



CHRONIFER®
Special KL
austenitic
Stainless Steel

Material No.	DIN Abbreviation	AFNOR	AISI/SAE/ASTM	ISO	Euro Standard EN	Others
1.4427 So	X12CrNiMoS18-11	Z 3 CNDF 17-13	AISI ~ 316L (+S)			JIS ~ SUS 316F

Distinctive feature & main attribute: a rust- and acid-proof, austenitic chromium-nickel-molybdenum-steel alloy whose sulphur content of 0.10 – 0.14 % maintains a better machinability than 1.4435. Nevertheless, it shows a good corrosion resistance which is higher than the one of the series 304 and 304, but is not very suited for welding.

Use & application range: this quality is deployed in the chemistry, watch, food and textile industries such as machine turning parts.

REFERENCE ANALYSIS %	C	Si	Mn	P	S	Cr	Mo	Ni	Fe
	max. 0.03	max. 1.00	max. 2.00	max. 0.045	0.10 0.14	16.50 18.50	2.00 2.50	12.00 14.00	balance

EXECUTION DELIVERY FORM STANDARD SIZES AVAILABILITY	<ul style="list-style-type: none"> • Execution in 3 m (2 m) round bars as well as in coils for Escomatic • Standard size in stock: see Product range • Other sizes on request
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TOLERANCES	<ul style="list-style-type: none"> • $\varnothing < 2.00$ mm, cold drawn, polished; ISO h8 • $\varnothing \geq 2.00$ mm, cold drawn, ground, polished; ISO h7; surface finish Ra 0.4 (N5) • Coil; ISO fg6 • Tighter tolerances on request
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MECHANICAL PROPERTIES	At delivery status: <ul style="list-style-type: none"> • Tensile strength (R_m): 750 – 1000 MPa, size depending
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HEAT TREATMENT	<ul style="list-style-type: none"> • Soft annealing: 1050 °C, cooling in water • Hardening and tempering by heat treatment is impossible
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CUTTING RATES	<ul style="list-style-type: none"> • $v_c \sim 30 - 50$ m/min, value depending on the lubrication oil, cutting tools and shape of parts. • Cutting oil: e.g. INOX or ORTHO NFX of Motorex
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Modifications will not be adjusted automatically

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