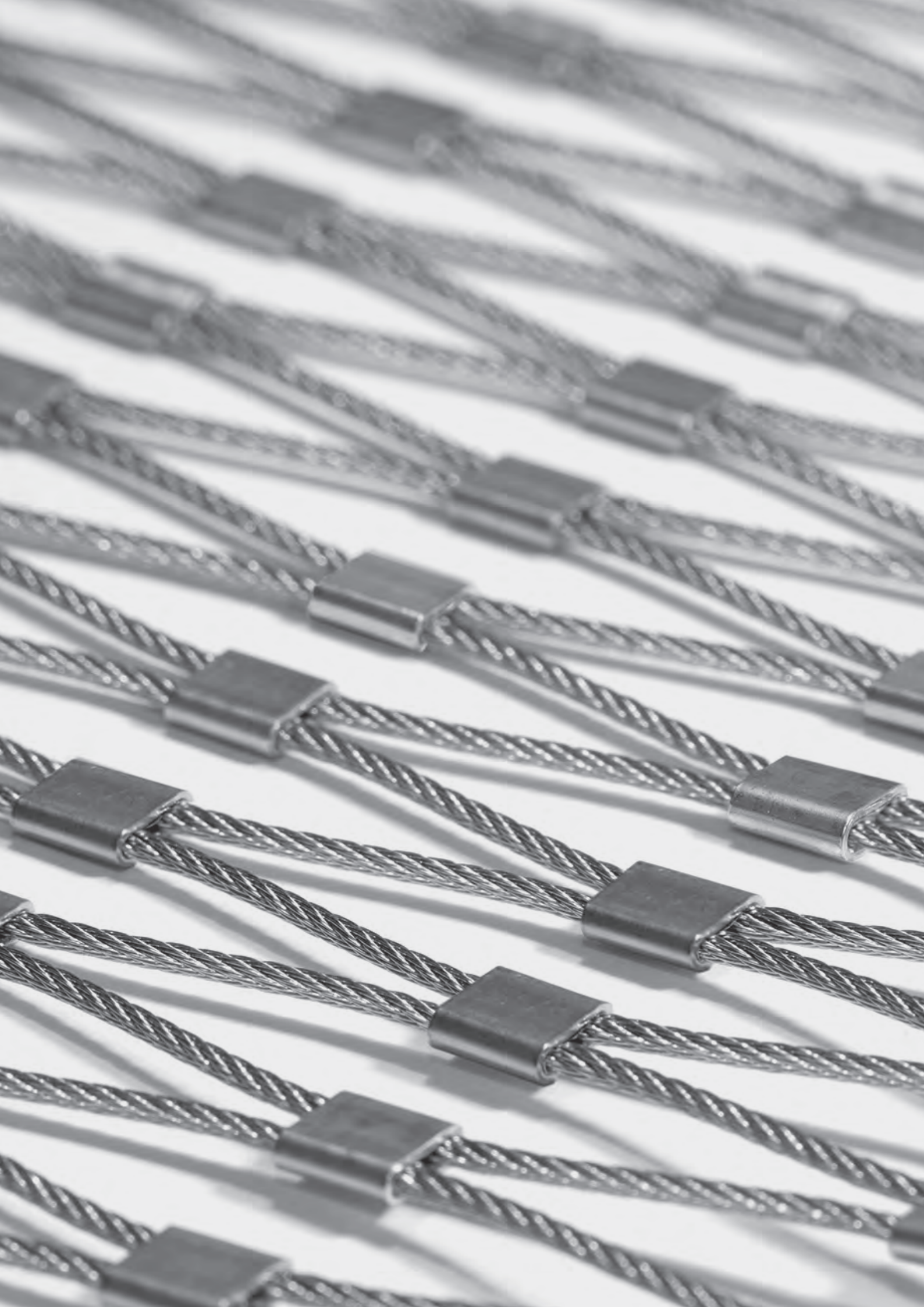




I-NET FRAME SYSTEMS





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• Who we are ?

inoxnet® is a young and dynamic company specializing in architectural stainless steel net and rope systems. Our mission is to deliver innovative, cost-effective, eco-friendly, and durable products of the highest quality. Stainless Steel Net and Rope Systems offer versatile solutions for a wide range of architectural projects, thanks to their flexibility, durability, high quality, and lightweight properties.

At inoxnet®, we are committed to being your solution partner, whether for small-scale individual projects or large, complex projects worldwide.

Our Company

inoxnet® has extensive experience in architectural applications of stainless steel net and rope systems. We offer solutions and services for a variety of architectural projects, including balustrades, safety nets, facades, greenery systems, decorative installations, and zoo enclosures.



What we do ?

inoxnet® offers comprehensive, end-to-end services-including consulting, design, planning, structural calculations, production, and installation-to clients worldwide who seek to transform their innovative ideas into reality.

Consulting

We provide consultancy to architects, design studios, and contractors, supporting them in achieving their design goals and meeting project requirements. Our consulting process begins with the initial architectural concept and continues through the planning stages to final implementation. We are always pleased to share our insights, whether through phone, email, or in person at our offices.

Planning & Design

The inoxnet® planning process includes:

- **Design and System Development**
- **Planning Support**
- **Administrative Planning**
- **Project Application for Ropes, Nets, and Steel Works**
- **Installation Planning**

inoxnet® services are always customer focused, with our specialists involved at every stage of the process, from start to finish. In addition to our standard products, we also offer custom-designed stainless steel net and rope solutions, tailored to meet the unique requirements of each project.



Static Calculations

inoxnet® provides structural static calculations for all types of stainless steel net and rope projects when required.

Our static analysis services include:

- **System Development**
- **Shaping of Stainless Steel Nets and Net Structures**
- **Sizing of Net and Rope Loads**
- **Calculation of Additional Costs**
- **Verifiable Structural Static Calculations**

Production

Once the production drawings are approved, they are forwarded to the production department, where manufacturing begins immediately according to these plans. Each net component is meticulously crafted to meet the specified dimensions, diamond orientation, and net ending features. I-ROPE® systems are also produced with precise attention to pin-to-pin measurements and pre-tension loads, as defined by the structural calculations.



Installation

- Self-Assembly by the customer,
- Installation training,
- Installation support,
- Installation supervision,
- Turn-key installation by inoxnet®.

Depending on customer preference, inoxnet® Stainless Steel Ropes and Net Systems can be installed on site by our experienced installation team.

Stainless, Ageless, Elegant, Durable, Solid & Transparent.

Istanbul 3.rd Airport I-ROPE® Installation

BEHIND EVERY INNOVATIVE PRODUCT

THERE IS A CREATIVE SOLUTION.

FRAMES



I-NET® FRAME SYSTEMS

Preassembled in our factory, I-NET® frames offer the opportunity for fast and easy on-site installation, combining elegance with high performance. These frames are highly customizable to meet the specific needs and preferences of our clients.

They can be supplied in a wide range of profiles, sizes, geometries, and surface finishes, ensuring flexibility for various project requirements.

I-NET® Frame Systems serve a variety of purposes, including balustrade infills, fall protection, interior decoration, and support for greenery applications.

In addition to standard options, inox-net® also offers custom manufacturing solutions tailored to specific project requirements.

I-NET® FRAME SYSTEMS

The I-NET® cable mesh frame systems are fully customizable, offering a variety of profile options, including different sizes of round tubes, square profiles, and rectangular or round slotted tubes.

The mesh diamonds can be oriented either vertically or horizontally, providing flexibility for diverse applications. Frames are available in standard AISI 316 stainless steel, with the option to produce them in AISI 304, 2205 duplex, or galvanized steel to meet specific project requirements.

While the standard surface finish is satin, frames can also be mirror-polished for enhanced aesthetics. Combining frames, which can be painted in any RAL color, with natural or black oxide I-NET® mesh offers a wide range of design possibilities. Slotted frames can be further customized with powder coating or wet painting, with the I-NET® cable mesh already installed.



Round Frame



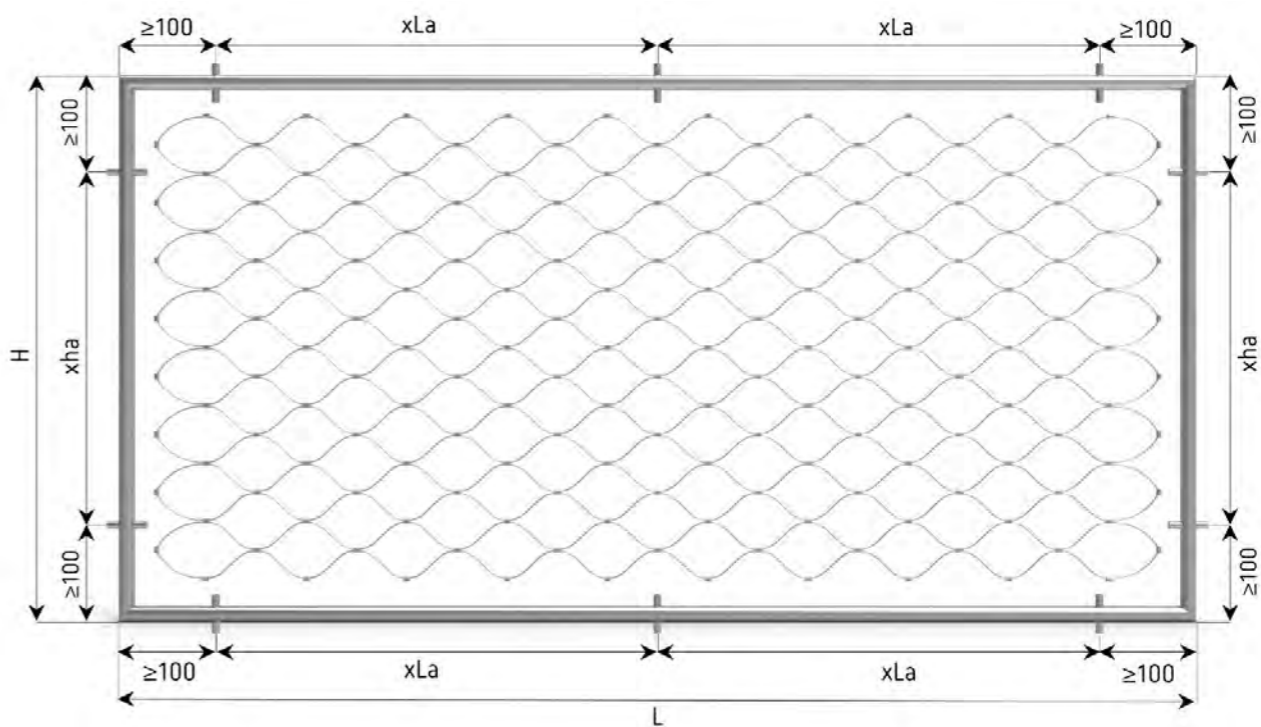
Rectangular Frame



Slotted Round Frame
**hidden installation ropes*



Slotted Rectangular Frame
**hidden installation ropes*



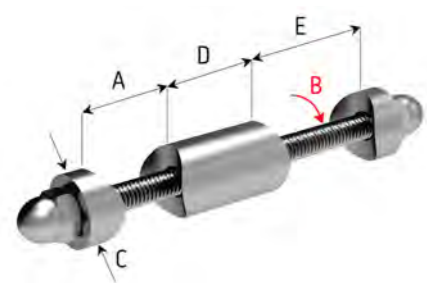
I-NET® Frame Systems Technical Details

Part Number	Frame Type	Frame Profile (mm)	Frame Geometry	Frame Material
IN-F-0021-020	Round Frame	Ø21,3x2	All frame geometries	AISI316
IN-F-0026-020	Round Frame	Ø26,9x2	All frame geometries	AISI316
IN-F-0033-026	Round Frame	Ø33,7x2,6	All frame geometries	AISI316
IN-F-0042-026	Round Frame	Ø42,4x2,6	All frame geometries	AISI316
IN-F-2020-015	Rectangular Frame	20x20x1,5	Rectangular and Parallelogram	AISI316
IN-F-2525-015	Rectangular Frame	25x25x1,5	Rectangular and Parallelogram	AISI316
IN-F-3030-015	Rectangular Frame	30x30x1,5	Rectangular and Parallelogram	AISI316
IN-SF-0026-015	Slotted Round Frame	Ø26,9x1,5	Rectangular and Parallelogram	AISI316
IN-SF-3020-015	Slotted Rectangular Frame	30x20X1,5	Rectangular and Parallelogram	AISI316

Frame Dimensions (mm)		Frame Holder Axles		Support Bar	I-NET®	I-NET® Rope	I-NET® Width (mm)	
min.-max. Height	min.-max. Length	min.-max. xha	min.-max. xLa	Dia (mm)	Direction	Dia (mm)	from	to
600 - ∞	600 - ∞	400-1200	400-1200	12	Horizontal and Vertical	1,5	25	80
						2	40	100
		400-1400	400-1400	12	Horizontal and Vertical	1,5	25	80
						2	40	100
		400-1500	400-1500	16	Horizontal and Vertical	1,5	25	80
						2	40	100
		400-1600	400-1600	16	Horizontal and Vertical	1,5	25	80
						2	40	100
		400-1200	400-1200	12	Horizontal and Vertical	1,5	25	80
						2	40	100
		400-1400	400-1400	12	Horizontal and Vertical	1,5	25	80
						2	40	100
750-1600	750-1600	400-1200	400-1200	12	Horizontal and Vertical	1,5	25	80
						2	40	100
750-1600	750-1600	400-1200	400-1200	12	Horizontal and Vertical	1,5	30	80
						2	40	100

FRAME HOLDERS

Round Frame Holders / Type 1

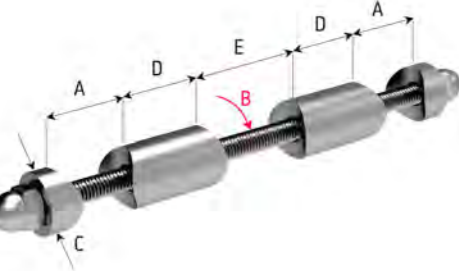


ROUND FRAME HOLDER TYPE 1 / FOR ROUND POSTS / SINGLE SIDE

Part Number	Dimensions in mm				
	A	B	C	D	E
IN-FH1-0021-033-01	Ø21,3	M6	16	25	Ø33,7
IN-FH1-0021-042-01	Ø21,3	M6	16	25	Ø42,4
IN-FH1-0026-033-01	Ø26,9	M6	16	25	Ø33,7
IN-FH1-0026-042-01	Ø26,9	M6	16	25	Ø42,4
IN-FH1-0033-033-01	Ø33,7	M8	20	25	Ø33,7
IN-FH1-0033-042-01	Ø33,7	M8	20	25	Ø42,4
IN-FH1-0042-042-01	Ø42,4	M8	20	25	Ø42,4

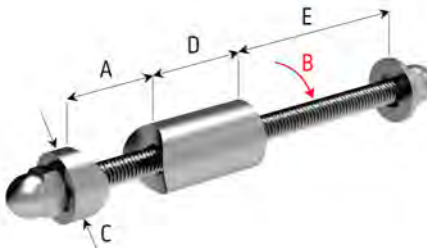
Material AISI316L

ROUND FRAME HOLDER TYPE 1 / FOR ROUND POSTS / DOUBLE SIDE



Part Number	Dimensions in mm				
	A	B	C	D	E
IN-FH1-0021-033-02	Ø21,3	M6	16	25	Ø33,7
IN-FH1-0021-042-02	Ø21,3	M6	16	25	Ø42,4
IN-FH1-0026-033-02	Ø26,9	M6	16	25	Ø33,7
IN-FH1-0026-042-02	Ø26,9	M6	16	25	Ø42,4
IN-FH1-0033-033-02	Ø33,7	M8	20	25	Ø33,7
IN-FH1-0033-042-02	Ø33,7	M8	20	25	Ø42,4
IN-FH1-0042-042-02	Ø42,4	M8	20	25	Ø42,4

Material AISI316L



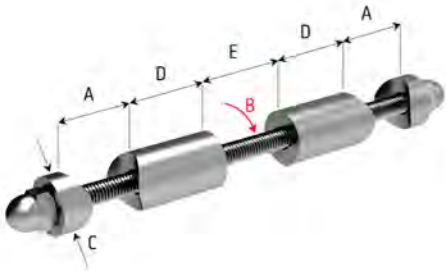
ROUND FRAME HOLDER TYPE 1 / FOR FLAT POSTS / SINGLE SIDE

Part Number	Dimensions in mm				
	A	B	C	D	E
IN-FH1-0021-000-01	Ø21,3	M6	16	25	variable
IN-FH1-0026-000-01	Ø26,9	M6	16	25	variable
IN-FH1-0033-000-01	Ø33,7	M8	20	25	variable
IN-FH1-0042-000-01	Ø42,4	M8	20	25	variable

Material AISI316L

Dimension E is variable from 5mm to 50mm posts.

ROUND FRAME HOLDER TYPE 1 / FOR FLAT POSTS / DOUBLE SIDE



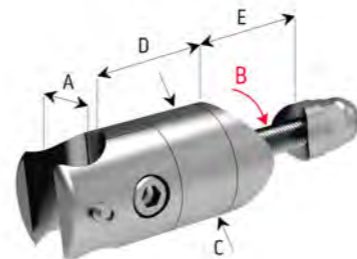
Part Number	Dimensions in mm				
	A	B	C	D	E
IN-FH1-0021-000-02	Ø21,3	M6	16	25	variable
IN-FH1-0026-000-02	Ø26,9	M6	16	25	variable
IN-FH1-0033-000-02	Ø33,7	M8	20	25	variable
IN-FH1-0042-000-02	Ø42,4	M8	20	25	variable

Material AISI316L

Dimension E is variable from 5mm to 50mm posts.

FRAME HOLDERS

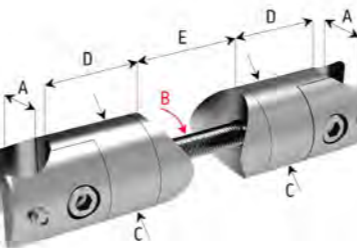
Round Frame Holders / Type 2



ROUND FRAME HOLDER TYPE 2 / FOR ROUND POSTS / SINGLE SIDE

Part Number	Dimensions in mm				
	A	B	C	D	E
IN-FH2-0021-033-01	Ø21,3	M8	30	25+2	Ø33,7
IN-FH2-0021-042-01	Ø21,3	M8	30	25+2	Ø42,4
IN-FH2-0026-033-01	Ø26,9	M8	35	25+2	Ø33,7
IN-FH2-0026-042-01	Ø26,9	M8	35	25+2	Ø42,4

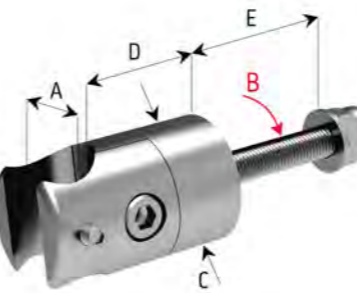
Material AISI316L



ROUND FRAME HOLDER TYPE 2 / FOR ROUND POSTS / DOUBLE SIDE

Part Number	Dimensions in mm				
	A	B	C	D	E
IN-FH2-0021-033-02	Ø21,3	M8	16	25+2	Ø33,7
IN-FH2-0021-042-02	Ø21,3	M8	16	25+2	Ø42,4
IN-FH2-0026-033-02	Ø26,9	M8	35	25+2	Ø33,7
IN-FH2-0026-042-02	Ø26,9	M8	35	25+2	Ø42,4

Material AISI316L

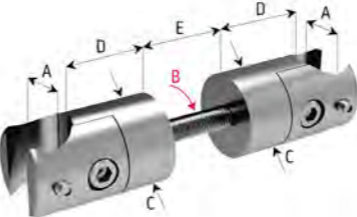


ROUND FRAME HOLDER TYPE 2 / FOR FLAT POSTS / SINGLE SIDE

Part Number	Dimensions in mm				
	A	B	C	D	E
IN-FH2-0021-000-01	Ø21,3	M8	30	25	variable
IN-FH2-0026-000-01	Ø26,9	M8	35	25	variable

Material AISI316L

Dimension E is variable from 5mm to 50mm posts.



ROUND FRAME HOLDER TYPE 2 / FOR FLAT POSTS / DOUBLE SIDE

Part Number	Dimensions in mm				
	A	B	C	D	E
IN-FH2-0021-000-02	Ø21,3	M8	30	25	variable
IN-FH2-0026-000-02	Ø26,9	M8	35	25	variable

Material AISI316L

Dimension E is variable from 5mm to 50mm posts.

FRAME HOLDERS

Rectangular Frame Holders

RECTANGULAR FRAME HOLDER / FOR ROUND POSTS / SINGLE SIDE

Part Number	Dimensions in mm				
	A	B	C	D	E
IN-FH3-2020-033-01	20x20	M6	16	25	Ø33,7
IN-FH3-2020-042-01	20x20	M6	16	25	Ø42,4
IN-FH3-2525-033-01	25x25	M6	16	25	Ø33,7
IN-FH3-2525-042-01	25x25	M6	16	25	Ø42,4
IN-FH3-3030-033-01	30x30	M8	20	25	Ø33,7
IN-FH3-3030-042-01	30x30	M8	20	25	Ø42,4

Material AISI316L

RECTANGULAR FRAME HOLDER / FOR ROUND POSTS / DOUBLE SIDE

Part Number	Dimensions in mm				
	A	B	C	D	E
IN-FH3-2020-033-02	20x20	M6	16	25	Ø33,7
IN-FH3-2020-042-02	20x20	M6	16	25	Ø42,4
IN-FH3-2525-033-02	25x25	M6	16	25	Ø33,7
IN-FH3-2525-042-02	25x25	M6	16	25	Ø42,4
IN-FH3-3030-033-02	30x30	M8	20	25	Ø33,7
IN-FH3-3030-042-02	30x30	M8	20	25	Ø42,4

Material AISI316L

RECTANGULAR FRAME HOLDER / FOR FLAT POSTS / SINGLE SIDE

Part Number	Dimensions in mm				
	A	B	C	D	E
IN-FH3-2020-000-01	20x20	M6	16	25	variable
IN-FH3-2525-000-01	25x25	M6	16	25	variable
IN-FH3-3030-000-01	30x30	M8	20	25	variable

Material AISI316L

Dimension E is variable from 5mm to 50mm posts.

RECTANGULAR FRAME HOLDER / FOR FLAT POSTS / DOUBLE SIDE

Part Number	Dimensions in mm				
	A	B	C	D	E
IN-FH3-2020-000-02	20x20	M6	16	25	variable
IN-FH3-2525-000-02	25x25	M6	16	25	variable
IN-FH3-3030-000-02	30x30	M8	20	25	variable

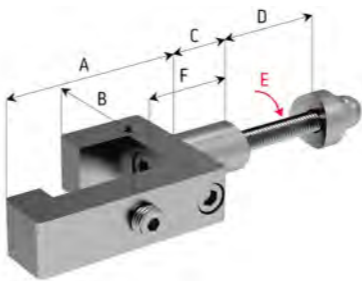
Material AISI316L

Dimension E is variable from 5mm to 50mm posts.

FRAME HOLDERS

Slotted Rectangular Frame Holders / Type 1

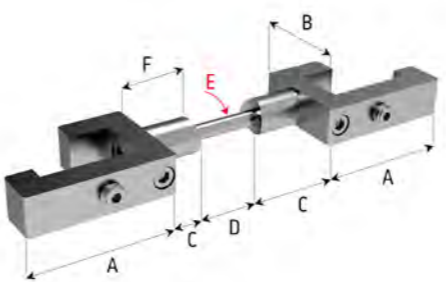
SLOTTED RECTANGULAR FRAME HOLDER TYPE 1 / FOR ROUND POSTS / SINGLE SIDE



Part Number	Dimensions in mm					
	A	B	C	D	E	F
IN-FH4-3020-033-01	55	40	20	Ø33,7	M6	30
IN-FH4-3020-042-01	55	40	20	Ø42,3	M6	30

Material AISI316L

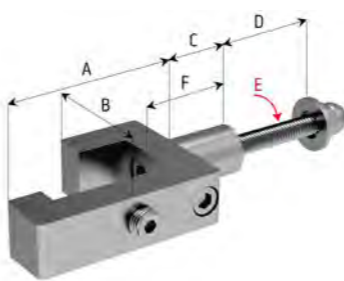
SLOTTED RECTANGULAR FRAME HOLDER TYPE 1 / FOR ROUND POSTS / DOUBLE SIDE



Part Number	Dimensions in mm					
	A	B	C	D	E	F
IN-FH4-3020-033-02	55	40	20	Ø33,7	M6	30
IN-FH4-3020-042-02	55	40	20	Ø42,3	M6	30

Material AISI316L

SLOTTED RECTANGULAR FRAME HOLDER TYPE 1 / FOR FLAT POSTS / SINGLE SIDE

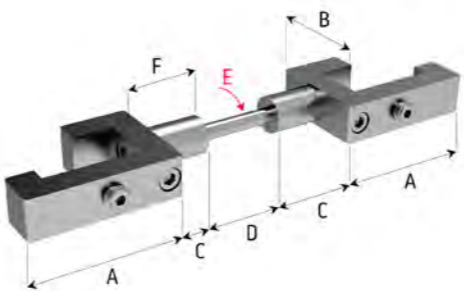


Part Number	Dimensions in mm					
	A	B	C	D	E	F
IN-FH4-3020-000-01	55	40	20	variable	M6	30

Material AISI316L

Dimension D is variable from 5mm to 50mm posts.

SLOTTED RECTANGULAR FRAME HOLDER TYPE 1 / FOR FLAT POSTS / DOUBLE SIDE



Part Number	Dimensions in mm					
	A	B	C	D	E	F
IN-FH4-3020-000-02	55	40	20	variable	M6	30

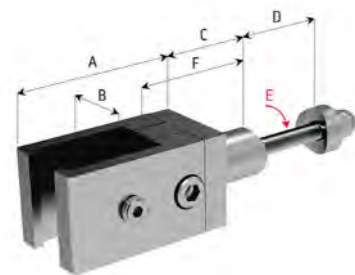
Material AISI316L

Dimension D is variable from 5mm to 50mm posts.

FRAME HOLDERS

Slotted Rectangular Frame Holders / Type 2

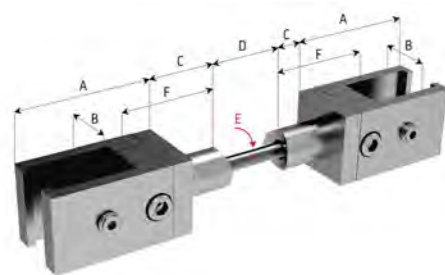
SLOTTED RECTANGULAR FRAME HOLDER TYPE 2 / FOR ROUND POSTS / SINGLE SIDE



Part Number	Dimensions in mm					
	A	B	C	D	E	F
IN-FH5-3020-033-01	55	30	10	Ø33,7	M6	30
IN-FH5-3020-042-01	55	30	10	Ø42,3	M6	30

Material AISI316L

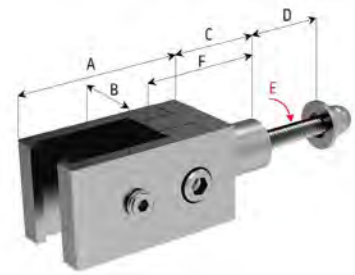
RECTANGULAR SLOTTED FRAME HOLDER TYPE 2 / FOR ROUND POSTS / DOUBLE SIDE



Part Number	Dimensions in mm					
	A	B	C	D	E	F
IN-FH5-3020-033-02	55	30	10	Ø33,7	M6	30
IN-FH5-3020-042-02	55	30	10	Ø42,3	M6	30

Material AISI316L

RECTANGULAR SLOTTED FRAME HOLDER TYPE 2 / FOR FLAT POSTS / SINGLE SIDE

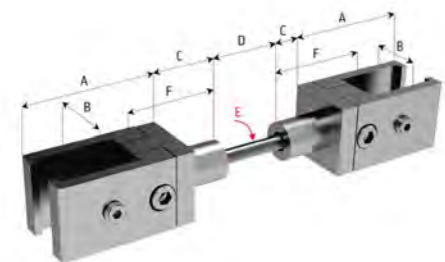


Part Number	Dimensions in mm					
	A	B	C	D	E	F
IN-FH5-3020-000-01	55	30	10	variable	M6	30

Material AISI316L

Dimension D is variable from 5mm to 50mm posts.

RECTANGULAR SLOTTED FRAME HOLDER TYPE 2 / FOR FLAT POSTS/ DOUBLE SIDE



Part Number	Dimensions in mm					
	A	B	C	D	E	F
IN-FH5-3020-000-02	55	30	10	variable	M6	30

Material AISI316L

Dimension D is variable from 5mm to 50mm posts.



ORDER DATA SHEET

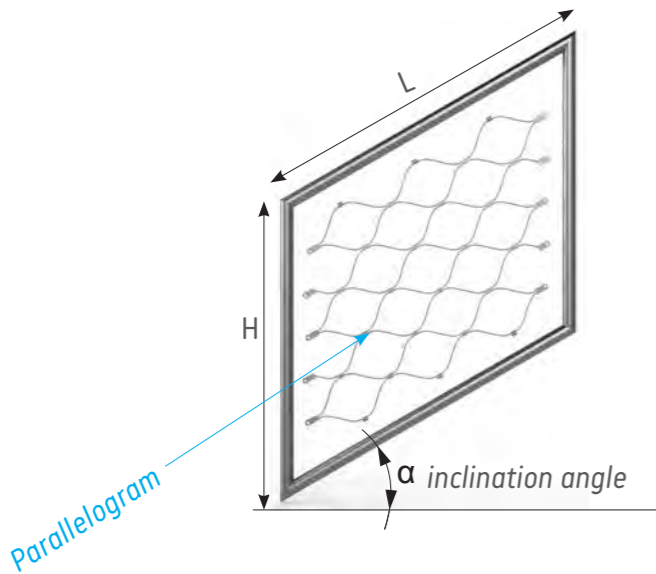
To provide a better service, please indicate following information when ordering stainless steel net systems. If you have any specific inquiry please contact us.

1. I-NET® Measurements

Outer Border / Frame Dimensions

Rectangular: **H** (Height in mm) x **L** (Length in mm)

Parallelogram: **H** (Height in mm) x **L** (Length in mm) x **α** (inclination angle)



For special shapes please share drawings.

2. I-NET® Type

- Rope Diameter: : (See page 16)
- Net Width : (See page 16)
- Net Direction and Endings : (See page 18,19,20,21)

3. Border Details

- Border Rope and Assembly Details: (See page 22 and 23)
- Frame System (Round and inviss): (See page 26,27,28,29,30,31, 32)

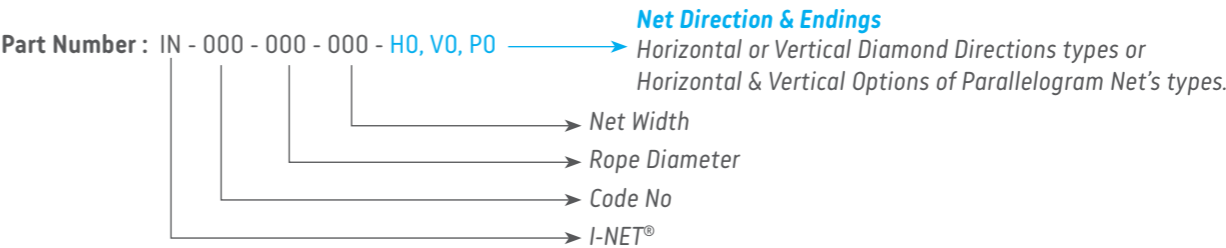
Additional for Installation

- Installation Cable : Rope diameter (See page 14)
- Ferrules : Type / dimension (See page 15)
- Eyelets : Type / dimension (See page 15)

To order I-NET® please refer to following code system to indetify part number.

I-NET® Part Number Description

IN	Code No.	Rope Diameter	Net Width	Net Direction & Endings
I-NET	110	1,5 mm	25 x 43 mm	H1 (Horizontal diamond direction, both sides open cable endings)
		2 mm	30 x 52 mm	H2 (Horizontal diamond direction, one side open cables, other side closed with loose ferrules)
		3 mm	40 x 69 mm	H3 (Horizontal diamond direction, both sides closed with loose ferrules)
			50 x 87 mm	H4 (Horizontal diamond direction, one side open cables, other side closed with eyelets)
			60 x 104 mm	H5 (Horizontal diamond direction, both sides closed with eyelets)
			70 x 121 mm	H6 (Horizontal diamond direction,one side closed with loose ferrules, other side closed with eyelets)
			80 x 139 mm	V1 (Vertical diamond direction, both sides open cable endings)
			100 x 173 mm	V2 (Vertical diamond direction, one side open cables, other side closed with loose ferrules)
			120 x 208 mm	V3 (Vertical diamond direction, both sides closed with loose ferrules)
			140 x 242 mm	V4 (Vertical diamond direction, one side open cable, other side closed with eyelets)
			160 x 277 mm	V5 (Vertical diamond direction, both sides closed with eyelets)
			180 x 312 mm	V6 (Vertical diamond direction, one side closed with loose ferrules, other side closed with eyelets)
		200 x 346 mm		PH1 (Parallelogram net, horizontal diamond, all sides open cable endings)
				PH2 (Parallelogram net, horizontal diamond, both sides closed with loose fer- rules, other sides open cables)
				PH3 (Parallelogram net, horizontal diamond, both sides closed with loose fer- rules and open cables, other sides closed with loose ferrules)
				PH4 (Parallelogram net, horizontal diamond, all net sides closed with eyelets)
				PH5 (Parallelogram net, horizontal diamond, all net sides closed with eyelets)
				PH6 (Parallelogram net, horizontal diamond, both sides closed with eyelets, other side closed with loose ferrules)
				PH7 (Parallelogram net, horizontal diamond, both sides closed with loose ferrules and eyelets, other sides closed with loose ferrules)
				PH8 (Parallelogram net, horizontal diamond, both sides closed with loose ferrules, other sides closed with eyelets)
				PH9 (Parallelogram net, horizontal diamond, all net sides closed with eyelets)
				PV1 (Parallelgram net, vertical diamond, both sides closed with loose ferrules, other sides closed with loose ferrules and open cables)
				PV2 (Parallelogram net, vertical diamond, both sides open cables, other sides closed with loose ferrules)
				PV3 (Parallelogram net, vertical diamond, both sides closed with loose fer- rules, other sides closed with eyelets)
				PV4 (Parallelogram net, vertical diamond, all net sides closed with eyelets)
				PV5 (Parallelogram net, vertical diamond, both sides closed with loose fer- rules, other sides closed with loose ferrules and eyelets)
				PV6 (Parallelogram net, vertical diamond, both sides closed with eyelets, other sides closed with loose ferrules)



INSTALLATION ACCESSORIES AND EQUIPMENTS

Fixing components

CONCRETE ANCHOR



Part Number	Thread	Length (mm)
922-006-00	M6	65
922-008-00	M8	70
922-010-00	M10	83
922-012-00	M12	100

Material AISI 316

AERATED CONCRETE ANCHOR



Part Number	Thread	Length (mm)
923-006-00	M6	70
923-008-00	M8	70
923-010-00	M10	70

Material AISI 316

ANCHOR SYSTEM FOR CONCRETE



Part Number	Dimension	Length (mm)	Description
921-006-00	M6	60	including M6 threaded rod, hexagon nut and washer
921-008-00	M8	80	including M8 threaded rod, hexagon nut and washer
921-010-00	M10	100	including M10 threaded rod, hexagon nut and washer
921-012-00	M12	120	including M12 threaded rod, hexagon nut and washer
951-100-01	300ml		HIT-1 / HIT-1 CE / Adhesive anchor injection mortar
952-170-01	330ml		HIT- HY 170 / Adhesive anchor injection mortar

ANCHOR SYSTEM FOR MASONRY



Part Number	Dimension	Description
924-016-50	16 x 50	HIT-SC / 16 x 50mm mesh sleeve
924-016-85	16 x 85	HIT-SC / 16 x 85mm mesh sleeve
953-270-00	330ml	HIT- HY 270 / Adhesive anchor injection mortar for masonry
950-000-01		HDM / Manual Dispenser gun
950-000-02		HR-RE / Mixing nozzle



THERMO ANCHOR WITH PERFORATED SLEEVE



Part Number	Dimensions in mm				
	A	B	C	D	E
925-010-330	M10	330	150	170	15
925-012-330	M12	330	150	170	15
925-010-370	M10	370	150	210	15
925-012-370	M12	370	150	210	15



Part Number	Description
954-330-00	HIT-MM Plus 330/2 Adhesive anchor injection mortar
955-275-00	HFX 275/2 Adhesive anchor injection mortar



Part Number	Dimension	Description
956-243-10	10ml	Locktite 243 for locking and sealing the thread fasteners service temprature -55°C to 150 °C
956-243-50	50ml	

THREAD LOCK FLUID

SCREW FOR WOOD



Part Number	Thread	Length (mm)
916-006-00	M6	25
916-008-00	M8	30
916-010-00	M10	40

PLASTIC TIES



Part Number	Dimensions (mm)
INT-601-160	4,5x160
INT-601-300	4,5x300

PLASTIC ENDCAP



Part Number	Rope Dia (mm)
INT-602-004	4
INT-602-006	6

Tools and Equipments



PLIER WRENCH

Part Number	Rope Dia (in mm)	Dimensions (mm)	Weight (in gr)
INT-080-250	1.5, 2, 3	250 x 75 x 28	525



CABLE CUTTER

Part Number	Rope Dia (in mm)	Dimensions (mm)	Weight (in gr)
INT-740-012	1 to 4	200 x 47 x 15	263



CABLE CUTTER

Part Number	Rope Dia (in mm)	Dimensions (mm)	Weight (in gr)
INT-760-012	4 to 12	-	1500



DREMEL

Part Number	Rope Dia (in mm)	Dimensions (mm)	Weight (in gr)
INT-300-225	All	191 x 64 x 51	2070



MANUAL CRIMPING TOOL

Part Number	Rope Dia (in mm)	Dimensions (mm)	Weight (in gr)
INT-975-206	1,5 and 2	250 x 70 x 25	565



MANUAL CRIMPING TOOL DIES

Part Number	Rope Dia (in mm)	Dimensions (mm)	Weight (in gr)
INT-975-015-00	1,5	30 x 14 x 9	17
INT-975-020-00	2	30 x 14 x 9	17



HYDROLIC CRIMPING TOOL

Part Number	Rope Dia (in mm)	Dimensions (mm)	Weight (in gr)
INT-976-175	1.5, 2, 3	-	3000



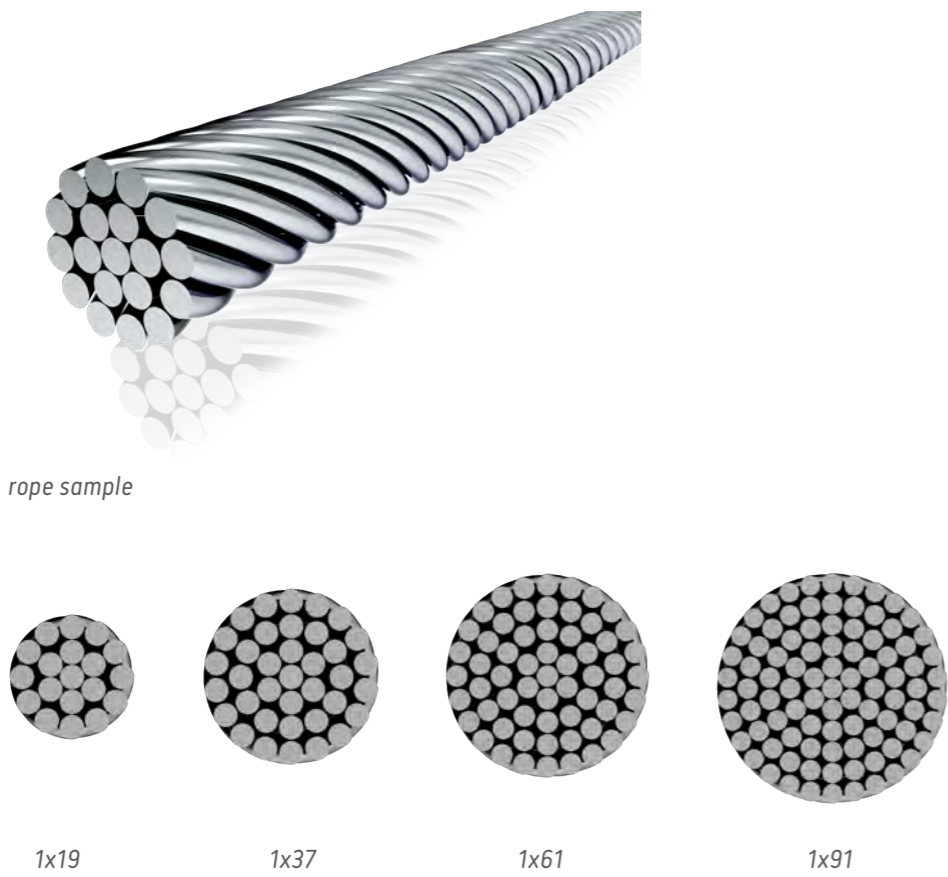
HYDROLIC CRIMPING DIES

Part Number	Rope Dia (in mm)	Description	Dimensions (mm)	Weight (in gr)
INT-976-015-01	1,5	for I-NET ferrules	42 x 22	235
INT-976-020-01	2	for I-NET ferrules	42 x 22	235
INT-976-030-01	3	for I-NET ferrules	42 x 22	235
INT-976-015-02	1,5	for I-NET eyelets	42 x 22	235
INT-976-020-02	2	for I-NET eyelets	42 x 22	235
INT-976-030-02	3	for I-NET eyelets	42 x 22	235
INT-976-040-03	4	for I-ROPE fittings	42 x 22	235
INT-976-060-03	6	for I-ROPE fittings	42 x 22	235
INT-976-080-03	8	for I-ROPE fittings	42 x 22	235

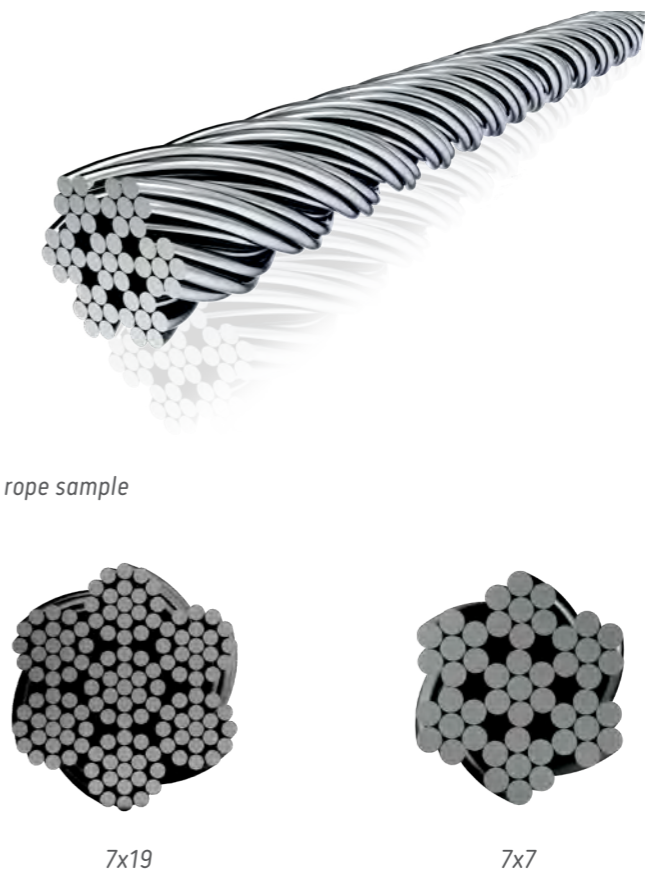


CHARACTERISTICS OF WIRE ROPES

Explanation and Application of Wire Ropes



Type of Wire Rope	Explanation
Spiral Ropes	Consist of several layers of individual round wires. They are manufactured from stainless steel wire. If a open spiral rope forms part of a strand rope, it is called "strand". The designation of the various types of wire rope constructions depends on the number of wires in the rope cross section.
	Applications
	Carrier cables for lightweight membran structures, Carrier/tensioning cables in cable nets, Carrier cables for light suspension bridges, Hanger cables for suspension bridges, Balustrade cables for suspension bridges, Bottom flange cables for load-bearing structures.



Type of Wire Rope	Explanation
Strand Ropes	Wire ropes consist of a number of strands twisted together. This construction makes them very flexible. The code for this type of wire depends on the number of strands and the number of wires per strand.
	Applications
	Tensioning cables for lightweight membran structures, Hanger cables for suspension bridges, Balustrade cables for bridges, Bottom flange cables for load-bearing structures, Cross-bracing structures.

Technical Information About Wire Ropes

SPIRAL / STRAND ROPE DIN EN 12385-10

- Material : Stainless steel wire 1.4401 (AISI 316) to DIN EN 10264-4
- Modulus of Elasticity : 130 kN/mm² ± 10 kN/mm²
- Tolerance on Diameter : 0% / +3%
- Socketing : D= 4-40mm Swaging

Rope Ø	Minimum Breaking Force	Charact. Breaking Force	Tension Strength	Metallic Cross Section	Stiffness	Weight
mm	Fmin [kN]	Fuk (1) [kN]	FRd (2) [kN]	A [mm²]	EA [MN]	[kg/m]
4	13	11.8	7.2	10	1.28	0.1
6	27	24.3	14.7	22	2.86	0.2
8	49	44.1	26.7	39	5.07	0.3
10	76	68.4	41.5	60.7	7.9	0.5
12	110	99	60	88	11.4	0.7
14	149	134.1	81.3	120	15.5	1
16	206	185.4	112.4	154	20.1	1.3
18	261	234.9	142.4	197	25.6	1.6
20	322	289.8	175.6	244	31.7	2
22	389	350.1	212.2	293	38.1	2.4
24	463	416.7	252.5	350	45.5	2.9
26	544	489.6	296.7	410	53.3	3.4
28	629	566.1	343.1	474	61.6	3.9
30	724	651.6	394.9	545	70.8	4.5
32	824	741.6	449.5	618	80.4	5.1
34	929	836.1	506.7	701	91.1	5.8
36	1042	937.8	568.4	784	102	6.5
38	1086	977.4	592.4	838	109	6.9
40	1198	1078.2	653.5	929	121	7.7

Fmin: Minimum Breaking Force.

Fuk: Breaking Strength of Wire Ropes Inc. End Connectors.

FRd: Limit Tension Resistance of the Wire Ropes Inc. End Connectors.

ke: Loss Factor .

$Fuk = Fmin \times ke$.

$FRd = (Fmin \times ke) / 1,65$.

ke = 0,9 (swaged fitting)



OVERVIEW OF STAINLESS STEEL

Material

Stainlesss steel is an iron-based alloy which contains 10,5% chromium. This element keeps it self stain proof by creating a chromium-oxide layer on the surface of the material.

316 is a type of austhenitic stainless steel which is a popular grade as 304 with a higher corrosion resistance.

Different to 304 it contains Molibdenum and higher Nickel as well as Chromium contents. Since inox-net® products are used widely in outer weather conditions. inox-net® prefers 316 grade because of its better resistance to chemicals and chlorides (like salt). 316L has a better corrosion resistance and welding behaviour containing less Carbon. 316Ti has a better corrosion resistance compared to 316L with its Titanium content and higher friction resistance.

On the other hand Duplex stainless steel has both better corrosion and mechanical properties than 316L and 316Ti. This inox-net® prefers duplex stainless steel for the individual properties requested by special projects.

MATERIAL GROUPS

EN 10088-3		AISI	Cmax.	Cr	Ni	Div	Type
AISI 316 group	1.4401	X5CrNiMo17-12-2	316	0.07	18	10	Austenitic
	1.4404	X2CrNiMo17-12-2	316L	0.03	17	11	Mo Austenitic
	1.4408	GXCrNiMo19-11-2		0.07	19	10	Austenitic
	1.4435	X2CrNiMo18-14-3	316L	0.03	18	12	Austenitic
	1.4571	X6CrNiMoTi17-12-2	316Ti	0.1	18	10	Ti Austenitic
Duplex group	1.4462	X2CrNiMoN22-5-3	2205	0.03	21-23	4,5-6,5	Mo Austenitic-Ferritic
	1.4410	X2CrNiMoN25-7-4	2507	0.03	24-26	6-8	Mo Austenitic-Ferritic
Designation	European	USA	Carbon	Chromium	Nickel	Ti = Titanium	
	Standard	Standard				Mo = Molybdenum	

CRITERIA OF DIFFERENTATION AISI 316 / DUPLEX

AISI 316		Duplex
Material Number	1.4401 1.4404	1.4462
	1.4408 1.4435	1.4410
	1.4436 1.4571	
Properties	weather-proof	weather-proof
	highly acid-resistant	highly acid and corrosion resistant highly resistant to aqueous environment and seawater higher mechanical properties



Corrosion

Although stainless steel is resistant to corrosion by its self-passivation mechanism rust may occur in some situations.

Some reasons of rust;

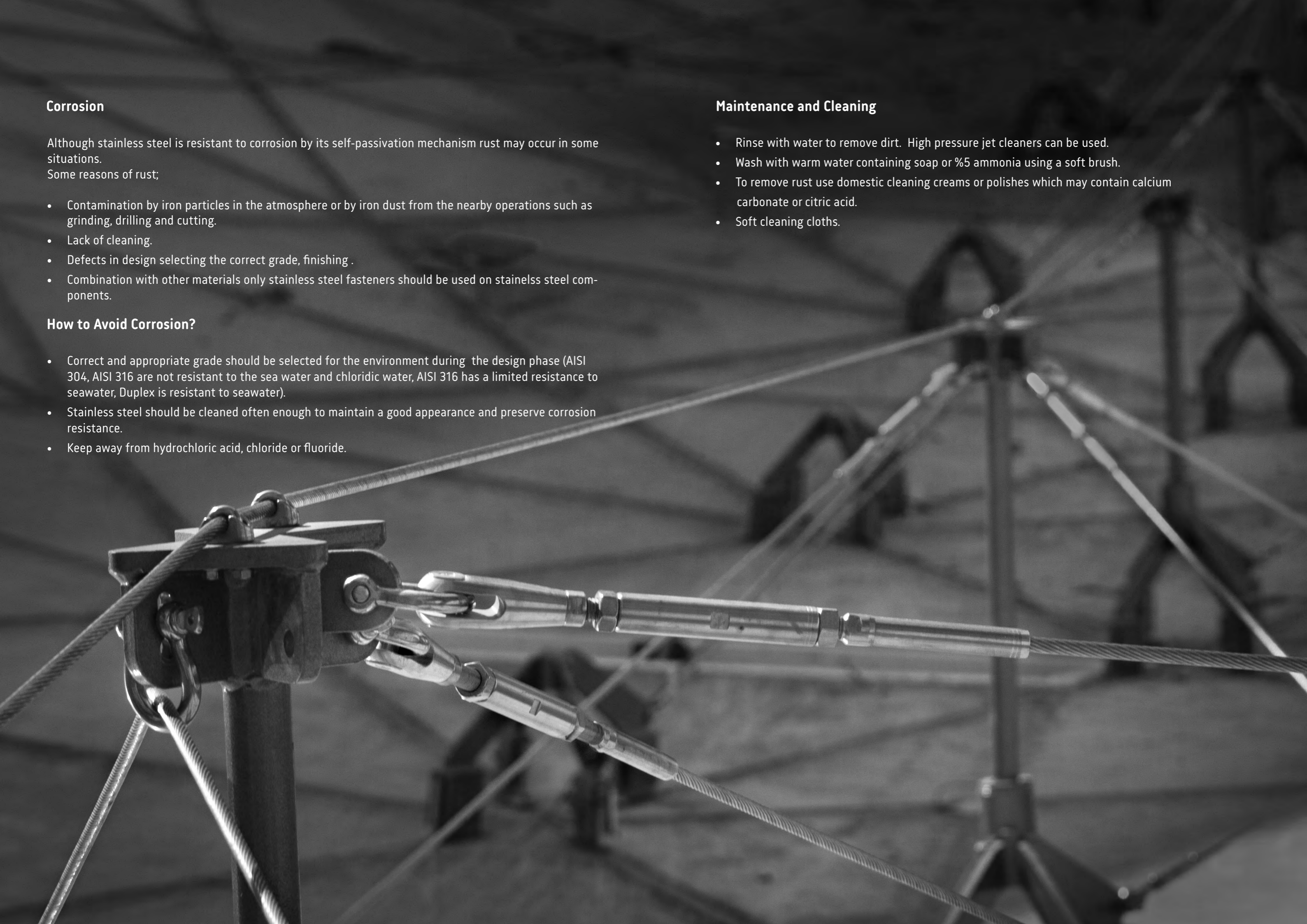
- Contamination by iron particles in the atmosphere or by iron dust from the nearby operations such as grinding, drilling and cutting.
- Lack of cleaning.
- Defects in design selecting the correct grade, finishing .
- Combination with other materials only stainless steel fasteners should be used on stainless steel components.

How to Avoid Corrosion?

- Correct and appropriate grade should be selected for the environment during the design phase (AISI 304, AISI 316 are not resistant to the sea water and chloridic water, AISI 316 has a limited resistance to seawater, Duplex is resistant to seawater).
- Stainless steel should be cleaned often enough to maintain a good appearance and preserve corrosion resistance.
- Keep away from hydrochloric acid, chloride or fluoride.

Maintenance and Cleaning

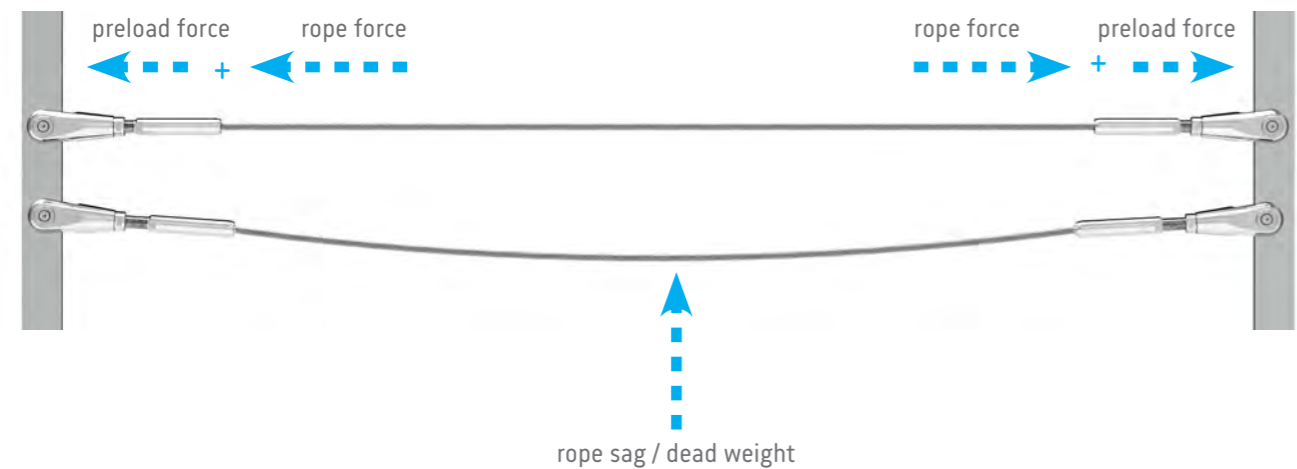
- Rinse with water to remove dirt. High pressure jet cleaners can be used.
- Wash with warm water containing soap or 5% ammonia using a soft brush.
- To remove rust use domestic cleaning creams or polishes which may contain calcium carbonate or citric acid.
- Soft cleaning cloths.



TECHNICAL TIPS

Rope Forces and Tensioning

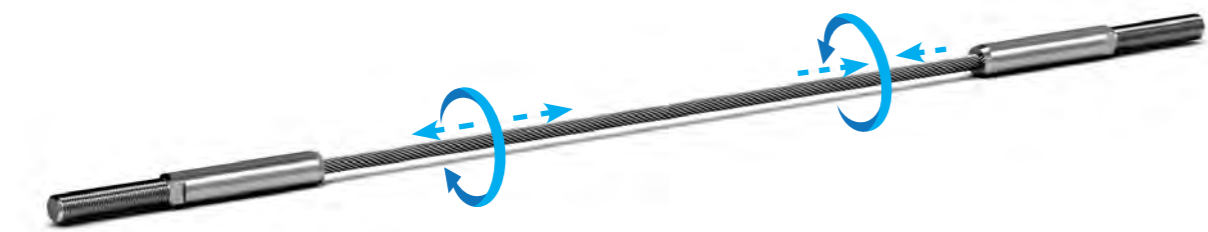
To make up an effective total, rope force and preload force should be applied as a combination. The ropes are held by means of fittings such as end stops and nuts. The length of the rope can be adjusted by the help of this joints.



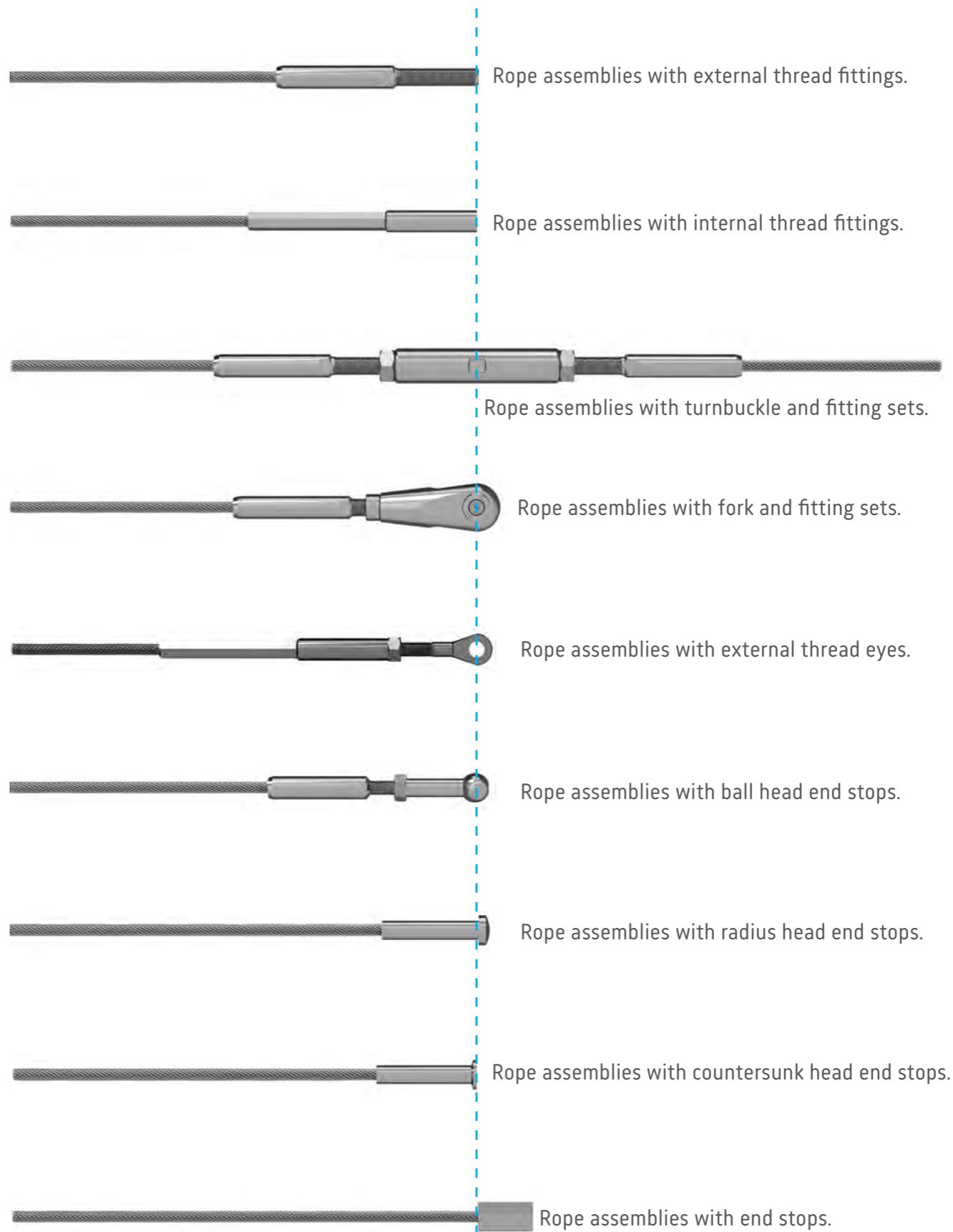
Tightening and Loosening Description of Rope System

Right Hand / Left Hand Thread

Where it is not possible to tension the rope from outside then a rope configuration with right hand /left hand thread should be used. The tensioning and releasing is effected by turning the entire rope. Both side right or both side left hand thread is used where the rope can be tensioned from outside.



ASSEMBLY LENGTHS



*reference line for production dimension

QUALITY CERTIFICATES AND PERFORMANCE TESTS

We are committed of the critical importance of material, system, and management quality in every stage of production. To ensure the highest standards, we carry out all necessary tests and procedures, systematically completing each step to guarantee the safety, durability, and performance of our products. Our commitment to continuous improvement ensures that every product we offer meets rigorous quality requirements, providing reliability in both architectural and industrial applications.

Currently hold certificates;

ISO 9001:2015

ISO 14001:2015

ISO 45001:2018

EN 1090-1:2009+A1:2011 system 2+

Our products undergo extensive performance testing, including,

Drop Tests, for Safety Nets, according to EN 1263-1:2002-07

Pendulum tests, for balustrade infills, according to EN 12600:2003-04

Tensile strength tests, for wire ropes, according to EN 12385-1:2009-01 / EN 10264-4:2002-11

Corrosion tests according to EN ISO 12944-2-1998-07 / EN ISO 12944-6-1998-07





OUR GOALS

As inoxnet® we have recently begun establishing new services in Turkey, however our factory and office goals are:

- Our goals as a company is to introduce our products within Turkey and the world. To provide our best services putting our product quality in the forefront while always ensuring customer satisfaction.
- Being the preferred company due to its professional management, which delivers absolute quality both at home and abroad,
- Being the first choice company by creating a working environment where employees are happily working as a member of the inoxnet® family.
- To demonstrate our quality all over the world, to increase our reputation and to expand our core competencies and competitiveness while competing,
- To continuously improve our research and development activities for a portfolio containing economic, high-quality and innovative products.

INOKSNET YAPI SİSTEMLERİ SAN. DIŞ. TİC. A.Ş.

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