SUPERNOVA 750®

NOVAMETAL Wire UK Ltd

UNS N08926 | WN 1.4529

PRE: 43.0 - 46.0

Supernova 750®

Supernova 750® is a tried and tested cost-effective solution for extremely sour gas and oil well conditions with high concentrations of CO_2, H_2S and chloride.

Manufactured in Switzerland and certified to 9001: 2008 all Supernova Slicklines are fully traceable, 100% Weld Free, 100% Eddy Current Tested and Wrap Tested.

All are produced with a consistent, tightly controlled surface finish, wire helix and wire cast for optimal spooling and in-service performance.

Suitable for service in Oil, Gas and Geothermal wells, Supernova 750® is a proven alternative to GD31Mo™, SUPA75©, Sanicro 26Mo, UGI© Slick B26 and Zapp 26-6Mo.

Key Characteristics

- High mechanical strength providing high breaking loads
- Very good resistance to crevice and stress corrosion cracking (SCC) in high concentrations of H_2S, Chloride and CO_2 environments (H_2S partial pressure up to 100 psi, CO_2 partial pressure up to 500 psi)
- Outstanding resistance to chloride induced stress corrosion cracking
- Very good resistance to pitting in aggressive chloride-containing environments and to general corrosion
- Good resistance to abrasion and erosion
- Able to operate in service temperatures of up to 250°C
- Excellent ductility and impact strength
- Non magnetic

Key Data

Standard Diameter[1]	Min Breaking Load	Min Tensile		Nominal Weight	Minimum Slickline Stretch[2]	Minimum Sheave Diameter
Inches	lbf	N/mm^2	Ksi	lbs/ 1000ft	Inch/100ft/ 100lb	Inches
0.092	1580	1640	238	23.31	0.79	11
0.108	2170	1635	237	32.00	0.58	13
0.125	2950	1630	236	42.90	0.43	15
0.140	3480	1560	226	54.10	0.34	17
0.160	4440	1530	221	70.00	0.26	20

[1] Tolerance +/-0.001" - other diameters are available on request. [2] Weight of tool string plus weight of wire of the drum.

Standard Lengths	15,000ft	18,000ft	6,000m	20,000ft	7,000m	25,000ft	8,000m	30,000ft

Other lengths are available on request.

Chemical Composition

Element		C	Si	Mn	P	S	Cr	Mo	Cu	Ni	N
Weight %	Min	-	-	-	-	-	19.50	6.00	0.80	24.50	0.15
	Max	0.02	0.50	1.00	0.03	0.005	21.00	6.70	1.00	26.00	0.20

Corrosion Resistance

PRE Number (PRE)

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PRE = Cr + 3.3 x Mo + 16 x N

Pitting Resistance Equivalent numbers (PRE) are a way of comparing the pitting corrosion resistance of various stainless steels based on the levels of chromium, molybdenum and nitrogen they contain with the most frequently used formula and Novametal's preferred method for calculating PRE numbers being :

PRE = Chromium + 3.3 x Molybdenum + 16 x Nitrogen.

Some suppliers may use a factor of 30 x N, resulting in a marginally inflated PRE Number.

Grade Selection

To ensure you obtain the optimal slickline for your requirements we will be pleased to make a recommendation on the most cost-effective material selection. Well environment details may be sent by email to **slickline@novametal.co.uk**

Physical Properties

Density	g/cm^3	8.1
Coefficient of Linear Expansion	µm/m/°C	15.0
Thermal Conductivity	W/m.K	12.0

Specific Heat	j/kg.K	415
Resistivity	µOhm Cm	96
Magnetic Permeability		1.01

Safe Working Loads (SWL)

Novametal recommends a maximum safe working load of 60% based on the published Minimum Break Load.

Where permitted by operating procedures and contractual constraints, the SWL may be set at 60% of the certified Actual Breaking Load.

Anyone wishing to operate with a higher SWL is encouraged to contact Novametal direct before doing so.

Other Mechanical Properties

Yield Strength	(0.2% P.S.)	80 -90% UTS
Elastic Strength		22 – 28% UTS
Minimum Wraps		8

Certification & Packaging

Reel specific Test Certificates are issued for all slicklines giving alloy chemistry, breaking load and key mechanical properties. All Supernova Slicklines are supplied on metal reels in individual treated timber crates for easy handling and safe storage.

Other Slickline Grades Available

SUPERNOVA 250® SUPERNOVA 316® SUPERNOVA 350® SUPERNOVA 400®