

1.4547 (254 SMO)

Super-austenitic stainless steel · Material no. 1.4547

1.4547 (254 SMO) is a 6-Mo super-austenite with very high chloride and pitting resistance (PREN > 40) – for seawater and the most aggressive chemicals.

1.4547 MATERIAL NO.	≥ 300 MPa YIELD STRENGTH RP0.2	650–850 MPa TENSILE STRENGTH RM	highly corrosion-resistant SERVICE TEMP.
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Application

- Seawater and offshore technology
- Flue-gas cleaning and desulphurisation
- Aggressive chloride-bearing media

Chemical composition (typical, wt.-%, per EN)

Element	Content (%)
C	≤ 0.020
Cr	19.5–20.5
Ni	17.5–18.5
Mo	6.0–6.5
N	0.18–0.25
Cu	0.5–1.0

Mechanical properties (typical at RT, per EN)

Property	Value
Yield strength Rp0.2	≥ 300 MPa
Tensile strength Rm	650–850 MPa
Elongation A	≥ 35 %

Standards & supply

Topic	Detail
Standards	EN 10216-5, EN 10088

Topic	Detail
ASME/ASTM equivalent	~ UNS S31254
Short name / aka	X1CrNiMoCuN20-18-7 · 254 SMO
Product forms	Pipes, flanges, fittings – seamless/welded, EN 10204 3.1/3.2 mill certificate

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All data are typical values per the relevant EN standards for first orientation – without warranty. The applicable standard and the mill certificate of the delivery are decisive.