welded Steel Construction"	GB/T 16672-1996	JIS Z3011 : 2004 ISO 6947 : 1990 (MOD)	KS B 0903	AWS A3.0M/A3.0:2010 ASME IX
ISO 6520-1:2007	Welding and allied processes - Classification of geometric imperfections in metallic materials - Part 1: Fusion welding (revision of ISO 6520-1:1998)				
Europe	Canada	China	Japan	Korea	US
EN ISO 6520-1:2007	CSA Standard W59-03 "Welded Steel Construction"	GB/T 6417.1-2005	JIS Z3001-4 : 2008 ISO 6520-1:1998 (MOD)	KS B ISO 6520-1	Various application Standards
ISO 6520-2:2001	Welding and allied processes - Classification of geometric imperfections in metallic materials - Part 2: Welding with pressure				
Europe	Canada	China	Japan	Korea	US
EN ISO 6520-2:2001	ASME IX	GB/T 6417.2-2008			
ISO 9692-1:2003	Welding and allied processes - Recommendations for joint preparation - Part 1: Manual metal-arc welding, gas-shielded metal-arc welding, gas welding, TIG welding and beam welding of steels (revision of ISO 9692-1:1992)				
Europe	Canada	China	Japan	Korea	US
EN ISO 9692-1:2003		GB/T 985.1-2008			Various application Standards
ISO 9692-2:1998	Welding and allied processes - Joint preparation - Part 2: Submerged arc welding of steels				
Europe	Canada	China	Japan	Korea	US
EN ISO 9692-2:1998 (replaces EN 29692:1994)	CSA Standard W59-03 "Welded Steel Construction"	GB/T 985.2-2008			

	Representation and terms				
ISO 9692-3:2000	Welding and allied processes - Recommendations for joint preparation - Part 3: Metal inert gas welding and tungsten inert gas welding of aluminium and its alloys				
Europe	Canada	China	Japan	Korea	US
EN ISO 9692-3:2001 EN ISO 9692-3:2001/A1:2003	CSA W59.2 "Welded Aluminum construction"	GB/T 985.3-2008		KS B ISO 9692-3	Various application Standards
ISO 9692-4:2003	Welding and allied processes - Recommendations for joint preparation - Part 4: Clad steels				
Europe	Canada	China	Japan	Korea	US
EN ISO 9692-4:2003		GB/T 985.4-2008			
ISO 17658:2002	Welding - Imperfections in oxyfuel flame cuts, laser beam cuts and plasma cuts – Terminology				
Europe	Canada	China	Japan	Korea	US
EN 12584 :1999					AWS A3.0M/A3.0:2010 AWS C4.1-77 (R2010) AWS C4.6M:2006 (ISO 9013:2002 IDT),
ISO 17659:2002	Welding - Multilingual terms for welded joints with illustrations				
Europe	Canada	China	Japan	Korea	US
EN ISO 17659:2004					AWS A3.0M/A3.0:2010
ISO/TS 17845:2004	Welding and allied processes - Designation system for imperfections				
Europe	Canada	China	Japan	Korea	US
CEN ISO/TS 17845:2004					Various application Standards

	Representation and terms				
ISO/PWI TR 25901-1	Welding and related processes – Vocabulary - Part 1: General terms (revision of ISO/TR 25901:2007)				
Europe	Canada	China	Japan	Korea	US
EN 1792:2003 CEN/TR 14599:2005	CSA Standard W59-03 “Welded Steel Construction”	GB/T 3375-1994			AWS A3.0M/A3.0:2010

Europe	Canada	China	Japan	Korea	US
EN 13622:2002 Gas welding equipment - Terminology - Terms used for gas welding equipment					AWS A3.0M/A3.0:2010 and C4 standards

Europe	Canada	China	Japan	Korea	US
EN 14610:2004 Welding and allied processes - Definitions of metal welding processes	CSA Standard W59-03 “Welded Steel Construction”				AWS A3.0M/A3.0:2010

Europe	Canada	China	Japan	Korea	US
CEN/TR 14633:2003 Welding - Working positions - Comparison of current international, European and US designations					None - US welding positions in AWS A3.0M/A3.0:2010 and ASME IX

7. Equipment for gas welding, cutting and allied processes

Equipment for gas welding, cutting and allied processes					
ISO 2503:2009 ISO 2503:2009/NP Amd 1	Gas welding equipment - Pressure regulators and pressure regulators with flow-metering devices for gas cylinders used in welding, cutting and allied processes up to 300 bar (30 MPa) (revision of ISO 2503 : 1998 and ISO 7292 : 1997)				
Europe	Canada	China	Japan	Korea	US
EN ISO 2503:2009 EN ISO 2503:2009/prA1	CGA Publications E-4, V-1		JIS B6083 : 2003 ISO 2503 : 1998 (MOD)	KS B ISO 2503	UL252, CGA E-4
ISO 3253:1998	Gas welding equipment - Hose connections for equipment for welding, cutting and allied processes (revision of ISO 3253:1975)				
Europe	Canada	China	Japan	Korea	US
EN 560 : 2005	CGA Publication E-1		ISB6805 : 2003 ISO 3253:1998 (NEQ)	KS B ISO 3253	CGA E-1
ISO 3821:2008	Gas welding equipment - Rubber hoses for welding, cutting and allied processes (revision of ISO 3821:1998)				
Europe	Canada	China	Japan	Korea	US
EN ISO 3821:2010 (replaces EN 559:2003)	RMA Publication IP-7 CGA Publication E-1		JIS K6333 : 1999 ISO/DIS 3821:1997 (MOD)	KS B ISO 3821	RMA IP-7
ISO 5171:2009	Gas welding equipment – Pressure gauges used in welding, cutting and allied processes (revision of ISO 5171:1995)				
Europe	Canada	China	Japan	Korea	US
EN ISO 5171:2010 (replaces EN 562:2003)	CGA Publications E-4, V-1			KS B ISO 5171	ASME B40.1, UL404

Equipment for gas welding, cutting and allied processes					
ISO 5172:2006 ISO 5172:2006/CD Amd 1 ISO 5172:2006/NP Amd 2	Gas welding equipment - Blowpipes for gas welding, heating and cutting - Specifications and tests				
Europe	Canada	China	Japan	Korea	US
EN ISO 5172:2006 (replaces EN ISO 5172:1996 + EN 874:1995) EN ISO 5172:2006/prA1 EN ISO 5172:2006/prA2		JB/T 7947-1999	JIS B6801 : 2003 ISO 5172 : 1995 (MOD)	KS B ISO 5172	UL123, CGA E-5
ISO 5175:1987/NP Amd 1	Equipment used in gas welding, cutting and allied processes - Safety devices for fuel gases and oxygen or compressed air - General specifications, requirements and tests (revision of ISO 5175:1983)				
Europe	Canada	China	Japan	Korea	US
	CGA Publications E-4, V-1	JB/T 7437-1994 Dry flashback arrestor			UL1357, CGA E-2
ISO 7287:2002	Graphical symbols for thermal cutting equipment (revision of ISO 7287:1992)				
Europe	Canada	China	Japan	Korea	US
EN ISO 7287:2002				KS B ISO 7287	
ISO 7289:2010	Gas welding equipment - Quick-action couplings with shut-off valves for welding, cutting and allied processes (revision of ISO 7289:1996)				
Europe	Canada	China	Japan	Korea	US
EN 561:2002					CGA E-17
ISO 7291 : 2010 ISO 7291 : 2010/NP Amd 1	Gas welding equipment– Pressure regulators for manifold systems used in welding, cutting and allied processes up to 30 MPa (300 bar) (revision of ISO 7291:1999)				
Europe	Canada	China	Japan	Korea	US
EN ISO 7291:2010 (revision of EN ISO 7291:2001) EN ISO 7291:2010/prA1				KS B ISO 7291	UL252, CGA E-4

Equipment for gas welding, cutting and allied processes					
ISO 8206:1991	Acceptance tests for oxygen cutting machines - Reproducible accuracy - Operational characteristics				
Europe	Canada	China	Japan	Korea	US
EN 28206:1992		JB/T 5102-1999			
ISO 8207:1996	Gas welding equipment - Specification for hose assemblies for equipment for welding, cutting and allied processes				
Europe	Canada	China	Japan	Korea	US
EN 1256:2006 (confirmation in 2011)	CGA Publication E-1				CGA E-1
ISO 9012:2008	Gas welding equipment - Air-aspirated hand blowpipes - Specifications and tests (revision of ISO 9012:1998)				
Europe	Canada	China	Japan	Korea	US
EN ISO 9012:2011		JB/T 6969-1993		KS B ISO 9012	UL147
ISO/PWI 9013	Thermal cutting - Classification of thermal cuts - Geometrical product specification and quality tolerances (revision of ISO 9013:2002)				
Europe	Canada	China	Japan	Korea	US
EN ISO 9013:2002 EN ISO 9013:2002/A1:2003					C4.6M:2006 (ISO 9013:2002 IDT),
ISO 9090:1989	Gas tightness of equipment for gas welding and allied processes				
Europe	Canada	China	Japan	Korea	US
EN 29090:1992					CGA E-14
ISO 9539:2010	Materials for equipment used in gas welding, cutting and allied processes (revision of ISO 9539 : 1988)				
Europe	Canada	China	Japan	Korea	US
EN ISO 9539:2010 (revision of EN 29539:1992)					

Equipment for gas welding, cutting and allied processes					
ISO/DIS 10225.2	Gas welding equipment – Marking for equipment used for gas welding, cutting and allied processes				
Europe	Canada	China	Japan	Korea	US
ISO 12170:1996	Gas welding equipment - Thermoplastic hoses for welding and allied processes				
Europe	Canada	China	Japan	Korea	US
EN 1327:1996				KS B ISO 12170	CGA E-9
ISO 14112:1996	Gas welding equipment - Small kits for gas brazing and welding				
Europe	Canada	China	Japan	Korea	US
EN 1326:1996				KS B ISO 14112	
ISO 14113:2007	Gas welding equipment - Rubber and plastics hose and hose assemblies for use with industrial gases up to 450 bar (45 MPa) (revision of ISO 14113:1997)				
Europe	Canada	China	Japan	Korea	US
EN ISO 14113:2008 (revision of EN ISO 14113:1997)	CGA Publication E-1			KS B ISO 14113	CGA E-9
ISO/CD 14114	Gas welding equipment - Acetylene manifold systems for welding, cutting and allied processes - General requirements (revision of ISO 14114:1999)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 14114 (revision of EN ISO 14114:1999) ISO lead	NFPA Standard 51				
ISO 15296:2004	Gas welding equipment - Vocabulary - Terms used for gas welding equipment				
Europe	Canada	China	Japan	Korea	US
EN 13622:2002	AWS A3.0			KS B ISO 15296	

Equipment for gas welding, cutting and allied processes					
ISO/DIS 15615	Gas welding equipment - Acetylene manifold systems for welding, cutting and allied processes - Safety requirements in high-pressure devices (revision of ISO 15615:2002)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 15615 (revision of EN ISO 15615:2002) ISO lead	CGA Publications E-2, TB-3			KS B ISO 15615	
ISO/DTR 28821	Gas welding equipment - Hose connections for equipment for welding, cutting and allied processes - Listing of connections which are either standardised or in common use				
Europe	Canada	China	Japan	Korea	US
	CGA Publications E-2, TB-3				References CGA E-1

Europe	Canada	China	Japan	Korea	US
EN 562:2003 Gas welding equipment - Pressure gauges used in welding, cutting and allied processes (revision of EN 562:1994)	CGA Publications E-2, TB-3				ASME B40.1, UL404 (Same as ISO 5171)

Europe	Canada	China	Japan	Korea	US
EN 730-1:2002 Gas welding equipment - Safety devices - Part 1: Incorporating a flame (flashback) arrestor (revision of EN 730-1:1995)	CGA Publications E-2, TB-3				UL1357, CGA E-2 (same as ISO 5175)

Equipment for gas welding, cutting and allied processes					
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Europe	Canada	China	Japan	Korea	US
EN 730-2:2002 Gas welding equipment - Safety devices - Part 2: Not incorporating a flame (flashback) arrestor (revision of EN 730-2:1995)	CGA Publications E-2, TB-3				UL1357, CGA E-2 (same as ISO 5175)
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Europe	Canada	China	Japan	Korea	US
EN 731:1995 Gas welding equipment - Air-aspirated hand blowpipes - Specifications and tests	CGA Publications E-2, TB-3				UL147 (same as ISO 9012)
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Europe	Canada	China	Japan	Korea	US
EN 1256:2006 Gas welding equipment - Specification for hose assemblies for equipment for welding, cutting and allied processes (revision of EN 1256:1996)					CGA E-1 (same as ISO 8207)

	Equipment for gas welding, cutting and allied processes				
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Europe	Canada	China	Japan	Korea	US
CR 13259:1998 Gas welding equipment - Industrial manual and machine oxygen-fuel gases blowpipes for flame heating and allied processes					
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Europe	Canada	China	Japan	Korea	US
prEN 1314 (preliminary) Brazing - Procedure approval					
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Europe	Canada	China	Japan	Korea	US
CEN/TR 15068:2009 Gas welding equipment - Measurement of noise emitted by blowpipe for welding, cutting, heating, brazing and soldering - Measurement method					None

Equipment for gas welding, cutting and allied processes					
Europe	Canada	China	Japan	Korea	US
00121617 (preliminary) Welding consumables - Covered electrodes for manual metal arc welding of copper and copper alloys - Classification					

8. Health and safety

Health and safety					
ISO 10882-1	Health and safety in welding and allied processes – Sampling of airborne particles and gases in the operator's breathing zone – Part 1: Sampling of airborne particles (revision of ISO 10882-1:2001)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 10882-1 (revision of EN ISO 10882-1:2001) ISO lead			JIS Z3950 : 2005 ISO 10882-1:2001 (MOD)		AWS F1.1M:2006
ISO 10882-2:2000	Health and safety in welding and allied processes - Sampling of airborne particles and gases in the operator's breathing zone - Part 2: Sampling of gases				
Europe	Canada	China	Japan	Korea	US
EN ISO 10882-2:2000			JIS Z3952 : 2005 ISO 10882-2:2000 (MOD)		AWS F1.5M:2003
ISO 15011-1:2009	Health and safety in welding and allied processes – Laboratory method for sampling fume and gases – Part 1: Determination of fume emission rate during arc welding and collection of fume for analysis (revision of ISO 15011-1:2002)				
Europe	Canada	China	Japan	Korea	US
EN ISO 15011-1:2009			JIS Z3930 : 2001 under revision ISO/FDIS 15011-1:2001 (MOD)		AWS F1.2:2006
ISO 15011-2:2009	Health and safety in welding and allied processes - Laboratory method for sampling fume and gases - Part 2: Determination of the emission rates of carbon monoxide (CO), carbon dioxide (CO ₂), nitrogen monoxide (NO) and nitrogen dioxide (NO ₂) during arc welding, cutting and gouging (revision of ISO 15011-2:2003)				
Europe	Canada	China	Japan	Korea	US
EN 15011-2:2009					

Health and safety					
ISO 15011-3:2009	Health and safety in welding and allied processes - Laboratory method for sampling fume and gases - Part 3: Determination of ozone emission rate during arc welding (revision of ISO 15011-3:2002)				
Europe	Canada	China	Japan	Korea	US
EN ISO 15011-3:2009					
ISO 15011-4:2006 ISO 15011-4:2006/Amd 1:2008	Health and safety in welding and allied processes - Laboratory method for sampling fume and gases - Part 4: Fume data sheets				
Europe	Canada	China	Japan	Korea	US
EN ISO 15011-4:2006 EN ISO 15011-4:2006/A1:2008			JIS Z3940 : 2010 ISO 15011-4 : 2006 (MOD)	KS B ISO 15011-4	
ISO/FDIS 15011-5	Health and safety in welding and allied processes - Laboratory method for sampling fume and gases - Part 5: Identification of thermal-degradation products generated when welding or cutting through products composed wholly or partly of organic materials (revision of ISO/TS 15011-5 : 2006)				
Europe	Canada	China	Japan	Korea	US
FprEN ISO 15011-5 (revision of CEN ISO/TS 15011-5:2006) ISO lead					
ISO/PRF TS 15011-6	Health and safety in welding and allied processes - Laboratory method for sampling fume and gases - Part 6: Procedure for quantitative determination of fume from resistance spot welding				
Europe	Canada	China	Japan	Korea	US
FprEN ISO 15011-6 CEN lead					

Health and safety					
ISO/DIS 15012-1	Health and safety in welding and allied processes - Requirements, testing and marking of equipment for air filtration - Part 1: Testing of the separation efficiency for welding fume (revision of ISO 15012-1:2004)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 15012-1 (revision of EN ISO 15012-1:2004) CEN lead				KS B ISO 15012-1	ASHRAE standards
ISO/NP15012-4	Health and safety in welding and allied processes – Requirements, testing and marking of equipment for air filtration – Part 4: Design requirements				
Europe	Canada	China	Japan	Korea	US
prEN ISO 15012-4 CEN lead					ASHRAE standards
ISO 15012-2:2008	Health and safety in welding and allied processes - Requirements, testing and marking of equipment for air filtration - Part 2: Determination of the minimum air volume flow rate of captor hoods and nozzles				
Europe	Canada	China	Japan	Korea	US
EN ISO 15012-2:2008					ASHRAE standards
ISO/PWI 15012-3	Health and safety in welding and allied processes - Requirements, testing and marking of equipment for air filtration - Part 3: Determination of the capture efficiency of on-gun welding fume extraction devices				
Europe	Canada	China	Japan	Korea	US
prEN ISO 15012-3 (preliminary) CEN lead					ASHRAE standards
ISO 17846:2004	Welding and allied processes - Health and safety - Wordless precautionary labels for equipment and consumables used in arc welding and cutting				
Europe	Canada	China	Japan	Korea	US
				KS B ISO 17846	NEMA EW 6

	Health and safety				
ISO/PWI TR 25901-2	Welding and related processes – Vocabulary - Part 2: Health and safety				
Europe	Canada	China	Japan	Korea	US
—					
Europe	Canada	China	Japan	Korea	US
EN 1598:2011 Health and safety in welding and allied processes - Transparent welding curtains, strips and screens for arc welding processes (revision of EN 1598:1997)					AWS F2.3M:2011

9. Unification of requirements in the field of metal welding

Unification of requirements in the field of metal welding					
ISO 3834-1:2005	Quality requirements for fusion welding of metallic materials - Part 1: Criteria for the selection of the appropriate level of quality requirements (revision of ISO 3834-1:1994)				
Europe	Canada	China	Japan	Korea	US
EN ISO 3834-1 : 2005 (replaces EN 729-1:1994)	CSA Standard W59-03 "Welded Steel Construction" CSA S16 "Design of Steel Structures" CSA S157 "Design in aluminum"	GB/T 12467.1-2009	ISO 3834-1:1994 ISO 3834-2:1994 (MOD)	KS B ISO 3834-1	
ISO 3834-2:2005	Quality requirements for fusion welding of metallic materials - Part 2: Comprehensive quality requirements (revision of ISO 3834-2:1994)				
Europe	Canada	China	Japan	Korea	US
EN ISO 3834-2 : 2005 (replaces EN 729-2:1994)	CSA W47.1 "Certification of Companies for the fusion welding of steel" CSA W47.2 "Certification of companies for the fusion welding of aluminum"	GB/T 12467.2-2009	JIS Z3400 : 1999 under revision ISO 3834-1:1994 ISO 3834-2:1994 (MOD)	KS B ISO 3834-2	

Unification of requirements in the field of metal welding					
ISO 3834-3:2005	Quality requirements for fusion welding of metallic materials - Part 3: Standard quality requirements (revision of ISO 3834-3:1994)				
Europe	Canada	China	Japan	Korea	US
EN ISO 3834-3 : 2005 (replaces EN 729-3:1994)	CSA W47.1 "Certification of companies for the fusion welding of steel" CSA W47.2 "Certification of Companies for the fusion welding of aluminum"	GB/T 12467.3-2009	under developing	KS B ISO 3834-3	
ISO 3834-4:2005	Quality requirements for fusion welding of metallic materials - Part 4: Elementary quality requirements requirements (revision of ISO 3834-4:1994)				
Europe	Canada	China	Japan	Korea	US
EN ISO 3834-4 : 2005 (replaces EN 729-4:1994)	CSA W47.1 "Certification of Companies for the fusion welding of steel" CSA W47.2 "Certification of companies for the fusion welding of aluminum"	GB/T 12467.4-2009	under developing	KS B ISO 3834-4	
ISO 3834-5:2005	Quality requirements for fusion welding of metallic materials - Part 5: Documents with which it is necessary to conform to claim conformity to the quality requirements of ISO 3834-2, ISO 3834-3 or ISO 3834-4				
Europe	Canada	China	Japan	Korea	US
EN ISO 3834-5 : 2005		GB/T 12467.5-2009	under developing	KS B ISO 3834-5	
ISO/TR 3834-6:2007	Quality requirements for fusion welding of metallic materials - Part 6: Guidelines on implementing ISO 3834				
Europe	Canada	China	Japan	Korea	US
CEN/ISO TR 3834-6 : 2007 (replaces CR 13576:1999)			under developing		

Unification of requirements in the field of metal welding					
ISO/NP 5817	Welding – Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) - Quality levels for imperfections (revision of ISO 5817:2003)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 5817 (revision of EN ISO 5817:2007) ISO lead		GB/T 19418-2003		KS B ISO 5817	various application standards
ISO 10042:2005	Welding - Arc-welded joints in aluminium and its alloys - Quality levels for imperfections (revision of ISO 10042:1992)				
Europe	Canada	China	Japan	Korea	US
EN ISO 10042 : 2005 (replaces EN 30042:1994)	CSA W59.2 "Welded Aluminum Construction"	GB/T 22087-2008		KS B ISO 10042	various application standards
ISO/DIS 12932	Welding -- Laser-arc hybrid welding of steels, nickel and nickel alloys -- Quality levels for imperfections				
Europe	Canada	China	Japan	Korea	US
prEN ISO 12932					
ISO 13916:1996	Welding - Guidance on the measurement of preheating temperature, interpass temperature and preheat maintenance temperature				
Europe	Canada	China	Japan	Korea	US
EN ISO 13916:1996		GB/T 18591-2001	JIS Z3703 : 2004 ISO 13916 : 1996 (IDT)	KS B ISO 13916	
ISO 13918:2008	Welding – Studs and ceramic ferrules for arc stud welding (revision of ISO 13918:1998)				
Europe	Canada	China	Japan	Korea	US
EN ISO 13918 : 2008	CSA Standard W59-03 "Welded Steel Construction"			KS B ISO 13918	AWS D1.1/D1.1M:2010 Welding Handbook AWS C5.4-93

Unification of requirements in the field of metal welding					
ISO 13919-1:1996	Welding - Electron and laser-beam welded joints - Guidance on quality levels for imperfections - Part 1: Steel				
Europe	Canada	China	Japan	Korea	US
EN ISO 13919-1:2001		GB/T 22085.1-2008		KS B ISO 13919-1	various application standards
ISO 13919-2:2001	Welding - Electron and laser beam welded joints - Guidance on quality levels for imperfections - Part 2: Aluminium and its weldable alloys				
Europe	Canada	China	Japan	Korea	US
EN ISO 13919-2:2001 EN ISO 13919-2:2001/A1:2003		GB/T 22085.2-2008		KS B ISO 13919-2	various application standards
ISO 13920:1996	Welding - General tolerances for welded constructions - Dimensions for lengths and angles - Shape and position				
Europe	Canada	China	Japan	Korea	US
EN ISO 13920:1996	CSA Standard W59-03 "Welded Steel Construction"	GB/T 19804-2005			
ISO/NP 14555	Welding - Arc stud welding of metallic materials (revision of ISO 14555:2006)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 14555 (revision of EN ISO 14555 : 2006 ISO lead	CSA Standard W59-03 "Welded Steel Construction"			KS B ISO 14555	Welding Handbook AWS C5.4-93 AWS D1.1/D1.1M:2010
ISO 14744-1:2008	Welding - Acceptance inspection of electron beam welding machines - Part 1: Principles and acceptance conditions (revision of ISO 14744-1:2000)				
Europe	Canada	China	Japan	Korea	US
EN ISO 14744-1 : 2008				KS B 0908	

Unification of requirements in the field of metal welding					
ISO 14744-2:2000	Welding - Acceptance inspection of electron beam welding machines - Part 2: Measurement of accelerating voltage characteristics				
Europe	Canada	China	Japan	Korea	US
EN ISO 14744-2:2000				KS B 0909	
ISO 14744-3:2000	Welding - Acceptance inspection of electron beam welding machines - Part 3: Measurement of beam current characteristics				
Europe	Canada	China	Japan	Korea	US
EN ISO 14744-3:2000				KS B 0910	
ISO 14744-4:2000	Welding - Acceptance inspection of electron beam welding machines - Part 4: Measurement of welding speed				
Europe	Canada	China	Japan	Korea	US
EN ISO 14744-4:2000				KS B 0911	
ISO 14744-5:2000	Welding - Acceptance inspection of electron beam welding machines - Part 5: Measurement of run-out accuracy				
Europe	Canada	China	Japan	Korea	US
EN ISO 14744-5:2000				KS B 0912	
ISO 14744-6:2000	Welding - Acceptance inspection of electron beam welding machines - Part 6: Measurement of stability of spot position				
Europe	Canada	China	Japan	Korea	US
EN ISO 14744-6:2000				KS B 0913	
ISO/PWI TR 14745	Welding - Local post heat-treatment parameters with cooling up and cooling down parameters and wide of heat input and devices of isolation				
Europe	Canada	China	Japan	Korea	US
			JIS Z3009 : 2009 (NEQ)		AWS D10.10/D10.10M:1999(R2009)

Unification of requirements in the field of metal welding					
ISO 15607:2003	Specification and qualification of welding procedures for metallic materials - General rules (revision of ISO 9956-1:1995 and Amd 1 : 1998)				
Europe	Canada	China	Japan	Korea	US
EN ISO 15607:2003		GB/T 19866-2005	JIS Z3420 : 2003 ISO/DIS 15607:2000 (MOD)	KS B ISO 15607	AWS B2.1/B2.1M:2009 ASME Section IX
ISO/PWI TR 15608	Welding - Guidelines for a metallic materials grouping system (revision of ISO/TR 15608:2005)				
Europe	Canada	China	Japan	Korea	US
CEN ISO/TR 15608 : 2005				KS B ISO 15608	AWS B2.1/B2.1M:2009 ASME Section IX
ISO 15609-1:2004	Specification and qualification of welding procedures for metallic materials - Welding procedure specification - Part 1: Arc welding (revision of ISO 9956-2:1995 and Amd 1 : 1998)				
Europe	Canada	China	Japan	Korea	US
EN ISO 15609-1 : 2004 (replaces EN 288-1:1992 + EN 288-1:1992/A1:1997)	CSA W47.1 "Certification of Companies for the fusion welding of steel" CSA W47.2 "Certification of companies for the fusion welding of aluminum"	GB/T 19867.1-2005	JIS Z3421-1 : 2003 ISO/DIS 15609-1:2000 (MOD)	KS B ISO 15609-1	AWS B2.1/B2.1M:2009 ASME Section IX
ISO 15609-2:2001	Specification and qualification of welding procedures for metallic materials - Welding procedure specification - Part 2: Gas welding				
Europe	Canada	China	Japan	Korea	US
EN ISO 15609-2:2001		GB/T 19867.2-2008		KS B ISO 15609-2	AWS B2.1/B2.1M:2009 ASME Section IX

Unification of requirements in the field of metal welding					
ISO 15609-3:2004	Specification and qualification of welding procedures for metallic materials - Welding procedure specification - Part 3: Electron beam welding (revision of ISO 9956-10:1996)				
Europe	Canada	China	Japan	Korea	US
EN ISO 15609-3:2004 (replaces EN ISO 9956-10:1996)		GB/T 19867.3-2008		KS B ISO 15609-3	AWS B2.1/B2.1M:2009 ASME Section IX
ISO 15609-4:2009	Specification and qualification of welding procedures for metallic materials - Welding procedure specification - Part 4: Laser beam welding (revision of ISO 15609-4:2004)				
Europe	Canada	China	Japan	Korea	US
EN ISO 15609-4:2009 (revision of EN ISO 15609-4:2004)		GB/T 19867.4-2008		KS B ISO 15609-4	AWS B2.1/B2.1M:2009
ISO/DIS 15609-6	Specification and approval of welding procedures for metallic materials – Welding procedure specification – Part 6: Laser arc hybrid welding				
Europe	Canada	China	Japan	Korea	US
prEN ISO 15609-6					AWS B2.X (new standard)
ISO 15610:2003	Specification and qualification of welding procedures for metallic materials - Qualification based on tested welding consumables (revision of ISO 9956-5:1995)				
Europe	Canada	China	Japan	Korea	US
EN ISO 15610 : 2003 (replaces EN 288-5:1994)	CSA W47.1 “Certification of Companies for the fusion welding of steel” CSA W47.2 “Certification of companies for the fusion welding of aluminum”	GB/T 19868.1-2005		KS B ISO 15610	
ISO 15611:2003	Specification and qualification of welding procedures for metallic materials - Qualification based on previous welding experience (revision of ISO 9956-6:1995)				
Europe	Canada	China	Japan	Korea	US

Unification of requirements in the field of metal welding					
EN ISO 15611 : 2003 (replaces EN 288-6:1994)	CSA W47.1 "Certification of Companies for the fusion welding of steel" CSA W47.2 "Certification of companies for the fusion welding of aluminum"	GB/T 19868.2-2005		KS B ISO 15611	
ISO 15612:2004	Specification and qualification of welding procedures for metallic materials - Qualification by adoption of a standard welding procedure (revision of ISO 9956-8:1995)				
Europe	Canada	China	Japan	Korea	US
EN ISO 15612 : 2004 (replaces EN 288-7:1994)	GB/T 19868.3-2005			KS B ISO 15612	AWS B2.1/B2.1M:2009
ISO 15613:2004	Specification and qualification of welding procedures for metallic materials - Qualification based on pre-production welding test				
Europe	Canada	China	Japan	Korea	US
EN ISO 15613 : 2004 (replaces EN 288-8:1994)	CSA W47.1 "Certification of Companies for the fusion welding of steel" CSA W47.2 "Certification of companies for the fusion welding of aluminum"	GB/T 19868.4-2005		KS B ISO 15613	AWS B2.1/B2.1M:2009
ISO/PWI 15614-1 ISO 15614- 1:2004/FDAmd 2	Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 1: Arc and gas welding of steels and arc welding of nickel and nickel alloys (revision of ISO 15614-1:2004, Amd 1)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 15614-1 (preliminary) EN ISO 15614- 1:2004/prA 2 ISO lead	CSA W47.1 "Certification of Companies for the fusion welding of steel" AWS D1.6:2007 "Structural welding code - stainless steel"	GB/T 19869.1-2005	JIS Z3422-1 : 2003 ISO/DIS 15614-1:2000 (MOD)	KS B ISO 15614-1	AWS B2.1/B2.1M:2009

Unification of requirements in the field of metal welding					
ISO 15614-2:2005	Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 2: Arc welding of aluminium and its alloys (revision of ISO 9956-4:1995 and Amd 1 : 1998)				
Europe	Canada	China	Japan	Korea	US
EN ISO 15614-2:2005 (replaces EN 288-4:1994 EN 288-4:1994/A1:1997)	CSA W47.2 "Certification of companies for the fusion welding of aluminum"	Under prepare	JIS Z3422-2 : 2003 ISO/FDIS 15614-2:2001	KS B ISO 15614-2	AWS B2.1/B2.1M:2009 ASME Section IX
ISO 15614-3:2008	Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 3: Fusion welding of non-alloyed and low-alloyed cast irons				
Europe	Canada	China	Japan	Korea	US
EN ISO 15614-3:2008					AWS B2.1/B2.1M:2009 ASME Section IX
ISO 15614-4:2005	Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 4: Finishing welding of aluminium castings				
Europe	Canada	China	Japan	Korea	US
EN ISO 15614-4:2007				KS B ISO 15614-4	AWS B2.1/B2.1M:2009 ASME Section IX
ISO 15614-5:2004	Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 5: Arc welding of titanium, zirconium and their alloys				
Europe	Canada	China	Japan	Korea	US
EN ISO 15614-5:2004				KS B ISO 15614-5	AWS B2.1/B2.1M:2009 ASME Section IX
ISO 15614-6:2006	Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 6: Arc and gas welding of copper and its alloys				
Europe	Canada	China	Japan	Korea	US
EN ISO 15614-6:2006					AWS B2.1/B2.1M:2009 ASME Section IX

Unification of requirements in the field of metal welding					
ISO/NP 15614-7	Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 7: Overlay welding (revision of ISO 15614-7:2007)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 15614-7 (revision of EN ISO 15614-7 : 2007) ISO lead				KS B ISO 15614-7	AWS B2.1/B2.1M:2009 ASME Section IX
ISO/NP 15614-8	Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 8: Welding of tubes to tube-plate joints (revision of ISO 15614-8:2002)				
Europe	Canada	China	Japan	Korea	US
pr EN ISO 15614-8 (revision of EN ISO 15614-8:2002) ISO lead				KS B ISO 15614-8	ASME Section IX
ISO 15614-10:2005	Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 10: Hyperbaric dry welding				
Europe	Canada	China	Japan	Korea	US
EN ISO 15614-10:2005				KS B ISO 15614-10	AWS D3.6M:2010
ISO 15614-11:2002	Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 11: Electron and laser beam welding				
Europe	Canada	China	Japan	Korea	US
EN ISO 15614-11:2002					AWS B2.1/B2.1M:2009 ASME Section IX
ISO/DIS 15614-14	Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 14: Laser-arc hybrid welding of steels, nickel and nickel alloys				
Europe	Canada	China	Japan	Korea	US
prEN ISO 15614-14 ISO lead					

Unification of requirements in the field of metal welding					
ISO 15616-1:2003	Acceptance tests for CO ₂ -laser beam machines for high quality welding and cutting - Part 1: General principles, acceptance conditions				
Europe	Canada	China	Japan	Korea	US
EN ISO 15616-1:2004				KS B ISO 15616-1	
ISO 15616-2:2003	Acceptance tests for CO ₂ -laser beam machines for high quality welding and cutting - Part 2: Measurement of static and dynamic accuracy				
Europe	Canada	China	Japan	Korea	US
EN ISO 15616-2:2003				KS B ISO 15616-2	
ISO 15616-3:2003	Acceptance tests for CO ₂ -laser beam machines for high quality welding and cutting - Part 3: Calibration of instruments for measurement of gas flow and pressure				
Europe	Canada	China	Japan	Korea	US
EN ISO 15616-3:2003				KS B ISO 15616-3	
ISO 15616-4:20083	Acceptance tests for CO ₂ -laser beam machines for high quality welding and cutting - Part 4: Machines with 2-D moving optics (revision of ISO/TS 17477:2003)				
Europe	Canada	China	Japan	Korea	US
EN ISO 15616-4:2009					
ISO 15620:2000	Welding - Friction welding of metallic materials				
Europe	Canada	China	Japan	Korea	US
EN ISO 15620:2000					AWS C6.1-89 (R2009) AWS B2.1/B2.1M:2009 ASME Section IX
ISO/PWI 17279	Welding – Micro-diffusion joining of 2nd generation ReBCO high temperature superconductors				
Europe	Canada	China	Japan	Korea	US

Unification of requirements in the field of metal welding					
ISO 17652-1:2003	Welding - Test for shop primers in relation to welding and allied processes - Part 1: General requirements				
Europe	Canada	China	Japan	Korea	US
EN ISO 17652-1:2003					AWS D3.9:2010
ISO 17652-2:2003	Welding - Test for shop primers in relation to welding and allied processes - Part 2: Welding properties of shop primers				
Europe	Canada	China	Japan	Korea	US
EN ISO 17652-2:2003			JIS Z3185 : 2006 ISO 17652-2:2003(MOD)		AWS D3.9:2010
ISO 17652-3:2003	Welding – Test for shop primers in relation to welding and allied processes - Part 3: Thermal cutting				
Europe	Canada	China	Japan	Korea	US
EN ISO 17652-3:2003					AWS D3.9:2010
ISO 17652-4:2003	Welding - Test for shop primers in relation to welding and allied processes - Part 4: Emission of fumes and gases				
Europe	Canada	China	Japan	Korea	US
EN ISO 17652-4:2003					AWS D3.9:2010
ISO 17660-1:2006	Welding – Welding of reinforcing steel - Part 1: Load-bearing welded joints				
Europe	Canada	China	Japan	Korea	US
EN ISO 17660-1:2006	CSA W186 “Welding of Reinforcing Bars in Reinforced Concrete Construction”			KS B ISO 17660-1	AWS D1.4/D1.4M:2011 AWS D1.1/D1.1M:2010
ISO 17660-2:2006	Welding – Welding of reinforcing steel - Part 2: Non load-bearing welded joints				
Europe	Canada	China	Japan	Korea	US
EN ISO 17660-2:2006	CSA W186 “Welding of Reinforcing Bars in Reinforced Concrete Construction”			KS B ISO 17660-2	AWS D1.4/D1.4M:2011 AWS D1.1/D1.1M:2010

Unification of requirements in the field of metal welding					
ISO 17662:2005	Welding - Calibration, verification and validation of equipment used for welding, including ancillary activities				
Europe	Canada	China	Japan	Korea	US
EN ISO 17662:2005					
ISO 17663 : 2009	Welding – Quality requirements for heat treatment in connection with welding and allied processes				
Europe	Canada	China	Japan	Korea	US
EN ISO 17663:2009 (revision of CR ISO TR 17663:2001)				KS B ISO 17663	Various application standards
ISO/PWI TR 17671-1	Welding - Recommendations for welding of metallic materials - Part 1: General guidance for arc welding (revision ISO/TR 17671-1:2002)				
Europe	Canada	China	Japan	Korea	US
EN 1011-1:2009				KS B ISO 17671-1	Welding Handbook AWS C5 series
ISO/PWI TR 17671-2	Welding - Recommendations for welding of metallic materials - Part 2: Arc welding of ferritic steels (revision ISO/TR 17671-2:2002)				
Europe	Canada	China	Japan	Korea	US
EN 1011-2:2001 (confirmation in 2011) EN 1011-2:2001/A1:2003				KS B ISO 17671-2	Welding Handbook AWS C5 series
ISO/TR 17671-3:2002	Welding - Recommendations for welding of metallic materials - Part 3: Arc welding of stainless steels				
Europe	Canada	China	Japan	Korea	US
EN 1011-3:2000 EN 1011-3:2000/A1:2003 (confirmed in 2010)				KS B ISO 17671-3	Welding Handbook AWS C5 series

Unification of requirements in the field of metal welding					
ISO/TR 17671-4:2002	Welding - Recommendations for welding of metallic materials - Part 4: Arc welding of aluminium and aluminium alloys				
Europe	Canada	China	Japan	Korea	US
EN 1011-4:2000 EN 1011-4:2000/A1:2003 (confirmed in 2010)		GB/T 22086-2008		KS B ISO 17671-4	Welding Handbook AWS C5 series
ISO/TR 17671-5:2004	Welding - Recommendations for welding of metallic materials - Part 5: Welding of clad steels				
Europe	Canada	China	Japan	Korea	US
EN 1011-5:2005					Welding Handbook AWS C5 series
ISO/TR 17671-6:2005	Welding - Recommendations for welding of metallic materials - Part 6: Laser beam welding				
Europe	Canada	China	Japan	Korea	US
EN 1011-6:2005 (confirmed in 2010)		Under prepare			Welding Handbook AWS C7.2M:2010
ISO/TR 17671-7:2004	Welding - Recommendations for welding of metallic materials - Part 7: Electron beam welding				
Europe	Canada	China	Japan	Korea	US
EN 1011-7:2004		Under prepare			Welding Handbook AWS C7.1M/C7.1:2004 AWS C7.3:1999(R2003)
ISO/TR 17844:2004	Welding - Comparison of standardised methods for the avoidance of cold cracks				
Europe	Canada	China	Japan	Korea	US
CEN ISO/TR 17844:2004					D14.8M:2009 (ISO/TR 17844:2004 IDT)

Unification of requirements in the field of metal welding					
ISO/TR 20172:2009	Welding - Grouping systems for materials – European materials (revision of ISO/TR 20172:2006)				
Europe	Canada	China	Japan	Korea	US
CEN/ISO TR 20172 : 2009					
ISO TR 20173:2009	Welding - Grouping systems for materials – American materials (revision of ISO/TR 20173:2005)				
Europe	Canada	China	Japan	Korea	US
CEN ISO/TR 20173:2009	CSA W47.1 "Certification of Companies for the fusion welding of steel" CSA W47.2 "Certification of companies for the fusion welding of aluminum"				AWS B2.1/B2.1M:2009 ASME Section IX
ISO/TR 20174:2005	Welding - Grouping systems for materials - Japanese materials				
Europe	Canada	China	Japan	Korea	US
CEN ISO/TR 20174:2005					
ISO 22827-1:2005	Acceptance tests for Nd:YAG laser beam welding machines - Machines with optical fibre delivery - Part 1: Laser assembly				
Europe	Canada	China	Japan	Korea	US
EN ISO 22827-1 : 2005					
ISO 22827-2:2005	Acceptance tests for Nd:YAG laser beam welding machines - Machines with optical fibre delivery - Part 2: Moving mechanism				
Europe	Canada	China	Japan	Korea	US
EN ISO 22827-2:2005					

Unification of requirements in the field of metal welding					
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Europe	Canada	China	Japan	Korea	US
EN 1708-1:2010 Welding - Basic welded joint details in steel - Part 1: Pressurized components	AMSE IX				None
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Europe	Canada	China	Japan	Korea	US
EN 1708-2:2000 Welding - Basic weld joint details in steel - Part 2: Non internal pressurized components (confirmed in 2010)	AMSE IX				None
—					
Europe	Canada	China	Japan	Korea	US
FprEN 1708-3 Welding - Basic weld joint details in steel - Part 3: Plating, buttering, lining of pressurized components	AMSE IX				None

Unification of requirements in the field of metal welding					
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Europe	Canada	China	Japan	Korea	US
CEN/TR 15481:2006 Welding of reinforcing steel - Tack weldability - Test methods and performance requirements					AWS D1.4/D1.4M:2011 AWS D1.1/D1.1M:2010

10. Qualification requirements for welding and allied processes personnel

Qualification requirements for welding and allied processes personnel					
ISO/FDIS 9606-1	Approval testing of welders - Fusion welding - Part 1: Steels (revision of ISO 9606-1:1994 and Amd 1:1998)				
Europe	Canada	China	Japan	Korea	US
EN 287-1 : 2011 (revision of EN 287-1:1992)	CSA W47.1 "Certification of Companies for the fusion welding of steel"	GB/T 15169-2003	JISZ3801(1997) JISZ3841(1997) JISZ3821(2001)	KS B ISO 9606-1	AWS D1.1/D1.1M:2010 AWS B2.1/B2.1M:2009 ASME Section IX
ISO 9606-2:2004	Qualification test of welders - Fusion welding - Part 2: Aluminium and aluminium alloys				
Europe	Canada	China	Japan	Korea	US
EN ISO 9606-2:2004 (replaces EN 287-2:1992 + EN 287-2:1992/A1:2007)	CSA W47.2 "Certification of companies for the fusion welding of aluminum"	GB/T 24598-2009	JIS Z3811 : 2000	KS B ISO 9606-2	AWS D1.1/D1.1M:2010 AWS B2.1/B2.1M:2009
ISO 9606-3:1999	Approval testing of welders - Fusion welding - Part 3: Copper and copper alloys				
Europe	Canada	China	Japan	Korea	US
EN ISO 9606-3 : 1999					
ISO 9606-4:1999	Approval testing of welders - Fusion welding - Part 4: Nickel and nickel alloys				
Europe	Canada	China	Japan	Korea	US
EN ISO 9606-4:1999	AWS D1.6:2007 Structural welding code - stainless steel				
ISO 9606-5:2000	Approval testing of welders - Fusion welding - Part 5: Titanium and titanium alloys, zirconium and zirconium alloys				
Europe	Canada	China	Japan	Korea	US
EN ISO 9606-5:2000			JIS Z3805 : 1997	KS B ISO 9606-5	AWS D1.1/D1.1M:2010 AWS B2.1/B2.1M:2009

Qualification requirements for welding and allied processes personnel					
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ISO 14731 : 2006	Welding coordination – Tasks and responsibilities (revision of ISO 14731:1997)				
Europe	Canada	China	Japan	Korea	US
EN ISO 14731 : 2006	CSA W47.1 “Certification of Companies for the fusion welding of steel” CSA W47.2 “Certification of companies for the fusion welding of aluminum”	GB/T 19419-2003	JIS Z3410 : 1999 under revision ISO 14731:1997 (IDT)	KS B ISO 14731	
ISO/DIS 14732	Welding personnel - Approval testing of welding operators for fusion welding and of resistance weld setters for fully mechanized and automatic welding of metallic materials (revision of ISO 14732 : 1998)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 14732 (replaces EN 1418:1997)	CSA W47.1 “Certification of Companies for the fusion welding of steel” CSA W47.2 “Certification of companies for the fusion welding of aluminum” CSA W55.3 “Certification of companies for resistance welding of steel and aluminum”	GB/T 19805-2005			RWMA documents
ISO 15618-1 : 2001	Qualification testing of welders for underwater welding – Part 1: Diver-welders for hyperbaric wet welding				
Europe	Canada	China	Japan	Korea	US
EN ISO 15618-1 : 2002	AWS D3.6			KS B ISO 15618-1	AWS D3.6M:2010
ISO 15618-2 : 2001	Qualification testing of welders for underwater welding – Part 2: Diver-welders and welding operators for hyperbaric dry welding				
Europe	Canada	China	Japan	Korea	US
EN ISO 15618-2 : 2002	AWS D3.6			KS B ISO 15618-2	AWS D3.6M:2010

11. Soldering materials

	Soldering materials				
ISO 5179:1983	Investigation of brazeability using a varying gap test piece				
Europe	Canada	China	Japan	Korea	US
		GB/T 11364-2008	JIS Z3191 : 2003 ISO 5179:1983(MOD)	KS B 0873 (MOD)	
ISO/NP 9453	Soft solder alloys - Chemical compositions and forms (revision of ISO 9453:2006)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 9453 (revision of EN ISO 9453:2006) ISO lead		GB/T 20422-2006	JIS Z3282 : 2006 ISO/FDIS 9453 : 2005 (MOD)	KS D ISO 9453	
ISO/NP 9454-1	Soft soldering fluxes - Classification and requirements - Part 1: Classification, labeling and packaging (revision of ISO 9454-1:1990)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 9454-1 (revision of EN 29454-1:1993) ISO lead		GB/T 15829-200	JIS Z3284 : 1994 ISO 9454-1 : 1990 (MOD)	KS B ISO 9454-1	
ISO 9454-2:1998	Soft soldering fluxes - Classification and requirements - Part 2: Performance requirements				
Europe	Canada	China	Japan	Korea	US
EN ISO 9454-2:2000			JIS Z3284:1994 JIS Z3197:1999 ISO 9454-2:1998 (MOD)	KS B ISO 9454-2	
ISO 9455-1:1990	Soft soldering fluxes - Test methods - Part 1: Determination of non-volatile matter, gravimetric method				
Europe	Canada	China	Japan	Korea	US
EN 29455-1:1994			JIS Z3197:1999 ISO 9455-1:1990 (MOD)	KS D 6773 (MOD)	

Soldering materials					
ISO 9455-2:1993	Soft soldering fluxes - Test methods - Part 2: Determination of non-volatile matter, ebulliometric method				
Europe	Canada	China	Japan	Korea	US
EN ISO 9455-2:1995			JIS Z3197:1999 ISO 9455-2:1993 (MOD)	KS B ISO 9455-2	
ISO 9455-3:1992	Soft soldering fluxes - Test methods - Part 3: Determination of acid value, potentiometric and visual titration methods				
Europe	Canada	China	Japan	Korea	US
EN ISO 9455-3 : 1994			JIS Z3197:1999 ISO 9455-3:1992 (MOD)	KS B ISO 9455-3	ASTM (structural/general) IPC (electronics)
ISO/NP 9455-5	Soft soldering fluxes - Test methods - Part 5: Copper mirror test (revision of ISO 9455-5:1992)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 9455-5 (revision of EN 29455-5 : 1993) ISO lead			JIS Z3197:1999 ISO 9455-5:1992 (MOD)	KS B ISO 9455-5	ASTM (structural/general) IPC (electronics)
ISO 9455-6:1995	Soft soldering fluxes - Test methods - Part 6: Determination and detection of halide (excluding fluoride) content				
Europe	Canada	China	Japan	Korea	US
EN ISO 9455-6 : 1997			JIS Z3197:1999 ISO 9455-6:1995 (MOD)	KS B ISO 9455-6	ASTM (structural/general) IPC (electronics)
ISO 9455-8:1991	Soft soldering fluxes - Test methods - Part 8: Determination of zinc content				
Europe	Canada	China	Japan	Korea	US
EN 29455-8 : 1993			JIS Z3197:1999 ISO 9455-8:1991 (MOD)	KS B ISO 9455-8	ASTM (structural/general) IPC (electronics)

Soldering materials					
ISO 9455-9:1993	Soft soldering fluxes - Test methods - Part 9: Determination of ammonia content				
Europe	Canada	China	Japan	Korea	US
EN ISO 9455-9 : 1995			JIS Z3197:1999 ISO 9455-9:1993 (MOD)	KS B ISO 9455-9	ASTM (structural/general) IPC (electronics)
ISO/DIS 9455-10	Soft soldering fluxes - Test methods - Part 10: Flux efficacy tests, solder spread method (revision of ISO 9455-10:1998)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 9455-10 (revision of EN ISO 9455-10:2000) ISO lead			JIS Z3197:1999 ISO 9455-10:1998 (MOD)	KS B ISO 9455-10	ASTM (structural/general) IPC (electronics)
ISO 9455-11:1991	Soft soldering fluxes - Test methods - Part 11: Solubility of flux residues				
Europe	Canada	China	Japan	Korea	US
EN 29455-11 : 1993			JIS Z3197:1999 ISO 9455-11:1991 (MOD)	KS B ISO 9455-11	ASTM (structural/general) IPC (electronics)
ISO 9455-13:1996	Soft soldering fluxes - Test methods - Part 13: Determination of flux spattering				
Europe	Canada	China	Japan	Korea	US
EN ISO 9455-13 : 1999			JIS Z3197:1999 ISO 9455-13:1996 (MOD)	KS B ISO 9455-13	ASTM (structural/general) IPC (electronics)
ISO 9455-14:1991	Soft soldering fluxes - Test methods - Part 14: Assessment of tackiness of flux residues				
Europe	Canada	China	Japan	Korea	US
EN 29455-14 : 1993			JIS Z3197:1999 ISO 9455-14:1991 (MOD)	KS B ISO 9455-14	ASTM (structural/general) IPC (electronics)

	Soldering materials				
ISO 9455-15:1996	Soft soldering fluxes - Test methods - Part 15: Copper corrosion test				
Europe	Canada	China	Japan	Korea	US
EN ISO 9455-15 :1999			JIS Z3197:1999 ISO 9455-15:1996 (MOD)	KS B ISO 9455-15	ASTM (structural/general) IPC (electronics)
ISO/DIS 9455-16	Soft soldering fluxes - Test methods - Part 16: Flux efficacy tests, wetting balance method (revision of ISO 9455-16:1998)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 9455-16 (revision of EN ISO 9455-16:2001) ISO lead			JIS Z3197:1999 ISO 9455-16:1998 (MOD)		ASTM (structural/general) IPC (electronics)
ISO/PWI 9455-17	Soft soldering fluxes - Test methods - Part 17: Surface insulation resistance comb test and electrochemical migration test of flux residues (revision of ISO 9455-17:2002)				
Europe	Canada	China	Japan	Korea	US
prEN ISO 9455-17 (revision of EN ISO 9455-17:2006) ISO lead			JIS Z3197:1999		ASTM (structural/general) IPC (electronics)
ISO 12224-1:1997	Solder wire, solid and flux cored - Specification and test methods - Part 1: Classification and performance requirements				
Europe	Canada	China	Japan	Korea	US
EN ISO 12224-1 : 1998			JIS Z3283:2006 ISO 12224-1:1997 (NEQ)		ASTM (structural/general) IPC (electronics)
ISO 12224-2:1997	Flux cored solder wire - Specification and test methods - Part 2: Determination of flux content				
Europe	Canada	China	Japan	Korea	US
EN ISO 12224-2 : 1999			JIS Z3283:2006 ISO 12224-2:1997 (NEQ)		ASTM (structural/general) IPC (electronics)
ISO 12224-3:2003	Solder wire, solid and flux cored - Specifications and test methods - Part 3: Wetting balance test method for flux cored solder wire efficacy				

Soldering materials					
Europe	Canada	China	Japan	Korea	US
EN ISO 12224-3 : 2003			JIS Z3283:2006 ISO 12224-3:2003 (NEQ)		ASTM (structural/general) IPC (electronics)

11. Other items

	Other items				
ISO 5187:1985	Welding and allied processes – Assemblies made with soft solders and brazing filler metals – Mechanical test methods (revision of ISO 3683:1978)				
Europe	Canada	China	Japan	Korea	US
		GB/T 11363-2008	JIS Z3192:1999 (ISO MOD)	KS D ISO 5187 (ISO IDT)	AWS C3.2M/C3.2:2008
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Europe	Canada	China	Japan	Korea	US
EN 14717:2005 Welding and allied processes - Environmental check list					None