



AISI 416

1.4005

ACX 752

Revision 0- October/16

Chemical Composition:

ACX 752	C	Mn	P	S	Si	Cr	Ni	Mo	N	Cu
EN 1.4005	0,06 – 0,15	1,50	0,040	0,15 – 0,35	1,00	12,0 – 14,0	-	0,60	-	-
AISI 416	≤0,15	≤1,25	≤0,060	≥0,15	≤1,00	12,0 – 14,0	-	(0,60)*	-	-

*May be found

Conditions and Supply Range

EN 10088-3				
Estado de Tratamiento Térmico	0,2% Límite elástico (MPa) min	Resistencia a la Tracción (MPa)	Alargamiento (%) min	
Wire Rod 5,5 – 41,5mm (*)	+A	Max 730		
Wire Rod 5,5 – 41,5mm (*)	+QT 650	450	12	
Bar 4,5 ≤ Ø ≤ 10mm		550	8	
Bar 10 < Ø ≤ 16mm		500	8	
Bar 16 < Ø ≤ 40mm		450	10	

(*) For wire rod, only tensile strength values apply

Standards

EN 10088-3 Stainless steels. Semi-finished products, bars, rods, wire, sections and bright products for general purposes.

ASTM A 484 Stainless steel bars, billets and forgings.

ASTM A 581 Free-machining stainless steel wire and wire rods.

ASTM A 582 Free-machining stainless steel bars

Steel group

Martensitic stainless steel. It is a heat treatable chromium steel. Excellent machinability. The alloy is magnetic in all its conditions.

Applications

Production of screws, nuts, bolts, gears, pinions, valves, and complex shaped axle, small turned and milled metallic pieces, worm drives, leadscrews, screw studs, pieces for pumps and compressor.

Machining and corrosion resistance

It has by far, better machinability properties than the rest of the series 400 martensitic steel, thanks to the addition of sulphur, which causes it to reduce its performance regarding corrosion resistance. Nevertheless, it is resistant to mild corrosive environments, such as drinking water, water steam, organic materials, as well as against several acids and petroleum-derived products.

