

GD31Mo™ Slickline

Rev. 29-MAY-18

UNS N08926

GD31Mo™ is a super austenitic stainless steel with increased molybdenum and nitrogen suitable for extremely sour gas and oil well conditions with high concentrations of CO₂, H₂S and chlorides. GD31Mo™ is CWI's "go to" alloy, characterized by excellent resistance to pitting and crevice corrosion in H₂S containing sour environments, with outstanding resistance to chloride ion stress corrosion cracking. GD31Mo™ has excellent general corrosion resistance to a wide range of chemical media, both oxidizing and reducing, including sulphuric acid, sour gas, seawater, salts and organic acids. GD31Mo™ slicklines are available in continuous weld free lengths up to 30,000+ ft (9145 m). Every GD31Mo™ line is 100% NDT and inspected. GD™ slicklines are shipped on steel reels. Custom lengths and diameters are available.

Chemical Compositional Range (wt. %)

	Ni	Cr	Mo	Cu	N	Mn	P	S	C	PRE = %Cr+3.3 x % Mo + 16 x %N
Min	24.0	20.0	6.0	0.5	0.15					
Max	26.0	21.0	6.8	1.0	0.25	2.00	0.03	0.005	0.02	PRE = 42-47

Physical Properties

Density	8.10 g/ cm ³	0.293 lbs./in ³
Thermal Expansion	16.6 x 10 ⁻⁶ (0 to 100 °C)	9.2 x 10 ⁻⁶ (32 °F to 212 °F)
Thermal Conductivity	12.9 W/m. °K (@ 100 °C)	89.0 BTU in/Ft ² . h . °F (@212 °F)

Dia. (in.)	Dia. (mm)	MINIMUM Breaking Load (lbf)	MINIMUM Breaking Load (kN)	NOMINAL Weight (lbs./1,000 ft.)	NOMINAL Weight (kg/1000 m)
.092	2.34	1,620	7.21	23.37	34.78
.108	2.74	2,170	9.65	32.21	47.93
.125	3.18	2,850	12.68	43.15	64.21
.140	3.56	3,400	15.12	54.12	80.54
.150	3.81	4,020	17.88	62.13	92.44
.160	4.06	4,400	19.57	70.70	105.21

To maximize the life of your GD™ Slickline:

- Use properly sized sheaves (min. sheave diameter = 120 x wire OD) and inspect them for excessive wear
- Ensure the sheaves rotate freely
- Always use new guides in the stuffing box
- Avoid kinking the line
- Layer winding or smooth wrapping the wire onto the winch drum will result in extended life / less damage and reduced likelihood of small kinks
- Prevent the line from rubbing the side of the drum, dragging on the ground, over shafts or other equipment
- Maintain the natural curvature of the wire, maintain constant tension during winding and re-spooling operations
- Exercise extreme caution during jarring operations, check "jarred" lines for possible stretch (reduced wire diameter) or other damage
- When running the line down hole avoid sudden brake application
- Never store reels on their sides
- Maintaining a logbook for each line is recommended
- Clean the line after each use