

EN 10217 P235

- ALLLAND Production Standards Overview



Definition and Applications

1. Definition

EN 10217 P235 Welded Steel Pipe is a non-alloy carbon steel welded pipe designed for pressure applications according to the European standard EN 10217. It offers reliable mechanical properties, good weldability, and excellent dimensional accuracy for use in pressure systems, industrial pipelines, and mechanical applications.

ALLLAND supplies EN 10217 P235 welded steel pipes manufactured with advanced welding technology and strict quality control procedures to ensure compliance with European standards and international project requirements.

2. ALLLAND EN 10217 P235 Steel Pipe Dimensions

Item	Specification
Standard	EN 10217
Grade	P235TR1 / P235TR2
Product Type	Welded Steel Pipe
Manufacturing Process	HFW / ERW / SAW
Material	Non-alloy Carbon Steel
Pipe Type	Circular Welded Pipe
Outside Diameter	10.2–660 mm
Wall Thickness	1.6–40 mm
Length	6 m / 12 m / Customized
Surface	Black, Galvanized, Coated

3. Standard Classification

EN 10217 P235 Pipe Grades

EN 10217 includes different welded steel pipe grades for pressure applications. The P235 series is commonly supplied in the following grades:

Grade	Standard	Application
P235TR1	EN 10217-1	Pressure pipes at room temperature, general applications
P235TR2	EN 10217-1	Pressure pipes requiring additional impact testing
P235GH	EN 10217-2 / EN 10217-5	High-temperature pressure applications

Note: ALLLAND can supply corresponding grades according to project requirements and applicable regulations.

4. Application

EN 10217 P235 Steel Pipes are widely used for pressure and industrial applications requiring reliable strength and weldability. They are commonly applied in boiler systems, heat exchangers, pressure equipment, compressed air systems, water pipelines, industrial fluid transportation, and mechanical engineering projects. With stable mechanical properties and excellent fabrication performance, P235 welded pipes provide a dependable solution for medium-pressure applications.

Critical Tolerances

EN 10217 P235 welded pipes require strict control of diameter, wall thickness, length, and straightness to ensure safe operation in pressure applications.

Item	Tolerance
Outside Diameter	±1% (Minimum ±0.5 mm)
Wall Thickness	±10%
Length	+50 mm / -0 mm
Straightness	≤0.2% of pipe length
Pipe End	Beveled or Plain End

Specific tolerances can be customized according to customer requirements.

Chemical and Mechanical Properties

1. Chemical Composition

EN 10217 P235TR1 / P235TR2

Grade	C (Max)	Si (Max)	Mn (Max)	P (Max)	S (Max)
P235TR1	0.16%	0.35%	1.20%	0.025%	0.020%

Grade	C (Max)	Si (Max)	Mn (Max)	P (Max)	S (Max)
P235TR2	0.16%	0.35%	1.20%	0.025%	0.020%

2. Mechanical Properties

Grade	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation (%)
P235TR1	≥235	360–500	≥25
P235TR2	≥235	360–500	≥25

Dimension Specifications Table

Outside Diameter (mm)	Wall Thickness (mm)	Approx. Weight (kg/m)
21.3	2.0	0.96
26.9	2.0	1.22
33.7	2.0–3.2	1.54–2.29
42.4	2.0–4.0	1.95–3.79
48.3	2.0–5.0	2.25–5.40
60.3	2.0–6.3	2.82–8.39
76.1	2.0–6.3	3.58–9.03
88.9	2.0–8.0	4.22–16.70
101.6	2.0–8.0	4.85–18.70
114.3	2.0–10.0	5.49–26.80
139.7	3.0–10.0	10.10–31.20
168.3	3.2–12.5	13.00–49.10
193.7	4.0–12.5	18.70–56.20
219.1	4.0–16.0	21.00–82.80
244.5	5.0–16.0	29.10–93.10
273.0	5.0–20.0	33.10–129.00
323.9	6.0–25.0	47.10–193.00
355.6	6.0–25.0	51.80–211.00
406.4	6.0–30.0	59.70–291.00
457.0	8.0–30.0	88.00–327.00
508.0	8.0–40.0	98.80–487.00
559.0	10.0–40.0	135.00–538.00
610.0	10.0–40.0	147.00–589.00
660.0	12.0–40.0	190.00–638.00

Note: Dimensions above represent typical EN 10217 P235 welded steel pipe sizes. ALLLAND can manufacture customized OD, wall thickness, length, and surface coating options based on customer specifications.

Quality Control

ALLLAND EN 10217 P235 Welded Pipes undergo comprehensive inspections:

- ✓ Chemical Composition Test
- ✓ Tensile Test
- ✓ Hydrostatic Test
- ✓ Weld Seam Inspection
- ✓ Ultrasonic Testing (UT)
- ✓ Dimensional Inspection
- ✓ Visual Inspection
- ✓ EN 10204 3.1 Material Certificate

ALLLAND EN 10217 P235 Product Images



The image shows steel pipes actually produced by our company