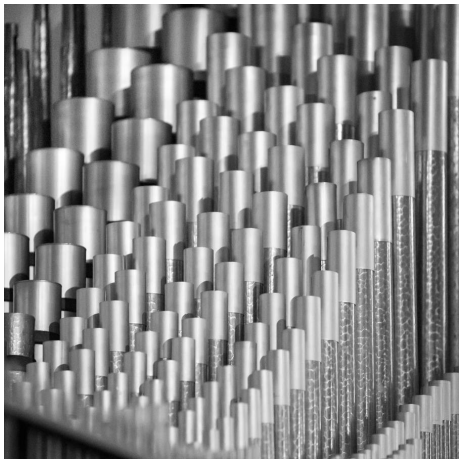
**ALLOY STEEL** Advanced Materials. Engineered for Performance.

# A335 P12 Seamless Pipe



Alloy Steel | ASTM / ASME: A335 / SA335 Grade P12 | EN: 13CrMo4-5 / 1.7335 | Fittings / flanges: A234 WP12 / A182 F12

1Cr-0.5Mo seamless pipe. The economical Cr-Mo pipe grade for boiler feed, steam and hot process service up to around 540 C, and the usual partner to SA387 Grade 12 plate.

**Stock status: Mill indent - Typical lead time: 4 - 8 weeks mill indent**

## Key features

- Seamless, normalised and tempered to ASME SA335
- Creep rupture strength for long term elevated temperature service
- Matched fittings (A234 WP) and flanges (A182 F) available from one source
- Hardness, hydro and ultrasonic test reports with every heat

## Available forms & sizes

| Form | Size range |
|---|---|
| Seamless Pipes & Tubes | 1/2" - 24" NB, SCH 40 - SCH 160 / XXS |
| Fittings | 1/2" - 24" butt weld fittings, WP11 / WP22 / WP91 |
| Flanges | 1/2" - 24", 150# - 2500#, F11 / F12 / F22 / F5 / F9 / F91 |

## Chemical composition (%)

| Element | Min | Max |
|---|---|---|
| C | 0.05 | 0.17 |
| Cr | 0.80 | 1.15 |
| Mo | 0.45 | 0.60 |
| Si | 0.15 | 0.40 |
| Mn | 0.40 | 0.65 |

## Mechanical properties

| Property | Value | Unit |
|---|---|---|
| Yield Strength (0.2%) | 220 min | MPa |
| Tensile Strength | 415 min | MPa |

| Property | Value | Unit |
|---|---|---|
| Elongation | 20 min (longitudinal) | % |
| Condition | Normalised and tempered, seamless | - |

## Physical properties

| Property | Value | Unit |
|---|---|---|
| Density | 7.85 | g/cm3 |
| Max Service Temperature | 550 - 650 depending on grade | C |

## Standards

ASTM A335 / ASME SA335, ASTM A234 (fittings), ASTM A182 (flanges), EN 10216-2, EN 10204 3.1 / 3.2

## Equivalent grades

13CrMo4-5, 1.7335, WP12, F12

## Industries served

Power Generation, Petrochemical, Refining, Oil & Gas, Fertiliser

## Typical applications

- Main steam and hot reheat piping
- Superheater and reheater headers
- Refinery hot wall piping and heater coils
- High temperature process lines

Live datasheet