



## CHRONIFER® Special 35 austenitic Stainless Steel

Material No.	DIN Abbreviation	AFNOR	AISI/SAE/ASTM	ISO	Euro Standard EN	Others
1.4435	X2CrNiMo18-14-3	X2CrNiMo18-14-3 (former Z 3 CND 17.12.03)	AISI 316L		X2CrNiMo18-14-3	NF S 94-090 JIS ~ SUS 316

Distinctive feature & main attribute: a rust- and acid-proof chromium-nickel-molybdenum-steel alloy, well weldable but limited to workability. It shows a higher corrosion resistance than the 300 series.

Use & application range: this alloy matches the watch, food, chemistry, pharmaceutical, paper and textile industries.

REFERENCE ANALYSIS %	C	Si	Mn	P	S	Cr	Mo	Ni	N	Fe
	max. 0.03	max. 1.00	max. 2.00	max. 0.045	max. 0.03	17.00 19.00	2.50 3.00	12.50 14.00	max. 0.10	balance

<b>EXECUTION DELIVERY FORM STANDARD SIZES AVAILABILITY</b>	<ul style="list-style-type: none"> <li>• Execution in 3 m round bars as well as in coils for Escomatic</li> <li>• Standard size in stock: see <a href="#">Product range</a></li> <li>• Other sizes on request</li> </ul>
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<b>TOLERANCES</b>	<ul style="list-style-type: none"> <li>• <math>\varnothing &lt; 2.00</math> mm, cold drawn, polished; ISO <b>h8</b></li> <li>• <math>\varnothing \geq 2.00</math> mm, cold drawn, ground, polished; ISO <b>h7 (h6)</b>; surface finish Ra 0.4 (N5)</li> <li>• Tighter tolerances on request</li> </ul>
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<b>MECHANICAL PROPERTIES</b>	At delivery status: <ul style="list-style-type: none"> <li>• Tensile strength (<math>R_m</math>): <b>800 – 950 MPa</b>, size depending</li> </ul>
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<b>HEAT TREATMENT</b>	<ul style="list-style-type: none"> <li>• Soft annealing: 1050 °C, cooling in water</li> <li>• Hardening and tempering by heat treatment is impossible</li> </ul>
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<b>CUTTING RATES</b>	<ul style="list-style-type: none"> <li>• <math>v_c \sim 25 - 35</math> m/min, long-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>
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