



PRESTRESSING STRAND

Safety builds on quality

Our world is the world of wire - We specialize in customer-oriented, tailor-made wire production. As a versatile and innovative partner with a unique research infrastructure, we can guarantee you high-quality material solutions in your market environment. Based on our core values of quality, flexibility, innovation and sustainability, we live out PERFORMANCE IN WIRE at every stage of the process.

That is what our customers can build on:

- » Our prestressing steels are the first choice wherever major forces have to be transferred or absorbed reliably and efficiently
- » Surface coating and corrosion protection (zinc coating, plastic coating)
- » Various surface types (smooth, indented)
- » Special tests are carried out in our accredited laboratories
- » Special applications: LNG Tanks, Stay Cable Bridges

PRESTRESSING STRAND

7 wire strand, compacted in acc. with FprEN 10138-3

Diameter	Tensile strength	Cross sectional area	Mass	Characteristic Value of max. force	Max. value of max. force	Value of 0,1% proof force
D	Rm	Sn	M	Fm	Fm,max	Fp0,1
mm	N/mm ²	mm ²	g/m	kN	kN	kN
15,2	1820	165	1289,0	300,0	345,0	264,0
15,2	1860	165	1289,0	307,0	353,0	270,0

Advantages of the compacted strand compared to standard strand

- » + 18% more steel crosssection for the same outer strand diameter
- » + 13% higher nominal breaking load and 3% smaller outer diameter compared to strand 150mm² - 1770 N/mm²
- » + 8% higher breaking load and 3% smaller outer diameter compared to strand 150mm² - 1860N/mm²
- » More effective anchoring, due to higher grip-area of wedges
- » Lower surface pressure on HDPE-duct in deflection area, with applicaton of unbounded tendons

7 wire strand, galvanized, waxed and HDPE-sheathed

Nominal diameter strand	Total mass	Mass of components		
DL	M	Steel	HDPE	Wax
mm	kg/1000m		kg/1000 m	
15,3	≥ 1224	1093,0	≥ 82	> 12
15,7	≥ 1303	1172,0	≥ 82	> 12

Prestressing 7 wire strand galvanized, waxed, HDPE sheathed for stay cable bridges

- » Standard: FprEn 10337 or NF A35-035
- » Mass of zinc: 190 - 350 g/m² or 220 - 350 g/m²
- » Type of HDPE: HDPE80 / HDPE100 / HDPE100+, different types upon request
- » Minimum sheathing thickness: 1.25 mm
- » Special types upon request

7 wire strand in acc. with FprEN 10138-3 for application under cryogenic conditions

Diameter	Tensile strength	Cross section	Mass	Characteristic value of max. force	Max. value of max. force	Characteristic value of 0.1% proof force	Elongation at max. load
D	Rm	Sn	M	Fm	Fm,max	Fp0,1	Agt
mm	N/mm ²	mm ²	g/m	kN	kN	kN	%
15,7	1860	150	1172,0	279,0	329,0	246,0	> 3,5

Prestressing strand for applications under cryogenic conditions (LNG Tanks)

- » Standards and rules: fip SR 88/2, ETAG 013, BS 7777-3
- » Results of tensile tests under cryogenic conditions available



Prestressing steel 7 wire strand in acc. with FprEN 10138-3

Diameter	Tensile strength	Cross sectional area	Mass	Characteristic value of max. force	Max. value of max. force	Value of 0.1% proof force
D mm	Rm N/mm ²	Sn mm ²	M g/m	Fm kN	Fm,max kN	Fp0,1 kN
15,2	1860	139	1086,0	259,0	298,0	228,0
15,3	1860	140	1093,0	260,0	299,0	229,0
15,7	1860	150	1172,0	279,0	321,0	246,0

Please contact us for special requirements.

Surface quality

- » Smooth
- » Indented

7 wire strand, greased and HDPE sheathed

Strand diameter	Mass	Mass of components		
DL mm	M kg/1000m	Stahl	Kunststoff kg/1000 m	Fett
15,3	≥ 1218	1093,0	≥ 79	≥ 40
15,7	≥ 1303	1172,0	≥ 82	≥ 43

7 wire strand, compacted, greased and HDPE-sheathed

Strand diameter	Mass	Mass of components		
DL mm	M kg/1000m	Stahl	Kunststoff kg/1000 m	Fett
15,2	≥ 1403	1289,0	≥ 79	≥ 35

Standard minimum HDPE sheath: 1.5 mm

- » Other HDPE coating thickness upon request
- » Mechanical characteristics like bare strand
- » Extraction load of straight tendons max. 60 N/m



Special tests are carried out in our accredited laboratories:

- » Deflected tensile test
- » Relaxation test
- » NH4SCN corrosion test
- » Fatigue test frequency range 10 - 120 Hz

Our certificates

EN ISO 9001:2015

For detailed information regarding our certifications visit our webpage www.voestalpine.com/wire or scan the QR Code:



**WHERE PREMIUM QUALITY MEETS
ECO-FRIENDLY EXCELLENCE 2027**

DEVELOP NOW! Premium Wire Solutions with reduced carbon footprint

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