

Datasheet SM17

TALWELD NM253

Comparable specifications

ASTM: UNS S30815 Material No.: 1.4835

EN designation: X9CrNiSiNCe21-11-2

Description and applications*

* Illustrative, not-exhaustive list

This filer wire is designed as an austenitic chromium-nickel steel alloyed with nitrogen and Rare Earth Metals (REM), which include cerium.

Cerium combined with silicon improves the oxidation resistance and erosion-corrosion resistance in oxidizing and neutral environments, whereas the nitrogen allows superior strength at high temperatures. Therefore, this filler wire shows excellent resistance to high temperatures (most suitable temperature range is 850 - 1100 °C), high creep strength, very good resistance to isothermal and, particularly, cyclic oxidation.

Not suitable for applications exposed to wet corrosion.

Prior to welding, it is recommended to carefully brush or ground black plates and previous weld beats.

Weldable base materials*

1.4835 (Outokumpu 253 MA ®), 1.4818 (Outokumpu 153 MA ®)

All-weld metal mech. properties*

* For reference only (typical) values

Tensile strength (Rm): ~ 680 N/mm² Elongation: ~ 38% (A₅) Yield Strength (Rp_{0.2}): ~ 440 N/mm² Charpy-V Impact (R.T.): ~ 130 J

Chemical composition*

* For reference only values

C	Mn	Si	S	P	Ni	Cr	N	Ce
0.05	max	1.40	max	max	10.00	20.00	0.12	0.03
0.12	1.00	2.50	0.015	0.045	12.00	22.00	0.20	0.08

Lot classification

Class S3 acc. to EN ISO 14344.

Diam.	15 kg Spool				
0.9mm	NMM25309				
1.2mm	NMM25312				

TALARC Pty Ltd 10-16 Syme St Brunswick, Vic 3056

Ph. +61 3 9388 0588 Fax: +61 3 9388 0710 W: www.talarc.com.au E: sales@talarc.com

^{*} Illustrative, not-exhaustive list