

### Standards

Material No.	EN Designation	AISI/SAE	UNS
1.4436	X3CrNiMo17-13-3	316	S31600

### Description

1.4436 / AISI 316 is an austenitic chromium-nickel-molybdenum stainless steel.

### Special properties

1.4436 is a higher alloyed version of 1.4401 and is specified when the corrosion resistance of 1.4401 is no longer considered to be sufficient.

### Chemical Composition

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
≤ 0.05	1.00	2.00	0.045	0.015
Cr %	Mo %	Ni %	N %	
16.5-18.5	2.50-3.00	10.5-13.0	≤ 0.11	

### Mechanical Properties 20°C

Hardness HB 30 ≤ HB	0.2% Yield strength R <sub>p</sub> ≥ N/mm <sup>2</sup>	Tensile strength R <sub>m</sub> N/mm <sup>2</sup>	Elongation A <sub>5</sub> ≥ %	Modulus of elasticity kN/mm <sup>2</sup>
215	200	500-700	40/30	200

### Physical Properties 20°C

Density g/cm <sup>3</sup>	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm <sup>2</sup> /m
8	500	15	0.75

### Suitable welding filler materials

1.4403; 1.4430; 1.4576

### Application

Cellulose industry, textile industry

### Available forms for 1.4436 / AISI 316

Sheets/Plates	Bars	Wire	Tubes/Pipes	Fittings	Forged / cast parts	Finished part (drawing)
						