



1.4006/AISI 410

CONFIDENTIAL

CHEMICAL COMPOSITION [% weight]

| C | Si | Mn | P | S | Cr |
|-----------|----------|----------|-----------|-----------|-----------|
| 0.08-0.15 | 1.00 max | 1.50 max | 0.040 max | 0.030 max | 11.5-13.5 |

CHARACTERISTICS AND AREAS OF APPLICATION

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

Used for furnace and burner parts operating at temperatures below 650°C, valve and pump parts, oil flanges and fittings.

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 can be welded easily, although pre-heating to at least 200°C is recommended, to remove the fragility of the weld beam. Annealing must be carried out after welding. To obtain appropriate ductility of the weld bead, austenitic steel electrodes must be used.

CORROSION RESISTANCE

Good in mid-corrosive environments (atmosphere, fresh water, water vapour, crude oil, petrol, alcohol, ammonia, foodstuffs, organic solvents), not recommended for use in highly corrosive environments. Improves corrosion resistance in the hardened and tempered state at low temperature (approx. 200°C).

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.