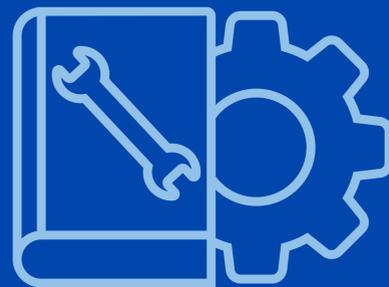


GUIDE TO EN 1090



About EN1090

If you are looking to access EU markets for your industrial equipment, compliance with international standards is critical to gaining this market access. EN 1090 standards govern the execution and conformity assessment of steel and aluminum structures and comprise the European standards that implement the requirements of the Construction Products Regulation (CPR) for steel and aluminum structures.

EN 1090-1: Requirements for conformity assessment for structural components (CE marking)

EN 1090-2: Technical requirements for the execution of steel structures

EN 1090-3: Technical requirements for the execution of aluminum structures

EN 1090 Execution Classes

EN 1090 standards have 4 defined execution classes (EXC), which each hold their own set of requirements. A structure's execution class is defined by the engineering effort that is needed to implement the design parameters. The classes include:



- **EXC 1:** This is comprised of structural components made of steel up to the strength class of S275 and structural components made of aluminum alloys. This class also covers agricultural buildings.



- **EXC 2:** This is the most common class and covers all supporting structures made of steel up to strength class of S700.



- **EXC 3:** This class covers supporting structures made of steel up to strength class S700 as well as structural components that are made of aluminum alloys.

- **EXC 4:** This includes all structural components that hold serious consequences for people and the environment in case of failure.

EN 1090 Services

- **Initial Type Testing and Initial Type Calculation (ITT/ITC):** We assess if manufacturers fulfil the requirements to deliver load-bearing components and kits that are compliant with the applicable standard through ITT and ITC.
- **Factory Production Control (FPC):** Based on ITT/ITC, our experts assess manufacturers to check if there is a factory production control implemented that includes documentation and maintenance to ensure that products placed on the market have the necessary and declared performance features.
- **Initial inspection:** As a Notified Body, TÜV SÜD comes in during the initial type inspection to verify that the FPC is suitable for standard-compliant manufacturing of components and kits.
- **Ongoing surveillance:** Our experts perform regular mandatory continuous surveillance of your FPC to ensure consistent high quality and standard-compliant manufacturing of components and kits.



Add value.
Inspire trust.

Learn more about our EN 1090 Services

www.tuvsud.com/en-us