

1.4057 / X17CrNi16-2 / AISI 431 — Corrosion resistant, martensitic

Summary

The steel grade 1.4057 is a stainless, martensitic steel.

Chemical Analysis

	C	Si	Mn	P	S	Cr	Ni
min.	0,12	-	-	-	-	15,00	1,50
max.	0,22	1,00	1,50	0,040	0,015	17,00	2,50

Properties

Tempered, suitable for use up to 400 ° C, good weldability, medium forgeability, poor machinability, good corrosion resistance, suitable for mechanically stressed machine elements due to its high strength.

Application Areas

Good mechanical properties: automotive industry, aviation, mechanical engineering, glass mold making, textile industry, chemical industry.

Use

Injection molds, plain bearing parts, apparatus engineering, compressor construction, compressor impellers, feed pumps, perforated plates, machine parts in paper industry, valve blocks.

International designation

DIN EN 10088	1.4057 X17CrNi16-2
Aisi	AISI 431
UNS	S43100
AFNOR	Z15CrN16-02
SS	2321
UNE	F.3427
B.S.	431S29

Mech. Properties at
Room temperature (QT800)

Rm Tensile Strength	Re Yield point	A Elongation	Z Reduction	KV Impact Strength	Hardness
800-950 N/mm ²	min. 600 N/mm ²	min. 10 % (L) min. 8 % (Q)	Informativ	min. 10 J (L) min. 10 J (Q)	251-299 HB

Mech. Properties at
Room temperature (QT900)

Rm Tensile Strength	Re Yield point	A Elongation	Z Reduction	KV Impact Strength	Hardness
900-1050 N/mm ²	min. 700 N/mm ²	min. 12 %	Informativ	min. 8 J	284-331 HB

Special Features

Stored in QT800 and QT900, 100% US tested.

The forging ratio is min. 3.5

Delivery options

We can saw the material to your required dimensions.

Request/questions:

Do you have a request, or have a question about the material 1.4057?

Contact us!. Our competent staff will gladly help you.

Stahlhandel Gröditz GmbH

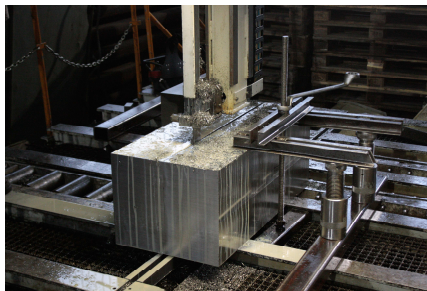
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