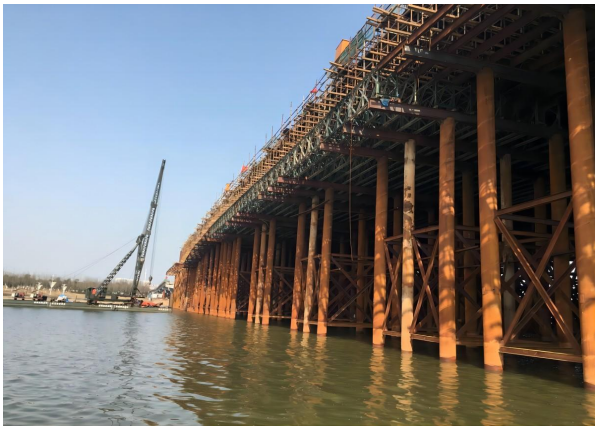


STRUCTURAL STEEL PIPE

Structural steel pipe is a hollow tubular section used in construction and engineering load applications. Manufactured by seamless or welded processes (ERW/SAW) with a high strength-to-light ratio and excellent torsional resistance. Due to its durability and design flexibility, it is widely used in building frames, bridges, industrial supports, and infrastructure. With proper corrosion protection, a service life of more than 30 years can be achieved.



- **Outside Diameter:** \varnothing 21.3mm - 2000mm (1" - 78")
- **Wall Thickness:** 1.0 - 50mm (SCH10 - SCH160)
- **Quality Standards:** ASTM、 EN、 ISO、 JIS、 GB、 AS/NZS
- **Length:** 3 - 18m (10" - 60")
- **Shapes:** Round, Square, Rectangular, Custom Sections

Specification

Parameters	Typical range	Extreme range	Standard basis	Engineering constraints
Outside diameter	\varnothing 114.3mm~ \varnothing 508mm (4"~20")	\varnothing 21.3mm~ \varnothing 1626mm (1/2"~64")	ASTM A500, EN 10219	>1200mm often requires SAW process; >18m length transport limited
Wall thickness	4.78mm~12.7mm (SCH40-STD)	1.65mm (SCH10)~25mm (XXS)	ASTM A53, GB/T 3094	Thin wall (<3mm) limited to low-load applications; Thick wall requires specific welding procedures
Length	12m (standard)	5m (special) ~ 18m	Project Specs	>12m pipes require specialized handling/transport; Site splicing common for longer spans

STRUCTURAL STEEL PIPE Specification Range Reference Table

Classification	Standard	Positioning	Applicability
General Structural	ASTM A500	US standard for structural tubing	Primary standard for building frames, trusses, supports
Cold Formed SHS	EN 10219	European cold-formed hollow sections	Widely used in architectural and structural applications across EU/UK
Hot Formed SHS	EN 10210	European hot-finished hollow sections	Higher strength/stress applications, better weldability
Piling	ASTM A252, EN 10248	Foundation piles & retaining walls	Driven piles, micropiles, soldier piles
Regional Standard	GB/T 3094, GB 50981	China structural & seismic design	Mandatory for building structures in China, seismic zones
High Strength/Lines	API 5L, ASTM A106	Line pipe used structurally	Offshore platforms, heavy industrial structures, pipe racks

STRUCTURAL STEEL PIPE Standards and Applications Comparison Table