

API 9A/ISP10425 - 2003: Steel wire ropes for the petroleum and natural gas industries - Minimum requirements and terms for acceptance.

ZERON 100HS slickline is often required to comply with API 9A/ISO 14025 as being the standard recommended by the industry. API covers carbon steel ropes with a reference to other materials but with little detail. **ZERON 100HS** on the other hand is a single strand Super Duplex stainless steel wireline so inevitably there are some differences.

Below are the main areas where **ZERON 100HS** is to the technical requirements of the standard.

Material.

ZERON 100HS is a super duplex stainless steel which has outstanding strength and corrosion resistance. The product is a single strand wireline with high strength, as shown below.

Diameter (inch)	0.092	0.108	0.125	0.140	0.160
Breaking load (lbf)	1920	2500	3300	4050	5150

The wires do not contain any welds.

The wire is bare, uncoated and is lubricated with Metashield 610S.

The wires are Eddy current tested.

Tolerance on Diameter

Diameter (inch)	0.092	0.108	0.125	0.140	0.160
Tolerance (inch)	+/-0.001	+/- 0.001	+/- 0.001	+/- 0.002	+/- 0.002

Torsion test

It is unusual for a stainless steel wire to have significant torsions from a torsion test on an 8" gauge length. The torsions do not show a significant degradation in service as do the carbon steel wires. Typical torsion test values are as follows.

Diameter (inch)	0.092	0.108	0.125	0.140	0.160
Typical Torsions	4	4	3	3	3