

Stainless steel Axal

- Material**

Material No.	R300003
EN Symbol (short)	CoCr20Ni16Mo7
AISI/SAE	-
UNS	R300003/R300008
ASTM	-
B.S.	-
Alloy	-
Registered Works Label	-
Standards	-

- Chemical Composition¹**

C	Si	Mn	P	S	Cr	Mo	Ni	V
≤ %	≤ %	≤ %	≤ %	≤ %	%	%	%	
0.15	1,2 max.	2,0 max.	0,015 max.	0,015 max.	19,0-21	6,5-7,5	15-16	-
Nb	Ti	Al	Co	Cu	N	Fe		
-	-	-	%	-	≤ %	Balance	-	-
			39-41					

- Thermal Characteristics**

Axal has the ability to be used over a very wide range of temperatures, from 4.2K to about 500°C. Thanks to its Young modulus its very high yield strength and its good fatigue strength.

- Special Characteristics**

Temperature - Range:
520°C

Density kg/dm³:
8.3

Hardness HV
≤ 270

Welding Filler

Not commonly welded

Main fields of Application (depending of specific conditions of use)

Watch industry, medical

- Description**

Axal is an austenitic cobalt-based alloy. It's a non-magnetic steel extremely resistant to corrosion and its behavior in inorganic acids is greatly superior to that of the best stainless steel.