



1.4005/AISI 416

CONFIDENTIAL

CHEMICAL COMPOSITION [% weight]

C	Si	Mn	P	S	Cr
0.06-0.15	1.00 max	1.50 max	0.040 max	0.15-0.35	12-14

CHARACTERISTICS AND AREAS OF APPLICATION

Martensitic steel with mechanical properties similar to those of 1.4006 but particularly suitable for processing on automatic chip removal machinery thanks to its high sulphur content. Used for pump and electric motor shafts, valve stems, bolts and nuts, portable firearm parts.

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	≤ 800	-	-	250
Quenched QT650	650-930	450 min	10	-

WELDABILITY

This steel grade is not used for applications requiring welding.

CORROSION RESISTANCE

Good in drinking water, steam, petrol, naphtha, alcohol, ammonia but lower compared to 1.4006

HEAT TREATMENT

- ANNEALING** > 750-800°C/slow cooling
- HARDENING** > 950-1000°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.