



HELICAL SUBMERGED ARC WELDED (HSAW) PIPES FOR OIL AND GAS PURPOSE



HSAW pipe is also known in the industry as large diameter spiralwelded pipe with API standart, natural gas pipe, spiral natural gas pipe, coated natural gas pipe, spiral welded (HSAW) line pipe. Specially formulated for area of use and manufactured with minimum tolerance. Manufactured with wall thickness, diameter and coating options according to quality standards and area of use. Using as an alternative to large diameter pipes LSAW.

1. Helical Submerged Arc Welded (HSAW) Pipes For Oil and Gas Purpose

Manufacturing Standart and Steel Grade

API 5L (PSL1 - PSL2)	X80 M included
ISO 3183 (PSL1 - PSL2)	L555 M included
ГОСТ 20295	K60 included

Product range

Wall Thickness	6 - 24 mm (0,236"– 0.984")
Pipe Diameter	Ø 426 - Ø 2540 mm (16.8" – 100")
Pipe Length	15 meter



2. Laboratory tests

Destructive Steel Test
Tensile Test
Bending Test
Charpy Impact Test
Drop Weight Tear Testing
Macro Test
Micro Test
Hardness Test
Chemical Analysis

Paint Material Tests
Determination of tear resistance
Determination of adhesion after immersion in water
Shore hardness test
Indentation hardness
Determination of coating thickness
Thermal ageing
Viscosity test
Cathodic disbondment test
Determination of impact strength
Determination of ash content
Conical bend test
Cross-cut adhesion determination
Water absorption test
Density test
Bucholz hardness test
Determination of the degree of cure in epoxy paints

**Polyethylene Material Tests**

Shore hardness test
Indentation hardness
Elongation percent at break test

3. Insulation Parameters**Painting Parameters**

Wall Thickness	6 – 24 mm
Pipe Diameter	219 -2032 mm
Coat thickness	2.00 – 3.00 mm
Types of Coating	Single layer fusion bonded epoxy coating 3LPE coating Internal liquid epoxy coating External liquid epoxy coating

Painting Standards

Polyethylene Coating	DIN 30670
Internal liquid epoxy coating	EN 10339
External liquid epoxy coating	EN 10289
Internal and external liquid epoxy coating	AWWA C210

4. Certificates**International certificates**

API Spec. 5L
API Spec. Q1
ISO 9001:2015
ISO 14001:2015
OHSAS 18001:2007 (ISO 45001:2018)
ISO/IEC 17025
ISO/IEC 17020

Certificates of conformity

ГОСТ 8696-74
ГОСТ 20295-85
EN 10217-1
EN 10219-1
DIN 30670