



1.4021/AISI 420 +

CONFIDENTIAL

CHEMICAL COMPOSITION [% weight]

C	Si	Mn	P	S	Cr
0.16-0.25	1.00 max	1.50 max	0.040 max	0.030 max	12-14

CHARACTERISTICS AND AREAS OF APPLICATION

Hardenable, corrosion and heat resistant martensitic steel with improved processing features in chip removal machinery.

Used for machine parts, valve and pump parts, cutlery, surgical instruments, steam turbines, mechanical parts, tools, sports goods.

INDICATIVE MECHANICAL PROPERTIES

[ACCORDING TO EN10088-3 AT HARDENED STATE - ROOM TEMPERATURE]

Metallurgical condition	Rm [N/mm ²]	Rp 0.2 [N/mm ²]	A5 [%] min	Indic. hardness [HB] max
Annealed	≤ 850	-	-	260
Quenched QT700	700-950	450 min	10	-

WELDABILITY

Welding must be carried out with great care starting with preheating at 200-250°C followed by immediate annealing at 700-750°C for 6-8 hours. Air cool.

CORROSION RESISTANCE

Good in mid-corrosive environments but slightly lower compared to 1.4006.

Best corrosion resistance at hardened and tempered state and low temperature (200°C) with mirror polished surfaces.

HEAT TREATMENT

- ANNEALING** > 750-800°C/slow cooling
- HARDENING** > 980-1030°C/oil-air
- TEMPERING** > 600-650°C/air

[*] The information on this sheet is of a general nature and reflects the contents of the technical regulations. For any specific request or clarification, please contact Eure inox Quality Department.