

# BS EN 1090

## Structural Steel

Turning compliance into opportunity

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### What is BS EN 1090?

BS EN 1090 is a harmonized standard that covers structural/construction steel and aluminium products that will be installed permanently, for example in steel frames or metal roofing.



If you design and/or manufacture steel components to be sold in Europe, and your products are covered by a harmonized European Standard or a European Technical Assessment, **you must CE or UKCA mark your products.**



**CE marking to BS EN 1090 is a legal requirement** – Since July 2014 and UKCA marking from January 1st 2022, structural steelwork and aluminium fall under the Construction Products Regulation (CPR), which means aluminium or structural steel CE marking must be secured to show compliance with EN 1090-1.

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### Do I need to comply to BS EN 1090?

The Construction Products Regulation (CPR) has mandated that all construction products made from steel or aluminium, that fall into the scope of BS EN 1090, must be CE marked for entry into the EU and UKCA marked into the UK.



#### Did you know?

If a company does not comply with CE marking or UKCA certification, and their products are sold in the EU (CE) or the UK (UKCA), covered by the appropriate harmonized European standard or technical assessment – they are trading illegally.

In addition, a further piece of legislation has been introduced to allow the CPR to be enforced by the Trading Standards authority, which has the power to stop a business from trading and withdraw products until the company has shown that it complies with the Regulation.

#### Real business benefits

By complying with this legal requirement, you can also:

- Eliminate waste with efficiency gains of up to 20%
- Protect your business by providing tangible proof of the identity and traceability of your products
- Future-proof your business, increasing tender opportunities
- Strengthen bids and exceed client expectations
- Improve commercial quality awareness
- Show company-wide commitment to quality
- Drive business improvement

If your products fall into the scope of BS EN 1090, and it's been established that you will need to CE/UKCA mark one or more of these products, the next task for you as a manufacturer is to determine which Execution Class you require.

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### Understanding the 'Execution Class' your products fall into

The products you produce will fall into a class category, from 1-4:



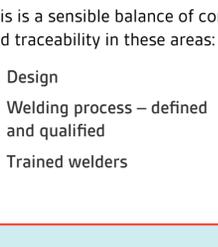
#### Class 1

For structures that carry the least risk to human life in the event of a failure, for example farm buildings.



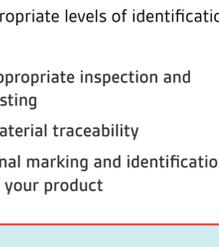
#### Class 2

Typically includes buildings with between 2 and 15 floors, for example general residential and commercial structures.



#### Class 3

For structures / buildings with more than 15 floors, including pedestrian, bicycle, road and railway bridges, and crane tracks.



#### Class 4

The highest risk, for example the sliding roof at Wimbledon, or Wembley Stadium, where a failure could have catastrophic consequences, with potential severe loss of life.

### The most common class is execution class 2

This is a sensible balance of control, with appropriate levels of identification and traceability in these areas:

- Design
- Welding process – defined and qualified
- Trained welders
- Appropriate inspection and testing
- Material traceability
- Final marking and identification of your product

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### How to CE/UKCA mark your construction products

When the product is complete and delivered to your client, it must be accompanied by a physical document with the CE logo, including information about the product and you the manufacturer.



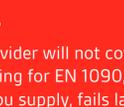
As part of achieving a CE/UKCA mark, you will also require third-party certification for your Factory Production Control (FPC) system.

That includes all the activities which you as a manufacturer carry out and it is only a Notified Body (NB) for such as and it is only a Notified Body (NB) for UKCA marking such as BSI, that can do this.

At BSI, we look at seven clauses which fall under two main areas:



Personnel competency



Documented work

The first step is to implement a formal FPC system. Your FPC is a collective term for all the activities that influence the conformity of your product.

#### Minimize risks

You may find that your insurance provider will not cover you if you don't have CE/UKCA marking for EN 1090, if any structure or part of a structure you supply, fails later in whole or in part.

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### Self-assessing your own Factory Production Control against the requirements of EN 1090



#### Contract review

- Do you have the facilities and skills?
- What is your pricing process?
- If there are changes – are these changes clear, and the costs recorded?



#### Design

- Do you have a qualified structural engineer?
- Do you have adequate insurance cover?

#### Stay protected

You may find that your insurance provider will not cover you if you don't have CE/UKCA marking for EN 1090, if any structure or part of a structure you supply, fails later in whole or in part.



#### Welding

- Do you have processes designed to cover your activities?
- Do you have qualified welders who work with those processes?
- Do you have welding plant calibration?



#### Best practice

- Do you undertake periodic non-destructive testing (NDT)?
- Can you demonstrate that the material is the grade specified at the design phase?
- Do you undertake regular inspections to avoid costly errors?
- Finishing processes
- Identifying as your product

#### Win more business

Aside from the law, it is becoming more common for major and smaller contractors – from builders to the rail industry – to demand EN 1090 from their suppliers.

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### Have BSI assess and certify your Factory Production Control

Choose a Notified Body with the knowledge and expertise you can rely on.



By working with us, you receive the added benefit of having a BSI expert to periodically validate that your business is operating as expected.

"From our perspective there are benefits to certification that go beyond compliance, including better processes, better controls and better traceability. It's just as much about improving working practices and professionalism."

Duncan Proctor, Managing Director, Specialised Laser Products (SLP)

"Obtaining and maintaining CE certificate for EN 1090 structural steel with BSI has enhanced quality and traceability systems, and improved our welding coordination and controls. The BSI Assessor for EN 1090 was very knowledgeable, experienced and practicable and, understood our business."

Paul Lamb, QESH Manager, Komatsu Mining Corp.

Whether you're looking for more information, or to get a quote, contact us today to start your journey and let us help you to meet the requirements of EN 1090 and the Construction Products Regulation (CPR) and the UK Conformity Assessed marking.