# **New and revised codes & standards**

From BSI Updates November 2018

# **BS EN PUBLICATIONS**

#### BS EN 560:2018

Gas welding equipment. Hose connections for equipment for welding, cutting and allied processes Supersedes BS EN 560:2005

#### BS EN IEC 60974-1:2018

Arc welding equipment. Welding power sources Supersedes BS EN 60974-1:2012

# BS EN IEC 62822-1:2018

Electric welding equipment. Assessment of restrictions related to human exposure to electromagnetic fields (0 Hz to 300 GHz). Product family standard Supersedes BS EN 50445:2008

#### **BS EN ISO 2401:2018**

Welding consumables. Covered electrodes. Determination of the efficiency, metal recovery and deposition coefficient Supersedes BS EN 22401:1994

# BS EN ISO 3690:2018

Welding and allied processes. Determination of hydrogen content in arc weld metal Supersedes BS EN ISO 3690:2012

# BS EN ISO 4042:2018

Fasteners. Electroplated coating systems

Supersedes BS EN ISO 4042:2000

# BS EN ISO 7539-6:2018

Corrosion of metals and alloys. Stress corrosion testing. Preparation and use of precracked specimens

for tests under constant load or constant displacement Supersedes BS EN ISO 7539-6:2011

# BS EN ISO 8249:2018

Welding. Determination of Ferrite Number (FN) in austenitic and duplex ferritic-austenitic Cr-Ni stainless steel weld metals Supersedes BS EN ISO 8249:2000

# BS EN ISO 10683:2018

Fasteners. Non-electrolytically applied zinc flake coating systems Supersedes BS EN ISO 10683:2014

# BS EN ISO 11124:2018

Preparation of steel substrates before application of paints and related products. Specifications for metallic blast-cleaning abrasives Part 1: General introduction and classification

Part 2: Chilled-iron grit Part 4: Low-carbon cast-steel shot Supersedes BS EN ISO 11124-1, 2 &

# **BS EN ISO 11125:2018**

Preparation of steel substrates before application of paints and related products. Test methods for metallic blast-cleaning abrasives. Part 2: Determination of particle size distribution

Part 3: Determination of hardness Part 4: Determination of apparent density

Part 5: Determination of percentage defective particles and of microstructure

Part 6: Determination of foreign matter

Supersedes BS EN ISO 11125-2, 3, 4, 5

# **BS EN ISO 11126:2018**

Preparation of steel substrates before application of paints and related products. Specifications for non-metallic blast-cleaning abrasives.

Part 1: General introduction and classification

Part 3: Copper refinery slag Part 4: Coal furnace slag Part 8: Olivine Supersedes BS EN ISO 11126-1, 3, 4 & 8:1997/8

# BS EN ISO 11699-2:2018

Non-destructive testing. Industrial radiographic films. Control of film processing by means of reference values

Supersedes BS EN ISO 11699-2:2011

# BS EN ISO 18275:2018

Welding consumables. Covered electrodes for manual metal arc welding of high-strength steels. Classification

Supersedes BS EN ISO 18275:2012

# **PUBLISHED DOCUMENTS**

# PD CEN/TR 10261:2018

Iron and steel. European standards for the determination of chemical composition

Supersedes PD CEN/TR 10261:2013

# PD CEN/TR 17079:2018

Design of fastenings for use in concrete. Redundant non-structural systems

No current standard is superseded

# PD CEN/TR 17080:2018

Design of fastenings for use in concrete. Anchor channels. Supplementary rules No current standard is superseded

# PD CEN/TR 17081:2018

Design of fastenings for use in concrete. Plastic design of fastenings with headed and post-installed fasteners

No current standard is superseded

#### **NEW WORK STARTED**

#### BS EN 1993-1-5:2006/A

Eurocode 3. Design of steel structures. Plated structural elements

#### **BS ISO 630-4**

Structural steels. Technical delivery conditions for high-yield-strength quenched and tempered structural steel plates

# **BS ISO 7788**

Steel. Surface finish of hot-rolled plates and wide flats. Delivery requirements

# **BS ISO 11971**

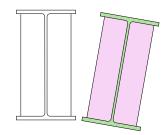
Steel and iron castings. Visual testing of surface quality Will supersede BS ISO 11971:2008

# AD 425: Full depth stiffeners Bolt head protrusion and lateral torsional buckling

The SCI Advisory Desk sometimes receives questions about the potential to use full depth stiffeners to restrain lateral torsional buckling, suggesting that the stiffeners prevent relative movement of the compression and tension flanges. Whilst this is true, lateral torsional buckling is a displacement and twist of the complete section, which stiffeners alone do nothing to prevent. The American Institute of Steel Construction notes that "transverse stiffeners are

simply along for the ride" as the sketch indicates.

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# **AD 426:** through nuts and threads in grip lengths

To ensure that bolt threads are fully engaged in the nut, BS EN 1090-2 clause 8.2.2 specifies that the protrusion must be at least one thread pitch. This is because the very end of the bolt may be slightly convex, leading to a reduced resistance if threads are not fully

The same clause specifies the necessary numbers of threads within the grip length (between bolt head and the nut). For non-preloaded bolts, one full thread is required - to ensure the nut can be properly tightened. For preloaded bolts according to BS EN 14399-3 (HR system, generally used in the UK in preference to the HV system) or according to BS EN 14399-10 (HRC

system, commonly known as a 'tension control bolt'), a minimum of four threads within the tensioned length is specified. The reason for the threads in the tensioned length is to encourage ductile behaviour - AD 268 (which related to the BS 5950 requirements) reproduces a figure from Owens and Cheal (Butterworths), showing significantly more elongation when there are more threads in the tensioned length. Incidentally, BS 5950-2 required three and five threads in the tensioned length, for class 8.8 and 10.9 bolts respectively.

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