

16Mo3

Creep-resistant alloy steel · Material no. 1.5415

16Mo3 is a molybdenum-alloyed creep-resistant steel – the classic grade for boiler tubes, superheaters, live-steam and header tubes. Molybdenum improves high-temperature strength over unalloyed steel.

1.5415 MATERIAL NO.	≥ 275 MPa YIELD STRENGTH RP0.2 (T ≤ 16 MM)	440–590 MPa TENSILE STRENGTH RM	~ 530 °C SERVICE TEMP.
-------------------------------	---	---	----------------------------------

Application

- Boiler tubes and superheater coils
- Live-steam lines and headers
- Heat exchangers, furnace and process tubes
- Oil & petrochemical industry

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

Element	Content (%)
C	0.12–0.20
Si	≤ 0.35
Mn	0.40–0.90
P	≤ 0.025
S	≤ 0.010
Cr	≤ 0.30
Mo	0.25–0.35
Ni	≤ 0.30

Mechanical properties (typical at RT, per EN)

Property	Value
Yield strength Rp0.2 (t ≤ 16 mm)	≥ 275 MPa
Tensile strength Rm	440–590 MPa
Elongation A	≥ 24 %
Impact energy KV	≥ 40 J

Standards & supply

Topic	Detail
Standards	EN 10216-2 (tubes), EN 10028-2 (plate)
ASME/ASTM equivalent	~ ASTM A335 P1 · A182 F1
Short name / aka	Molybdänstahl · Kesselrohr
Product forms	Pipes, flanges, fittings – seamless/welded, EN 10204 3.1/3.2 mill certificate

ROHRLINE · Gewerbering 19/1/6, 3484 Grafenwörth, Austria · +43 (0) 664 1203063 · office@rohrline.at · rohrline.at/en/werkstoff-16mo3.html

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.