S+D METALS

A BIBUS GROUP COMPANY

Technical datasheet

PH 13-8 MO | 1.4534

Major specifications

1.4534.9	UNS S13800	AMS 5629

Available product forms

Round bars in 1.4534.9, Condition A, solution annealed
The current stock range can be found on www.sd-metals.com.
Further dimensions available upon request.
Use our Service Centre to have the available sizes cut to your desired dimensions.

Key features

PH 13-8 Mo is a stainless steel with approximately 13% chromium and 8% nickel content that has good resistance to corrosion in general as well as to stress corrosion cracking. PH 13-8 Mo offers better mechanical properties in demanding environmental conditions in comparison to other materials based on iron. Precise control of the microstructure is achieved through vacuum melting and remelting. Medium to high strength can be achieved through precipitation hardening aging treatments.

Applications

- airframe structural components
- water jet cutting equipment
- injection molding equipment
- motorsport components
- fasteners
- valves
- fittings

Chemical properties

Composition - limits in %

Cr	Ni	Mo	Al	Mn	N	Si	C	P	Fe
12,25 - 13,25	7,5 - 8,5	2 - 2,5	0,9 - 1,35	max. 0,20	max. 0,10	max. 0,10	max. 0,05	max. 0,01	Rest

Physical and thermal properties

Density	7,76 g/cm³
Melting temperature	1404 °C
Thermal conductivity at 20°C	12,8 W/m • °C
Elongation coefficient at 20-100°C	13 µm/m • °C

Typical mechanical properties (room temperature)

	H950	H1000	H1050
Yield strength	min. 1413 MPa	min. 1310 MPa	min. 1138 MPa
Tensile strength	min. 1517 MPa	min. 1413 MPa	min. 1207 MPa
Elongation	min. 10 %	min. 10 %	min. 12 %

All information is subject to change without notice.
The properties correspond to the material in the heading. They may vary for other specifications.
Please contact us for more details.

Michael Brackenwagen | +49 4174 66 94 -116 | m.brackenwagen@sd-metals.com
Veronika Droßbach | +49 4174 66 94 -117 | v.drossbach@sd-metals.com
S+D METALS GmbH | +49 4174 66 94 -0 | www.sd-metals.com