



PRVÁ ZVĀRAČSKĀ, a. s.
FIRST WELDING Inc.

EN 1090 Certification in India


Complete Guide for Structural Steel Export Manufacturers

Prepared By

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EN 1090 Certification: Executive Overview

What is EN 1090 Certification?

EN 1090 is a European standard that governs the design, fabrication and conformity assessment of steel and aluminium structures.

Manufacturers supplying structural components to the European Economic Area (EEA) must comply with EN 1090 requirements and implement Factory Production Control (FPC) systems to obtain CE Marking.

The standard helps ensure structural integrity, welding quality, traceability and compliance with European construction regulations.

Why EN 1090 Matters for Indian Manufacturers

The growing need for manufacturers of fabricated steel structures, rail equipment, bridges and heavy engineering goods in India who sell their products to European countries is now EN 1090 certification.

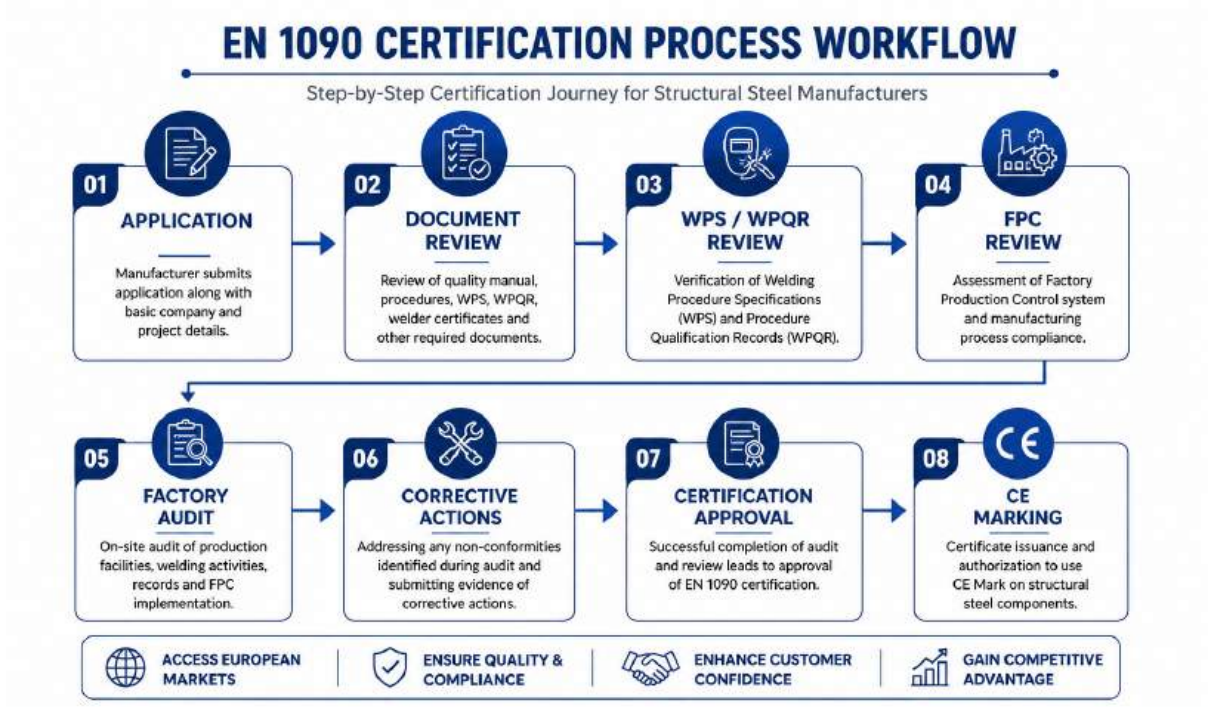
Key Advantages

- Entry into European Markets
- CE Certification
- Better Quality Management
- Greater Customer Satisfaction
- Advantage in International Tender Processes

A Glance : EN 15085 Certification

Requirement	Description
Standard	EN 1090
Scope	Steel & Aluminium Structures
Mandatory for CE Marking	Yes

Factory Audit	Required
Welding Qualification	Required
FPC Implementation	Required



Understanding EN 1090 Execution Classes

Execution Class	Typical Applications	Risk Level
EX 1	Agricultural Buildings	Low
EX 2	Commercial Buildings	Medium
EX 3	Bridges & Industrial Structures	High
EX 4	Critical Infrastructure	Very High

EN 1090 vs ISO 3834

Feature	EN 1090	ISO 3834
CE Marking	Yes	No
Structural Steel	Yes	Indirect
Welding Quality	Yes	Yes
Factory Audit	Yes	Yes
European Market Access	Yes	Supports

Industry Insights & Market Trends

Growing Demand for EN 1090 Certification

The globalization trend in the construction industry, infrastructure, railways, and heavy engineering has contributed greatly to the increased need for internationally recognized certification standards. Structural steel and aluminum component manufacturers serving markets in Europe have started using EN 1090 certifications to prove their adherence to regulatory standards.

There are several reasons why EN 1090 certifications are experiencing greater acceptance:

- ✓ Increase in international construction activities
- ✓ Higher demand for CE marked products
- ✓ Increased emphasis on welding quality control
- ✓ Higher regulatory compliance demands
- ✓ Increasing client demand for quality assurance and traceability

With global supply chain dynamics changing, companies holding EN 1090 certifications become more competitive when participating in export-related ventures.

Industry Trends

Industry Trend	Impact on Manufacturers
Growing European Infrastructure Projects	Increased demand for certified suppliers
Stricter Quality Requirements	Greater focus on welding quality systems
Export Market Expansion	Higher need for EN 1090 compliance
Digital Documentation & Traceability	Improved quality control and audit readiness
Sustainability Initiatives	Enhanced process efficiency and compliance

Understanding the EN 1090 Certification Process

EN 1090 Certification is a key requirement for manufacturers of structural steel and aluminium components seeking access to European markets. The certification confirms that a company has implemented effective production controls, qualified welding procedures, and quality management practices that meet European standards.

The assessment process includes document review, Factory Production Control (FPC) evaluation, welding qualification verification, and factory audits. Successfully obtaining EN 1090 Certification enables

manufacturers to apply CE Marking, improve customer confidence, and expand international business opportunities.

The following workflow outlines the main stages involved in achieving EN 1090 Certification.

EN 1090 Certification Process



Real Project Examples

EN 1090 certification is widely applied across projects involving load-bearing steel and aluminium structures. The standard helps ensure that fabricated components meet quality, safety, and traceability requirements throughout the manufacturing process.

Typical applications where EN 1090 certification plays a critical role in ensuring compliance, quality and market access.

 <p>Commercial Building Construction</p> <p>EN 1090 certification supports structural steel used in office buildings, malls, airports and commercial facilities.</p> <p>Requirement: CE Marking Focus Areas:</p> <ul style="list-style-type: none">• FPC• WPQR• Material Traceability	 <p>Industrial Facilities</p> <p>Manufacturing plants, warehouses, and process industries require compliant fabricated steel structures.</p> <p>Requirement Manufacturing Compliance Focus Areas:</p> <ul style="list-style-type: none">• FPC Implementation• Documentation• Internal Audits	 <p>Bridge & Infrastructure Projects</p> <p>Steel bridges and infrastructure projects require documented quality control and CE compliance.</p> <p>Requirement: Execution Class Compliance Focus Areas:</p> <ul style="list-style-type: none">• Welding Quality• Inspection Records• Traceability
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These examples are illustrative scenarios demonstrating common EN 1090 certification requirements across different industries.

Expert Insight

Manufacturers that establish robust Factory Production Control systems, maintain qualified welding procedures, and implement effective traceability practices are generally better prepared for EN 1090 certification assessments and international market requirements.

Common Challenges Faced by Steel Fabricators During EN 1090 Certification

There exist quite a number of challenges related to compliance in terms of EN 1090 certification faced by most steel fabricators. It is critical to identify such problems and mitigate them before initiating the process of certification. Knowledge of some of the gaps in the process will enhance the effectiveness of the quality system and help organizations become well prepared to meet Factory Production Control

requirements.

1. Lack of WPQR

WPQR indicates that welding procedure is qualified in accordance with the relevant standards. A lot of steel fabricators have either no welding procedure qualification record at all or a qualified record that has expired.

Implications:

- Audit non-conformity
- Delay in certification
- Expenses incurred in re-qualification

2. Absence of WPS

WPS serves as the basis on which high-quality welds are made. If there exists lack of any relevant data or outdated Welding Procedure Specification, then it might create inconsistencies in the entire welding process.

Implications:

- Inconsistency
- Quality issues

3. Welder Qualifications Problem

According to EN 1090, a welder must be appropriately qualified and the certification should be within its validity period. Expired or inadequate qualifications are frequently highlighted during audits.

Impact:

- Observations in Audits
- Non-compliance with production standards
- Need for qualifications

4. Poor Traceability Practices

Tracing material flow and documentation is important for proving compliance. Insufficient documentation of materials can complicate

traceability through the production process.

Impact:

- Problems demonstrating compliance
- Observations in Audits
- Loss of customer trust

5. Weaknesses in the FPC Procedure Documentation

The FPC procedure is critical for meeting the EN 1090 standard. There are difficulties with procedures, missing documents or lack of implementation.

Impact:

- Critical observations in Audits
- Delays in certification
- More corrective action requests

Best Practices to Avoid Certification Delays

- ✓ Keep WPQR and WPS documents up to date
- ✓ Ensure validity of welders' qualifications
- ✓ Establish effective traceability system for materials
- ✓ Routinely assess FPC and quality documents
- ✓ Perform internal audits before undergoing certification audit

Through preemptive actions aimed at overcoming these typical issues, steel fabricators can benefit from improved certification process, successful EN 1090 compliance, and better positioning in global marketplaces.

Why Choose PRVÁ ZVÁRAČSKÁ, a. s. | First Welding Certification Inc.

Your Trusted Partner for EN 1090 Certification

PRVÁ ZVÁRAČSKÁ, a. s. (PZ) is an internationally recognized certification body headquartered in Slovakia, supporting manufacturers across the globe in achieving compliance with European welding and structural steel standards. Through First Welding Certification Inc., our India operations provide professional certification, inspection, auditing and technical support services for organizations seeking access to international markets.

Our Services

- ✓ EN 1090 Certification
- ✓ EN 15085 Certification
- ✓ EN ISO 3834 Certification
- ✓ EN 10025-1 Certification
- ✓ (SPVD)2014/29/EU
- ✓ (PED)2014/68/EU
- ✓ EN 10204 3.2 Certification
- ✓ (SPVD)2014/29/EU
- ✓ Welding Procedure Qualification (WPQR)
- ✓ ISO 9712 Certification
- ✓ Factory Production Control (FPC) Assessment
- ✓ CE Marking Support
- ✓ Technical Audits and Gap Assessments

Why Manufacturers Choose Us

- International Certification Expertise
- Experienced Technical Auditors
- Industry-Specific Knowledge
- Transparent Certification Process
- Global Recognition
- Dedicated Customer Support

Need EN 1090 Certification for Your Organization?

Contact our technical team today to discuss your EN 1090 certification requirements and receive guidance on achieving compliance efficiently.

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International Certification Body for Welding, Structural Steel and CE
Marking Compliance