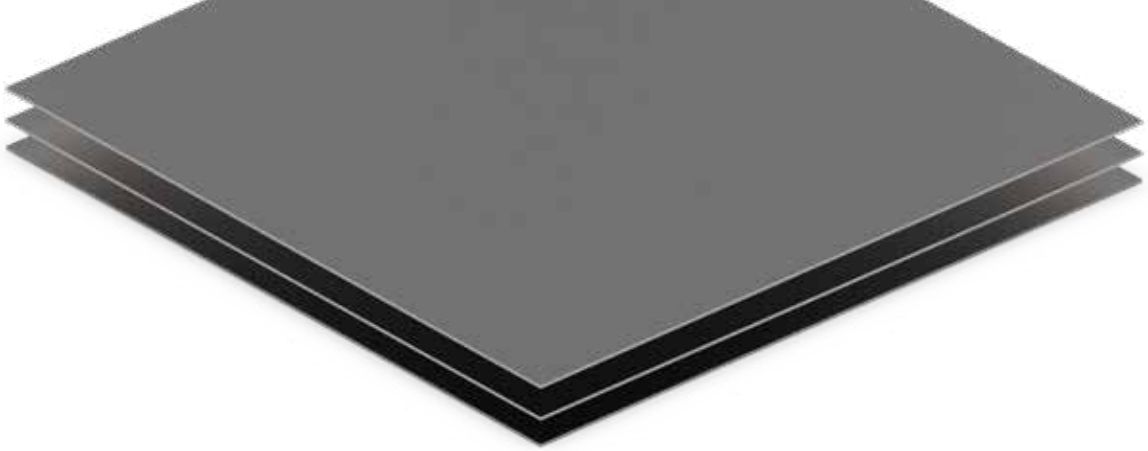
TG Steels

13 - 8 Mo

PLATE AND SHEET



Applications

Petrochemical Components, Aircraft Structural parts, Fittings, Fasteners, Valves

Features

- 13-8 Mo is a martensitic precipitation-hardening stainless steel that conforms to the AMS 5629, AMS 5864 specifications.
- This material is characterised by excellent strength, corrosion resistance, and toughness at both room and elevated temperatures.
- 13-8 Mo *(UNS S13800)* is often used in aerospace, chemical processing, and power generation applications where high strength and corrosion resistance are essential. The material is not particularly easy to work with due to its high strength and toughness, which can make cutting and machining difficult.
- 13-8 Mo stainless steel is produced by Vacuum Induction Melting *(VIM)* followed by Vacuum Arc Remelting *(VAR)*.

Standard

AMS 5629

Material

13-8 Mo / UNS S13800 / W.Nr 1.4534

Chemical composition *(Nominal)* %

Grade	C	Mn	Si	P	S	Cr
13-8 Mo	0.05 max	0.10 max	0.10 max	0.01 max	0.008 max	12.25-13.25
	Ni	Al	N	Mo	Fe	
	7.50-8.50	0.90-1.35	0.0 max	2.00-2.50	Bal	

Physical properties

Density	7.76 g/cm^3

Size range

Product	Material	WD Range	Length Range	WT Range
PLATE & SHEET	13-8 Mo	1000~2000mm	2000~6000mm	0.5~150mm

Mechanical properties

Condition	Tensile Strength, min, MPa	Yield Strength, min. *(0.2 % offset)*, min, MPa	Elongation in 2 in. or 50 mm *(or 4D)*, %	Reduction of Area, min,%	Hardness, HRC
H950	1517	1413	10	45	45
H1000	1413	1310	10	50	43
H1025	1276	1207	11	50	41
H1050	1207	1138	12	50	40
H1100	1034	931	14	50	34
H1150	931	621	14	50	30