



## CHRONIFER® Special 01 austenitic Stainless Steel

Material No.	DIN Abbreviation	AFNOR	AISI/SAE/ASTM	ISO	Euro Standard EN	Others
1.4401	X5CrNiMo17-12-2	Z 6 CND 17.11 Z 7 CND 17.11.02 Z 7 CND 17.12.02	AISI 316 (V4A)		X6CrNiMo17-12-2 10088-3	~ SS 2347 ~ UNS S31600 JIS ~ SUS 316

Distinctive feature & main attribute: a rust- and acid-proof, free cutting chromium-nickel-molybdenum-steel alloy, widely used to meet the requirement of higher resistance to corrosion than the qualities of 1.4301/1.4306, 1.4305. Applicable to welding and polishing.

Use & application range: this alloy is required for the chemical, medical and pharmaceutical industry, dairies and brewery.

CHEMICAL COMPOSITION IN VOLUME PERCENTAGE	C	Si	Mn	P	S	Cr	Mo	Ni	N	Fe
	max. 0.07	max. 1.00	max. 2.00	max. 0.045	max. 0.03	16.50 18.50	2.00 2.50	10.00 13.00	max. 0.11	balance

EXECUTION DELIVERY FORM STANDARD SIZES AVAILABILITY	
	<ul style="list-style-type: none"> <li>Execution in 3 m round bars</li> <li>Standard size in stock: see <a href="#">Product range</a></li> <li>Other sizes on request</li> </ul>

TOLERANCES	
	<ul style="list-style-type: none"> <li>Ø 1.00 – 6.00 mm, cold drawn, ground; ISO <b>h8</b>; surface finish Ra 0.8</li> <li>Tighter tolerances on request</li> </ul>

MECHANICAL PROPERTIES	
	At delivery status: <ul style="list-style-type: none"> <li>Tensile strength (<math>R_m</math>): <b>600 – 980 MPa</b>, size depending</li> </ul>

HEAT TREATMENT	
	<ul style="list-style-type: none"> <li>Soft annealing: 1020 – 1100 °C, cooling in water</li> <li>Hardening and tempering by heat treatment is impossible</li> </ul>

CUTTING RATES	
	<ul style="list-style-type: none"> <li><math>v_c \sim 25 – 30 \text{ m/min}</math>, short-chipping, value depending on the lubrication oil, cutting tools and shape of parts.</li> <li>Cutting oil: e.g. INOX or ORTHO NFX of Motorex</li> </ul>