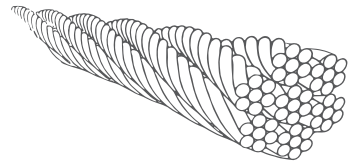
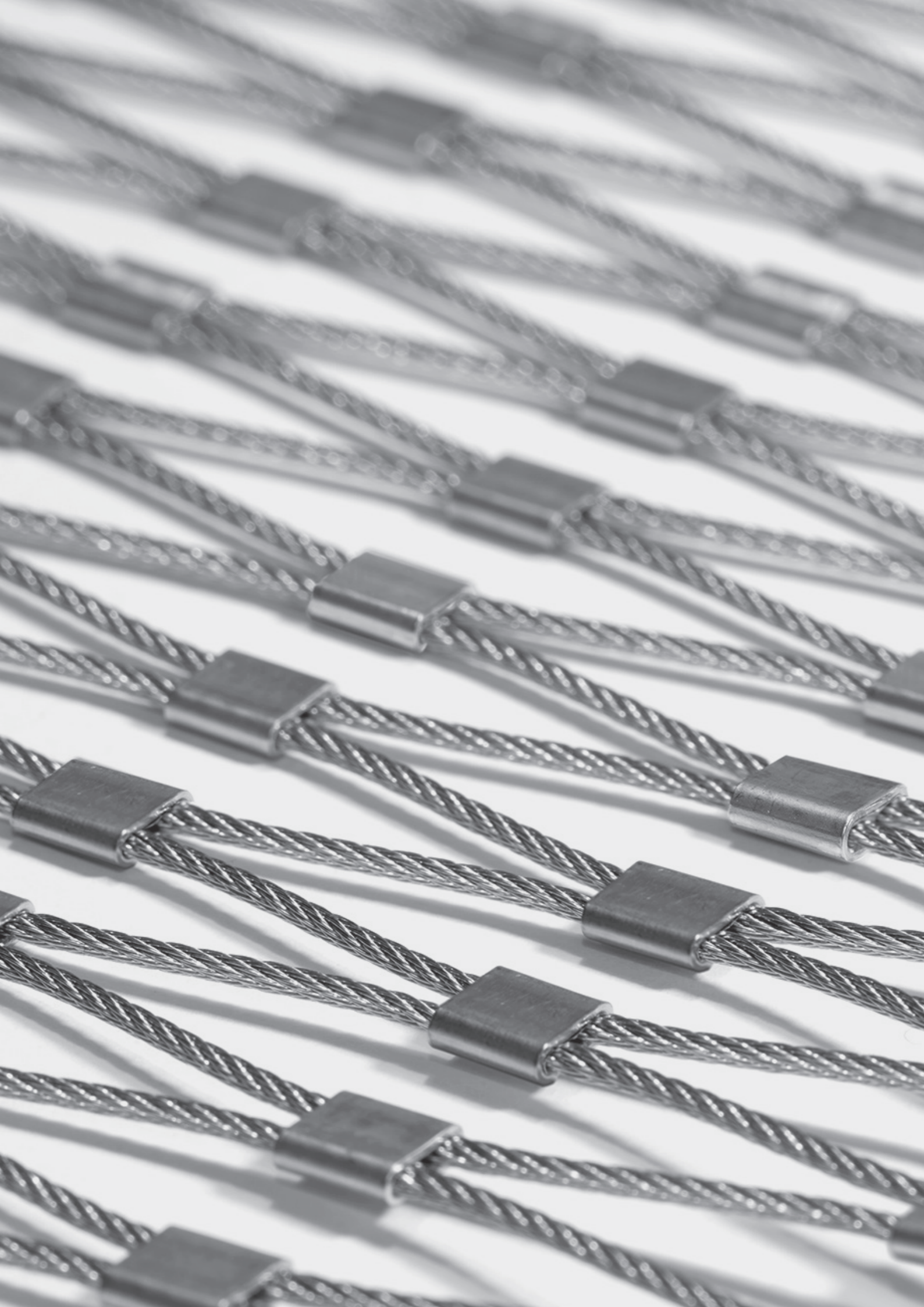


**inoxnet**



**I-NET STAINLESS STEEL  
NET SYSTEMS**





## CONTENT

## PAGE

• <b>Who we are ?</b>	
Our Company .....	-4/5-
• <b>What we do ?</b>	
Consulting.....	-6-
Planning & Design .....	-6-
Static Calculations.....	-7-
Production .....	-7-
Installation.....	-8/9-
• <b>Our Products</b>	
<b>I-NET® Stainless Steel Net Systems</b> .....	-12-
- I-NET® Technical & Geometrical Details .....	-14-
- I-NET® Components .....	-15-
- I-NET® General Information .....	-16-
- I-NET® Comparison .....	-17-
- I-NET® Types Directions & Endings .....	-18/21-
- Border Ropes & Assembly Details .....	-22/23-
<b>Installation Accessories and Equipments</b> .....	-24-
- Fixing components .....	-24/25-
- Tools and Equipments .....	-26-
• <b>Characteristics Of Wire Ropes</b> .....	-28/31-
- Explanation & Application of Wire Ropes .....	-28/29-
- Technical Information about Wire Ropes .....	-30-
• <b>Overview Of Stainless Steel</b> .....	-32/35-
- Material .....	-32-
- Corrosion .....	-34-
- Maintenance & Cleaning .....	-35-
• <b>Technical Tips</b> .....	-36-
- Rope Forces & Tensioning .....	-36-
- Tightening & Loosening Description of Rope System .....	-36-
• <b>Assembly Lenghts</b> .....	-37-
• <b>Certificates</b> .....	-38-
• <b>Our Goals</b> .....	-40-

- **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.**

**I-NET® STAINLESS STEEL NET SYSTEMS**

## I-NET® STAINLESS STEEL NET SYSTEMS

I-NET® is a lightweight, flexible, transparent, and durable material created by knitting high-quality stainless steel rope and ferrules. It's the ideal solution for architects and designers looking to bring their creative ideas to life. Thanks to its flexibility and ability to curve in multiple directions, I-NET® adapts to various geometric forms, making it suitable for large areas without additional support structures.

Available in different net widths and rope diameters, I-NET® is perfect for a wide range of applications, including railing infills, facades, and free-form zoo enclosures.

### Key Features

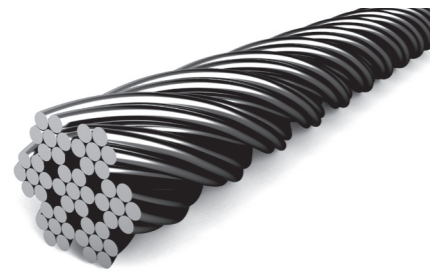
- Durability
- Transparency
- Lightweight

### Common Application Areas for I-NET®

- Balustrades
- Safety Nets
- Facades
- Greenery
- Decorative Designs
- Zoo Enclosures

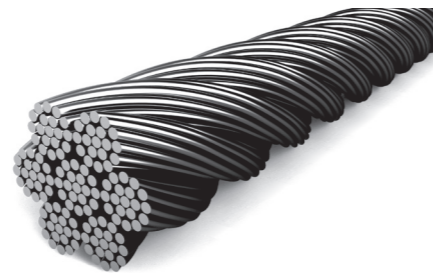
# I-NET® TECHNICAL & GEOMETRICAL DETAILS

I-NET®  
AISI 316 Stainless Steel Rope



Rope 7x7 for  
1,5mm and 2mm

I-NET®  
AISI 316 Stainless Steel Rope



Rope 7x19 for  
3mm and 4mm

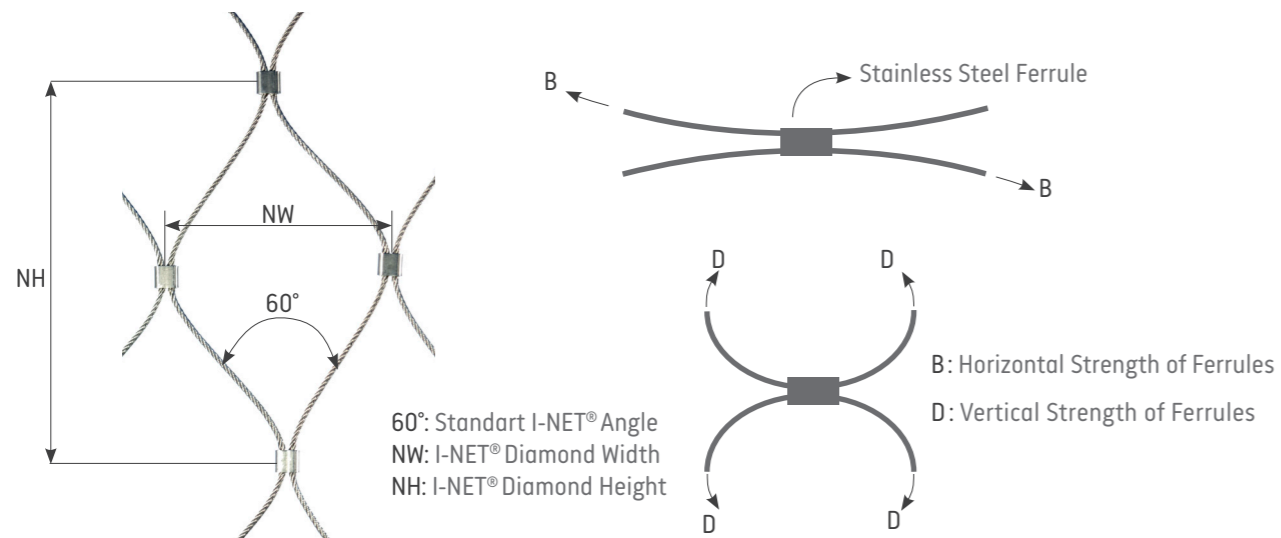
## ROPES

Part Number	Rope (Ømm)	Material	Construction	F (kN)	MQ mm²	S (N/mm²)
IR-102-0150	1,5	AISI 316	7x7	1,79	0,97	1570
IR-102-0200	2	AISI 316	7x7	3,52	1,73	1570
IR-103-0300	3	AISI 316	7x19	6,89	3,73	1570
IR-103-0400	4	AISI 316	7x19	12,38	6,63	1570

F = Breaking load  
MQ = Metallic cross section  
S = Nominal strength of the individual wires

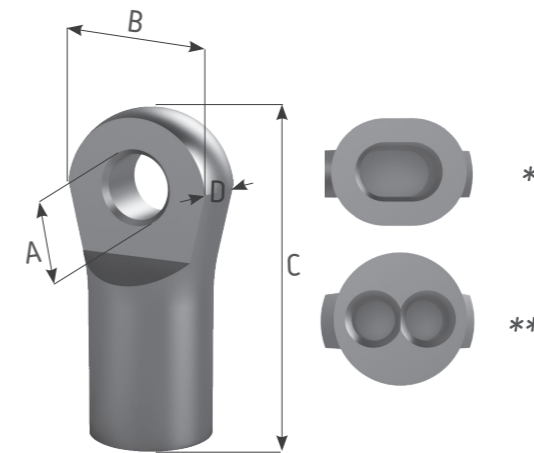
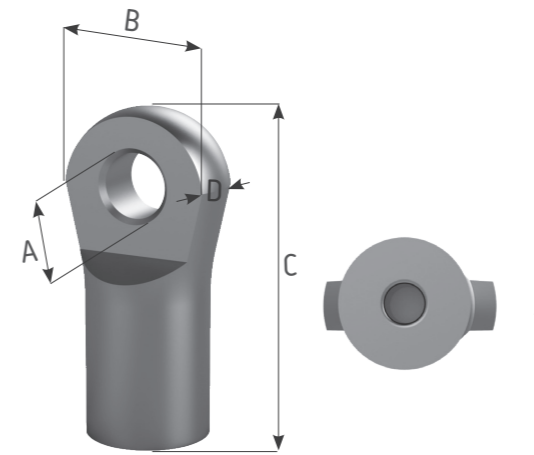
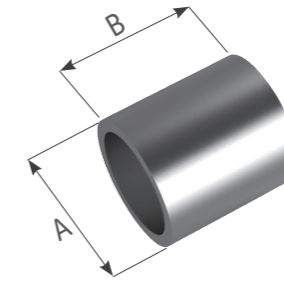
## FERRULES

Part Number	Rope (Ømm)	Material	Node Strength B(kN)	Node Strength D(kN)	Diameter Ø (mm)	Length (mm)
IN-115-0150	1,5	AISI 316Ti	0,16	2,36	5	6,4
IN-115-0200	2	AISI 316Ti	0,42	3,81	6	7,8
IN-115-0300	3	AISI 316Ti	0,53	6,93	8	11

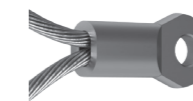


The standard diameters of rope used in I-NET® stainless steel nets are produced as 1.5 mm, 2 mm, 3 mm or 4 mm. Producing net width of 25 to 200mm (or larger) is possible depending on the rope diameter. The material grade of I-NET® is AISI316 (1.4401), AISI316L (1.4404), AISI316Ti (1.4571) and 2205Duplex (1.4462).

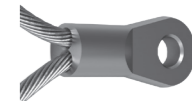
# I-NET® Components



Single 1,5, 2 and 3mm



Double 1,5 and 2mm



Double 3mm

## I-NET® FERRULE

Part Number	Rope (Ømm)	Dimensions in mm	
		A	B
IN-115-0150	1,5	5	6,4
IN-115-0200	2	6	7,8
IN-115-0300	3	8	11

Material AISI 316 L

## I-NET® EYELET SINGLE

Part Number	Rope (Ømm)	Dimensions in mm			
		A	B	C	D
*IN-116-0150	1,5	3,1	7,8	15,9	3
*IN-116-0200	2	4,6	10,6	21	3
*IN-116-0300	3	6	14,4	31	5

Material AISI 316 L

## I-NET® EYELET DOUBLE

Part Number	Rope (Ømm)	Dimensions in mm			
		A	B	C	D
**IN-117-0150	1,5	3,1	7,8	15,9	3
**IN-117-0200	2	4,6	10,6	21	3
***IN-117-0300	3	6	14,4	31	5

Material AISI 316 L



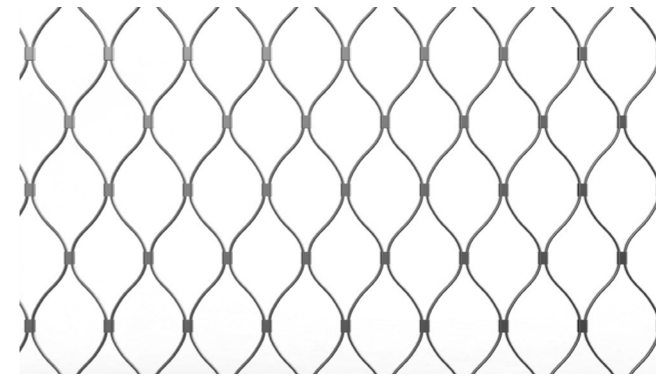
## I-NET® General Information

Part Number	Rope Ø mm	NW X NH mm	Weight kg/m <sup>2</sup>	Transparency %
IN-110-150-025	1,5	25 x 43	1,71	82,6
IN-110-150-030	1,5	30 x 52	1,31	85,9
IN-110-150-040	1,5	40 x 69	0,87	89,9
IN-110-150-050	1,5	50 x 87	0,64	92,2
IN-110-150-060	1,5	60 x 104	0,5	93,7
IN-110-150-070	1,5	70 x 121	0,41	94,6
IN-110-150-080	1,5	80 x 139	0,35	95,3
IN-110-150-100	1,5	100 x 173	0,27	96,3
IN-110-150-120	1,5	120 x 208	0,22	97
IN-110-150-140	1,5	140 x 242	0,18	97,5
IN-110-150-160	1,5	160 x 277	0,15	97,8
IN-110-150-180	1,5	180 x 312	0,14	98
IN-110-150-200	1,5	200 x 346	0,12	98,9
IN-110-200-040	2	40 x 69	1,45	86,1
IN-110-200-050	2	50 x 87	1,07	89,3
IN-110-200-060	2	60 x 104	0,85	91,4
IN-110-200-070	2	70 x 121	0,7	92,6
IN-110-200-080	2	80 x 139	0,6	93,6
IN-110-200-100	2	100 x 173	0,45	95
IN-110-200-120	2	120 x 208	0,36	95,9
IN-110-200-140	2	140 x 242	0,3	96,6
IN-110-200-160	2	160 x 277	0,26	97,1
IN-110-200-180	2	180 x 312	0,23	97,3
IN-110-200-200	2	200 x 346	0,2	97,8
IN-110-300-050	3	50 x 87	2,48	85
IN-110-300-060	3	60 x 104	1,94	87,1
IN-110-300-070	3	70 x 121	1,59	89
IN-110-300-080	3	80 x 139	1,34	90,5
IN-110-300-100	3	100 x 173	1,01	92,6
IN-110-300-120	3	120 x 208	0,81	93,9
IN-110-300-140	3	140 x 242	0,68	94,9
IN-110-300-160	3	160 x 277	0,58	95,6
IN-110-300-180	3	180 x 312	0,51	95,9
IN-110-300-200	3	200 x 346	0,45	95

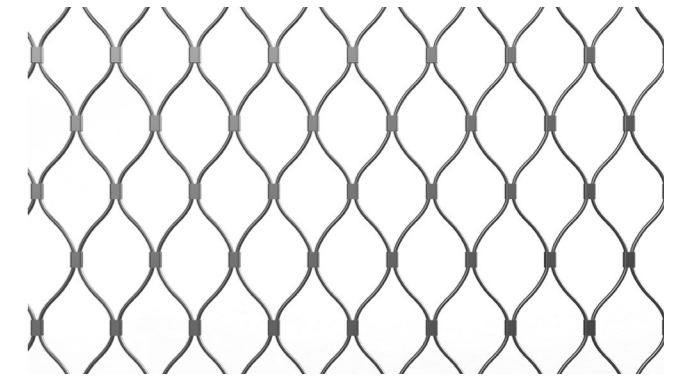
Part Number : IN - 000 - 000 - 000

- I-NET® Width
- Rope Diameter
- Code No
- I-NET®

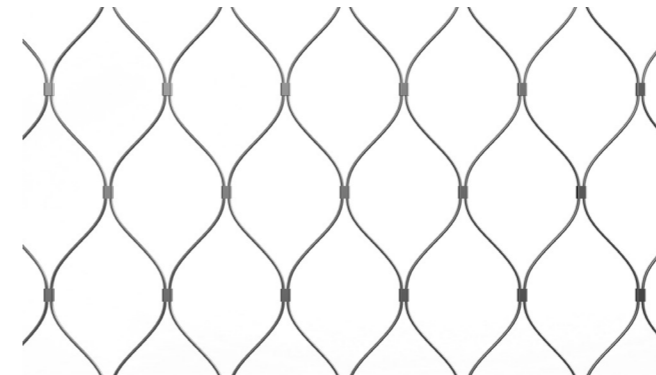
## I-NET® Comparison



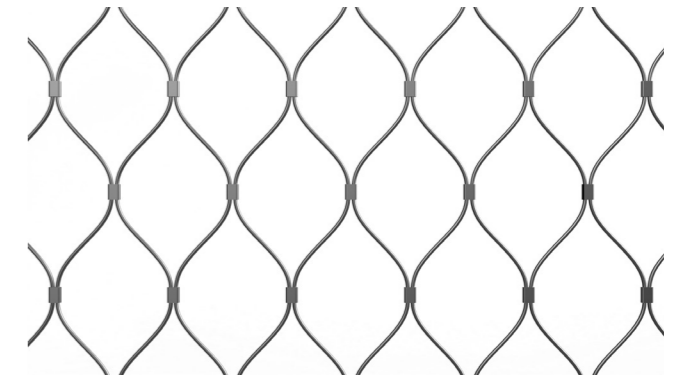
I-NET® 40mm with 1,5mm rope diameter



I-NET® 40mm with 2mm rope diameter



I-NET® 60mm with 1,5mm rope diameter



I-NET® 60mm with 2mm rope diameter



I-NET® 80mm with 2mm rope diameter



I-NET® 80mm with 3mm rope diameter

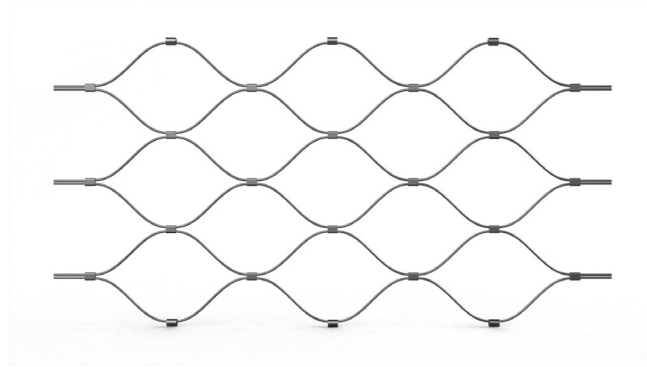


## I-NET® Types / Directions and Endings

### Horizontal Diamond I-NET® Endings

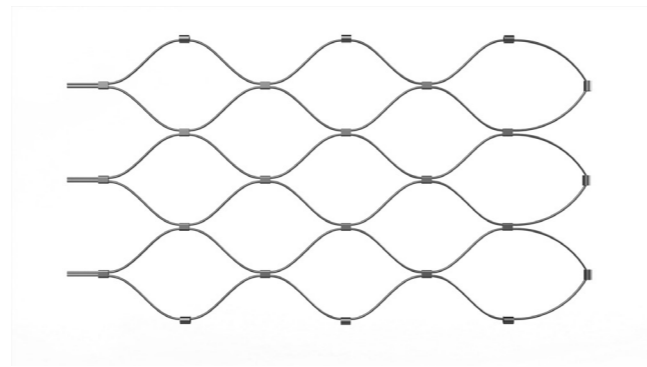
The horizontal diamond net direction is commonly used in balustrades, greenery, and decorative projects. It is often preferred for projects requiring long, continuous nets as an economical solution. The possible finishing options for I-NET® in a horizontal diamond direction are as follows:

**H1**



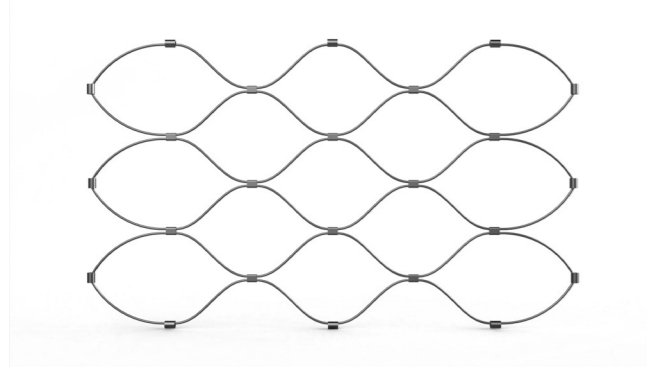
Both sides open cable endings.

**H2**



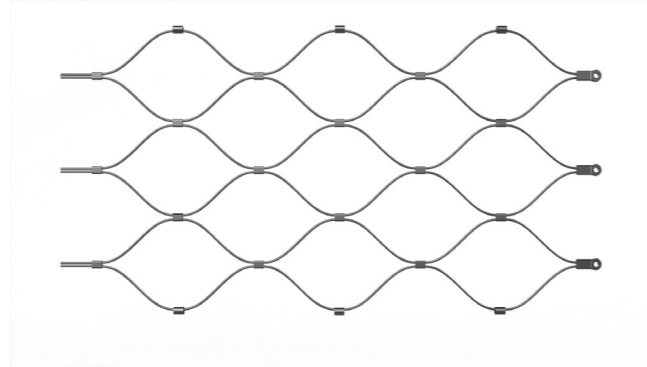
One side open cables, other side closed with loose ferrules.

**H3**



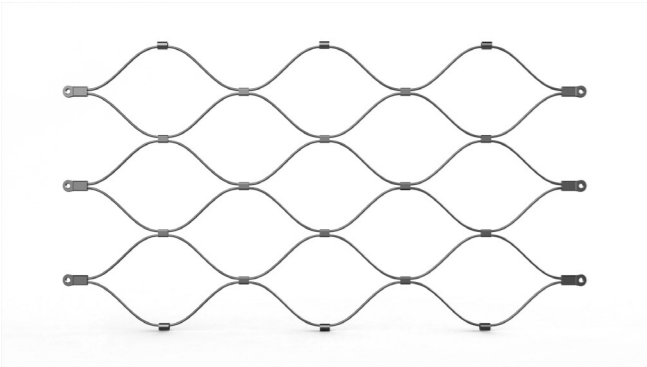
Both sides closed with loose ferrules.

**H4**



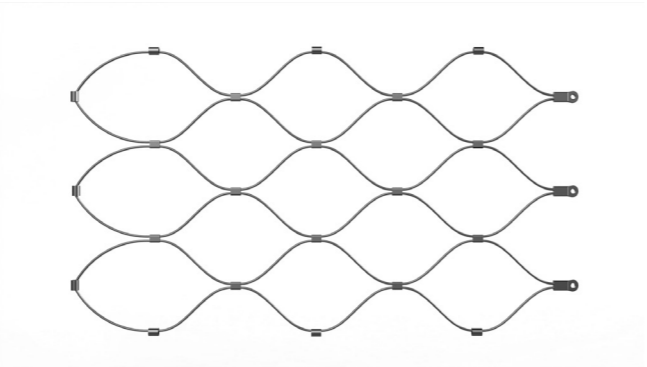
One side open cables, other side closed with eyelets.

**H5**



Both sides closed with eyelets.

**H6**



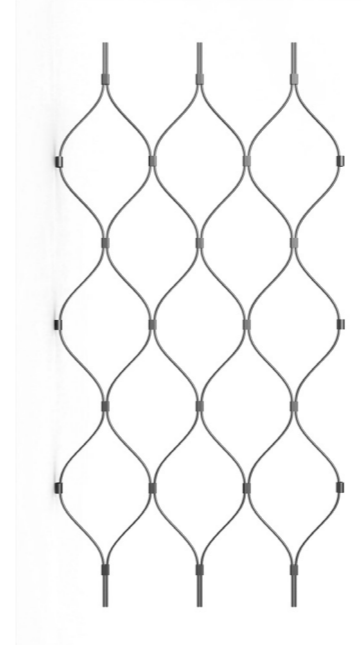
One side closed with loose ferrules, other side closed with eyelets.

## I-NET® Types / Directions and Endings

### Vertical Diamond I-NET® Endings

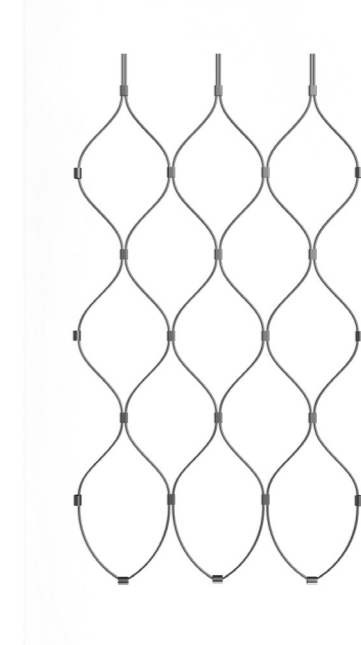
The vertical diamond net direction is mostly preferred for safety-focused applications and facade projects. The possible finishing options for I-NET® in a vertical diamond direction are as follows:

**V1**



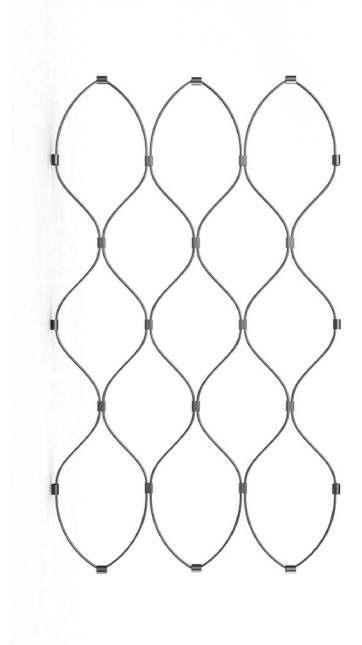
Both sides open cable endings.

**V2**



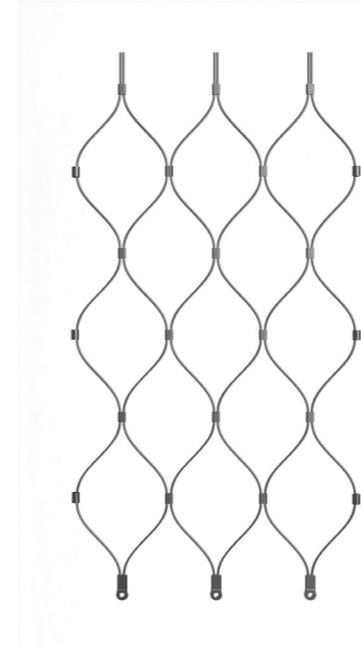
One side open cables, other side closed with loose ferrules.

**V3**



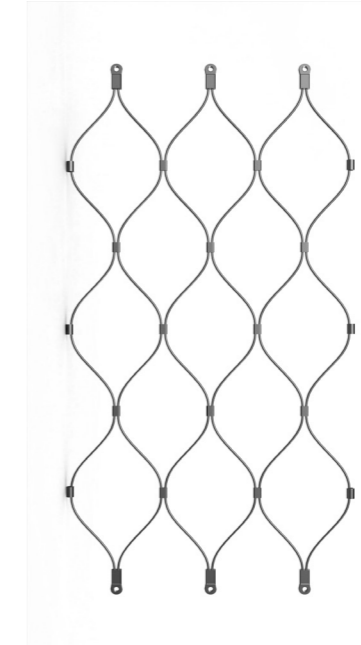
Both sides closed with loose ferrules.

**V4**



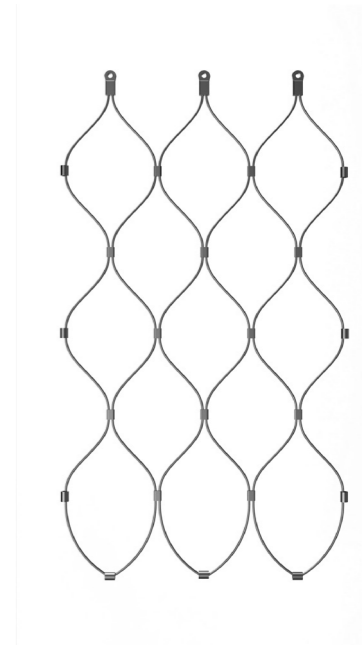
One side open cables, other side closed with eyelet.

**V5**



Both sides closed with eyelet.

**V6**



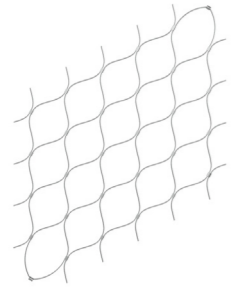
One side closed with loose ferrules other side closed with eyelets.

## I-NET® Types / Directions and Endings

### Horizontal Diamond Parallelograms I-NET® Endings

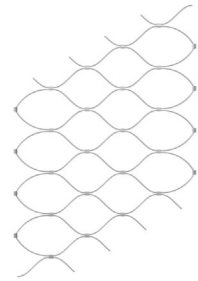
Parallelogram I-NET® panel requirements are most commonly seen in staircase projects. The planning and production processes are meticulously carried out to meet exact dimensions. The possible finishing options for horizontal diamond-directioned parallelogram I-NET® panels are as follows:

**PH1**



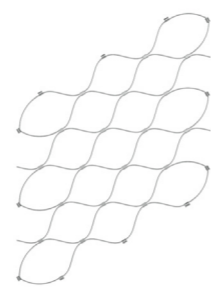
All sides open cable net endings.

**PH2**



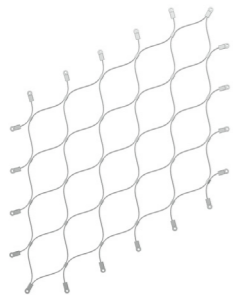
Both sides closed with loose ferrules, other sides open cable endings.

**PH3**



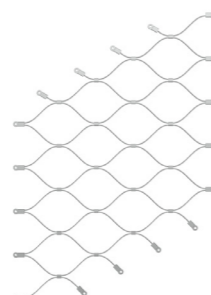
Both sides closed with loose ferrules and open cables, other sides closed with loose ferrules.

**PH4**



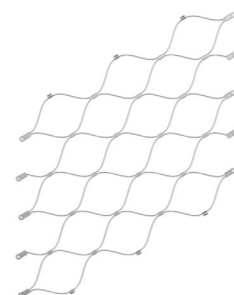
All net sides closed with eyelets.

**PH5**



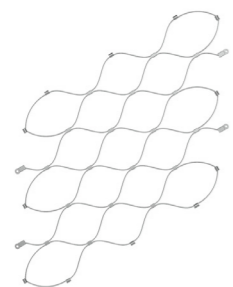
All net sides closed with eyelets.

**PH6**



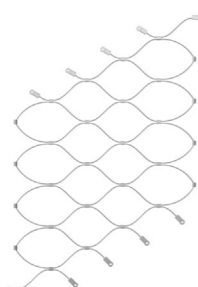
Both sides closed with eyelets, both sides closed with loose ferrules

**PH7**



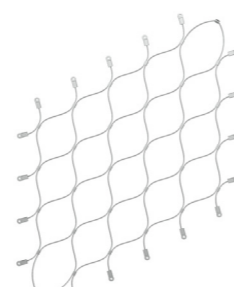
Both sides closed with loose ferrules and eyelets, other sides closed with loose ferrules.

**PH8**



Both sides closed with loose ferrules, other sides closed with eyelets.

**PH9**



All net sides closed with eyelets.

## I-NET® Types / Directions and Endings

### Vertical Diamond Parallelograms I-NET® Endings

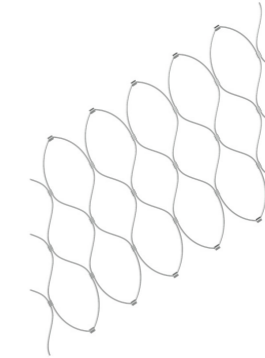
Parallelogram I-NET® panel requirements are most commonly seen in staircase projects. The planning and production processes are precisely executed to meet exact dimensions. The possible finishing options for vertical diamond-directioned parallelogram I-NET® panels are as follows:

**PV1**



Both sides closed with loose ferrules, other sides closed with loose ferrules and open cables.

**PV2**



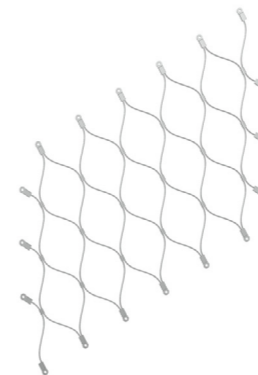
Both sides open cables, other sides closed with loose ferrules.

**PV3**



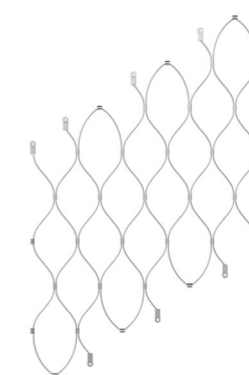
Both sides closed with loose ferrules, other sides closed with eyelets.

**PV4**



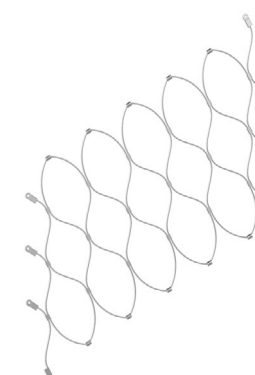
All net sides closed with eyelets.

**PV5**



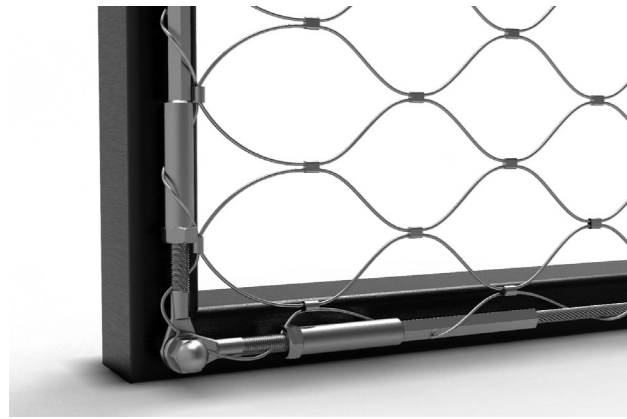
Both sides closed with loose ferrules, other sides closed with loose ferrules and eyelets.

**PV6**

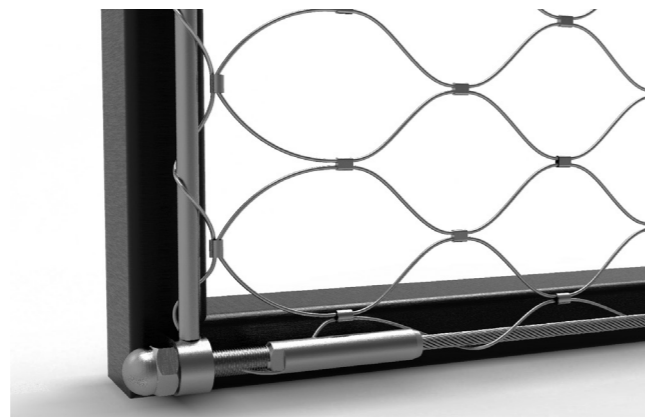


Both sides closed with eyelets, other sides closed with loose ferrules.

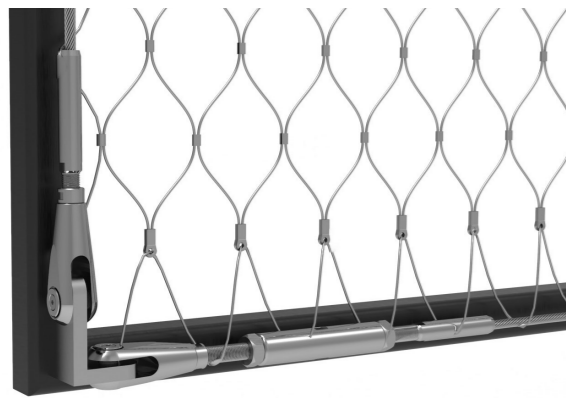
## Border Ropes and Assembly Details



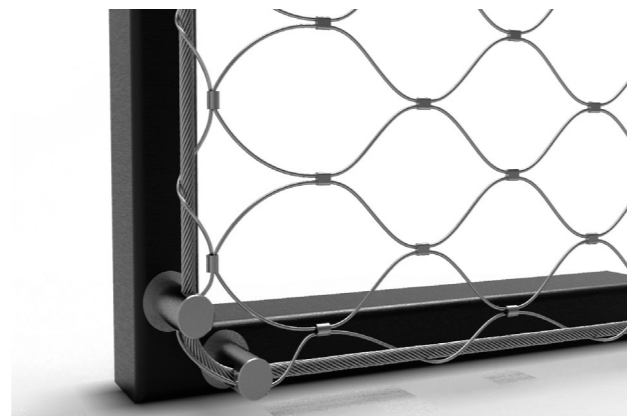
1. Corner solution, Eye with internal thread swaged fitting



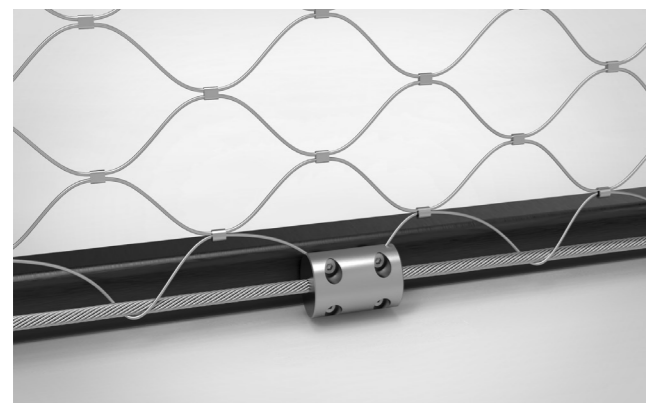
2. Corner solution with external thread fitting and rod fixation



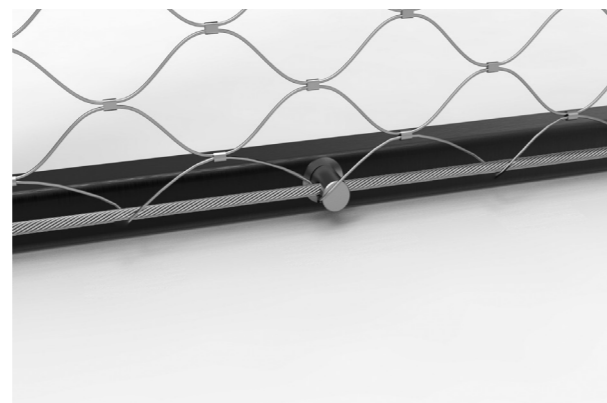
3. Corner connection bracket fixation with fork and swaged fitting



4. Corner solution with rope holder



5. Border cable guidance with clamp ring with two parts



6. Border cable guidance with rope holder

## Border Ropes and Assembly Details



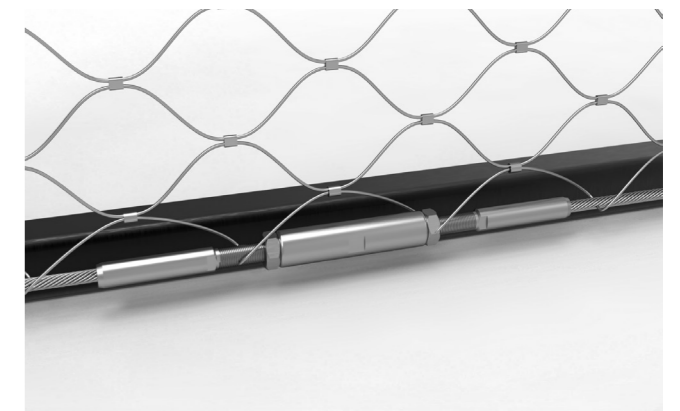
7. Corner solution, with fork-head rope guiding



8. Corner solution with eye bolt



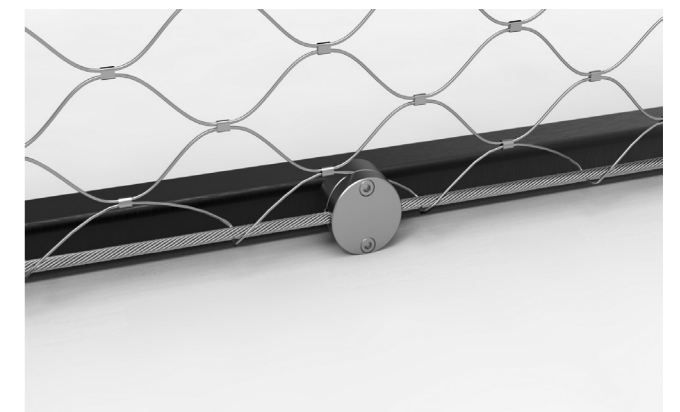
9. Corner solution with D-Form Shackle



10. Turnbuckle with both sides external thread fitting



11. Border cable guidance with connection bracket



12. Border cable guidance with screw on cross clamp

# 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



### THREAD LOCK FLUID

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

### 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



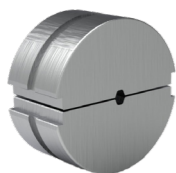
### MANUAL CRIMPING TOOL DIES

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



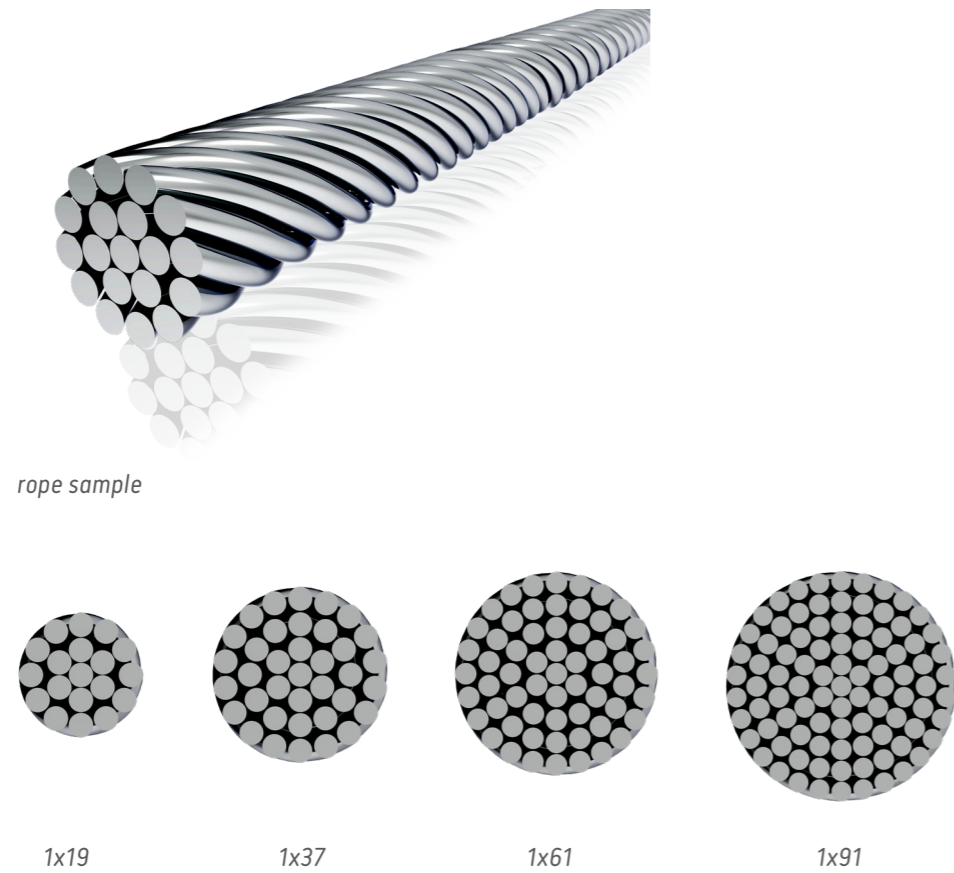
### HYDROLIC CRIMPING DIES

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



rope sample

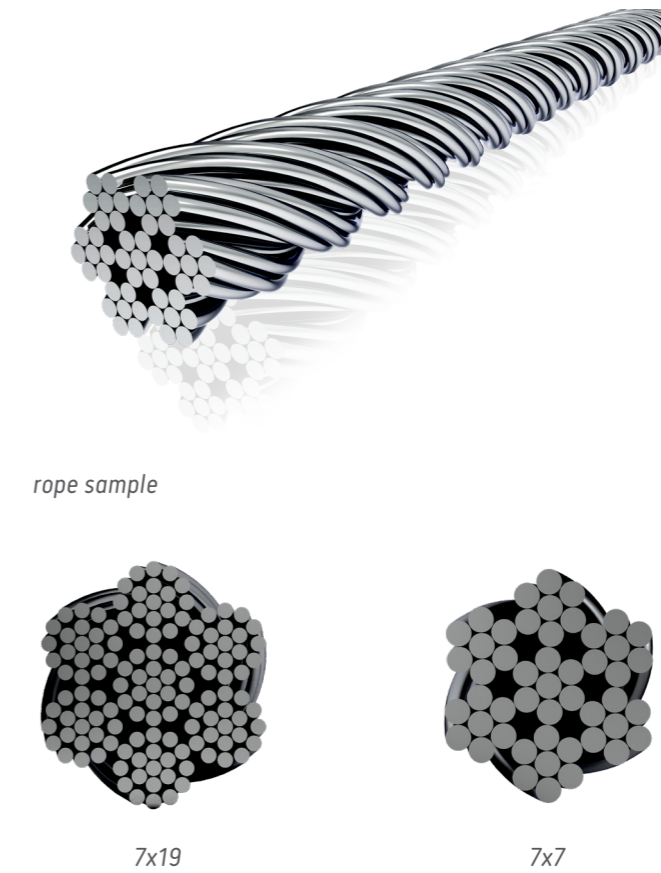
1x19

1x37

1x61

1x91

Type of Wire Rope	Explanation
Spiral Ropes	<p>Consist of several layers of individual round wires. They are manufactured from stainless steel wire. If an 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.</p>
Type of Wire Rope	Applications
Spiral Ropes	<p>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.</p>



rope sample

7x19

7x7

Type of Wire Rope	Explanation
Strand Ropes	<p>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.</p>
Type of Wire Rope	Applications
Strand Ropes	<p>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.</p>

## 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/mm<sup>2</sup> ± 10 kN/mm<sup>2</sup>

**Tolerance on Diameter** : 0% / +3%

**Socketing** : D= 4-40mm Swaging

Rope Ø mm	Minimum Breaking Force F <sub>min</sub> [kN]	Charact. Breaking Force F <sub>uk</sub> (1) [kN]	Tension Strength FRd (2) [kN]	Metallic Cross Section A [mm <sup>2</sup> ]	Stiffness EA [MN]	Weight [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

*F<sub>min</sub>*: Minimum Breaking Force.

*F<sub>uk</sub>*: Breaking Strength of Wire Ropes Inc. End Connectors.

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

*ke*: Loss Factor.

$F_{uk} = F_{min} \times k_e$ .

$FRd = (F_{min} \times k_e) / 1,65$ .

$k_e = 0,9$  (swaged fitting)





## OVERVIEW OF STAINLESS STEEL

### Material

Stainless 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 austenitic stainless steel which is a popular grade as 304 with a higher corrosion resistance.

Different to 304 it contains Molybdenum 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 DIFFERENTIATION 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;

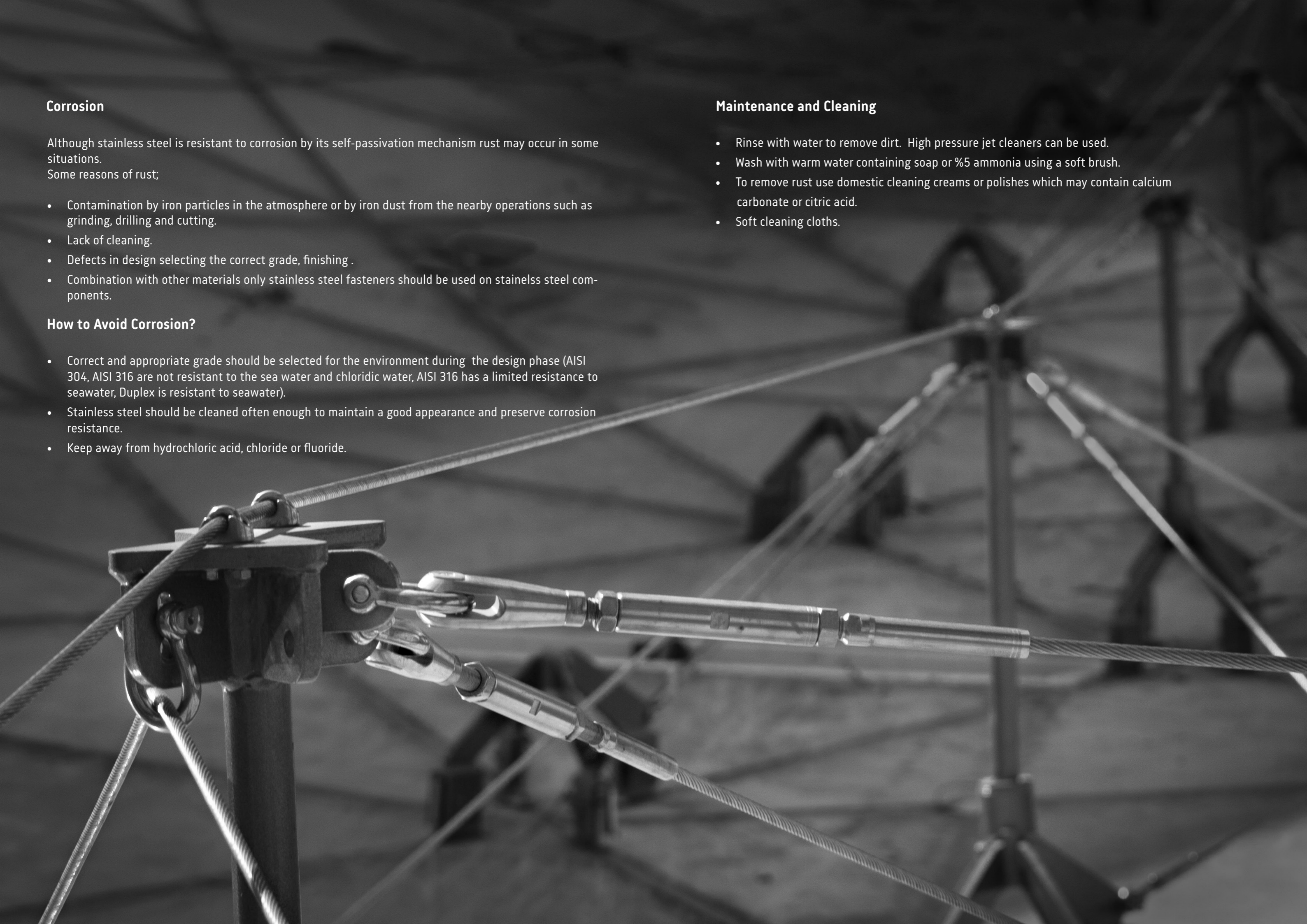
- Contamination by iron particles in the atmosphere or by iron dust from the nearby operations such as grinding, drilling and cutting.
- Lack of cleaning.
- Defects in design selecting the correct grade, finishing .
- Combination with other materials only stainless steel fasteners should be used on stainless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

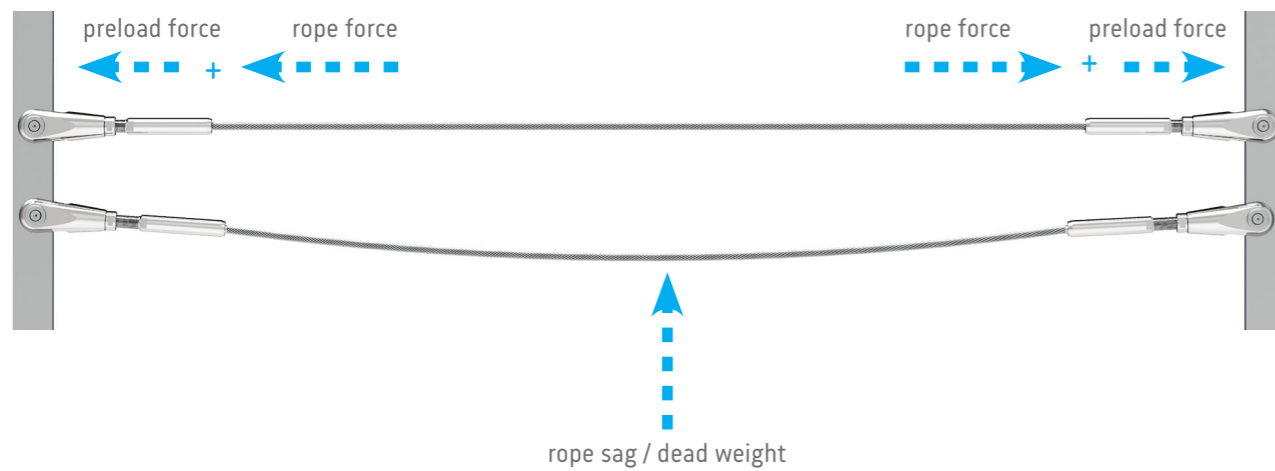
- Rinse with water to remove dirt. High pressure jet cleaners can be used.
- Wash with warm water containing soap or %5 ammonia using a soft brush.
- To remove rust use domestic cleaning creams or polishes which may contain calcium carbonate or citric acid.
- Soft cleaning cloths.



## TECHNICAL TIPS

### Rope Forces and Tensioning

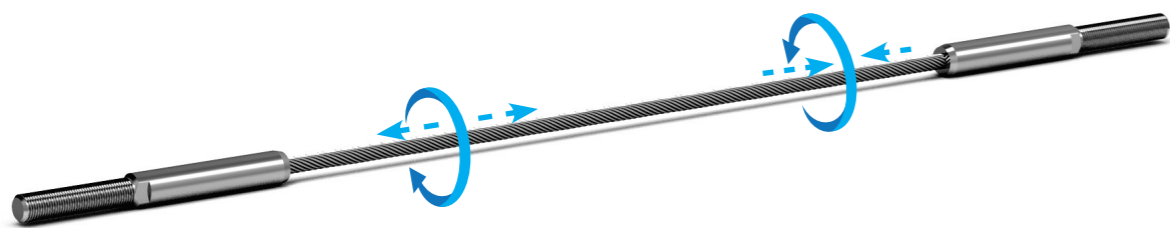
To make up an effective total, rope force and preload force should be applied as a combination. The ropes are held by means of fittings such as end stops and nuts. The length of the rope can be adjusted by the help of this joints.



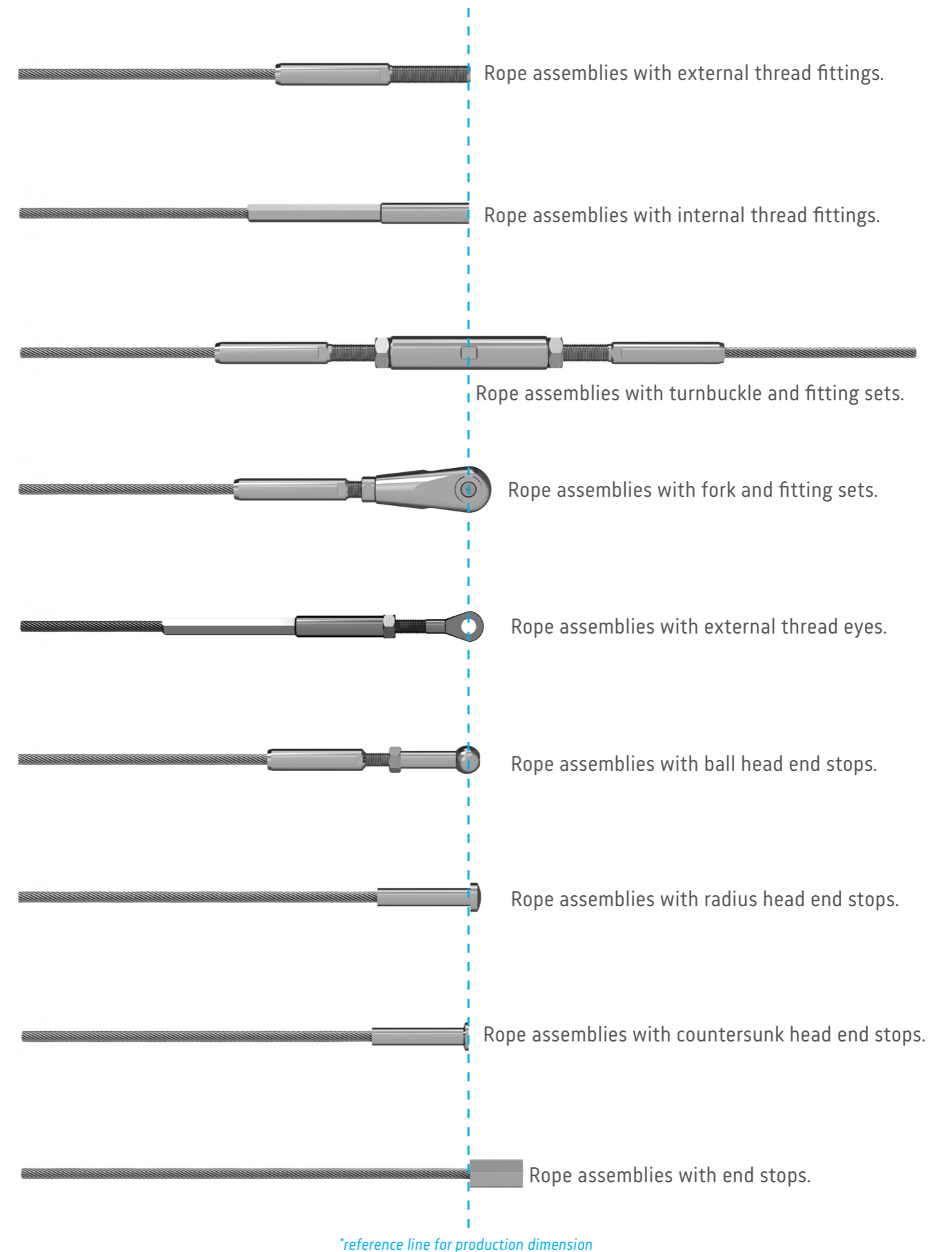
### Tightening and Loosening Description of Rope System

#### 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



## 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. DIŐ. TİC. A.Ő.

### Head Office

Rüzgarlıbahçe Mah. Özalp Çıkmaı Sokak 2/10 K Plaza 4.th Floor  
34805 Kavacık-Beykoz / İstanbul / TÜRKİYE  
Tel: +90 216 425 03 25

### Factory

FerhatpaŐa SB Mahallesi, Ali Rıza Efendi Cad. Blok 17  
İç Kapı No: 201 Çatalca / İstanbul / TÜRKİYE

e-mail: [info@inox-net.com](mailto:info@inox-net.com)

[www.inox-net.com](http://www.inox-net.com)

