

1.4435

Austenitic stainless steel · Material no. 1.4435

1.4435 is a higher-alloyed 316L stainless steel with increased nickel and molybdenum – even more chloride-resistant, common in pharma and ultra-pure media.

1.4435

MATERIAL NO.

≥ 200 MPa

YIELD STRENGTH RP0.2

500–700 MPa

TENSILE STRENGTH RM

creep-resistant to
~550 °C · tough to
cryogenic

SERVICE TEMP.

Application

- Pharma, bio and ultra-pure media plants
- Chemicals with high chloride load
- Welded apparatus and piping

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

Element	Content (%)
C	≤ 0.030
Si	≤ 1.00
Mn	≤ 2.00
Cr	17.0–19.0
Ni	12.5–15.0
Mo	2.50–3.00
N	≤ 0.11

Mechanical properties (typical at RT, per EN)

Property	Value
Yield strength Rp0.2	≥ 200 MPa
Tensile strength Rm	500–700 MPa
Elongation A	≥ 40 %

Standards & supply

Topic	Detail
Standards	EN 10216-5, EN 10088
ASME/ASTM equivalent	~ AISI 316L
Short name / aka	X2CrNiMo18-14-3 · 316L (hoch-Mo)
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.