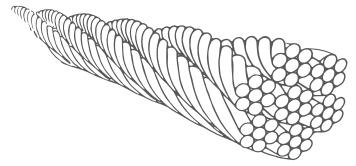
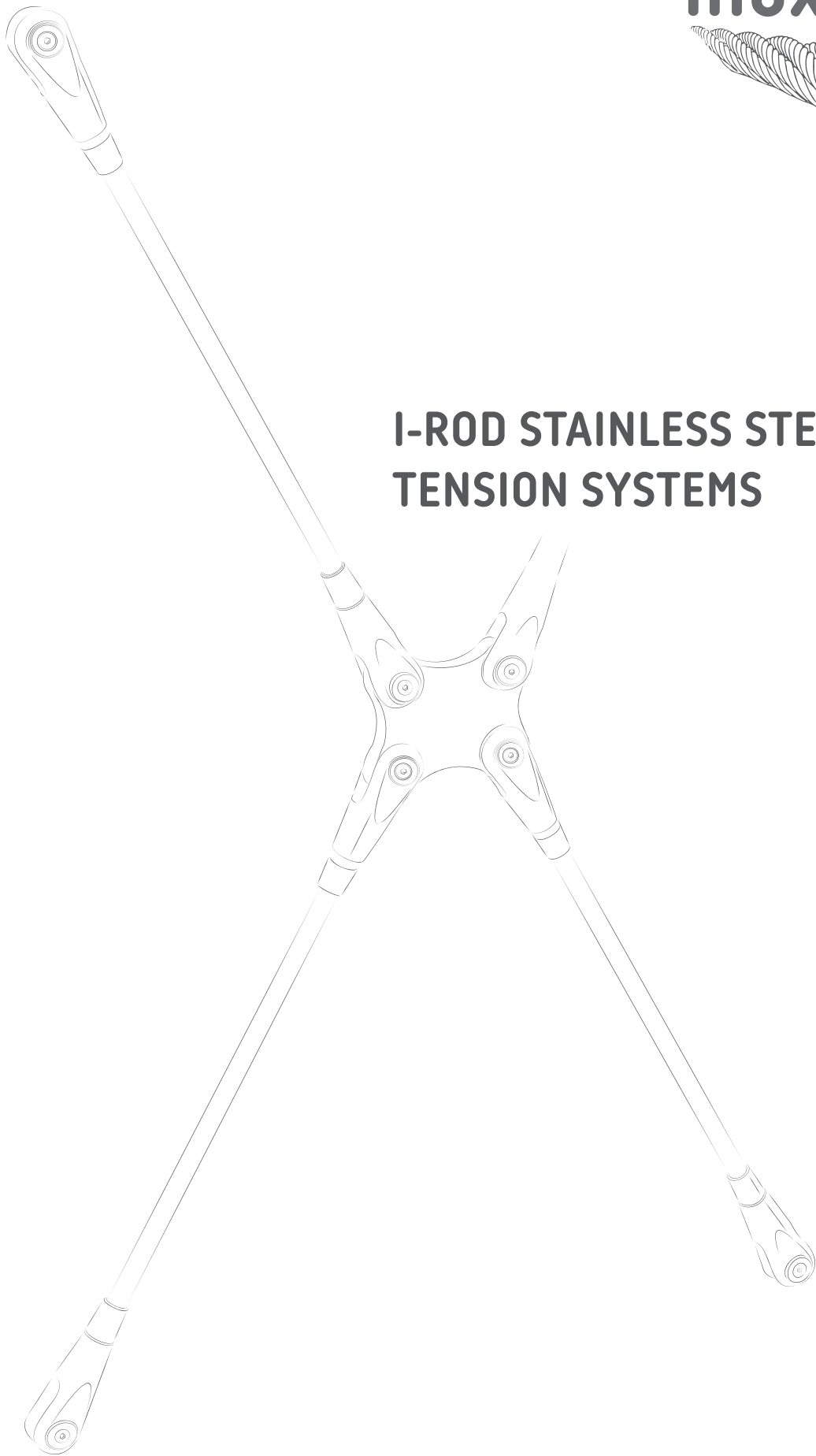
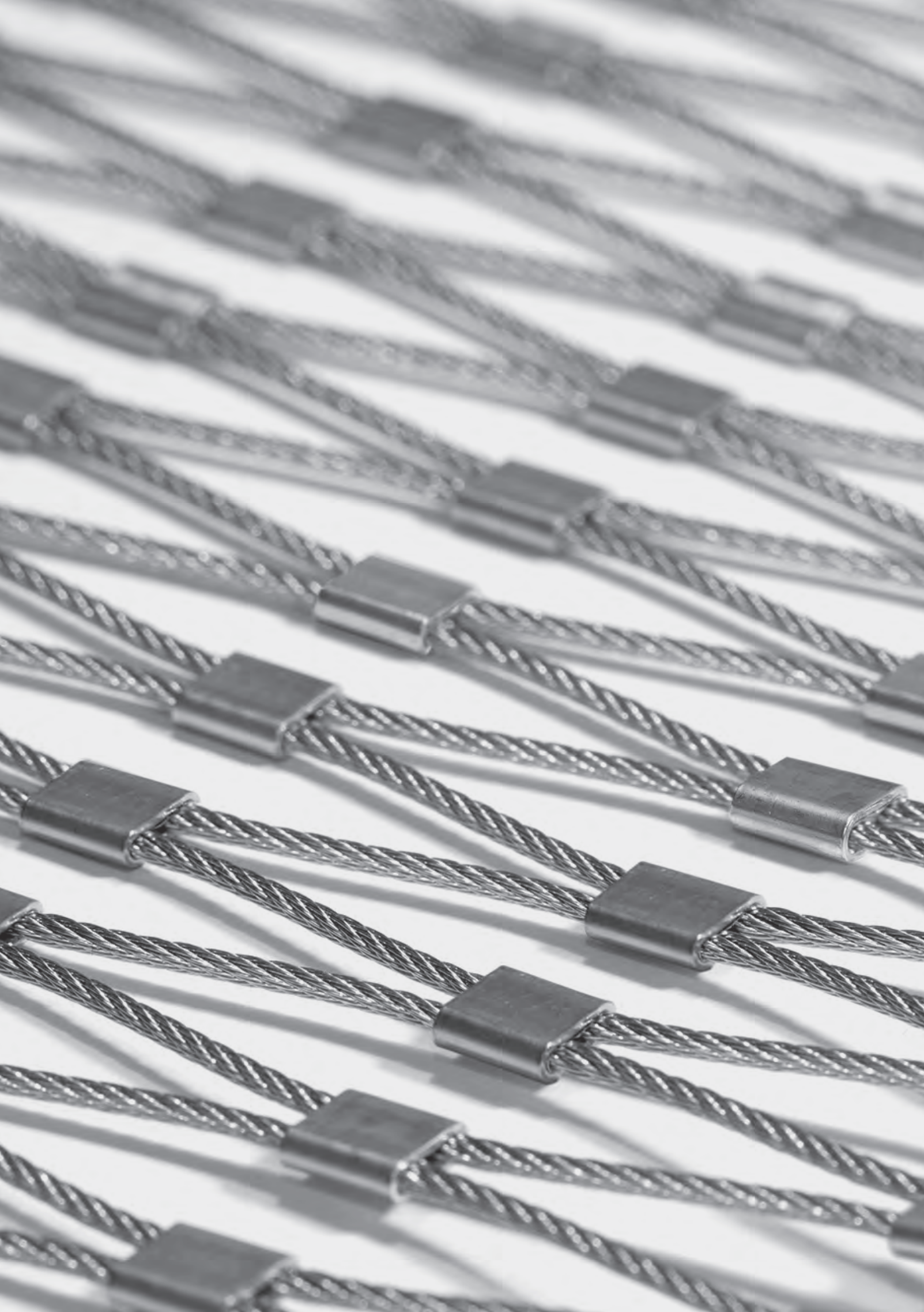


inoxnet



**I-ROD STAINLESS STEEL
TENSION 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.

I-ROD[®] STAINLESS STEEL ROD SYSTEMS

I-ROD® SYSTEMS

I-ROD® tension rod systems are ideal for a variety of applications, including canopies, glass facades, bridges, bus stations, and airport terminals. Made from high-quality stainless steel, these systems combine strength, stability, and sustainability, offering versatile solutions that enhance architectural designs.

I-ROD® systems meet both aesthetic and structural requirements, ensuring long-lasting durability. With sizes from M10 to M30 and galvanized steel options in addition to AISI 316, I-ROD® systems offer flexibility for projects of any scale. Pre-assembled to precise specifications, I-ROD® ensures easy integration and efficient installation, saving time and resources on-site.

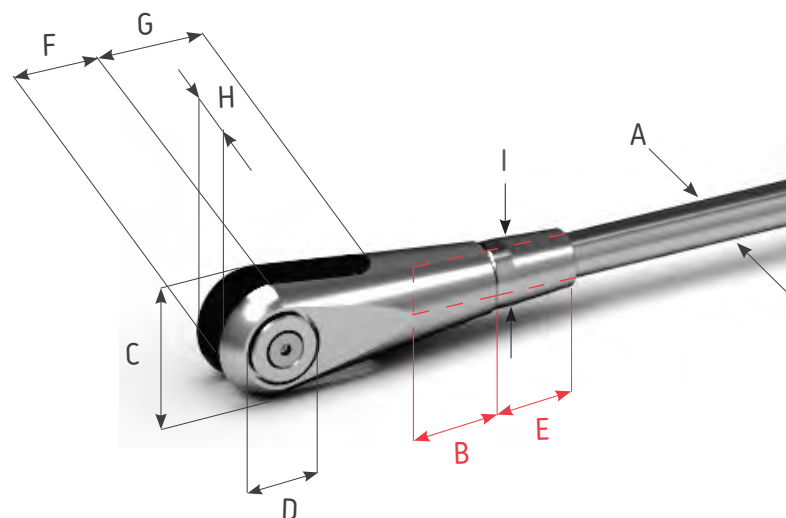
68
70
72

I-ROD® Accessories

FORK

Part Number	System Thread	Rod Ø mm	Dimensions in mm							
			A	B	C	D	E	F	G	H
IRD-610-010-00	M10	10	20	25.7	10	20	12.9	19.7	11	15
IRD-610-012-00	M12	12	24	29.7	12	23	14.8	22	12	18
IRD-610-016-00	M16	16	32	39.6	18	28	19.8	29.3	16	24
IRD-610-020-00	M20	20	40	52.6	20	35	26.3	38.7	16	28
IRD-610-024-00	M24	25	48	60.1	26	42	30	45	22	35
IRD-610-027-00	M27	28	55	66.5	28	47	34.1	48.2	22	36
IRD-610-030-00	M30	30	60	75.9	30	53	37.9	55	22	40

Material AISI 316 L / 1.4462 Duplex



BOTH SIDES FORK SET

Set Number	System Thread	Rod Ø A(mm)	Max. Rod Length (mm)	Max. Set Length (L) max.(mm)	Min. Set Length (L) min.(mm)	Length Adjustment L +/- (mm)
IRDS-601-010	M10	10	6000	6084	294	10
IRDS-601-012	M12	12	6000	6096	316	12
IRDS-601-016	M16	16	6000	6128	366	16
IRDS-601-020	M20	20	6000	6170	480	20
IRDS-601-024	M24	25	6000	6192	524	24
IRDS-601-027	M27	28	6000	6217	615	28
IRDS-601-030	M30	30	6000	6240	656	30

Material AISI 316 L / 1.4462 Duplex

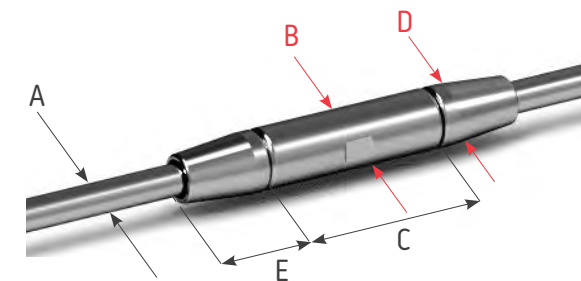


set up thread point is 1,5 x thread diameter for each fork
min. thread depth is 1 x thread diameter
fork adjustment is 0,5 x thread diameter for each fork

TURNBUCKLE

Part Number	System Thread	Rod Ø mm	Dimensions in mm				
			A	B	C	D	E
IRD-620-010-00	M10	10	19	65	19	27	
IRD-620-012-00	M12	12	20	71	20	30	
IRD-620-016-00	M16	16	28	79	28	37	
IRD-620-020-00	M20	20	38	85	38	47	
IRD-620-024-00	M24	25	40	105	40	58	
IRD-620-027-00	M27	28	45	109	45	62	
IRD-620-030-00	M30	30	50	145	50	65	

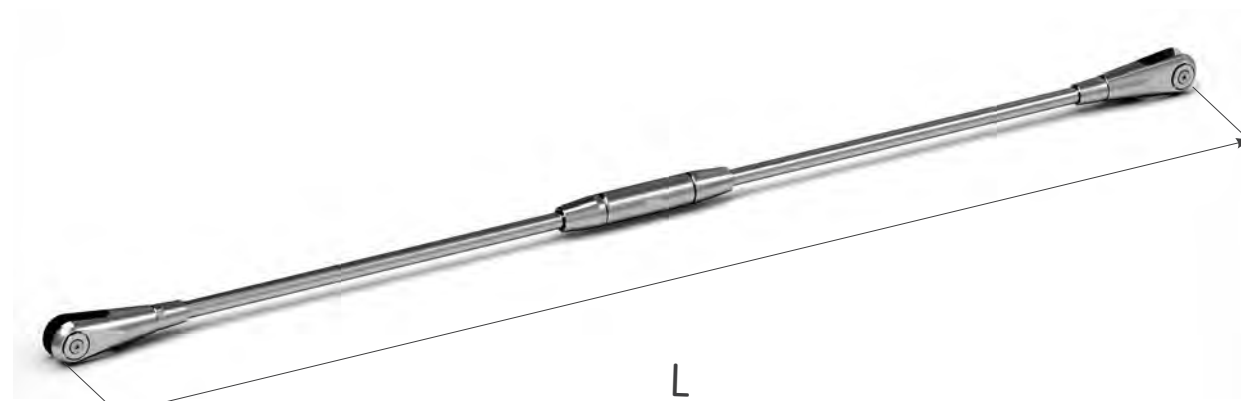
Material AISI 316 L / 1.4462 Duplex



BOTH SIDES FORK WITH TURNBUCKLE SET

Set Number	System Thread	Rod Ø A(mm)	Max. Rod Length (mm)	Max. Set Length (L) max.(mm)	Min. Set Length (L) min.(mm)	Length Adjustment L +/- (mm)
IRDS-602-010	M10	10	6000	12129	563	30
IRDS-602-012	M12	12	6000	12141	597	32
IRDS-602-016	M16	16	6000	12175	669	36
IRDS-602-020	M20	20	6000	12215	859	40
IRDS-602-024	M24	25	6000	12249	945	49
IRDS-602-027	M27	28	6000	12272	1098	53
IRDS-602-030	M30	30	6000	12325	1181	70

Material AISI 316 L / 1.4462 Duplex

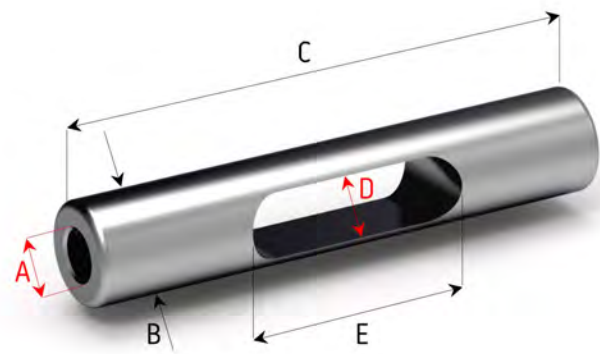


Material AISI 316 L / 1.4462 Duplex

set up thread point is "thread diameter + 10 mm" for each side of turnbuckle for M10-M20
"thread diameter + 12,5 mm" for each side of turnbuckle for M24-M27
"thread diameter + 20 mm" for each side of turnbuckle for M30
min. thread depth is 1 x thread diameter
turnbuckle adjustment is "+/- 20mm" for M10-M20
"+/- 25mm" for M24-M27
"+/- 40mm" for M30



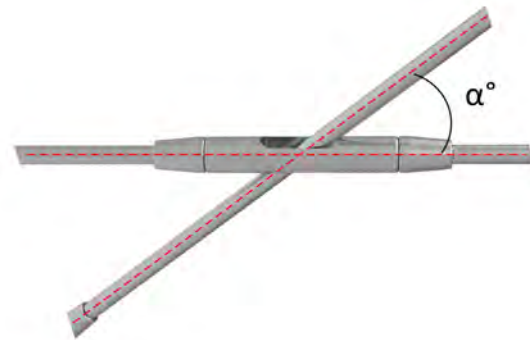
CROSS COUPLER



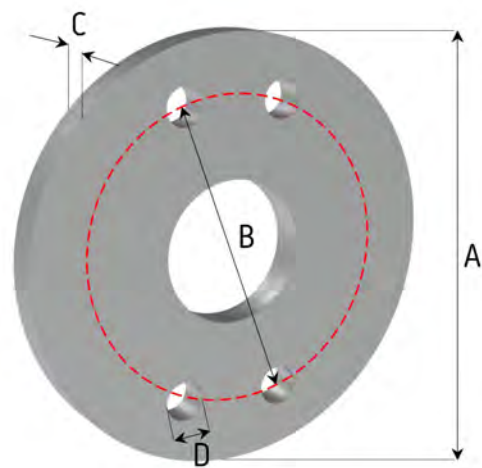
Part Number	System Thread	Dimensions in mm				
	A	B	C	D	E	
IRD-630-010-00	M10	19	100	12	42	
IRD-630-012-00	M12	22	112	15	48	
IRD-630-016-00	M16	28	145	19	61	
IRD-630-020-00	M20	38	181	23	79	
IRD-630-024-00	M24	40	208	27	88	
IRD-630-027-00	M27	45	227	30	99	
IRD-630-030-00	M30	50	250	33	110	

Material AISI316L

Connection angle α : between 40 and 90°



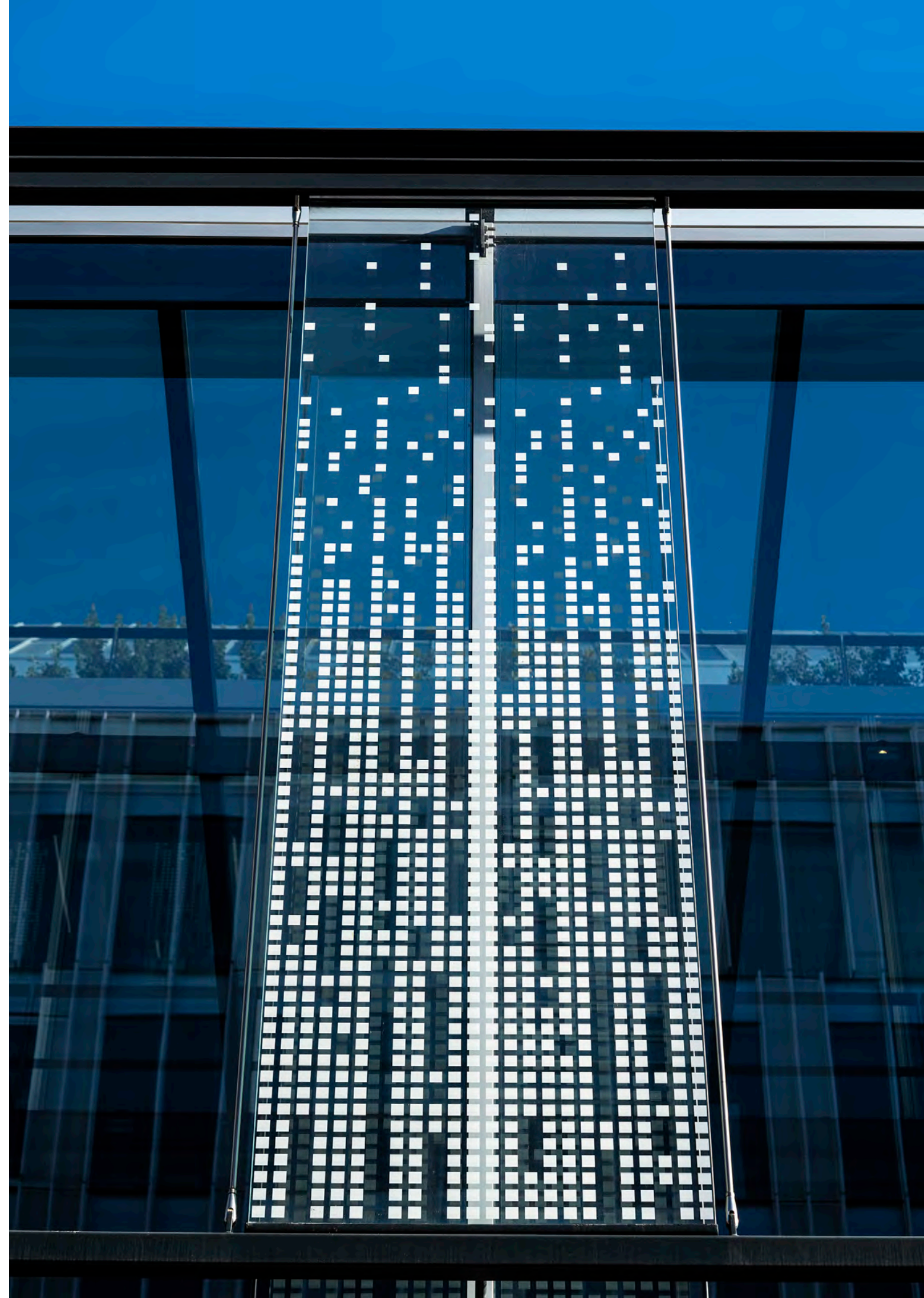
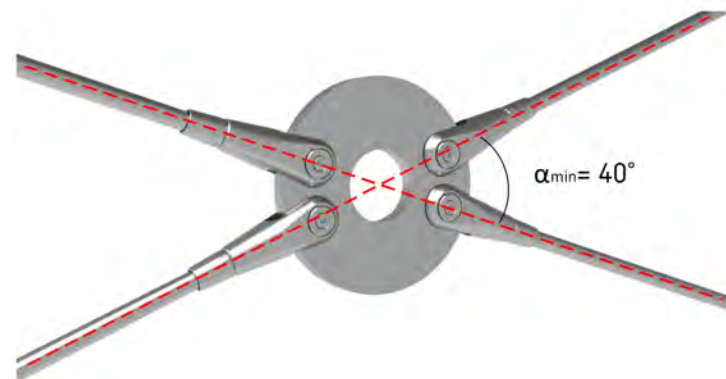
CONNECTION DISC



Part Number	System Thread	Dimensions in mm				
	A	B	C	D	E	
IRD-640-010-00	M10	120	87	10	11	
IRD-640-012-00	M12	150	108	10	14	
IRD-640-016-00	M16	187	130	12	19	
IRD-640-020-00	M20	233	170	15	21	
IRD-640-024-00	M24	281	200	20	27	
IRD-640-027-00	M27	317	230	20	29	
IRD-640-030-00	M30	343	250	20	31	

Material AISI316L

Custom manufacturing based on the project's requirements
Smallest connection angle α : 40°



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

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 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 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;

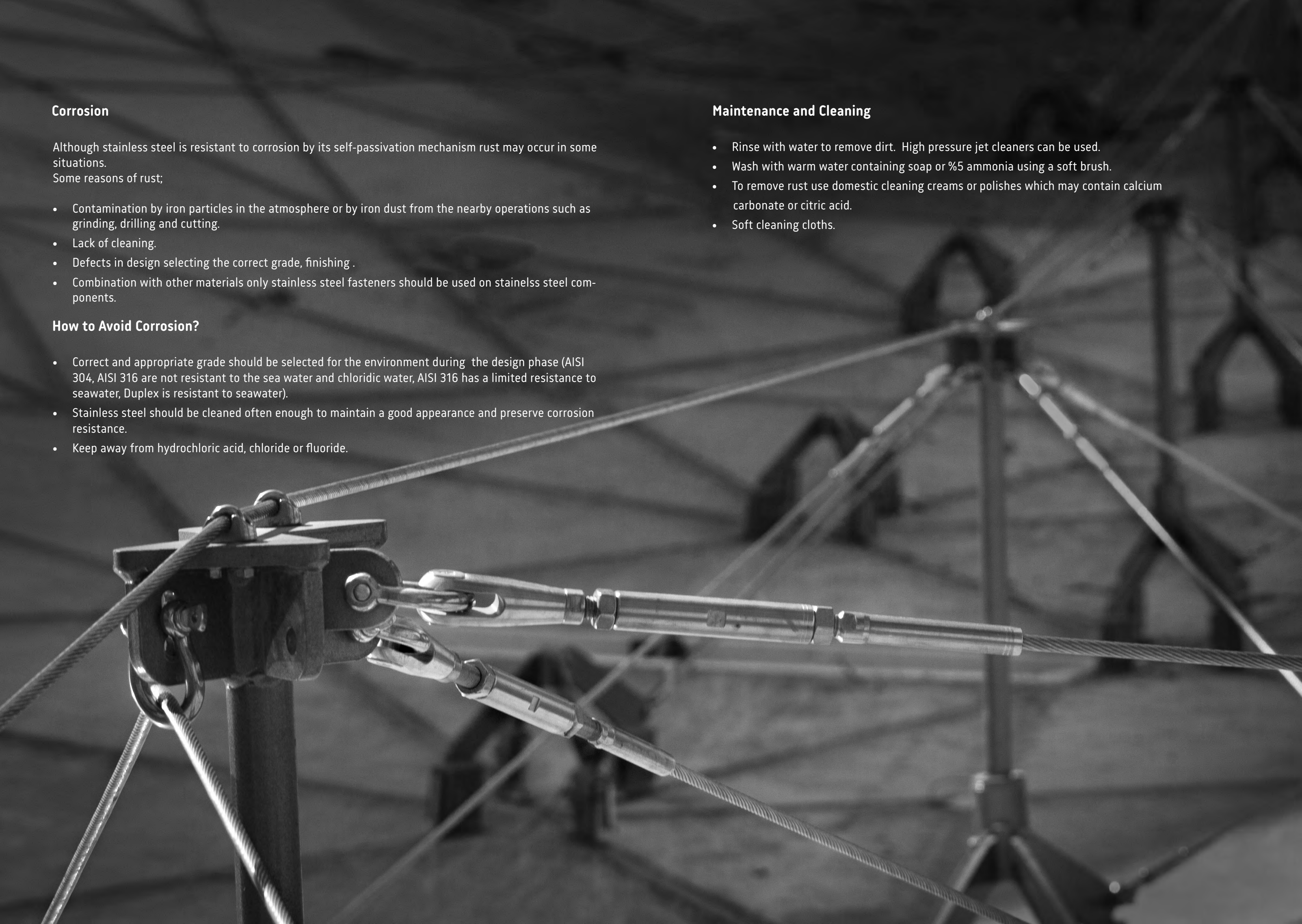
- Contamination by iron particles in the atmosphere or by iron dust from the nearby operations such as grinding, drilling and cutting.
- Lack of cleaning.
- Defects in design selecting the correct grade, finishing .
- Combination with other materials only stainless steel fasteners should be used on stainless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

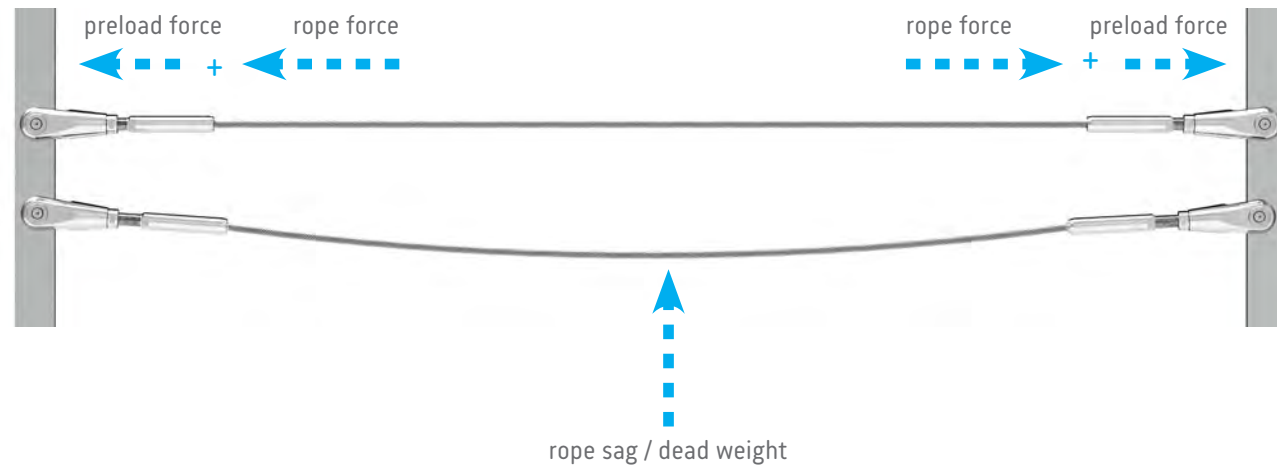
- Rinse with water to remove dirt. High pressure jet cleaners can be used.
- Wash with warm water containing soap or %5 ammonia using a soft brush.
- To remove rust use domestic cleaning creams or polishes which may contain calcium carbonate or citric acid.
- Soft cleaning cloths.



TECHNICAL TIPS

Rope Forces and Tensioning

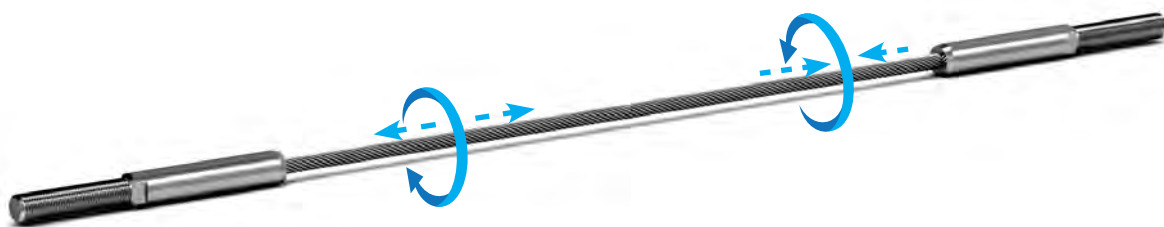
To make up an effective total, rope force and preload force should be applied as a combination. The ropes are held by means of fittings such as end stops and nuts. The length of the rope can be adjusted by the help of this joints.



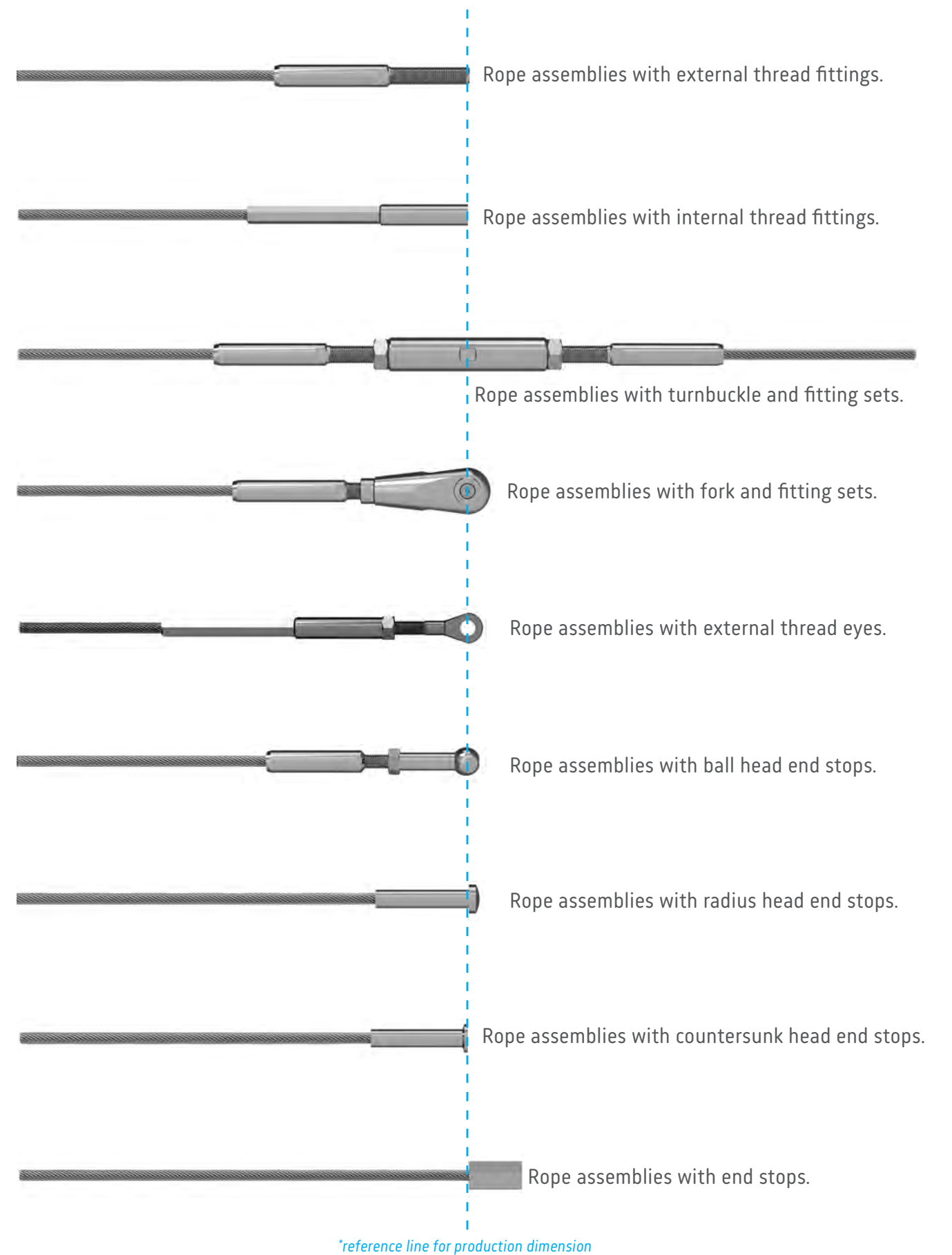
Tightening and Loosening Description of Rope System

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. DIŞ. TİC. A.Ş.

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