



1.4057/AISI 431

CONFIDENTIAL

CHEMICAL COMPOSITION [% weight]

C	Si	Mn	P	S	Cr	Ni
0.12-0.22	1.00 max	1.50 max	0.040 max	0.030 max	15-17	1,50-2,50

CHARACTERISTICS AND AREAS OF APPLICATION

Martensitic, hardenable, corrosion-resistant stainless steel with improved processing features in chip removal machinery.

Used for parts in the shipbuilding and aeronautical, chemical, petrochemical and food industries.

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	≤ 1000	-	-	310
Quenched QT800	800-1050	650 min	9	-

WELDABILITY

Normally not used in processes involving welding.

CORROSION RESISTANCE

Among the martensitic grades, it is the most resistant to corrosion which is also good in a marine atmosphere.

HEAT TREATMENT

- ANNEALING** > 700-750°C/slow cooling
- HARDENING** > 980-1050°C/oil-air
- TEMPERING** > 650-750°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.