

Comparison of BS and BS EN for steel materials

Appendix

This table only highlights the comparison of BS and BS EN on steel materials, which are relevant to plan approval.

Title of BS	BS	BS EN/other standards	Title of BS EN/other standards	Difference btn BS/BS EN and remarks relevant to structural plan processing	Status
Specification for weldable structural steels	BS 4360: 1986 (Superseded, Withdrawn)	BS EN 10025: 1-5: 2004 BS EN 10025-1 : 2004 (Current) BS EN 10025-2 : 2004 (withdrawn) replaced by BS EN 10025-2 : 2019 (Current) BS EN 10025-3 : 2004 (withdrawn) replaced by	Hot rolled products of structural steels Part 1:General technical delivery conditions Part 2: Technical delivery conditions for non-alloy structural steels Part 2: Technical delivery conditions for non-alloy structural steels Part 3: Technical delivery conditions for normalized/normalized rolled weldable fine grain structural steels		Approval related

		BS EN 10025-3 : 2019 (Current)	Part 3: Technical delivery conditions for normalized/normalized rolled weldable fine grain structural steels		
		BS EN 10025-4 : 2004 (withdrawn) replaced by	Part 4: Technical delivery conditions for thermomechanical rolled weldable fine grain structural steels		
		BS EN 10025-4 : 2019 (Current)	Part 4: Technical delivery conditions for thermomechanical rolled weldable fine grain structural steels		
		BS EN 10025-5 : 2004 (withdrawn) replaced by	Part 5: Technical delivery conditions for structural steels with improved atmospheric corrosion resistance.		
		BS EN 10025-5 : 2019 (Current)	Part 5: Technical delivery conditions for		

			structural steels with improved atmospheric corrosion resistance		
		BS EN 10025-6 : 2004 +A1 : 2009 (withdrawn) replaced by	Part 6: Technical delivery conditions for flat products of high yield strength structural steels in the quenched and tempered condition		
		BS EN 10025-6 : 2019 (Current)	Part 6: Technical delivery conditions for flat products of high yield strength structural steels in the quenched and tempered condition		
		BS EN 10210-1: 2006 (Current)	Hot finished structural hollow sections of non-alloy and fine grain structural steels Part 1: Technical delivery requirements		
		BS EN 10164: 2004 (withdrawn) replaced by	Steel products with improved deformation properties perpendicular		

		<p>BS EN 10164: 2018 (Current)</p> <p>BS EN 10219-1: 2006 (Current)</p>	<p>to the surface of the product – Technical delivery conditions</p> <p>Steel products with improved deformation properties perpendicular to the surface of the product – Technical delivery conditions</p> <p>Cold formed welded structural hollow sections of non-alloy and fine grain steels Part 1: Technical delivery requirements</p>		
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Comparison of BS and BS EN for DT of steel materials

This table only highlights the comparison of BS and BS EN on Destructive Testing of steel materials, which are relevant to plan approval.

Title of BS	BS	BS EN/other standards	Title of BS EN/other standards	Difference btn BS/BS EN and remarks relevant to structural plan processing	Status
Method for tensile testing of metals (including aerospace materials)	BS 18:1987 (Superseded, Withdrawn)	BS EN 10002-1:2001 (withdrawn) and ISO 6892: 1998 (withdrawn) both standard are replaced by BS EN ISO 6892-1: 2009 (withdrawn) replaced by BS EN ISO 6892-1: 2016 (withdrawn) replaced by	Tensile testing of metallic materials. Part 1: Method of test at ambient temperature Metallic materials – Tensile testing at ambient temperature Metallic materials – Tensile testing Part 1: Method of test at ambient temperature Metallic materials – Tensile testing Part 1: Method of test at room temperature (ISO 6892 -1: 2016)		Approval related

		BS EN ISO 6892-1: 2019 (Current)	Metallic materials – Tensile testing Part 1: Method of test at room temperature		
Methods for notched bar tests. Part 2: The Charpy V-notch impact test on metals	BS 131-2:1972 (Superseded, Withdrawn)	BS EN 10045-1: 1990 (Superseded, Withdrawn) Replaced by	Charpy impact test on metallic materials. Part 1: Test method (V- and U-notches)		Low priority
		BS EN ISO 148-1: 2010 (withdrawn) Replaced by BS EN ISO 148-1: 2016 (Current)	Metallic materials – Charpy pendulum impact test. Part 1: Test method Metallic materials – Charpy pendulum impact test. Part 1: Test method (ISO148-1 : 2016)		
Method for Brinell hardness test and for verification of Brinell hardness testing machines	BS 240: 1986 (Superseded, Withdrawn)	BS EN ISO 6506: 1-3: 2005 (Revised,Withdrawn) Replaced by	Metallic materials. Brinell hardness test. Part 1: Test method.		Low priority

		<p>BS EN ISO 6506 -1: 2014 BS EN ISO 6506 -3: 2014</p> <p>Part 1 and 3 (Current)</p> <p>Part 2 (withdrawn and replaced by</p> <p>BS EN ISO 6506-2: 2018</p>	<p>Part 2: Verification and calibration of testing machines</p> <p>Part 3: Calibration of reference blocks</p> <p>Metallic materials. Brinell hardness test.</p> <p>Part 1: Test method.</p> <p>Part 2: Verification and calibration of testing machines</p> <p>Part 3: Calibration of reference blocks</p> <p>Part 2: Verification and calibration of testing machines</p>		
Method for Vickers hardness test and for verification of Vickers	BS 427:1990 (Superseded, Withdrawn)	BS EN ISO 6507 1-3 : 2005 (Revised,Withdrawn)	<p>Metallic materials. Vickers hardness test.</p> <p>Part 1: Test method.</p>		Low priority

hardness testing machines		Replaced by	Part 2: Verification and calibration of testing machines		
			Part 3: Calibration of reference blocks		
		BS EN ISO 6507 1-3 : 2018 (Current)	Metallic materials. Vickers hardness test. Part 1: Test method.		
			Part 2: Verification and calibration of testing machines		
			Part 3: Calibration of reference blocks		

Comparison of BS and BS EN for Dimensional Tolerances

This table only highlights the comparison of BS and BS EN on dimensional tolerances of steel products, which are relevant to plan approval.

Title of BS	BS	BS EN/other standards	Title of BS EN/other standards	Difference btn BS/BS EN and remarks relevant to structural plan processing	Status
Structural steel sections Part 1: Specification for hot rolled sections	BS 4-1: 2005 (Superseded, Withdrawn)	Replaced by BS EN 10365 : 2017 (current)	Hot rolled steel channels, I and H sections. Dimension and masses		Low priority
	-	BS EN 10024: 1995 (Current)	Hot rolled taper flange I sections. Tolerances on shape and dimensions.		Low priority
Weldable structural steels	BS 4360:1990 (Superseded, Withdrawn)	BS EN 10029: 1991 (Revised, Withdrawn) BS EN 10029: 2010 (Current)	Specification for tolerances on dimensions, shape and mass for hot rolled steel plates 3 mm thick or above Hot-rolled steel plates 3 mm thick or above. Tolerances on dimensions and shape		Low priority
Structural steel sections Part 1: Specification for hot rolled sections	BS 4-1: 1980 (Superseded, Withdrawn)	BS EN 10034: 1993 (Current)	Structural Steel I and H sections. Tolerances on shape and dimensions.		Low priority

	-	BS EN 10055: 1996 (Current)	Hot rolled steel equal flange tees with radiused root and toes. Dimensions and tolerances on shape and dimensions.		Low priority
Hot rolled structural steel sections Part 4: Equal and unequal angles	BS 4848-4:1972 (Superseded, Withdrawn)	BS EN 10056-1: 1999 (Withdrawn) Replaced by BS EN 10056-1: 2017 (Current) BS EN 10056-2: 1993 (Current)	Specification for structural steel equal and unequal angles. Part 1: Dimensions. Specification for structural steel equal and unequal angles. Part 1: Dimensions. Specification for structural steel equal and unequal angles. Part 2: Tolerances on shape and dimensions.		Low priority
Hot rolled structural steel sections	BS 4848-2: 1991 (Superseded,	BS EN 10210-2: 1997 (withdrawn)	Hot finished structural hollow sections of		Approval related

Part 2: Specification for hot-finished hollow sections	Withdrawn)	<p>BS EN 10210-2: 2006 (Revised, Withdrawn)</p> <p>Replaced by BS EN 10210-2: 2019 (current)</p>	<p>non-alloy and fine grain structural steels. Part 2: Tolerances, dimensions and sectional properties.</p> <p>Hot finished structural hollow sections of non-alloy and fine grain structural steels. Part 2: Tolerances, dimensions and sectional properties.</p>		
	-	<p>BS EN 10279:2000 (Current)</p>	<p>Hot rolled steel channels. Tolerances on shape, dimension and mass.</p>		<p>Low priority</p>
Specification for welded cold formed steel structural hollow sections	<p>BS 6363:1983 (Superseded, Withdrawn)</p>	<p>BS EN 10219-2: 1997 withdrawn)</p> <p>BS EN 10219-2: 2006 (Revised, Withdrawn)</p> <p>Replaced by BS EN 10219-2: 2019</p>	<p>Cold formed welded structural sections of non-alloy and fine grain steels. Part 2: Tolerances, dimensions and sectional properties.</p> <p>Cold formed welded structural sections of</p>		<p>Approval related</p>

		(current)	non-alloy and fine grain steels. Part 2: Tolerances, dimensions and sectional properties.		
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Comparison of BS and BS EN on Corrosion Protection

This table only highlights the comparison of BS and BS EN on Corrosion Protection of steel, which are relevant to plan approval.

Title of BS	BS	BS EN/other standards	Title of BS EN/other standards	Difference btn BS/BS EN and remarks relevant to structural plan processing	Status
	-	BS EN ISO 11124-1:1997 <i>(Revised, Withdrawn)</i> <i>Replaced by</i> BS EN ISO 11124-1:2018 <i>(Current)</i>	Preparation of steel substrates before application of paints and related products. Specifications for metallic blast-cleaning abrasives. Part 1: General introduction and classification. Preparation of steel substrates before application of paints and related products. Specifications for metallic blast-cleaning abrasives. Part 1: General introduction and classification		Low priority
	-	BS EN ISO 11124-2:1997 <i>(Revised, Withdrawn)</i> <i>Replaced by</i>	Preparation of steel substrates before application of paints and related products.		Low priority

		<p style="text-align: center;">BS EN ISO 11124-2:2018 (Current)</p>	<p>Specifications for metallic blast-cleaning abrasives. Part 2: Chilled iron.</p> <p>Preparation of steel substrates before application of paints and related products. Specifications for metallic blast-cleaning abrasives. Part 2: Chilled iron.</p>		
Specification for chilled iron shot and grit	BS 2451: 1963 (Superseded, Withdrawn)	<p>BS EN ISO 11124-3: 1997 (Revised, Withdrawn) Replaced by</p> <p style="text-align: center;">BS EN ISO 11124-3:2018 (Current)</p>	<p>Preparation of steel substrates before application of paints and related products. Specifications for metallic blast-cleaning abrasives. Part 3: High carbon cast-steel shot and grit.</p> <p>Preparation of steel substrates before application of paints and related products. Specifications for metallic blast-cleaning abrasives. Part 3: High carbon cast-steel shot and grit.</p>		Low priority

		<p>BS EN ISO 11124-4: 1997 (Revised, Withdrawn) Replaced by</p> <p>BS EN ISO 11124-4:2018 (Current)</p>	<p>Preparation of steel substrates before application of paints and related products. Specifications for metallic blast-cleaning abrasives. Part 4: Low carbon cast-steel shot.</p> <p>Preparation of steel substrates before application of paints and related products. Specifications for metallic blast-cleaning abrasives. Part 4: Low carbon cast-steel shot.</p>		Low priority
Specification for sherardized coatings on iron and steel articles	BS 4921: 1973 (Withdrawn, superseded)	BS 4921: 1988 (Current)	Specification for sherardized coatings on iron and steel.		Low priority
Specification for metallic zinc-rich priming paint (organic media)	BS 4652: 1971 (Withdrawn, superseded)	BS 4652: 1995 (Current)	Specification for zinc-rich priming paint (organic media)		Low priority
Specification for sprayed metal coatings. Part 1: Protection of	BS 2569-1: 1964 (Withdrawn, superseded)	BS EN 22063: 1994 (Superseded, Withdrawn) by	Metallic and other inorganic coatings. Thermal spraying. Zinc,		Low priority

<p>iron and steel by aluminium and zinc against atmospheric corrosion</p>		<p>BS EN ISO 2063: 2005 (Revised,Withdrawn) Replaced by</p> <p>BS EN ISO 2063 part 1 & 2 : 2017 (Current) BS EN ISO 2063 part 1: 2017 (Revised,Withdrawn) Replaced by</p> <p>BS EN ISO 2063 part 1 : 2019 (Current)</p>	<p>aluminium and their alloys.</p> <p>Thermal spraying. Metallic and other inorganic coatings. Zinc, aluminium and their alloys.</p> <p>Thermal spraying – Zinc, aluminium and their alloys.</p> <p>Part 1 : Design considerations and quality requirements for corrosion protection systems [ISO 2063-1 : 2017] Part 2 : Execution of corrosion protection systems [ISO 2063-2 : 2017]</p> <p>Thermal spraying – Zinc, aluminium and their alloys. Part 1 : Design considerations and quality</p>		
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			requirements for corrosion protection systems [ISO 2063-1 : 2019]		
Specification for hot-dip galvanized coatings on iron and steel articles	BS 729 : 1971 (Superseded, Withdrawn)	BS EN ISO 1461: 1999 (Withdrawn)	Hot-dip galvanized coatings on fabricated iron and steel articles. Specifications and test methods.		Approval related
		BS EN ISO 1461: 2009 (Current)	Hot-dip galvanized coatings on fabricated iron and steel articles. Specifications and test methods. (ISO 1461 : 2009)		

Comparison of BS and BS EN for Welding consumables

This table only highlights the comparison of BS and BS EN on welding consumables, which are relevant to plan approval.

Title of BS	BS	BS EN/other standards	Title of BS EN/other standards	Difference btn BS/BS EN and remarks relevant to structural plan processing	Status
Covered carbon and carbon manganese steel electrodes for manual metal-arc welding	BS 639:1986 (Superseded, Withdrawn)	BS EN 499: 1995 (Superseded, Withdrawn) by BS EN ISO 2560: 2005 (withdrawn) replaced by BS EN ISO 2560 : 2009 (withdrawn) replaced by BS EN ISO 2560 : 2020 (Current)	Welding consumables- Covered electrodes for manual metal arc welding of non-alloy and fine grain steels – Classification Welding consumables- Covered electrodes for manual metal arc welding of non-alloy and fine grain steels – Classification Welding consumables- Covered electrodes for manual metal arc welding of non-alloy and fine grain steels - Classification		Approval related

<p>Filler rods and wires for gas-shielded arc welding. Part 1: Ferritic steels</p>	<p>BS 2901-1: 1983 (Superseded, Withdrawn)</p>	<p>BS EN 440: 1995 (withdrawn)</p> <p>Replaced by BS EN ISO 14341: 2008 (Revised, Withdrawn)</p> <p>BS EN ISO 14341: 2011 (withdrawn) replaced by</p> <p>BS EN ISO 14341: 2020 (Current)</p>	<p>Welding consumables- Wire electrodes and deposits for gas shielded metal arc welding of non-alloy and fine grain steels – Classification.</p> <p>Welding consumables. Wire electrodes and weld deposits for gas shielded metal arc welding of non alloy and fine grain steels. Classification</p> <p>Welding consumables. Wire electrodes and weld deposits for gas shielded metal arc welding of non alloy and fine grain steels. Classification</p>		<p>Low priority</p>
<p>Specification for electrode wires and fluxes for the submerged arc welding of carbon steel and medium-tensile steel</p>	<p>BS 4165: 1984 (Superseded, Withdrawn)</p>	<p>BS EN 756: 2004 (Superseded, Withdrawn)</p> <p>Replaced by</p>	<p>Welding consumables- Solid wires, solid wire-flux and tubular cored electrode-flux combinations for submerged arc welding of non-alloy and fine grain steels – Classification</p>		<p>Low priority</p>

		BS EN ISO 14171: 2010 (withdrawn again) replaced by	Welding consumables – Solid wire electrodes, tubular cored electrodes and electrode/flux combinations for submerged arc welding of non alloy and fine grain steels – Classification		
		BS EN ISO 14171: 2016 (Current)	Welding consumables – Solid wire electrodes, tubular cored electrodes and electrode/flux combinations for submerged arc welding of non alloy and fine grain steels – Classification (ISO 14171 : 2016)		
Specification for carbon and carbon-manganese steel tubular cored welding electrodes	BS 7084: 1989 (Revised, Withdrawn)	BS EN 758: 1997 (Superseded, Withdrawn) Replaced by	Welding consumables- Tubular cored electrodes for metal arc welding with and without a gas shield of non-alloy and fine grain steels – Classification		Low priority

		BS EN ISO 17632 : 2008 (withdrawn) replaced by	Welding consumables- Tubular cored electrodes for gas shielded and non-gas shielded metal arc welding of non-alloy and fine grain steels – Classification”		
		BS EN ISO 17632 : 2015 (Current)	Welding consumables- Tubular cored electrodes for gas shielded and non-gas shielded metal arc welding of non-alloy and fine grain steels – Classification”		

Comparison of BS and BS EN for Welding Standard, Procedure, Coordination and Welder

This table only highlights the comparison of BS and BS EN on Welding Standard, Procedure, Coordination and Welder, which are relevant to plan approval.

Title of BS	BS	BS EN/other standards	Title of BS EN/other standards	Difference btn BS/BS EN and remarks relevant to structural plan processing	Status
Specification for arc welding of carbon and carbon manganese steels	BS 5135:1984 (Superseded, Withdrawn)	BS EN 1011-1:1998 (Revised, Withdrawn) Replaced by BS EN 1011-1: 2009 (Current) BS EN 1011-2:2001 (Current)	Welding. Recommendations for welding of metallic materials. General guidance for arc welding Welding. Recommendations for welding of metallic materials. General guidance for arc welding Welding. Recommendations for welding of metallic materials. Arc welding of ferritic steels		Approval related
Specification for approval testing of welding procedures.	BS 4870-1:1981 (Superseded, Withdrawn)	BS EN ISO 15614-1: 2004 (+ A1 : 2008 / +A2 : 2012)	Specification and qualification of welding procedures for metallic		Approval related

<p>Part 1: Fusion welding of steel.</p>		<p>(withdrawn) replaced by</p> <p>BS EN ISO 15614-1: 2017 (withdrawn) replaced by</p> <p>BS EN ISO 15614-1: 2017 (+A1 : 2019) (Current)</p>	<p>materials. Welding procedure test. Part 1: Arc and gas welding of steels and arc welding of nickel and nickel alloys</p> <p>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</p> <p>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</p>		
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Part 3: Arc welding of tube to tube-plate joints in metallic materials	BS 4870-3:1985 (Superseded, Withdrawn)	BS EN ISO 15614-8:2002 (withdrawn) replaced by BS EN ISO 15614-8:2016 (Current)	Specification and qualification of welding procedures for metallic materials – welding procedure test Part 8: Welding of tubes to tube-plate joints Specification and qualification of welding procedures for metallic materials – welding procedure test Part 8: Welding of tubes to tube-plate joints (ISO 15614-8 : 2016)		Approval related
Part 4: Specification for automatic fusion welding of metallic materials, including welding operator approval	BS 4870-4:1988 (Superseded, Withdrawn)	BS EN 1418: 1998 (Superseded, Withdrawn) Replaced by	Welding personnel. Approval testing of welding operators for fusion welding and resistance weld setters for fully mechanized and automatic welding of metallic materials.		Approval related

		BS EN ISO 14732 : 2013 (Current)	Welding personnel. Qualification testing of welding operators and weld setters for mechanized and automatic welding of metallic materials.		
	-	BS EN 719: 1994 (Superseded, Withdrawn)	Welding co-ordination. Tasks and responsibilities		Approval related
		BS EN ISO 14731 : 2006 (withdrawn) replaced by	Welding co-ordination. Tasks and responsibilities		
		BS EN ISO 14731 : 2019 (Current)	Welding co-ordination. Tasks and responsibilities		
	-	BS EN 729-2: 1995 (Superseded, Withdrawn) Replaced by	Quality requirements for welding. Fusion welding of metallic materials. Comprehensive quality		Low priority

		BS EN ISO 3834-2: 2005 (Current)	requirements. Quality requirements for fusion welding of metallic materials. Part 2: Comprehensive quality requirements.		
	-	BS EN 729-3: 1995 (Superseded, Withdrawn) by BS EN ISO 3834-3:2005 (Current)	Quality requirements for welding. Fusion welding of metallic materials. Part 3: Standard quality requirements. Quality requirements for fusion welding of metallic materials. Part 3: Standard quality requirements		Low priority
	-	BS EN 729-4:1995 (Superseded, Withdrawn) by	Quality requirements for welding. Fusion welding of metallic materials. Part 4: Elementary quality requirements.		Low priority

		BS EN ISO 3834-4:2005 (Current)	Quality requirements for fusion welding of metallic materials. Part 4: Elementary quality requirements		
Specification for approval testing of welders to approved welding procedures. Fusion welding of steel	BS 4871-1:1982 (Superseded, Withdrawn)	BS EN 287-1:2004 (Superseded, Withdrawn) Replaced by BS EN 287-1:2011 (Superseded, Withdrawn at year 2013) Replaced by BS EN ISO 9606-1 : 2013 (Revised, Withdrawn) Replaced by	Qualification test of welders. Fusion welding. Part 1: Steels Qualification test of welders. Fusion welding. Part 1: Steels Qualification testing of welders--- Fusion welding. Part 1: Steels		Approval related

		BS EN ISO 9606-1 : 2017 (Current)	Qualification testing of welders--- Fusion welding. Part 1: Steels		
Specification for approval testing of welders to approved welding procedures. Part 3: Arc welding of tube to tube-plate joints in metallic materials	BS 4871-3:1985 (Withdrawn) (No new version)				Low priority
Specification for approval testing of welders when welding procedure approval is not required Part 1: Fusion welding of steel	BS 4872-1: 1982 (Current)				Low priority
Specification for a metallic material grouping systems		ISO / TR 15608 : 2017 (Current)	Welding –Guideline for a metallic material grouping systems		Low priority
Specification for a metallic material grouping systems		ISO / TR 20172 : 2009 (Current)	Welding - grouping systems for materials – European materials		Low priority
Specification for a metallic material grouping systems		ISO / TR 20173 : 2018 (Current)	Welding - grouping systems for materials – American materials		Low priority

Specification for a metallic material grouping systems		ISO / TR 20174 : 2020 (Current)	Welding - grouping systems for materials – Japanese materials		Low priority
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Comparison of BS and BS EN for DT of welds

This table only highlights the comparison of BS and BS EN on Destructive Testing of welds, which are relevant to plan approval.

Title of BS	BS	BS EN/other standards	Title of BS EN/other standards	Difference btn BS/BS EN and remarks relevant to structural plan processing	Status
Methods of destructive testing, fusion welded joints and weld metal in steel	BS 709:1983 (Superseded, Withdrawn)	BS EN 875: 1995 (Superseded, Withdrawn) Replaced by	Destructive tests on welds in metallic materials. Impact tests. Test specimen location, notch orientation and examination.		Low priority
		BS EN ISO 9016: 2011 (Superseded, Withdrawn) Replaced by	Destructive tests on welds in metallic materials. Impact tests. Test specimen location, notch orientation and examination		
		BS EN ISO 9016 : 2012 (Current)	Destructive tests on welds in metallic materials. Impact tests. Test specimen location, notch orientation and examination (ISO9016: 2012)		
		BS EN 876: 1995 (Superseded, Withdrawn)	Destructive tests on welds in metallic materials. Longitudinal tensile test on		Low priority

Replaced by	weld metal in fusion welded joints.		
BS EN ISO 5178: 2011 (Superseded, Withdrawn)	Destructive tests on welds in metallic materials. Longitudinal tensile test on weld metal in fusion welded joints		
Replaced by BS EN ISO 5178: 2019 (Current)	Destructive tests on welds in metallic materials. Longitudinal tensile test on weld metal in fusion welded joints		
BS EN 895: 1995 (Superseded, Withdrawn) Replaced by	Destructive tests on welds in metallic materials. Transverse tensile test.		Low priority
BS EN ISO 4136: 2011 (Superseded, Withdrawn) Replaced by	Destructive tests on welds in metallic materials. Transverse tensile test		
BS EN ISO 4136 : 2012	Destructive tests on welds		

(Current)	in metallic materials. Transverse tensile test (ISO4136: 2012)		
BS EN 910: 1996 (Superseded, Withdrawn) Replaced by	Destructive tests on welds in metallic materials. Bend tests.		Low priority
BS EN ISO 5173: 2010 + A1 : 2011 (Current)	Destructive tests on welds in metallic materials - Bend tests.		
BS EN 1043-1: 1996 (Superseded, Withdrawn) Replaced by	Destructive tests on welds in metallic materials. Hardness testing. Part 1: Hardness test on arc welded joints.		Low priority
BS EN ISO 9015 –1 : 2011 (Current)	Destructive tests on welds in metallic materials. Hardness testing. Part 1: Hardness test on arc welded joints.		

	<p>BS EN 1320: 1997 (Superseded, Withdrawn)</p> <p>Replaced by BS EN ISO 9017 : 2013 (Revised,Withdrawn) Replaced by</p> <p>BS EN ISO 9017 : 2018 (Current)</p>	<p>Destructive test on welds in metallic materials. Fracture tests.</p> <p>Destructive test on welds in metallic materials. -- Fracture tests.</p> <p>Destructive test on welds in metallic materials. -- Fracture tests.</p>		<p>Low priority</p>
	<p>BS EN 1321: 1997 (Superseded, Withdrawn)</p> <p>Replaced by BS EN ISO 17639 : 2013 (Current)</p>	<p>Destructive test on welds in metallic materials. Macroscopic and microscopic examination of welds</p> <p>Destructive test on welds in metallic materials --- Macroscopic and microscopic examination of welds</p>		<p>Low priority</p>

Comparison of BS and BS EN for NDT of welds

This table only highlights the comparison of BS and BS EN on Non-Destructive Testing of welds, which are relevant to plan approval.

Title of BS	BS	BS EN/other standards	Title of BS EN/other standards	Difference btn BS/BS EN and remarks relevant to structural plan processing	Status
Code of practice. Visual inspection of fusion welded joints.	BS 5289:1976 (Superseded, Withdrawn)	BS EN 970:1997 (Superseded, Withdrawn) Replaced by	Non-destructive examination of fusion welds – Visual examination		Low priority
		BS EN ISO 17637:2011 (withdrawn) replaced by	Non-destructive testing of welds. Visual testing of fusion-welded joints		
		BS EN ISO 17637:2016 (Current)	Non-destructive testing of welds. Visual testing of fusion-welded joints		
Method for penetrant flaw detection.	BS 6443:1984 (Superseded, Withdrawn)	BS EN 571-1:1997 (Superseded, Withdrawn) Replaced by BS EN ISO 3452-1 : 2013 (Current)	Non-destructive testing – Penetrant testing Part 1: General principles Non-destructive testing – Penetrant testing Part 1: General principles		Low priority

Method for magnetic particle flaw detection	BS 6072:1981 (Current, Obsolescent, Superseded)	<p>BS EN 1290:1998 (withdrawn) replaced by</p> <p>BS EN ISO 17638 : 2009 (withdrawn) replaced by</p> <p>BS EN ISO 17638 : 2016 (Current)</p> <p>BS EN ISO 9934-1:2001 (Withdrawn) Replaced by</p> <p>BS EN ISO 9934-1 : 2015 (withdrawn again) replaced by</p>	<p>Non-destructive examination of welds – Magnetic particle examination of welds</p> <p>Non-destructive testing of welds – Magnetic particle testing</p> <p>Non-destructive testing of welds – Magnetic particle testing (ISO 17638 : 2016)</p> <p>Non-destructive testing. Magnetic particle testing. Part 1: General principles.</p> <p>Non-destructive testing. Magnetic particle testing. Part 1: General Principles.</p>		Low priority

		BS EN ISO 9934-1 : 2016 (Current)	Non-destructive testing. Magnetic particle testing. Part 1: General Principles.		
Method for ultrasonic examination of welds Part 1: Methods for manual examination of fusion welds in ferritic steels	BS 3923-1:1986 (Superseded, Withdrawn)	BS EN 1714:1998 (Superseded, Withdrawn) Replaced by	Non-destructive testing of welded joints – Ultrasonic testing of welded joints		Low priority
		BS EN ISO 17640:2010 (Superseded, Withdrawn) Replaced by	Non-destructive testing of welds. Ultrasonic testing. Techniques, testing levels, and assessment		
		BS EN ISO 17640:2017 (Superseded, Withdrawn) Replaced by	Non-destructive testing of welds. Ultrasonic testing. Techniques, testing levels, and assessment.		

		BS EN ISO 17640:2018 (Current)	Non-destructive testing of welds. Ultrasonic testing. Techniques, testing levels, and assessment.	
Ultrasonic thickness measurement		BS EN 14127 : 2011 (Superseded, Withdrawn) Replaced by BS EN ISO 16809 : 2019 (Current)	Non-destructive testing – Ultrasonic thickness measurement Non-destructive testing – Ultrasonic thickness measurement [ISO 16809 : 2017]	Low priority
Radiographic examination of fusion welded butt joints in steel. Part 1: Methods for steel 2 mm up to and including 50 mm thick Part 2: Methods for steel over 50 mm up to and including 200 mm thick	BS 2600-1 & 2:1983 (Superseded, Withdrawn)	BS EN 1435:1997 (Superseded, Withdrawn) Replaced by BS EN ISO 17636-1 : 2013 (Current)	Non-destructive examination of welds. Radiographic examination of welded joints. Non-destructive testing of welds. Radiographic testing Part 1 : X and Gamma –ray techniques with film.	Low priority

Comparison of BS and BS EN for Fastener, Nut and Washer

This table only highlights the comparison of overdue and new standards for Fastener, Nut and Washer, which are relevant to plan approval.

Title of BS	BS	BS EN/other standards	Title of BS EN/other standards	Difference between standards and remarks relevant to structural plan processing	Status
		BS EN ISO 4014: 2001 (Revised, Withdrawn) Replaced by BS EN ISO 4014: 2011 (Current)	Hexagon head bolts. Product grades A and B Hexagon head bolts. Product grades A and B		
		BS EN ISO 4016: 2001 (Revised, Withdrawn) Replaced by BS EN ISO 4016: 2011 (Current)	Hexagon head bolts. Product grade C Hexagon head bolts. Product grade C		
		BS EN ISO 4017: 2001 (Revised, Withdrawn) Replaced by	Hexagon head screws. Product grades A and B		

		<p>BS EN ISO 4017: 2011 (Revised, Withdrawn) Replaced by</p> <p>BS EN ISO 4017: 2014 (Current)</p>	<p>Hexagon head screws. Product grades A and B</p> <p>Fasteners - Hexagon head screws. Product grades A and B(ISO 4017 : 2014)</p>	
		<p>BS EN ISO 4018: 2001 (Revised, Withdrawn) Replaced by</p> <p>BS EN ISO 4018: 2011 (Current)</p>	<p>Hexagon head screws. Product grade C</p> <p>Hexagon head screws. Product grade C</p>	

Comparison of BS and BS EN on Matching Bolt, Nut and Washer & HSFG Bolt

This table only highlights the comparison of BS and BS EN on Matching Bolt, Nut and Washer & HSFG Bolt

Grade	Title of BS	BS	BS EN/other standard	Title of BS EN/Other standards	Comparison btn BS/BS EN	Status
4.6	Specification for ISO metric black hexagon bolts, screws and nuts. Metric units.	Bolt BS 4190:2001 (Withdrawn) Replaced by BS 4190 : 2014 (Current)	BS EN ISO 4018:2011 (Current) BS EN ISO 4016:2011 (Current)	Hexagon head screws. Product grade C Hexagon head bolts. Product grade C		Low priority
	Specification for holding down bolts	BS 7419:1991 (Withdrawn) Replaced by BS 7419 : 2012 (Current)		Specification for holding down bolts		
	Specification for ISO metric black hexagon bolts, screws and nuts. Metric units	Nut BS 4190:2001 (Grade 4) (Withdrawn) Replaced by BS 4190 : 2014 (Current)	BS EN ISO 4034:2001 (Superseded, Withdrawn) Replaced by BS EN ISO 4034 : 2012 (Current)	Hexagon nuts. Product grade C Hexagon regular nuts (style 1). Product grades C		Low priority

	Specification for metal washers for general engineering purposes. Metric series.	Washer BS 4320:1968 (Current)	BS EN ISO 7091:2000 (Current)	Plain washers. Normal series. Product grade C		Low priority
8.8	Specification for ISO metric black hexagon bolts, screws and nuts. Specification for holding down bolts	Bolt BS 4190:2001 (Withdrawn) Replaced by BS 4190 : 2014 (Current) BS 7419:1991 (Withdrawn) Replaced by BS 7419 : 2012 (Current)	BS EN ISO 4017: 2011 (Revised, Withdrawn) Replaced by BS EN ISO 4017: 2014 (Current) BS EN ISO 4014:2011 (Current)	Hexagon head screws. Product grades A and B Fasteners - Hexagon head screws. Product grades A and B(ISO 4017 : 2014) Hexagon head bolts. Product grades A and B		Low priority

	Specification for ISO metric black hexagon bolts, screws and nuts.	Nut BS 4190:2001) (Grade 8) (Withdrawn) Replaced by BS 4190 : 2014 (Current)	BS EN ISO 4032:2001 (Superseded, Withdrawn) Replaced by BS EN ISO 4032 : 2012 (Current)	Hexagon nuts, style 1. Product grades A and B Hexagon regular nuts (style 1). Product grades A and B		Low priority
	Specification for metal washers for general engineering purposes. Metric series.	Washer BS 4320:1968 (Current)	BS EN ISO 7091:2000 (Current)	Plain washers. Normal series. Product grade C		Low priority

10.9	Specification for ISO metric black hexagon bolts, screws and nuts.	Bolt BS 4190:2001 (Withdrawn) Replaced by BS 4190 : 2014 (Current)	BS EN ISO 4017:2011 (Revised, Withdrawn) Replaced by BS EN ISO 4017: 2014 (Current)	Hexagon head screws. Product grades A and B Fasteners - Hexagon head screws. Product grades A and B(ISO 4017 : 2014)		Low priority
			BS EN ISO 4014:2011 (Current)	Hexagon head bolts. Product grades A and B		
	Specification for ISO metric black hexagon bolts, screws and nuts.	Nut BS 4190:2001 (Grade 10) (Withdrawn) Replaced by BS 4190 : 2014 (Current)	BS EN ISO 4032:2001 (Superseded, Withdrawn) Replaced by BS EN ISO 4032 : 2012 (Current)	Hexagon nuts, style 1. Product grades A and B Hexagon regular nuts (style 1). Product grades A and B		Low priority

	Specification for metal washers for general engineering purposes. Metric series.	Washer BS 4320:1968 (Current)	BS EN ISO 7091:2000 (Current)	Plain washers. Normal series. Product grade C		Low priority
HSFG Bolt	Specification for high strength friction grip bolts and associated nuts and washers for structural engineering. Part 1: General grade Specification for the use of high strength friction grip bolts in structural steelwork. Metric series. Part 1: General grade	General grade BS 4395-1: 1969 , (Withdrawn) BS 4604-1: 1970 (Withdrawn)	BS EN 14399- Part 1 to 6 :2005 (Withdrawn) Replaced by BS EN 14399 - Part 1 to 6 : 2015 (Current)	High-strength structural bolting assemblies for preloading. Part 1: General requirements Part 2: Suitability test for preloading Part 3: System HR. Hexagon bolt and nut assemblies Part 4: System HV. Hexagon bolt and nut assemblies Part 5: Plain washers		Low priority

				Part 6: Plain chamfered washers		
HSFG Bolt	<p>Specification for high strength friction grip bolts and associated nuts and washers for structural engineering. Part 2: Higher grade bolts and nuts and general grade washers</p> <p>Specification for the use of high strength friction grip bolts in structural steelwork. Metric series. Part 2: Higher grade (parallel shank)</p>	<p>Higher grade BS 4395-2: 1969 (Withdrawn)</p> <p>BS 4604-2: 1970 (Withdrawn)</p>	<p>BS EN 14399-Part 1 to 6 :2005 (Withdrawn) Replaced by BS EN 14399 - Part 1 to 6 : 2015 (Current)</p>	<p>High-strength structural bolting assemblies for preloading.</p> <p>Part 1: General requirements</p> <p>Part 2: Suitability test for preloading</p> <p>Part 3: System HR. Hexagon bolt and nut assemblies</p> <p>Part 4: System HV. Hexagon bolt and nut assemblies</p> <p>Part 5: Plain washers</p> <p>Part 6: Plain chamfered washers</p>		Low priority