STAINLESS STEEL

1.4104 (X14CrMoS17)

Excellence in Specialty Steel

Material Designation

1.4104

Standards

DIN EN 10088-3

Chemical Composition Mass-%

	C	Si	Mn	P	S	Cr	Mo
min.	0,10	-	-	-	0,15	15,5	0,20
max.	0,17	0,10	1,50	0,040	0,35	17,5	0,60

Customer specific restrictions upon request.

Properties

Grade 1.4104 is a heat-treatable martensitic chromium steel. Its excellent machinability is achieved through an increased sulphur content, which reduces its corrosion resistance compared to low-sulphur chromium steels (e.g. 1.4016). It offers a reasonable compromise between mechanical properties, machinability and corrosion resistance. 1.4104 exhibits good magnetic properties.

Delivery Condition

- annealed (+A), max. 220 HBW
- quenched and tempered (+QT)

Application Area

Machining of components requiring a high surface finish but with low corrosion resistance requirements.

Typical Applications

- Screws and nuts
- Automotive
- Mechanical engineering
- Electronic applications
- Decorative elements, e.g. kitchen fittings

Mechanical Properties acc. to DIN EN 10088-3

Condition	Diameter [mm]	Yield strength [N/mm²]	Tensile strength [N/mm²]	Elongation [%]
+A	≤ 160	-	≤ 730	-
+QT650	≤ 60	≥ 500	650 - 850	≥ 12
	> 60 - 160	≥ 500	650 - 850	≥ 10

Heat Treatment Guideline values acc. to DIN EN 10088-3

	Temperature [°C]	Cooling medium
Annealing (+A)	750 - 850	Furnace, air
Quenching and tempering (+QT)	950 - 1070 (Hardening) 550 - 650 (Tempering)	Oil, air Air

Quality

- ISO 9001
- ISO 14001
- ISO 50001
- Approvals acc. to standards like ABS, BV, DNV ...
- Customer specific approval certificates

Innovation

- Fully automated ultrasonic testing up to dia. 1000 mm
- CO_2-reduction by innovative heat treatment solutions

Flexibility

- Product range from fine wire to forging
- Directly from stock close at hand

Individuality

- Dimensions
- Tolerances
- Surface qualities
- Delivery conditions

Your personal contact:

BGH Edelstahlwerke GmbH

Am Stahlwerk 1
01705 Freital
+49 351 646-0
www.bgh.de

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