



TIG 312



Standards

AWS 5.9
ER 312

EN ISO 14343-A
W 29 9

W. Nr.
1.4337

Description & applications

Filler material in solid metal sticks for TIG welding of dissimilar steels and for overlay welding of carbon and low-alloy steels . The high Chromium content generates a ferritic-austenitic structure highly resistant to hot cracking and fissuration of the weldment . The high Chromium content also provides a good resistance to high temperature oxidation up to 1050 °C.

Typical chemical composition (%)

C	Mn	Si	Cr	Ni	Mo	S max	P max	Fe
0.10	1.8	0.4	30.0	9.0	0.3	0.03	0.0	Base

Typical mechanical properties of all-weld metal

Rm	Rp 0,2	A5	KV-196°C
740 MPα	520 MPα	25 %	30 J

Operating parameters

Shielding gas recommendations :

EN ISO 14175 I1:100 % Argon/ 6-12 l/mn

Root: Argon,Nitrogen/3-6l/mn

