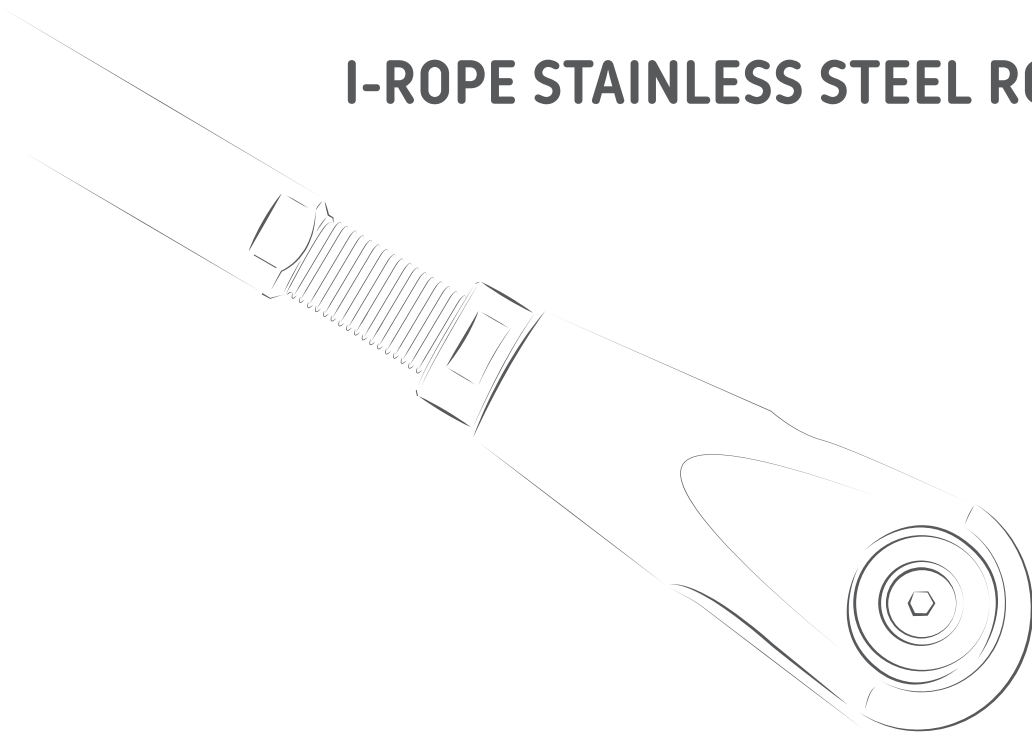


I-ROPE STAINLESS STEEL ROPE SYSTEMS





CONTENT	PAGE
• Who we are ?	
Our Company	-4-
• What we do ?	
Consulting	-5-
Planning & Design	-6-
Static Calculations	-7-
Production	-7-
Installation	-8/9-
• I-ROPE Stainless Steel Rope Systems	-12/13-
Technical Details	
External Thread Fittings	-14/17-
Internal Thread Fittings	-18-
Forks	-19/21-
Eyes	-22/23-
Accessories	-24/35-
I-ROPE Systems	-36-
I-ROPE Tension Systems	-37/40-
• Characteristics of Wire Ropes	
Explanation & Application of Wire Ropes	-42/43-
Technical Information about Wire Ropes	-44-
• Overview of Stainless Steel	
Material	-46-
Corrosion	-48-
Maintenance & Cleaning	-49-
• Technical Tips	
Rope Forces & Tensioning	-50-
Tightening & Loosening Description of Rope System	-50-
• Assembly Lengths	-51-
• Our Goals	-53-



- **Who we are ?**

INOX-NET is a young and dynamic company specializing in architectural stainless steel net and rope systems. Our aim is to provide innovative, cost-effective, environmentally friendly, and long-lasting products with excellent quality. Stainless Steel Net and Rope Systems provide suitable solutions for many types of architectural projects by their features such as flexibility, durability, high quality, and lightweight.

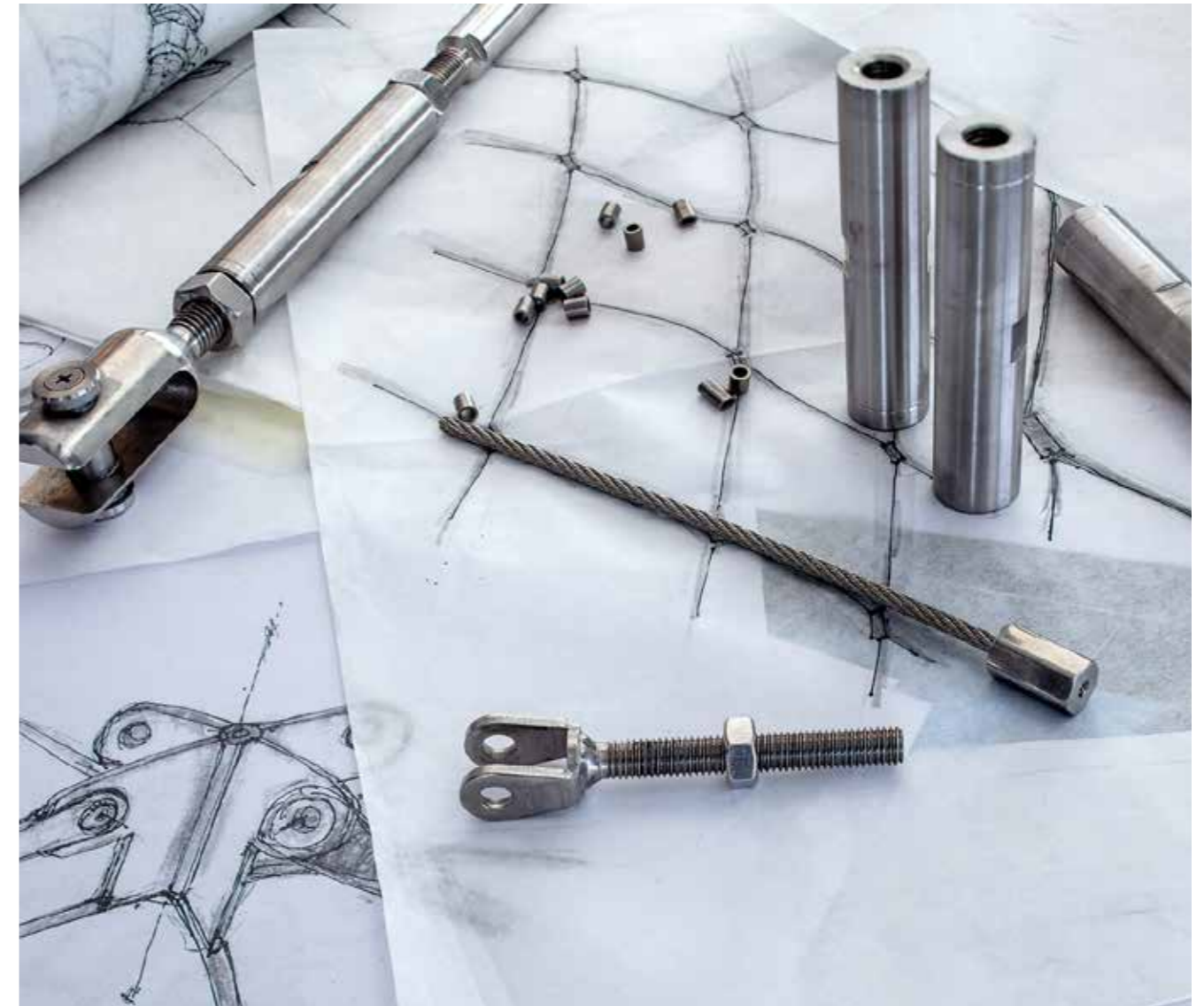
INOX-NET is interested to be your solution partner from the smallest volume individual projects to the most unique and challenging projects from all over the world.

Our Company ;

INOX-NET is experienced in architectural applications involving stainless steel net and rope systems. We provide services and solutions in many architectural projects ranging from balustrades, safety nets, facades, greenery, decoration and zoo enclosures.

- **What we do ?**

INOX-NET provides A to Z services from consulting, design and planning, static calculations to production and installation for customers all over the world who want to give life to their innovative ideas and imaginations.



Consulting ;

We provide consultancy services to architects, architectural design offices and contractors to fulfill their needs and guide their imagination. The consulting service we provide begins from the first idea of the architectural design project and lasts through the planning stage to the realization stage. We are always happy to share our ideas with you whether through phone, via email, or if you like face to face in our offices.

Planning & Design

The INOX-NET planning process includes:

- **DESIGN AND SYSTEM DEVELOPMENT,**
- **PLANNING SUPPORT,**
- **ADMINISTRATIVE PLANNING,**
- **PROJECT APPLICATION FOR ROPES, NETS AND STEEL WORKS,**
- **INSTALLATION PLANNING.**

INOX-NET services are always customer focused and our specialists are actively involved in the whole process from the beginning. Besides providing standard products, INOX-NET also provides custom design stainless steel net and stainless steel rope application concepts if so desired.



Static Calculations

INOX-NET can perform structural static calculations for all kinds of stainless steel net and rope projects when needed.

Our static analysis services are:

- **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

After approval of the production drawings, they are delivered to the production department and productions start immediately according to these plans. Each net part is produced according to the desired measurements, diamond direction, and net ending features. I-ROPE systems are also produced by taking attention to the pin to pin measurements and pre-tension loads resulting from the static calculations.



Installation

- Self-Assembly by the customer,
- Installation training,
- Installation support.
- Installation supervision,
- Turn-key installation by INOX-NET.

According to customer preference, INOX-NET 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.



STAINLESS STEEL I-ROPE SYSTEMS

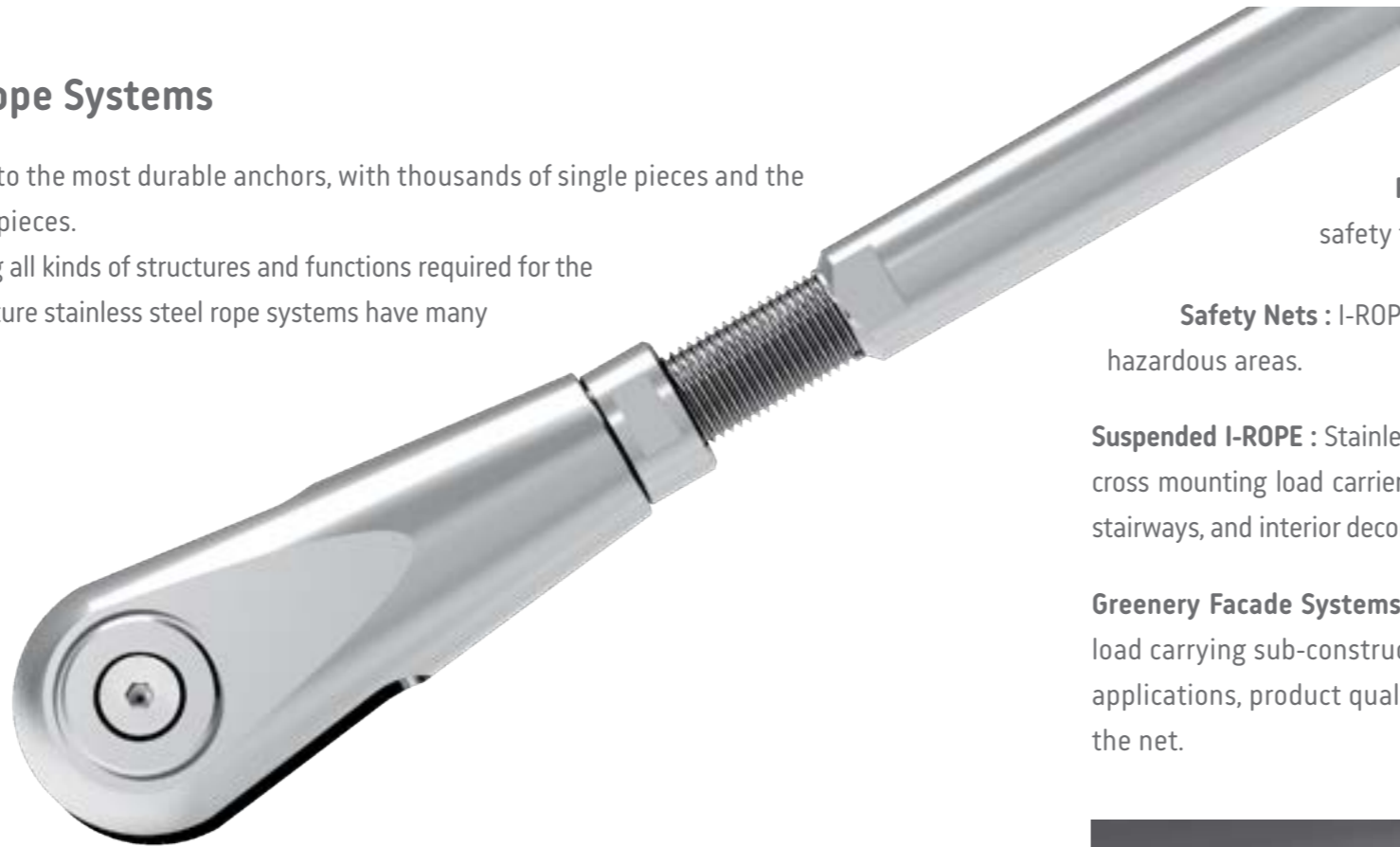
I-ROPE Stainless Steel Rope Systems

From the most delicate railing fillings to the most durable anchors, with thousands of single pieces and the many different combination of these pieces.

Stainless steel rope systems easily bring all kinds of structures and functions required for the construction industry to life. In architecture stainless steel rope systems have many advantages

These are:

- **FUNCTIONALITY,**
- **DECORATION,**
- **FLEXIBILITY,**
- **DURABILITY,**
- **LONG LIFE.**



I-ROPE combines all these features and provides customized solutions for architectural projects.

I-ROPE stainless steel ropes are available in diameters up to 4 mm to 40 mm. All of our products in our I-ROPE program are made from acid and corrosion resistant stainless steel. The ropes are made of 1.4401 class stainless steel material. Other components and accessories that make up the system use stainless steel grades 1.4401, 1.4404 and 1.4462.



Application areas for I-ROPE:

Railing : INOX-ROPE offers excellent solutions for railings. They can be used as safety fillings with their strong, long life features and aesthetic look.

Safety Nets : I-ROPE systems are used as boundary ropes and carrier systems of safety nets used in hazardous areas.

Suspended I-ROPE : Stainless Steel I-ROPE systems can be applied in various ways such as hanging vertical or cross mounting load carriers. Load carrying I-ROPE systems are used in facades, bridges, canopies, luminaries, stairways, and interior decorations.

Greenery Facade Systems : Plants can grow on the I-ROPE Stainless Steel ropes which has the role as a load carrying sub-construction of I-NET or can also be specially designed as a net. In the green facade applications, product quality and engineering calculations are important to ensure the plants grow above the net.

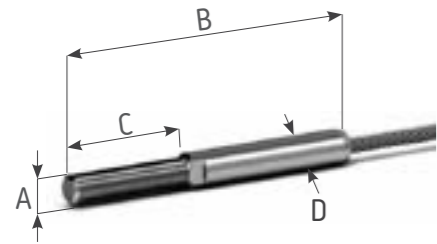


Istanbul 3. rd Airport / İSTANBUL

I-ROPE TECHNICAL DETAILS

External Thread fittings

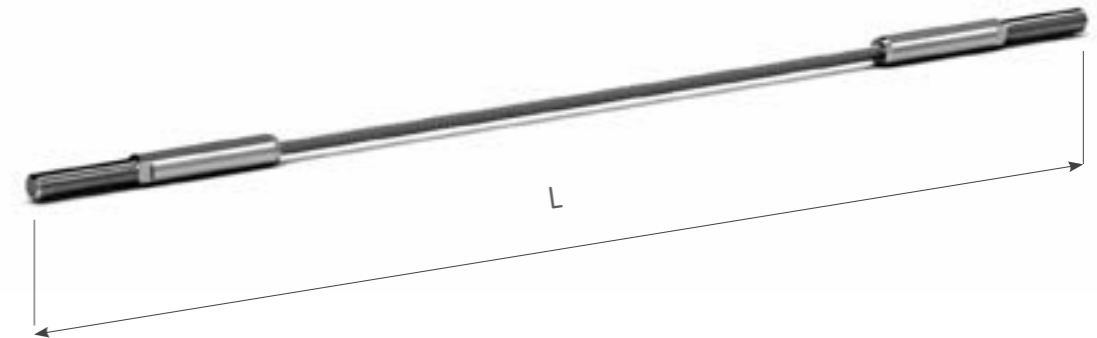
EXTERNAL THREAD ROLL SWAGED FITTING



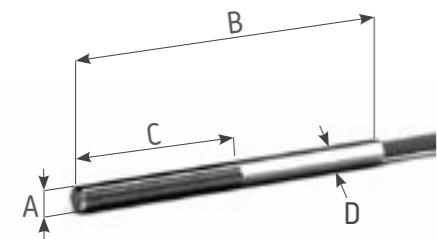
Part Number Right threaded	Part Number Left threaded	Set Number	Rope Ø mm	Dimensions in mm			
A	B	C	D				
IR-150-004-00	IR-150-004-01	IRS-120-004-00	4	M6	75	35	7,5
IR-150-006-00	IR-150-006-01	IRS-120-006-00	6	M10	109	45	12,5
IR-150-008-00	IR-150-008-01	IRS-120-008-00	8	M12	144	60	16
IR-150-010-00	IR-150-010-01	IRS-120-010-00	10	M14	180	76	17,8
IR-150-012-00	IR-150-012-01	IRS-120-012-00	12	M16	215	90	21,4
IR-150-014-00	IR-150-014-01	IRS-120-014-00	14	M20	278	115	25
IR-150-016-00	IR-150-016-01	IRS-120-016-00	16	M24	313	130	28
IR-150-018-00	IR-150-018-01	IRS-120-018-00	18	M27	332	146	34,5
IR-150-020-00	IR-150-020-01	IRS-120-020-00	20	M30	397	162	40
IR-150-022-00	IR-150-022-01	IRS-120-022-00	22	M30	410	170	40
IR-150-024-00	IR-150-024-01	IRS-120-024-00	24	M36	425	175	46
IR-150-026-00	IR-150-026-01	IRS-120-026-00	26	M36	435	175	46

Material AISI 316 L

Both sides external thread roll swaged.



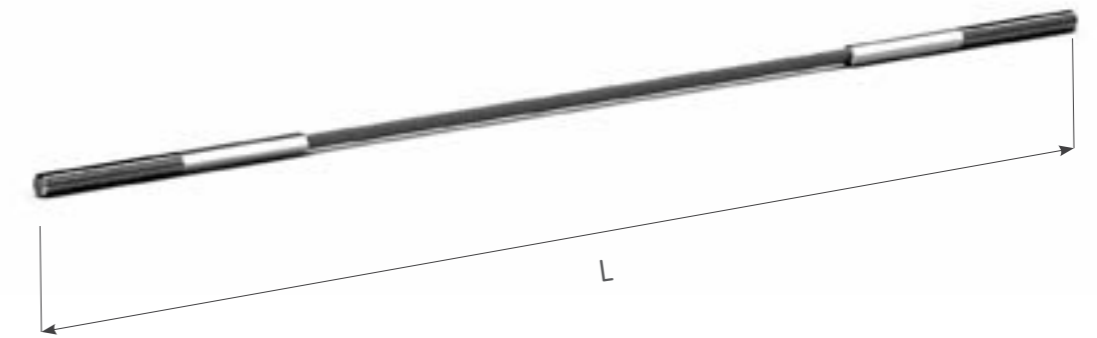
EXTERNAL THREAD SWAGED FITTING



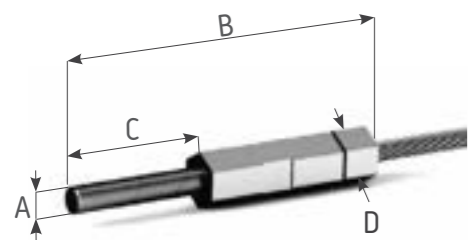
Part Number Right threaded	Part Number Left threaded	Set Number	Rope Ø mm	Dimensions in mm			
A	B	C	D				
IR-160-004-00	IR-160-004-01	IRS-130-004-00	4	M6	90	30	7
IR-160-006-00	IR-160-006-01	IRS-130-006-00	6	M10	125	50	10
IR-160-008-00	IR-160-008-01	IRS-130-008-00	8	M12	155	65	13
IR-160-010-00	IR-160-010-01	IRS-130-010-00	10	M16	190	80	18
IR-160-012-00	IR-160-012-01	IRS-130-012-00	12	M20	225	100	20
IR-160-014-00	IR-160-014-01	IRS-130-014-00	14	M22	280	115	25
IR-160-016-00	IR-160-016-01	IRS-130-016-00	16	M24	315	130	27

Material AISI 316 L

Both sides external thread swaged.



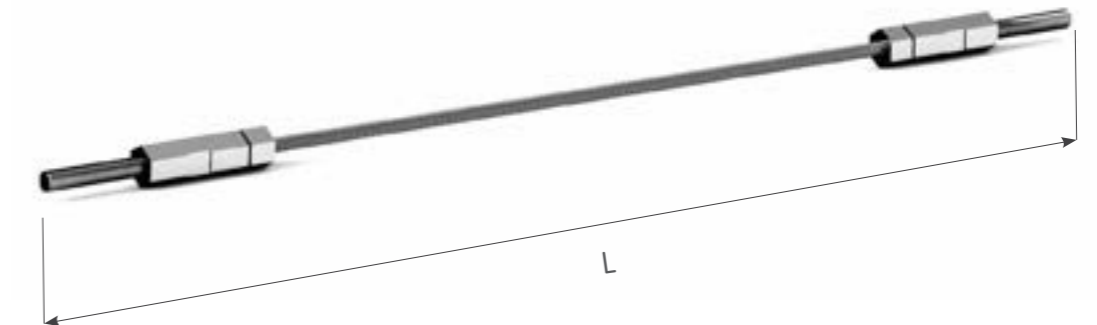
EXTERNAL THREAD SWAGELESS CONNECTION



Part Number Right threaded	Part Number Left threaded	Set Number	Rope Ø mm	Dimensions in mm			
A	B	C	D				
IR-170-004-00	IR-170-004-01	IRS-140-004-00	4	M6	110	60	13
IR-170-006-00	IR-170-006-01	IRS-140-006-00	6	M8	115	60	15
IR-170-008-00	IR-170-008-01	IRS-140-008-00	8	M10	160	80	19
IR-170-010-00	IR-170-010-01	IRS-140-010-00	10	M14	210	100	27

Material AISI 316 L

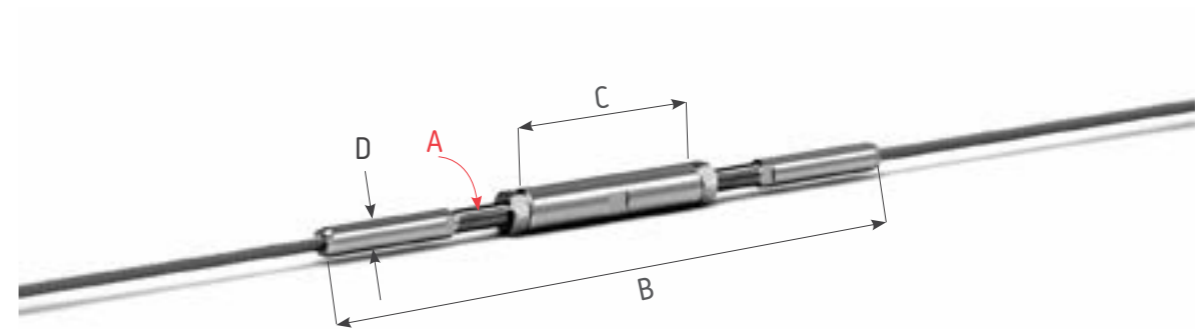
Both sides external thread swageless connection.



TURNBUCKLE THREADS, ROLL SWAGED

Part Number	Rope Ø mm	Dimensions in mm					
		A	B	B _{max}	B _{min}	C	D
IR-180-004-00	4	M6	194	206,5	162	65	7,5
IR-180-006-00	6	M10	271	284	230	80	12,5
IR-180-008-00	8	M12	361	376	298	104	16
IR-180-010-00	10	M14	456	476	378	136	17,8
IR-180-012-00	12	M16	548	568	444	158	21,4
IR-180-014-00	14	M20	686	716	560	190	25
IR-180-016-00	16	M24	796	822	648	230	28
IR-180-018-00	18	M27	833	873	683	245	34,5
IR-180-020-00	20	M30	983	1023	806	271	40
IR-180-022-00	22	M30	1011	1051	822	271	40
IR-180-024-00	24	M36	1040	1090	866	290	46
IR-180-026-00	26	M36	1060	1110	886	290	46

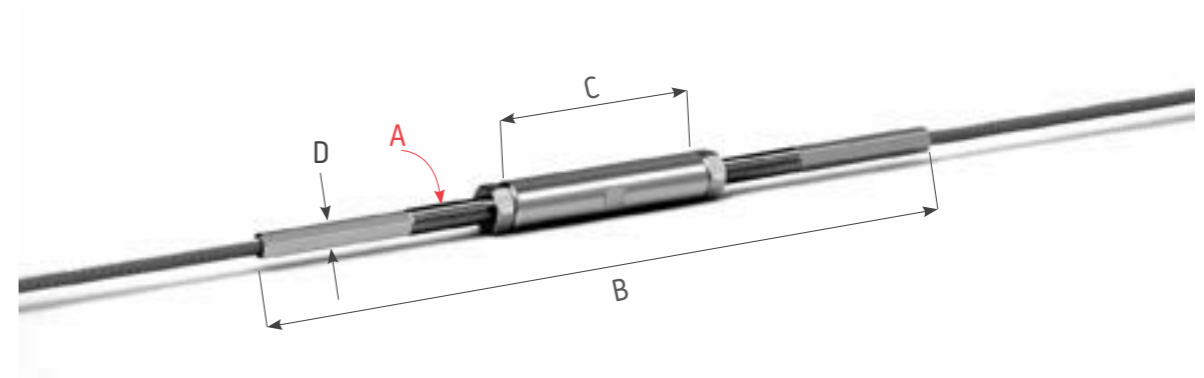
Material AISI 316 L



TURNBUCKLE THREADS, SWAGED

Part Number	Rope Ø mm	Dimensions in mm					
		A	B	B _{max}	B _{min}	C	D
IR-185-004-00	4	M6	227	233	200	65	7
IR-185-006-00	6	M10	300	310	255	80	10
IR-185-008-00	8	M12	376	390	314	104	13
IR-185-010-00	10	M16	490	506	414	158	18
IR-185-012-00	12	M20	580	600	485	190	20
IR-185-016-00	16	M24	793	811	655	230	27

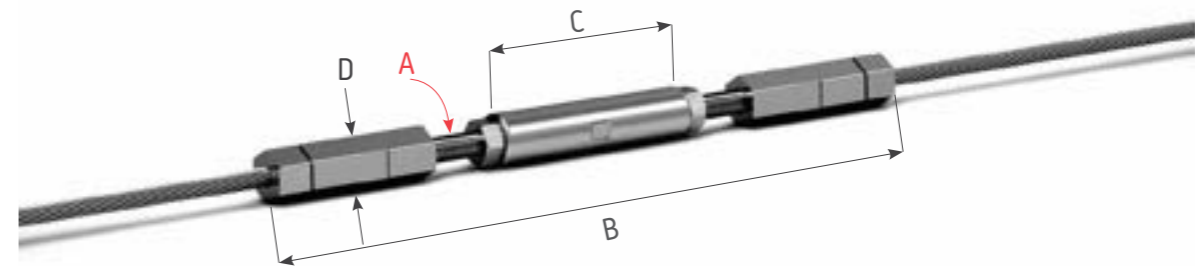
Material AISI 316 L



TURNBUCKLE THREADS, SWAGELESS

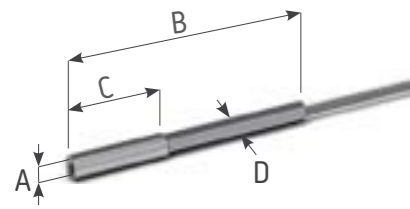
Part Number	Rope Ø mm	Dimensions in mm					
		A	B	B _{max}	B _{min}	C	D
IR-190-004-00	4	M6	267	273	220	65	13
IR-190-006-00	6	M8	276	284	230	70	15
IR-190-008-00	8	M10	370	380	320	80	19
IR-190-010-00	10	M14	514	532	420	136	27

Material AISI 316 L



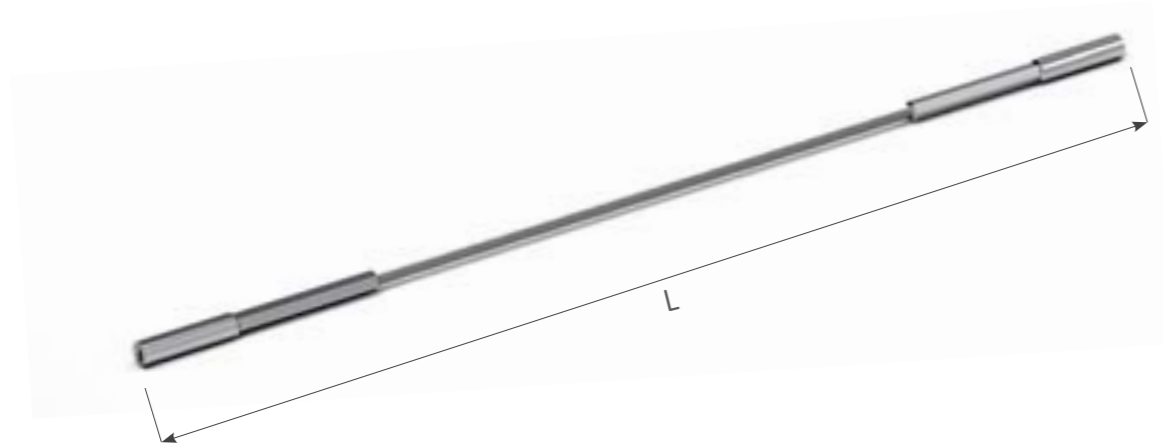
Internal Thread fittings

INTERNAL THREAD SWAGED FITTING

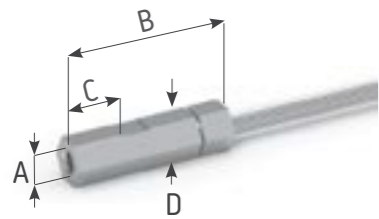


Part Number Right Threaded	Part Number Left Threaded	Set Number	Rope Ø mm	Dimensions in mm			
				A	B	C	D
IR-201-004-00	IR-201-004-01	IRS-210-004-00	4	M6	80	30	7
IR-201-006-00	IR-201-006-01	IRS-210-006-00	6	M8	120	50	10
IR-201-008-00	IR-201-008-01	IRS-210-008-00	8	M10	180	60	13
IR-201-010-00	IR-201-010-01	IRS-210-010-00	10	M12	190	80	18
IR-201-012-00	IR-201-012-01	IRS-210-012-00	12	M16	220	100	25
IR-201-014-00	IR-201-014-01	IRS-210-014-00	14	M18	260	110	28
IR-201-016-00	IR-201-016-01	IRS-210-016-00	16	M20	280	120	30

Material AISI 316 L



INTERNAL THREAD SWAGELESS CONNECTION



Part Number Right Threaded	Part Number Left Threaded	Set Number	Rope Ø mm	Dimensions in mm			
				A	B	C	D
IR-202-004-00	IR-202-004-01	IRS-220-004-00	4	M6	50	18	13
IR-202-006-00	IR-202-006-01	IRS-220-006-00	6	M8	55	20	15
IR-202-008-00	IR-202-008-01	IRS-220-008-00	8	M10	90	30	19
IR-202-010-00	IR-202-010-01	IRS-220-010-00	10	M14	110	45	27

Material AISI 316 L

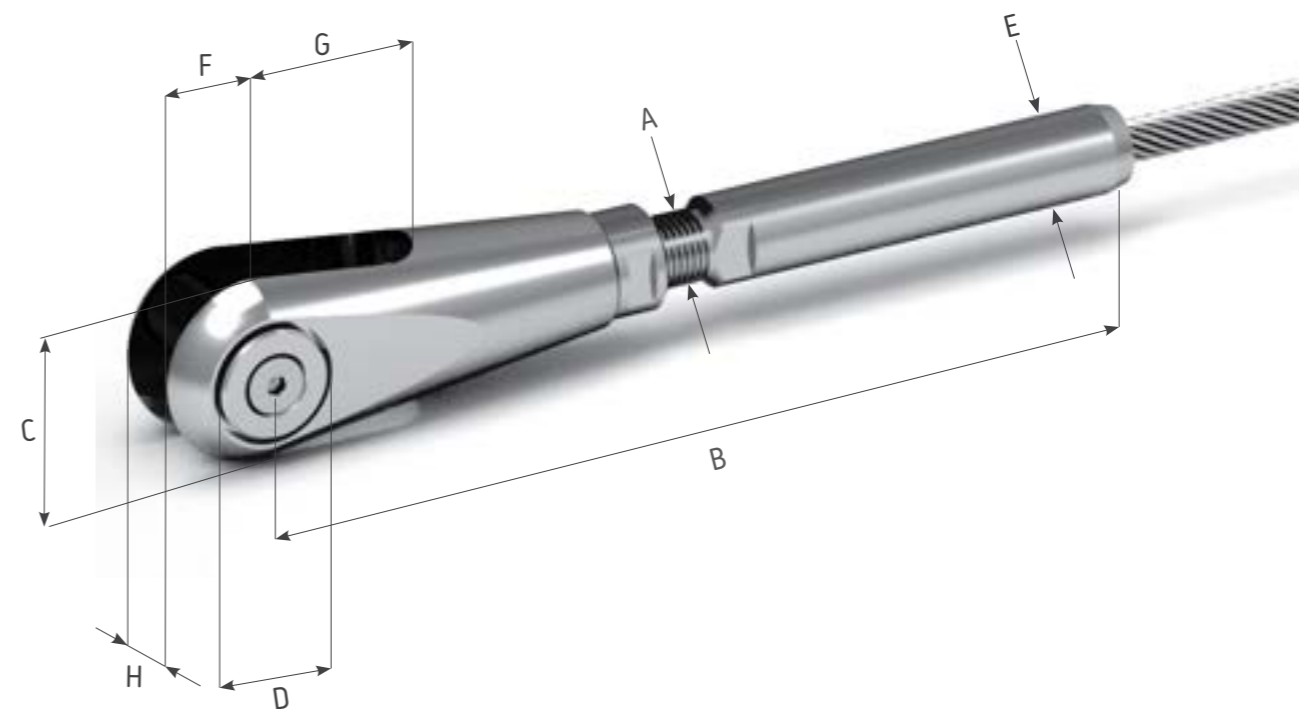


FORKS

FORK WITH SWAGED FITTING

Part Number Right threaded	Rope Ø mm	Dimensions in mm							
		A	B	C	D	E	F	G	H
IR-315-004-00	4	M6	82,2	15,5	6	7,5	8	11,5	6,6
IR-315-006-00	6	M10	132	25,7	10	12,5	12,9	19,7	11
IR-315-008-00	8	M12	164	29,7	12	16	14,8	22	12
IR-315-010-00	10	M14	195	34,6	15	17,8	17,3	25,7	14
IR-315-012-00	12	M16	225	39,6	18	21,4	19,8	29,3	16
IR-315-014-00	14	M20	293	52,6	20	25	26,3	38,7	16
IR-315-016-00	16	M24	328	60,1	26	28	30	45	22
IR-315-018-00	18	M27	353	66,5	28	34,5	34,1	48,2	22
IR-315-020-00	20	M30	415	75,9	30	40	37,9	55	22
IR-315-022-00	22	M30	435	75,9	30	40	37,9	55	22
IR-315-024-00	24	M36	480	90,6	36	46	45,5	64,2	27
IR-315-026-00	26	M36	485	90,6	36	46	45,5	64,2	27

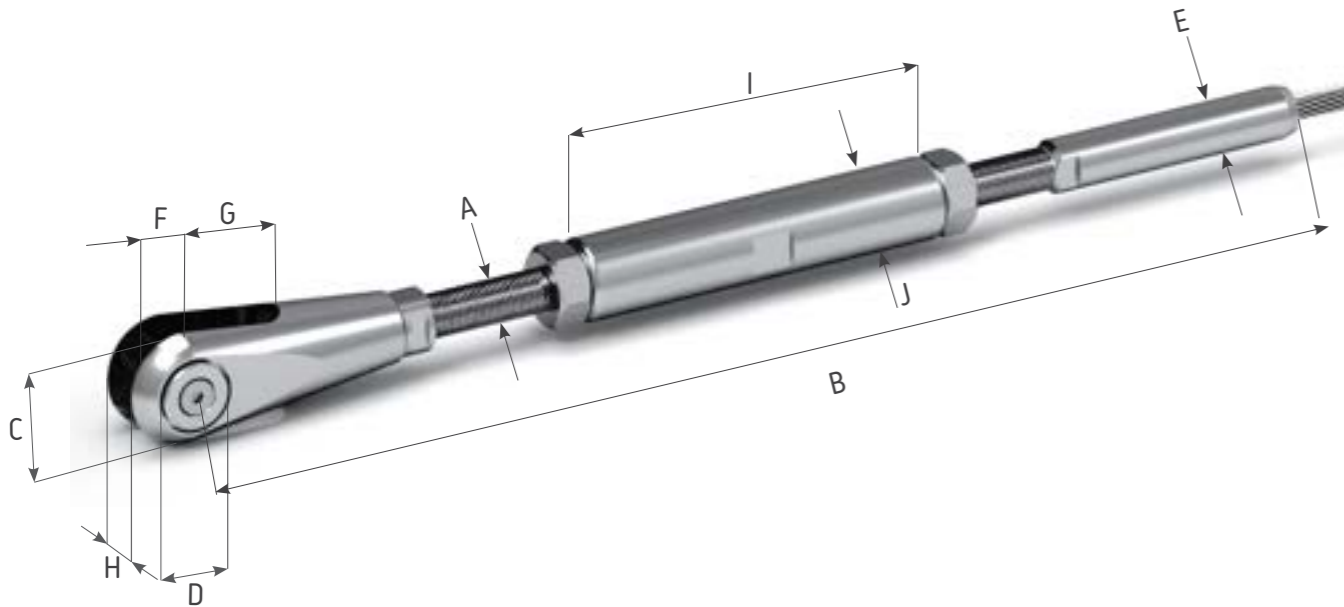
Material AISI 316 L



FORK WITH TURNBUCKLE AND SWAGED FITTING

Part Number	Rope Ø mm	Dimensions in mm											
		A	B	B _{max}	B _{min}	C	D	E	F	G	H	I	J
IR-325-004-00	4	M6	184,7	194,4	152,6	15,5	6	7,5	8	11,5	6,6	65	10
IR-325-006-00	6	M10	274	287	223	25,7	10	12,5	12,9	19,7	11	80	19
IR-325-008-00	8	M12	342	358	281	29,7	12	16	14,8	22	12	104	20
IR-325-010-00	10	M14	417	437	347	34,6	15	17,8	17,3	25,7	14	136	25
IR-325-012-00	12	M16	488	518	409	39,6	18	21,4	19,8	29,3	16	158	28
IR-325-014-00	14	M20	608	638	517	52,6	20	25	26,3	38,7	16	190	38
IR-325-016-00	16	M24	730	761	599	60,1	26	28	30	45	22	230	40
IR-325-018-00	18	M27	768	799	642	66,5	28	34,5	34,1	48,2	22	245	45
IR-325-020-00	20	M30	870	910	733	75,9	30	40	37,9	55	22	271	50
IR-325-022-00	22	M30	885	925	739	75,9	30	40	37,9	55	22	271	50
IR-325-024-00	24	M36	965	1015	812	90,6	36	46	45,5	64,2	27	290	55
IR-325-026-00	26	M36	975	1025	822	90,6	36	46	45,5	64,2	27	290	55

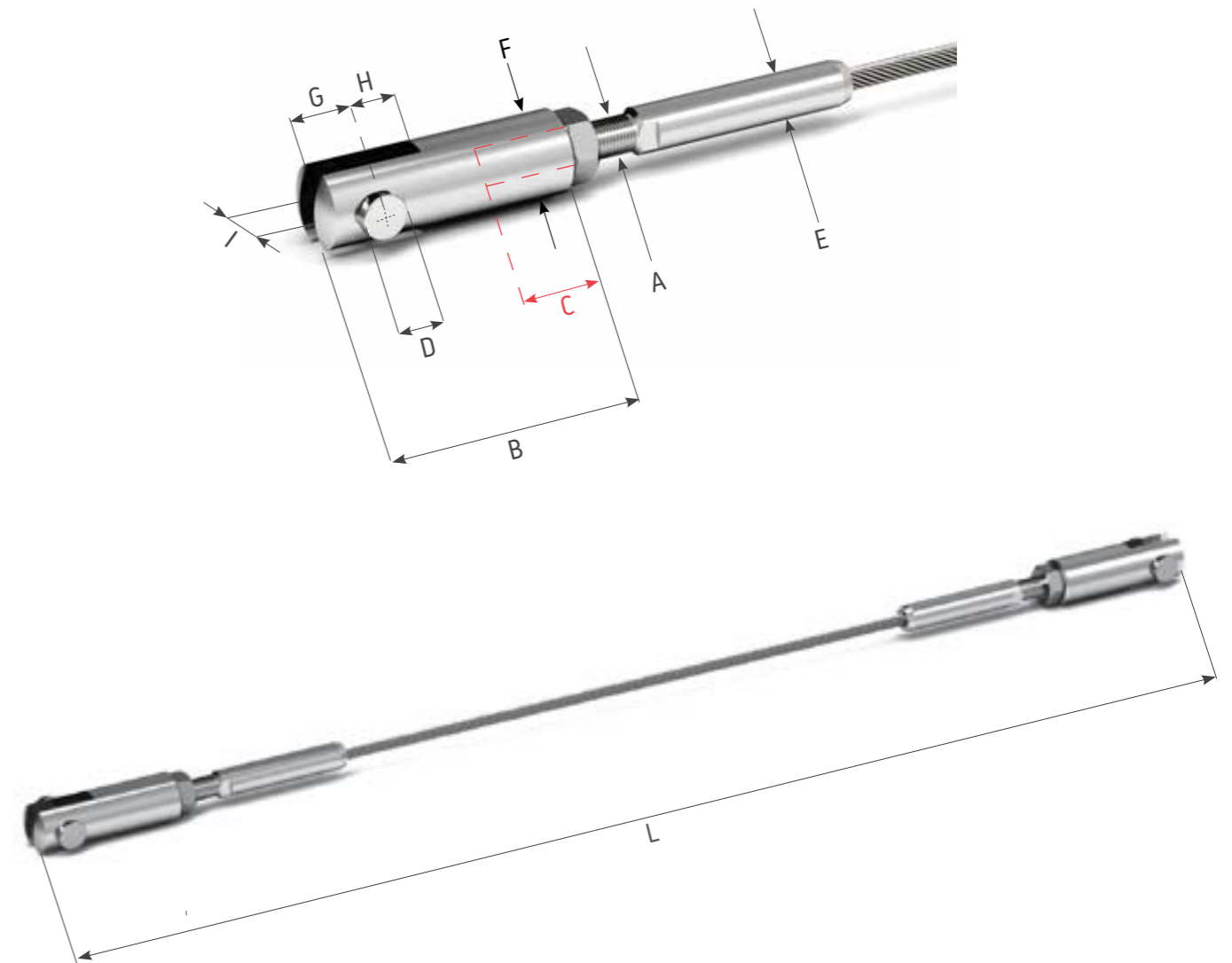
Material AISI 316 L



CYLINDRICAL FORK WITH SWAGED FITTING

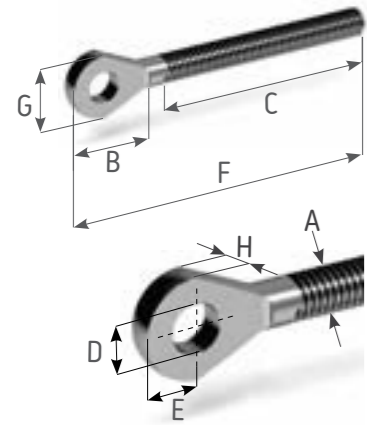
Part Number	Part Number	Set Number	Rope Ø mm	Dimensions in mm									
				A	B	C	D	E	F	G	H	I	
IR-335-006-00	IR-335-006-01	IRS-336-006-00	4	M6	45	20	6	7,5	14	8	9	6	
IR-335-008-00	IR-335-008-01	IRS-336-008-00	6	M8	55	25	8	12,5	18	12	13	7	
IR-335-010-00	IR-335-010-01	IRS-336-010-00	6	M10	70	30	10	12,5	22	15	15	8	
IR-335-012-00	IR-335-012-01	IRS-336-012-00	8	M12	80	35	12	16	26	17	18	10	
IR-335-014-00	IR-335-014-01	IRS-336-014-00	10	M14	90	35	14	17,8	30	19	20	11	
IR-335-016-00	IR-335-016-01	IRS-336-016-00	12	M16	100	40	16	21,4	34	22	22	12	
IR-335-020-00	IR-335-020-01	IRS-336-020-00	14	M20	120	40	20	25	42	27	27	15	
IR-335-024-00	IR-335-024-01	IRS-336-024-00	16	M24	150	40	22	28	52	34	34	18	

Material AISI 316 L



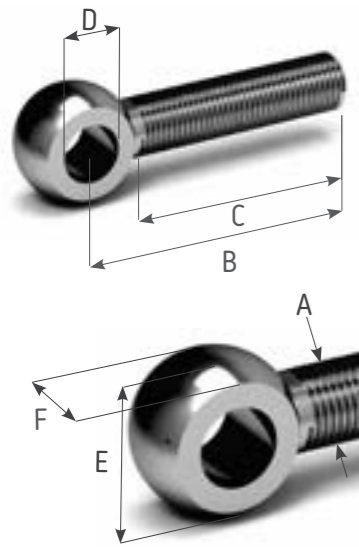
EYES

EYE WITH EXTERNAL THREAD



Part Number	Part Number	Dimensions in mm							
Right threaded	Left threaded	A	B	C	D	E	F	G	H
IR-404-005-00	IR-404-005-01	M5	14	51	5,5	6	63	12	3
IR-404-006-00	IR-404-006-01	M6	16	47	6,5	7	61	14	4
IR-404-008-00	IR-404-008-01	M8	21	57	8,5	8,5	78	17	5
IR-404-010-00	IR-404-010-01	M10	29	63	10,5	12	90	22	6
IR-404-012-00	IR-404-012-01	M12	31	80	13	14	110	25	8
IR-404-014-00	IR-404-014-01	M14	34	90	13	14	124	28	9
IR-404-016-00	IR-404-016-01	M16	37	100	14,5	15,5	133	31	10
IR-404-020-00	IR-404-020-01	M20	49	120	19,5	21	164	40	15

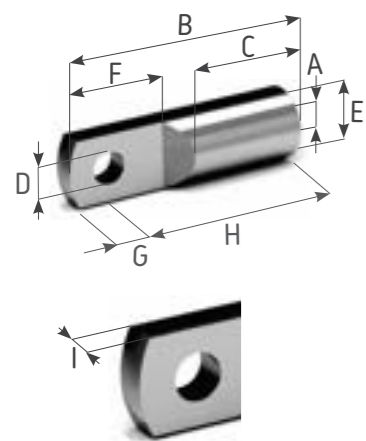
Material AISI 316 L



EYE BOLT

Part Number	Part Number	Dimensions in mm					
Right threaded	Left threaded	A	B	C	D	E	F
IR-405-006-00	IR-405-006-01	M6	40	30	6,1	14	7
IR-405-008-00	IR-405-008-01	M8	40	30	8,1	18	9
IR-405-010-00	IR-405-010-01	M10	50	40	10	20	12
IR-405-012-00	IR-405-012-01	M12	50	35	12,1	25	14
IR-405-016-00	IR-405-016-01	M16	60	40	16,1	32	17
IR-405-020-00	IR-405-020-01	M20	80	55	18,1	40	22

Material AISI 316 L

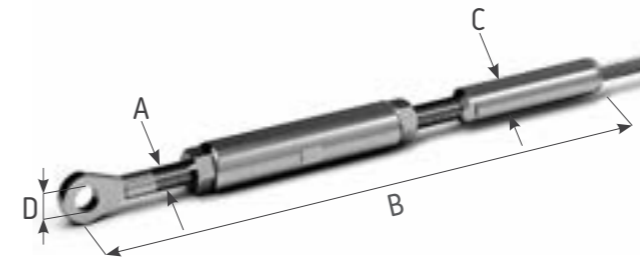


EYE INTERNAL THREAD

Part Number	Part Number	Rope	Dimensions in mm								
Right threaded	Left threaded	Ømm	A	B	C	D	E	F	G	H	I
IR-406-006-00	IR-406-006-01	4	M6	47	18,5	6	14	17	8	39	5,8
IR-406-008-00	IR-406-008-01	6	M8	62	24,5	8	18	25	10,5	51,5	6,8
IR-406-010-00	IR-406-010-01	6	M10	75	30	10	22	30	13	62	7,8
IR-406-012-00	IR-406-012-01	8	M12	89	35	12	26	35	15	74	9,8
IR-406-014-00	IR-406-014-01	10	M14	100	40	14	30	37	17	83	10,8
IR-406-016-00	IR-406-016-01	12	M16	113	44	16	34	40	19	94	11,8
IR-406-020-00	IR-406-020-01	14	M20	140	55	20	42	40	24	116	14,8
IR-406-024-00	IR-406-024-01	16	M24	170	68	22	52	40	30	140	17,8

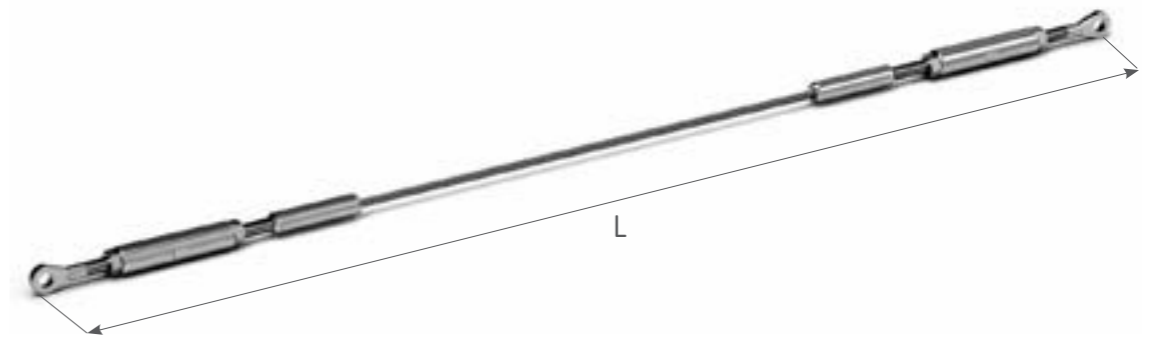
Material AISI 316 L

TURNBUCKLE WITH EXTERNAL THREAD EYE AND ROLL SWAGED FITTING

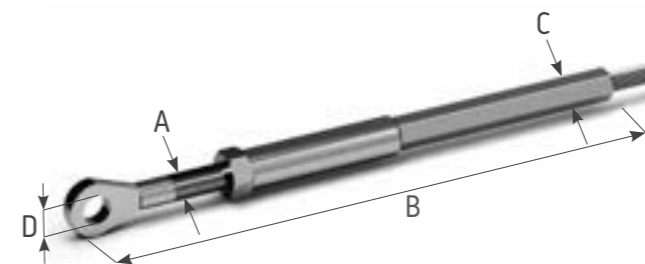


Part Number	Set Number	Dimensions in mm					
Right Threaded		A	B	Bmax	Bmin	C	D
IR-414-006-00	IRS-410-006-00	M6	187	196	151	7,5	6,5
IR-414-008-00	IRS-410-008-00	M8	219	230,5	178	12,5	8,5
IR-414-010-00	IRS-410-010-00	M10	259	273	207	12,5	10,5
IR-414-012-00	IRS-410-012-00	M12	323	340,4	260	16	13
IR-414-016-00	IRS-410-016-00	M16	452	472	354	28	14,5
IR-414-020-00	IRS-410-020-00	M20	572	602	448	38	19,5

Material AISI 316 L

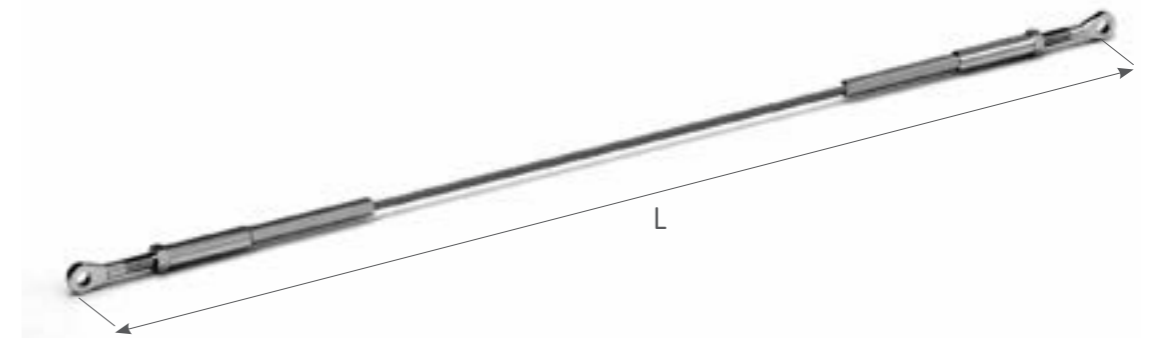


EYE WITH INTERNAL THREAD SWAGED



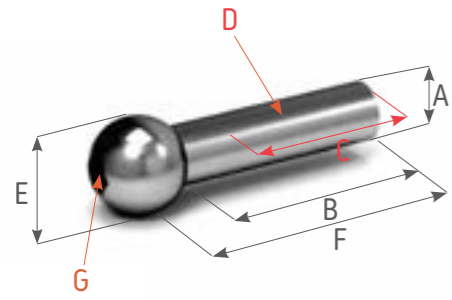
Part Number	Set Number	Dimensions in mm					
Right threaded		A	B	Bmax	Bmin	C	D
IR-424-006-00	IRS-420-006-00	M6	129	133,5	111	7	6,5
IR-424-008-00	IRS-420-008-00	M8	191	195,5	157,5	10	8,5
IR-424-010-00	IRS-420-010-00	M10	255	262	220	13	10,5
IR-424-012-00	IRS-420-012-00	M12	292,5	301,2	245	18	13
IR-424-016-00	IRS-420-016-00	M16	343	353	281	28	14,5
IR-424-020-00	IRS-420-020-00	M20	424	439	355	30	19,5

Material AISI 316 L



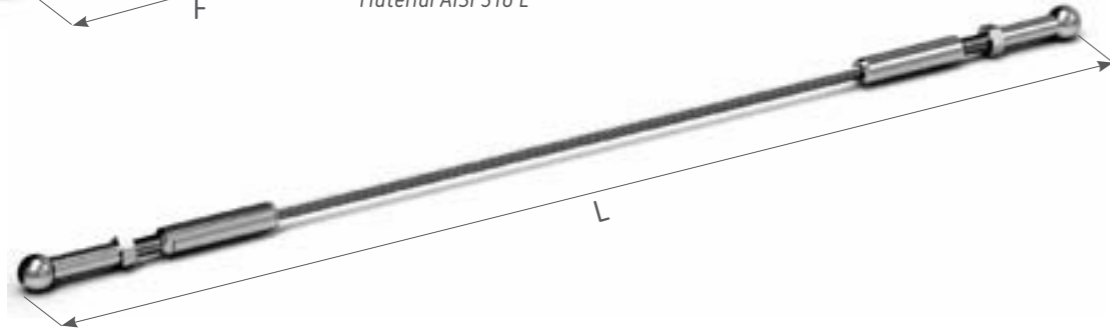
ACCESSORIES / Ending Accessories

BALL HEAD WITH INTERNAL THREAD

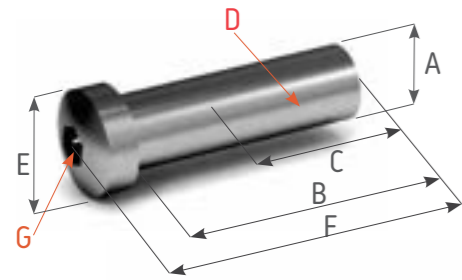


Part Number	Set Number	Rope Ø mm	Dimensions in mm						
			A	B	C	D	E	F	G
IR-581-004-00	IRS-501-004	4	M6	30	20	8	14	35,7	4
IR-581-006-00	IRS-501-006	6	M8	36	25	10	16	42,24	5

Material AISI 316 L

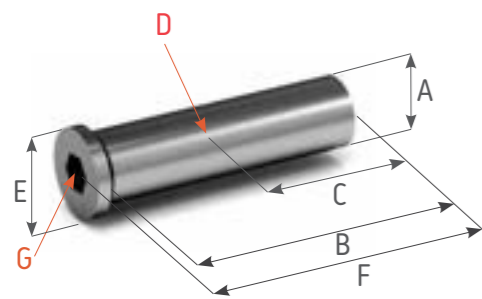
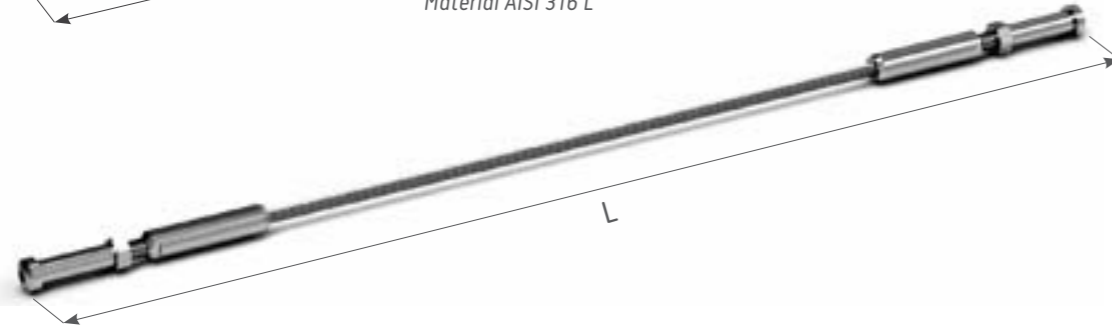


RADIUS HEAD END STOP WITH INTERNAL THREAD



Part Number	Set Number	Rope Ø mm	Dimensions in mm						
			A	B	C	D	E	F	G
IR-582-004-00	IRS-502-004	4	M6	30	20	8	14	35	4
IR-582-006-00	IRS-502-006	6	M8	34	25	10	14	40	5

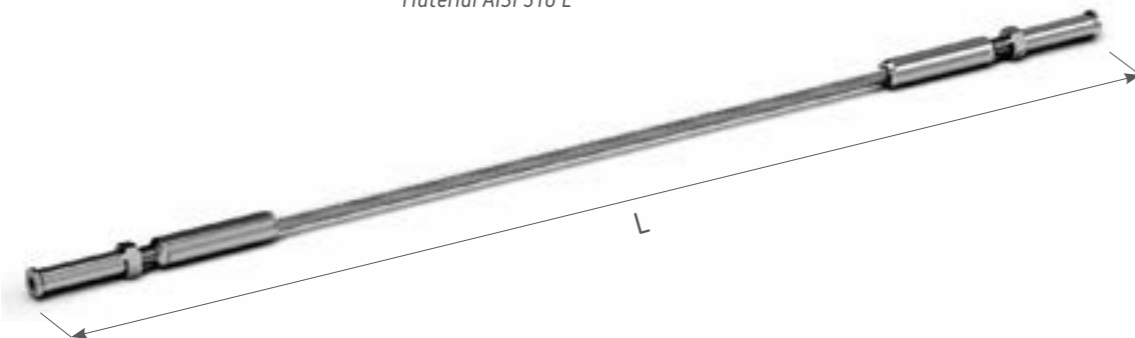
Material AISI 316 L



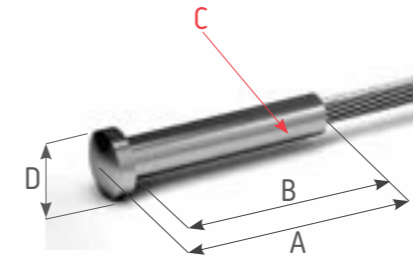
COUNTERSUNK END STOP WITH INTERNAL THREAD

Part Number	Set Number	Rope Ø mm	Dimensions in mm						
			A	B	C	D	E	F	G
IR-583-004-00	IRS-503-004	4	M6	30	20	8	12,4	34	4
IR-583-006-00	IRS-503-006	6	M8	36	25	10	12,4	40	5

Material AISI 316 L

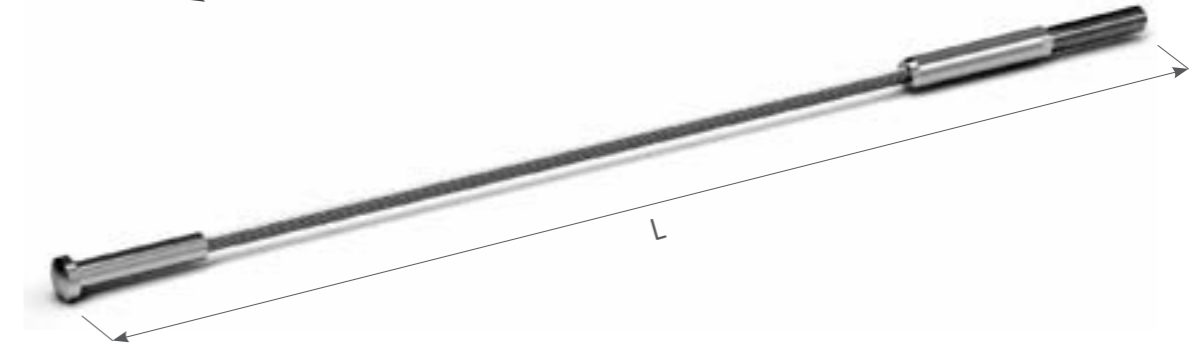


END STOP WITH RADIUS HEAD, SWAGED

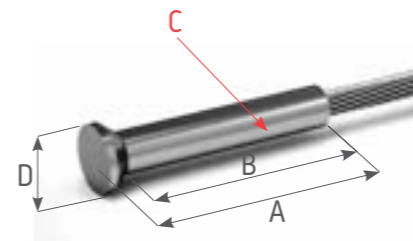


Part Number	Set Number	Rope Ø mm	Dimensions in mm			
			A	B	C	D
IR-584-004-00	IRS-504-004	4	40	36	7	12
IR-584-006-00	IRS-504-006	6	58	52	10	16

Material AISI 316 L

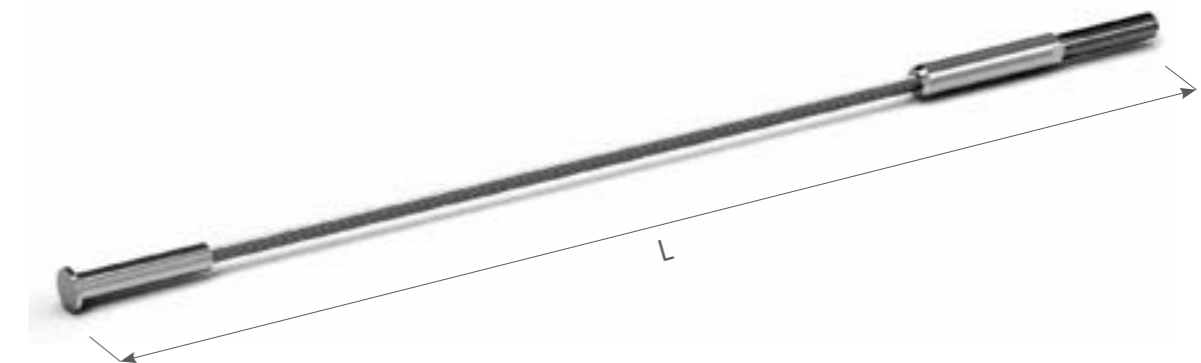


END STOP WITH COUNTERSUNK HEAD, SWAGED

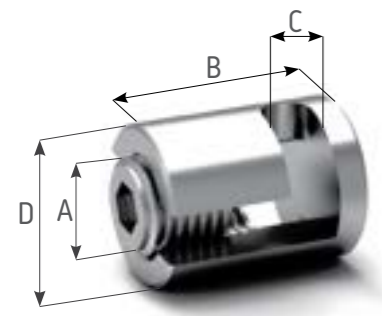


Part Number	Set Number	Rope Ø mm	Dimensions in mm			
			A	B	C	D
IR-585-004-00	IRS-505-004	4	40	36	7	12
IR-585-006-00	IRS-505-006	6	55	52	10	16

Material AISI 316 L



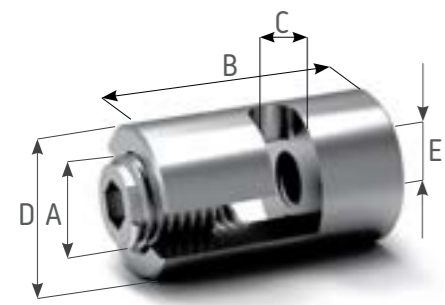
ACCESSORIES



CROSS CLAMP ADJUSTABLE

Part Number	Rope Ø mm	Dimensions in mm			
		A	B	C	D
IG-808-004-00	4	M12	22	4,5	20
IG-808-006-00	6	M12	26	6,5	20
IG-808-008-00	8	M12	32	8,5	20

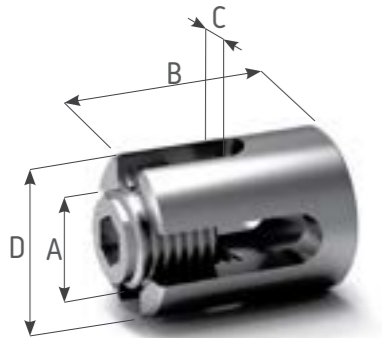
Material AISI 316 L



CROSS CLAMP WITH INTERNAL THREAD ADJUSTABLE

Part Number	Rope Ø mm	Dimensions in mm				
		A	B	C	D	E
IG-809-004-00	4	M12	30	4,5	20	M8
IG-809-006-00	6	M12	34	6,5	20	M8
IG-809-008-00	8	M12	40	8,5	20	M8

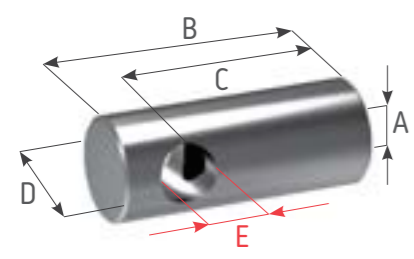
Material AISI 316 L



CROSS CLAMP 90°

Part Number	Rope Ø mm	Dimensions in mm			
		A	B	C	D
IG-810-004-00	4	M12	22	4,5	20
IG-810-006-00	6	M12	26	6,5	20
IG-810-008-00	8	M16	27	8,5	30

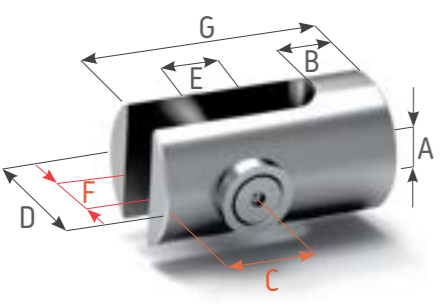
Material AISI 316 L



ROPE HOLDER

Part Number	Rope Ø mm	Dimensions in mm				
		A	B	C	D	E
IR-544-008-00	6-8	M8	40	30	16	9
IR-544-010-00	10-12	M10	43	30	22	13
IR-544-012-00	14-16	M12	45	30	30	17

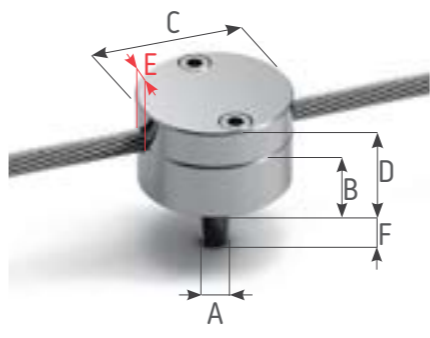
Material AISI 316 L



FORK HEAD ROPE GUIDING

Part Number	Rope Ø mm	Dimensions in mm						
		A	B	C	D	E	F	G
IR-543-010-00	8-10	M10	13	18	28	11	12	50
IR-543-012-00	12	M12	13	18	28	11	13,5	50

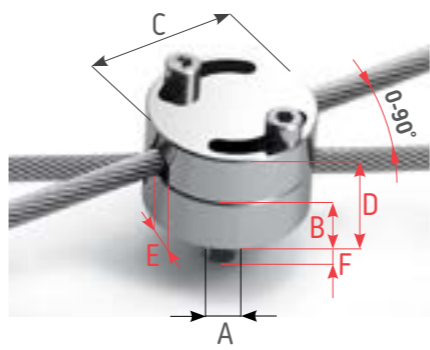
Material AISI 316 L



SCREW ON CROSS CLAMP

Part Number	Rope Ø mm	Dimensions in mm					
		A	B	C	D	E	F
IR-531-006-00	6	M8	15	40	25	6	20
IR-531-008-00	8	M8	15	40	25	8	20
IR-531-010-00	10	M8	15	40	25	10	20
IR-531-012-00	12	M8	15	40	25	12	20
IR-531-016-00	16	M10	19,5	50	32	16	16

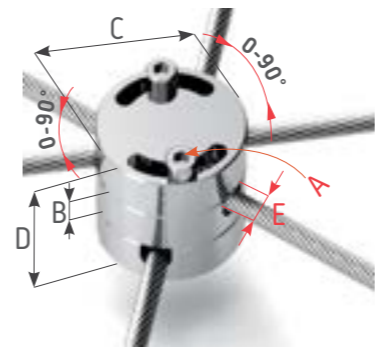
Material AISI 316



ADJUSTABLE SCREW ON CROSS CLAMP

Part Number	Rope Ø mm	Dimensions in mm					
		A	B	C	D	E	F
IR-532-008-00	8	M8	13	40	27	8,5	20
IR-532-010-00	10	M8	13	40	27	10,5	20

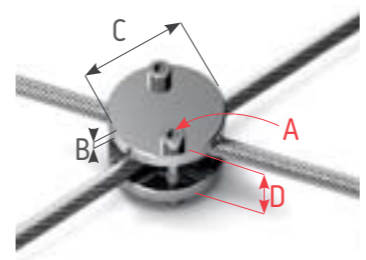
Material AISI 316



ADJUSTABLE TRIPLE CROSS CLAMP

Part Number	Rope Ø mm	Dimensions in mm				
		A	B	C	D	E
IR-533-008-00	8	M6	13	40	41	8,5
IR-533-010-00	10	M6	13	40	41	10,5

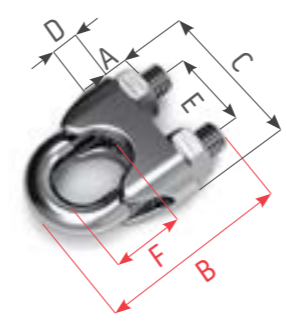
Material AISI 316



CROSS CLAMP

Part Number	Rope Ø mm	Dimensions in mm			
		A	B	C	D
IR-530-004-06	4-6	M4	5	35	18/22
IR-530-008-12	8-12	M6	8	45	32/40

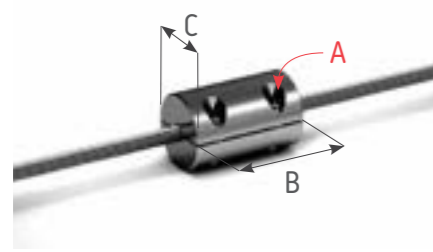
Material AISI 316



WIRE ROPE GRIP

Part Number	Rope Ø mm	Dimensions in mm					
		A	B	C	D	E	F min.max
IR-526-004-00	4	M4	24	19	17	10	5-12
IR-526-006-00	6	M6	33	28	20	14	4-15
IR-526-008-00	8	M8	40	34	27	19	5-16
IR-526-010-00	10	M10	50	45	29	21	8-23
IR-526-012-00	12	M12	60	51	32	26	8-29

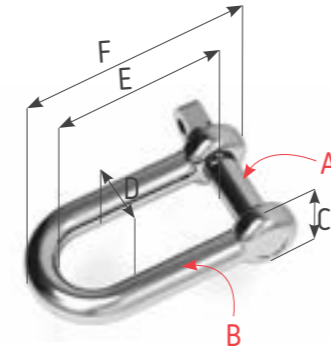
Material AISI 316



CLAMP RING WITH TWO PART

Part Number	Rope	Dimensions in mm		
	Ø mm	A	B	C
IR-542-004-00	4	M4	30	22
IR-542-006-00	6	M5	45	28
IR-542-008-00	8	M5	45	28

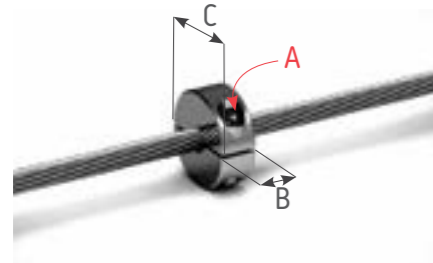
Material AISI 316 L



SHACKLE D-FORM

Part Number	Dimensions in mm					
	A	B	C	D	E	F
IR-557-006-00	6	6	12	12	24	38
IR-557-008-00	8	8	16	16	32	52
IR-557-010-00	10	10	20	20	40	66
IR-557-012-00	12	12	25	25	48	76
IR-557-016-00	16	16	32	32	64	101
IR-557-020-00	20	20	36	38	76	120

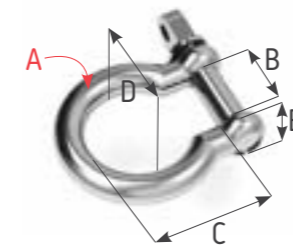
Material AISI 316



CLAMP RING

Part Number	Rope	Dimensions in mm		
	Ø mm	A	B	C
IR-541-004-00	4	M3	10	16
IR-541-006-00	6	M4	10	25
IR-541-008-00	8	M4	10	25

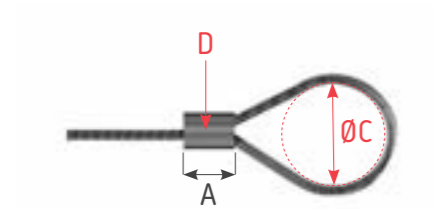
Material AISI 316 L



SHACKLE OMEGA

Part Number	Dimensions in mm				
	A	B	C	D	E
IR-559-006-00	6	12	24	18	12
IR-559-008-00	8	16	32	24	16
IR-559-010-00	10	20	40	30	20
IR-559-012-00	12	25	45	36	24

Material AISI 316

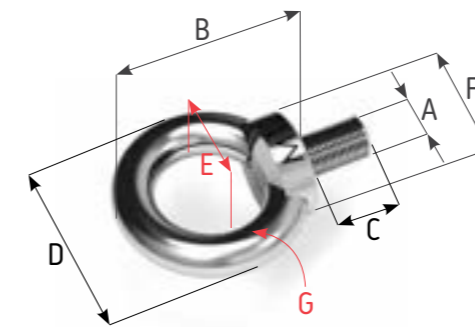


LOOP SWAGED WITHOUT TIMBLE

Part Number	Rope	Dimensions in mm		
	Ø mm	A	ØC	D
IR-522-002-00	2	10	-	4
IR-522-003-00	3	13	-	6
IR-522-004-00	4	16	-	8
IR-522-006-00	6	28	-	13
IR-522-008-00	8	40	-	16
IR-522-010-00	10	50	-	20
IR-522-012-00	12	60	-	24

Material AISI 316

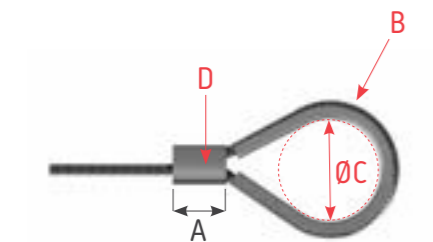
Dimension ØC is variable



EYE BOLT

Part Number	Dimensions in mm						
	A	B	C	D	E	F	G
IR-551-008-00	M8	36	13	36	20	20	8
IR-551-010-00	M10	45	17	45	25	25	10
IR-551-012-00	M12	53	21	54	30	30	12
IR-551-016-00	M16	62	27	63	35	35	14
IR-551-020-00	M20	71	30	72	40	40	16

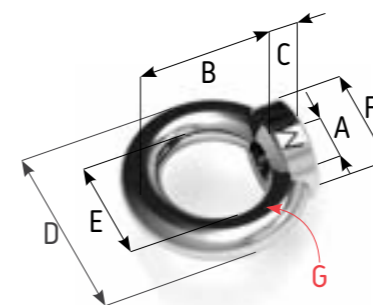
Material AISI 316



LOOP SWAGED WITH TIMBLE

Part Number	Rope	Dimensions in mm			
	Ø mm	A	B	ØC	D
IR-524-002-00	2	10	4	6,5	7
IR-524-003-00	3	13	5,5	9,5	9
IR-524-004-00	4	16	6,5	10,5	13
IR-524-006-00	6	28	9	15,5	13
IR-524-008-00	8	40	12	17,5	16
IR-524-010-00	10	50	14	23,5	20
IR-524-012-00	12	60	20	25,5	24

Material AISI 316

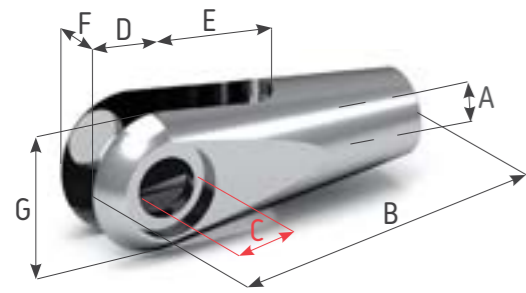


EYE NUT

Part Number	Dimensions in mm						
	A	B	C	D	E	F	G
IR-553-008-00	M8	36	8	36	20	20	8
IR-553-010-00	M10	45	10	45	25	25	10
IR-553-012-00	M12	53	11	54	30	30	12
IR-553-016-00	M16	62	13	63	35	35	14
IR-553-020-00	M20	71	15	72	40	40	16

Material AISI 316

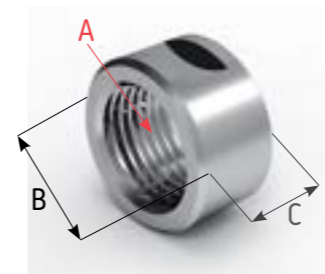
FORK WITH INTERNAL THREAD



Part Number Right threaded	Rope Ø mm	Dimensions in mm						
		A	B	C	D	E	F	G
IR-305-004-00	4	M6	39	6,5	8	11,5	6,6	15,5
IR-305-006-00	6	M10	65	11	12,9	19,7	11	25,7
IR-305-008-00	8	M12	75	13	14,8	22	12	29,7
IR-305-010-00	10	M14	87,5	16	17,3	25,7	14	34,6
IR-305-012-00	12	M16	100	19	19,8	29,3	16	39,6
IR-305-014-00	14	M20	132	21	26,3	38,7	16	52,6
IR-305-016-00	16	M24	150	27	30	45	22	60,1
IR-305-018-00	18	M27	170	29	34,1	48,2	22	66,5
IR-305-020-00	20	M30	188	31	37,9	55	22	75,9
IR-305-022-00	22	M30	188	31	37,9	55	22	75,9
IR-305-024-00	24	M36	225	37	45,4	64,2	27	90,6
IR-305-026-00	26	M36	225	37	45,5	64,2	27	90,6

Material AISI 316 L

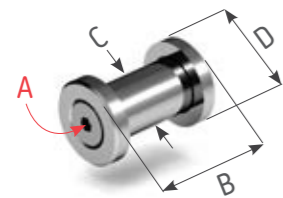
FORK NUT



Part Number Right threaded	Part Number Left threaded	Rope Ø mm	Dimensions in mm		
			A	B	C
IR-302-006-00	IR-302-006-01	4	M6	9	6
IR-302-010-00	IR-302-010-01	6	M10	14,5	8
IR-302-012-00	IR-302-012-01	8	M12	17,5	10
IR-302-014-00	IR-302-014-01	10	M14	20,5	10
IR-302-016-00	IR-302-016-01	12	M16	23,5	12
IR-302-020-00	IR-302-020-01	14	M20	28	15
IR-302-024-00	IR-302-024-01	16	M24	35	16
IR-302-027-00	IR-302-027-01	18	M27	36	20
IR-302-030-00	IR-302-030-01	20	M30	40	20
IR-302-030-00	IR-302-030-01	22	M30	40	20
IR-302-036-00	IR-302-036-01	24	M36	50	25
IR-302-036-00	IR-302-036-01	26	M36	50	25

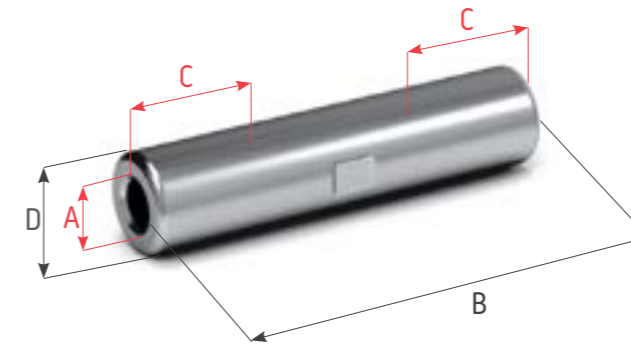
Material AISI 316 L

PIM/PIM COVER



Part Number Right threaded	Rope Ø mm	Dimensions in mm			
		A	B	C	D
IR-303-004-00	4	M3	14	6	9.5
IR-303-006-00	6	M4	22	10	15.5
IR-303-008-00	8	M4	26	12	18.5
IR-303-010-00	10	M4	29	15	22
IR-303-012-00	12	M5	34	18	25
IR-303-014-00	14	M5	42	20	38
IR-303-016-00	16	M6	52	26	38
IR-303-018-00	18	M6	54	28	45
IR-303-020-00	20	M6	60	30	52
IR-303-022-00	22	M6	60	30	52
IR-303-024-00	24	M8	76	36	65
IR-303-026-00	26	M8	76	36	65

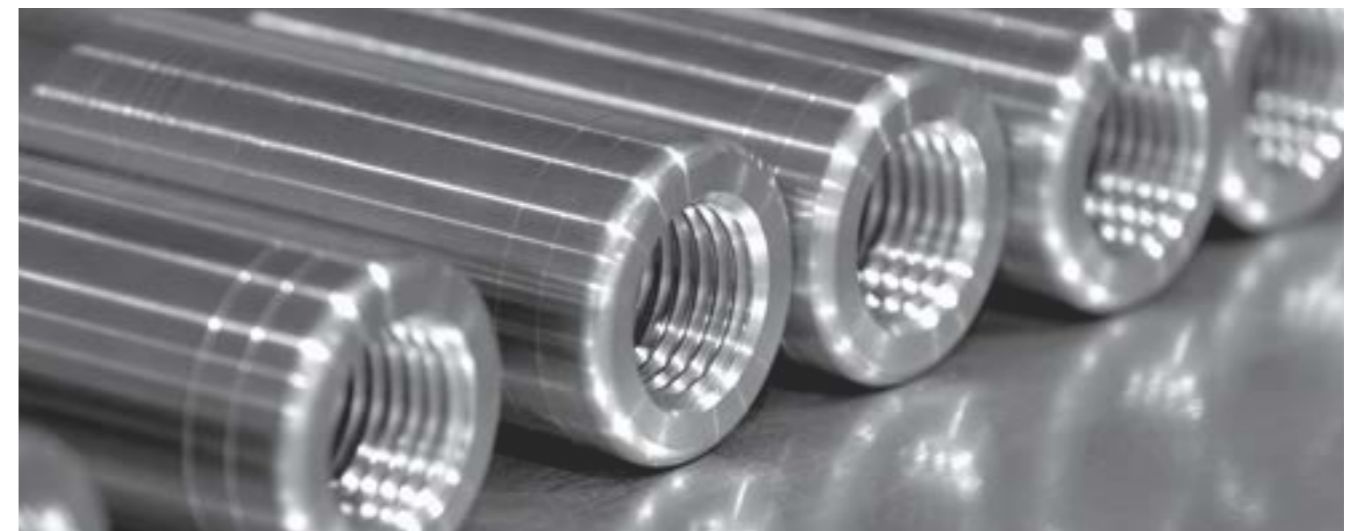
Material AISI 316 L



TURNBUCKLE

Part Number	Rope Ø mm	Dimensions in mm			
		A	B	C	D
IR-565-006-00	4	M6	65	12	10
IR-565-008-00	6	M8	70	12	16
IR-565-010-00	6	M10	80	13	19
IR-565-012-00	8	M12	104	15	20
IR-565-014-00	10	M14	136	20	25
IR-565-016-00	12	M16	158	25	28

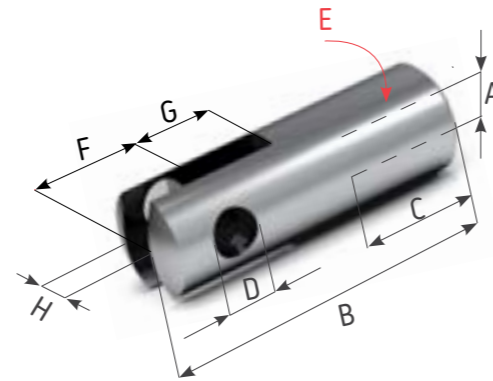
Material AISI 316 L



CYLINDRICAL FORK WITH INTERNAL THREAD

Part Number Right threaded	Part Number Left threaded	Rope Ø mm	Dimensions in mm							
			A	B	C	D	E	F	G	H
IR-335-004-00	IR-336-004-00	4	M6	45	20	6	14	8	9	6
IR-335-006-00	IR-336-006-00	6	M8	55	25	8	18	12	13	7
IR-335-006-01	IR-336-006-01	6	M10	70	30	10	22	15	15	8
IR-335-008-00	IR-336-008-00	8	M12	80	35	12	26	17	18	10
IR-335-010-00	IR-336-010-00	10	M14	90	35	14	30	19	20	11
IR-335-012-00	IR-336-012-00	12	M16	100	40	16	34	22	22	12
IR-335-014-00	IR-336-014-00	14	M20	120	40	20	42	27	27	15
IR-335-016-00	IR-336-016-00	16	M24	150	40	22	52	34	34	18

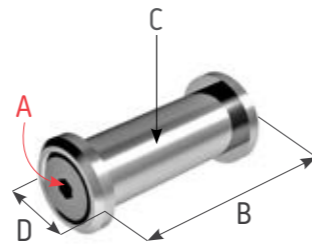
Material AISI 316 L



PIM/PIM COVER

Part Number Right threaded	Rope Ø mm	Dimensions in mm			
		A	B	C	D
IR-306-004-00	4	M3	17.5	5.5	9
IR-306-006-00	6	M3	22.1	7.2	12
IR-306-008-00	8	M4	31	11.5	18
IR-306-010-00	10	M5	36.5	13.5	20
IR-306-012-00	12	M5	42.5	15.5	22
IR-306-014-00	14	M6	47.5	19	26
IR-306-016-00	16	M6	58	21	28

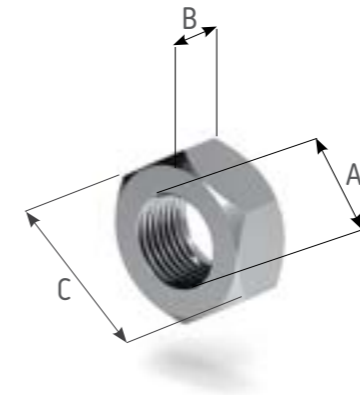
Material AISI 316 L



HEXAGON NUT

Part Number Right threaded	Part Number Left threaded	Thread	Dimensions in mm		
			A	B	C
944-006-00	944-006-01	M6	5	10	
944-008-00	944-008-02	M8	6,5	13	
944-010-00	944-010-01	M10	8	17	
944-012-00	944-012-01	M12	10	19	
944-014-00	944-014-01	M14	11	22	
944-016-00	944-016-01	M16	13	24	
944-020-00	944-020-01	M20	16	30	
944-024-00	944-024-01	M24	19	36	
944-027-00	944-027-01	M27	24	41	
944-030-00	944-030-01	M30	24	46	
944-036-00	944-036-01	M36	31	55	
944-042-00	944-042-01	M42	34	65	
944-048-00	944-048-01	M48	38	75	
944-052-00	944-052-01	M52	42	80	
944-056-00	944-056-01	M56	45	85	

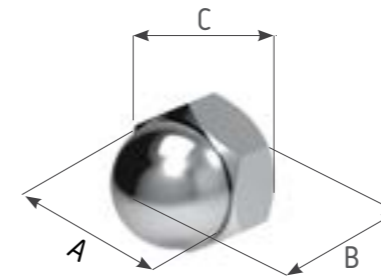
Material AISI 316



DOME NUT

Part Number Right threaded	Thread	Dimensions in mm		
		A	B	C
946-006-00	M6	12	10	
946-008-00	M8	15	13	
946-010-00	M10	18	17	
946-012-00	M12	22	19	
946-014-00	M14	25	22	
946-016-00	M16	28	24	
946-020-00	M20	34	30	
946-024-00	M24	42	36	

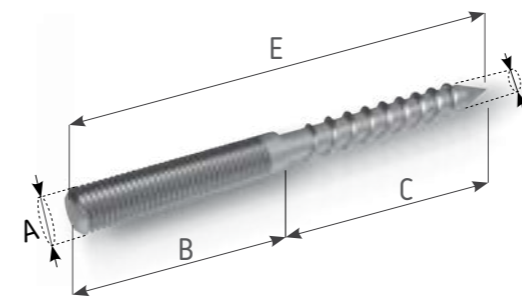
Material AISI 316

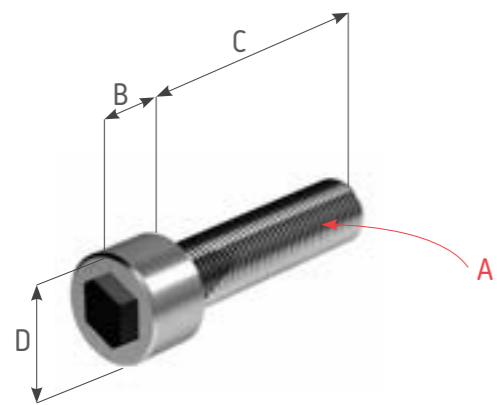


DUAL THREAD SCREW

Part Number Right threaded	Part Number Left threaded	Thread	Dimensions in mm				
			A	B	C	D	E
917-005-00	918-005-00	M5	20	30	4,3	50	
917-006-00	918-006-00	M6	30	40	5,2	70	
917-008-00	918-008-00	M8	40	60	6,9	100	
917-010-00	-	M10	30	40	8,9	70	
917-014-00	-	M12	30	80	12	110	

Material AISI 316

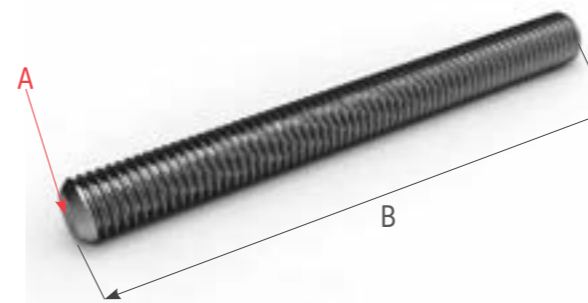




SOCKET HEAD SCREW

Part Number	Thread	Dimensions in mm			
	A	B	C	D	
930-004-00	M4	4	25	7	
930-005-00	M5	5	25	8,5	
930-006-00	M6	6	30	10	
930-008-00	M8	8	35	13	
930-010-00	M10	10	40	16	
930-012-00	M12	12	50	18	
930-016-00	M16	16	60	24	
930-020-00	M20	20	70	30	

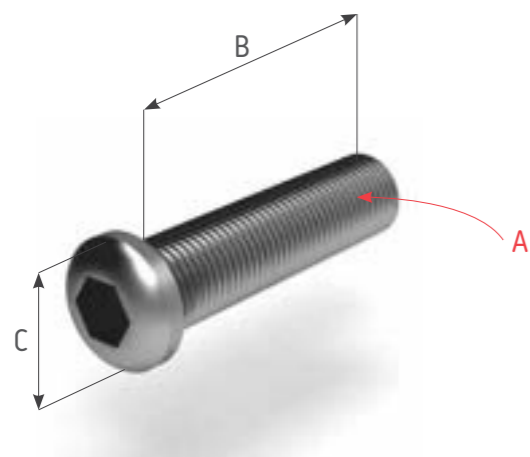
Material AISI 316



THREADED ROD

Part Number	Part Number	Thread	Dimensions in mm
		A	B
919-004-01	920-004-01	M4	100
919-004-10	920-004-10	M4	1000
919-006-01	920-006-01	M6	100
919-006-10	920-006-10	M6	1000
919-008-01	920-008-01	M8	100
919-008-10	920-008-10	M8	1000
919-010-01	920-010-01	M10	100
919-010-10	920-010-10	M10	1000
919-012-01	920-012-01	M12	100
919-012-10	920-012-10	M12	1000
919-014-01	920-014-01	M14	100
919-014-10	920-014-10	M14	1000
919-016-01	920-016-01	M16	100
919-016-10	920-016-10	M16	1000

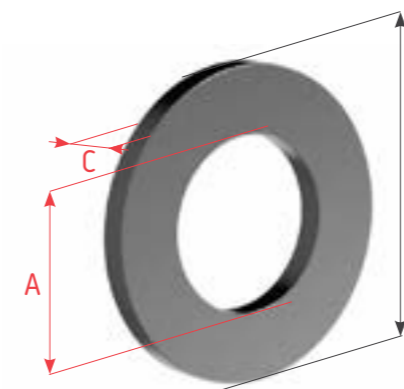
Material AISI 316



PAN HEAD SCREW

Part Number	Thread	Dimensions in mm	
	A	B	C
932-004-20	M4	20	7.5
932-004-25	M4	25	7.5
932-005-25	M5	25	9.5
932-005-30	M5	30	9.5
932-006-25	M6	25	10.5
932-006-30	M6	30	10.5
932-008-30	M8	30	14
932-008-40	M8	40	14
932-010-30	M10	30	17.5
932-010-40	M10	40	17.5
932-012-30	M12	30	21
932-012-50	M12	50	21

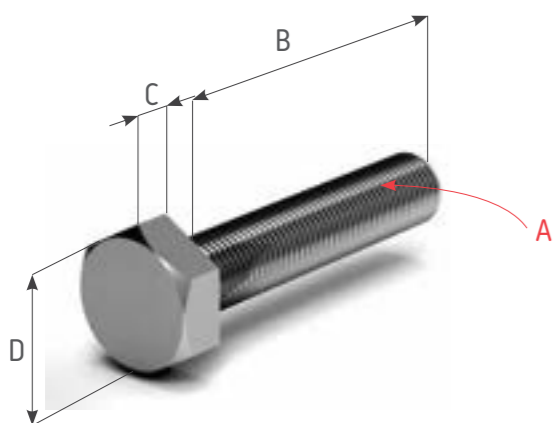
Material AISI 316



WASHER

Part Number	Thread	Dimensions in mm	
	A	B	C
937-004-00	M4	9	0,5
937-006-00	M6	11	1
937-008-00	M8	15	1,6
937-010-00	M10	18	1,6
937-012-00	M12	20	1,6
937-014-00	M14	25	2
937-016-00	M16	28	2,5
937-020-00	M20	34	2,5
937-022-00	M22	39	3
937-024-00	M24	39	3
937-030-00	M30	56	4

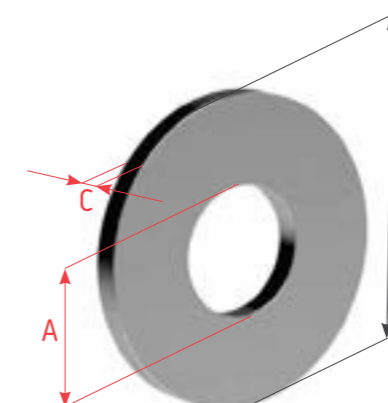
Material AISI 316



HEXAGON HEAD SCREW

Part Number	Thread	Dimensions in mm			
	A	B	C	D	
934-004-00	M4	25	2,8	7	
934-005-00	M5	30	3,5	8	
934-006-00	M6	30	4	10	
934-008-00	M8	40	5,3	13	
934-010-00	M10	50	6,4	17	
934-012-00	M12	70	7,5	19	
934-014-00	M14	70	8,8	22	
934-016-00	M16	90	10	24	
934-020-00	M20	100	12,5	30	

Material AISI 316



WASHER FOR WOOD

Part Number	Thread	Dimensions in mm	
	A	B	C
939-004-00	M4	12	1
939-006-00	M6	15	1.2
939-008-00	M8	18	1.6
939-010-00	M10	24	2
939-012-00	M12	30	2.5
939-014-00	M14	37	3
939-016-00	M16	50	3

Material AISI 316

I-ROPE SYSTEMS

Both side turnbuckle with fork and swaged fitting

IRS 330-004-040



One side turnbuckle with fork and swaged fitting, other side fork with swaged fitting

IRS 340-004-040



Both side fork with swaged fitting

IRS 350-004-040



One side fork with swaged fitting other side swaged fitting

IRS 360-004-040



Both side with swaged fitting

IRS 120-004-040

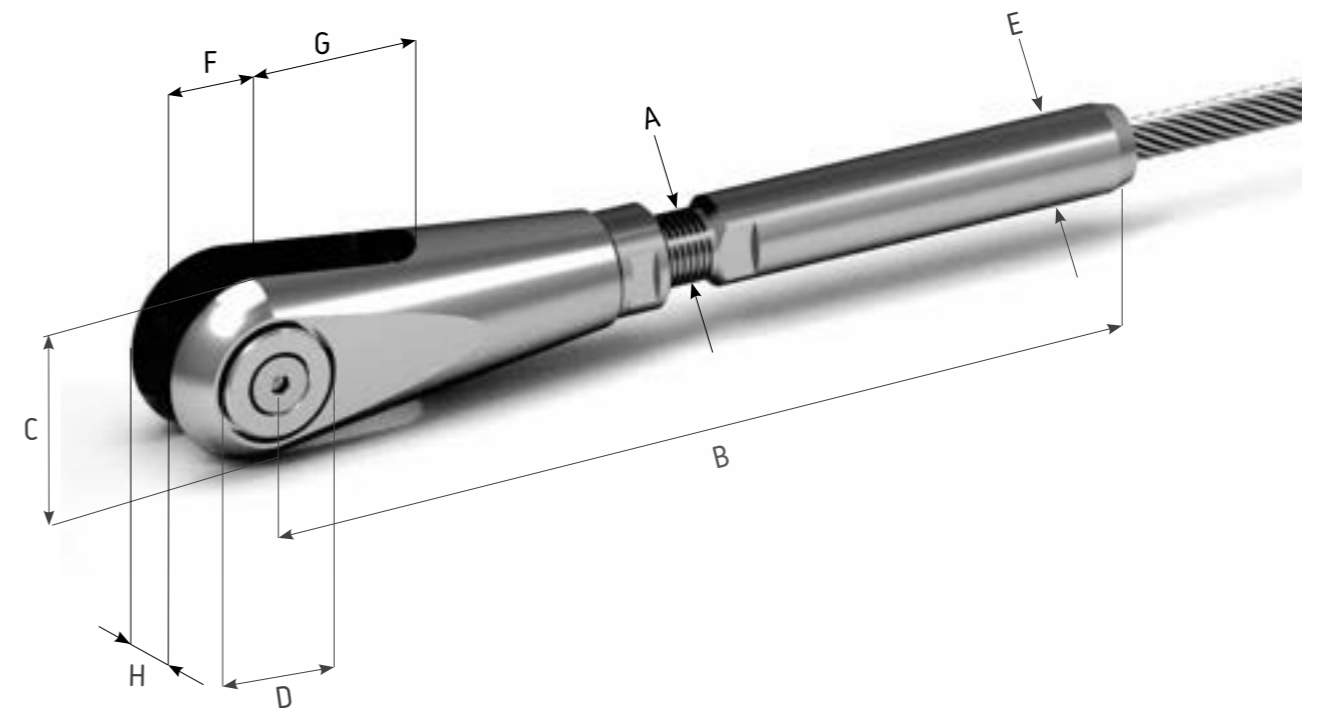


I-ROPE TENSION SYSTEMS

FORK WITH SWAGED FITTING

Part Number	Rope Ø mm	Dimensions in mm							
		A	B	C	D	E	F	G	H
IR-315-004-00	4	M6	82.2	15.5	6	7.5	8	11.5	6.6
IR-315-006-00	6	M10	132	25.7	10	12.5	12.9	19.7	11
IR-315-008-00	8	M12	164	29.7	12	16	14.8	22	12
IR-315-010-00	10	M14	195	34.6	15	17.8	17.3	25.7	14
IR-315-012-00	12	M16	225	39.6	18	21.4	19.8	29.3	16
IR-315-014-00	14	M20	293	52.6	20	25	26.3	38.7	16
IR-315-016-00	16	M24	328	60.1	26	28	30	45	22
IR-315-018-00	18	M27	353	66.5	28	34.5	34.1	48.2	22
IR-315-020-00	20	M30	415	75.9	30	40	37.9	55	22
IR-315-022-00	22	M30	435	75.9	30	40	37.9	55	22
IR-315-024-00	24	M36	480	90.6	36	46	45.5	64.2	27
IR-315-026-00	26	M36	485	90.6	36	46	45.5	64.2	27
IR-315-028-00	28	M42	533	104.3	40	50	52.1	74.9	35
IR-315-030-00	30	M48	561	107.1	50	58	53.6	78.4	42
IR-315-032-00	32	M48	571	107.1	50	58	53.6	78.4	42
IR-315-034-00	34	M52	595	115	50	65	57.6	84.7	47
IR-315-036-00	36	M52	610	115	50	65	57.6	84.7	47
IR-315-038-00	38	M56	645	129.6	58	72	64.5	93.5	52
IR-315-040-00	40	M56	655	129.6	58	72	64.5	93.5	52

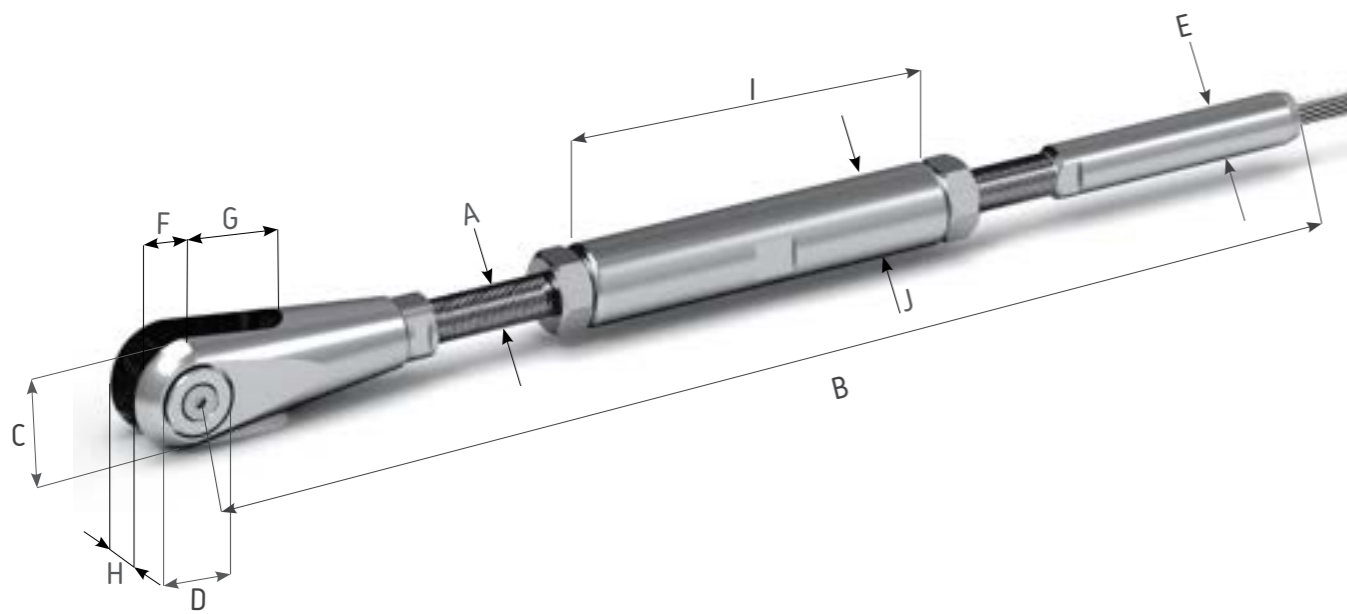
Material AISI 316 / 1.4462 Duplex



FORK WITH TURNBUCKLE AND SWAGED FITTING

Part Number	Rope Ø mm	Dimensions in mm											
		A	B	B _{max}	B _{min}	C	D	E	F	G	H	I	J
IR-325-004-00	4	M6	184.7	194.6	152.6	15.5	6	7.5	8	11.5	6.6	65	10
IR-325-006-00	6	M10	274	287	223	25.7	10	12.5	12.9	19.7	11	80	19
IR-325-008-00	8	M12	342	358	281	29.7	12	16	14.8	22	12	104	20
IR-325-010-00	10	M14	417	437	347	34.6	15	17.8	17.3	25.7	14	136	25
IR-325-012-00	12	M16	488	518	409	39.6	18	21.4	19.8	29.3	16	158	28
IR-325-014-00	14	M20	608	638	517	52.6	20	25	26.3	38.7	16	190	38
IR-325-016-00	16	M24	730	761	599	60.1	26	28	30	45	22	230	40
IR-325-018-00	18	M27	768	799	642	66.5	28	34.5	34.1	48.2	22	245	45
IR-325-020-00	20	M30	870	910	733	75.9	30	40	37.9	55	22	271	50
IR-325-022-00	22	M30	885	925	739	75.9	30	40	37.9	55	22	271	50
IR-325-024-00	24	M36	965	1015	812	90.6	36	46	45.5	64.2	27	290	55
IR-325-026-00	26	M36	975	1025	822	90.6	36	46	45.5	64.2	27	290	55
IR-325-028-00	28	M42	1117	1167	934	104.3	40	50	52.1	74.9	35	340	65
IR-325-030-00	30	M48	1231	1291	1018	107.1	50	58	53.6	78.4	42	400	70
IR-325-032-00	32	M48	1241	1301	1028	107.1	50	58	53.6	78.4	42	400	70
IR-325-034-00	34	M52	1304	1369	1084	115	50	65	57.6	84.7	47	425	75
IR-325-036-00	36	M52	1330	1395	1094	115	50	65	57.6	84.7	47	425	75
IR-325-038-00	38	M56	1375	1455	1150	129.6	58	72	64.5	93.5	52	430	85
IR-325-040-00	40	M56	1415	1495	1160	129.6	58	72	64.5	93.5	52	430	85

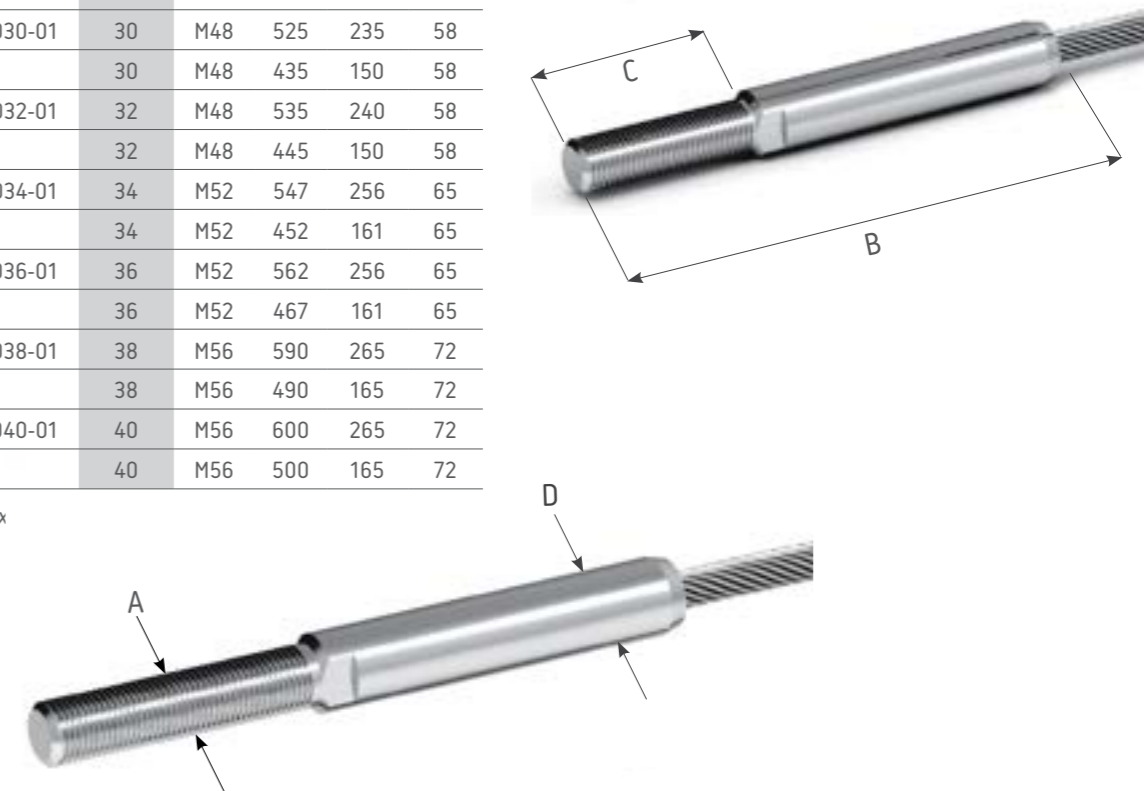
Material AISI 316 / 1.4462 Duplex



EXTERNAL THREAD ROLL SWAGED FITTING

Part Number	Part Number	Rope Ø mm	Dimensions in mm			
			A	B	C	D
IR-150-004-00	IR-150-004-01	4	M6	75	35	7.5
IR-155-004-00		4	M6	63	20	7.5
IR-150-006-00	IR-150-006-01	6	M10	109	45	12.5
IR-155-006-00		6	M10	99	35	12.5
IR-150-008-00	IR-150-008-01	8	M12	144	60	16
IR-155-008-00		8	M12	129	45	16
IR-150-010-00	IR-150-010-01	10	M14	180	76	17.8
IR-155-010-00		10	M14	155	51	17.8
IR-150-012-00	IR-150-012-01	12	M16	215	90	21.4
IR-155-012-00		12	M16	180	55	21.4
IR-150-014-00	IR-150-014-01	14	M20	278	115	25
IR-155-014-00		14	M20	228	65	25
IR-150-016-00	IR-150-016-01	16	M24	313	130	28
IR-155-016-00		16	M24	258	75	28
IR-150-018-00	IR-150-018-01	18	M27	332	146	34.5
IR-155-018-00		18	M27	277	91	34.5
IR-150-020-00	IR-150-020-01	20	M30	397	162	40
IR-155-020-00		20	M30	334	100	40
IR-150-022-00	IR-150-022-01	22	M30	410	170	40
IR-155-022-00		22	M30	345	105	40
IR-150-024-00	IR-150-024-01	24	M36	425	175	46
IR-155-024-00		24	M36	370	120	46
IR-150-026-00	IR-150-026-01	26	M36	435	175	46
IR-155-026-00		26	M36	380	120	46
IR-150-028-00	IR-150-028-01	28	M42	480	205	50
IR-155-028-00		28	M42	407	132	50
IR-150-030-00	IR-150-030-01	30	M48	525	235	58
IR-155-030-00		30	M48	435	150	58
IR-150-032-00	IR-150-032-01	32	M48	535	240	58
IR-155-032-00		32	M48	445	150	58
IR-150-034-00	IR-150-034-01	34	M52	547	256	65
IR-155-034-00		34	M52	452	161	65
IR-150-036-00	IR-150-036-01	36	M52	562	256	65
IR-155-036-00		36	M52	467	161	65
IR-150-038-00	IR-150-038-01	38	M56	590	265	72
IR-155-038-00		38	M56	490	165	72
IR-150-040-00	IR-150-040-01	40	M56	600	265	72
IR-155-040-00		40	M56	500	165	72

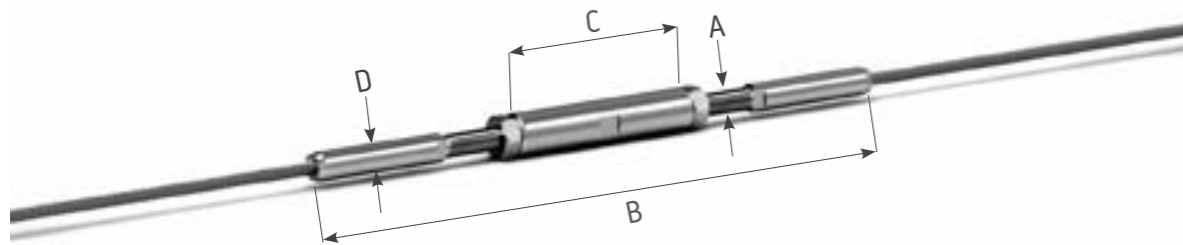
Material AISI 316 / 1.4462 Duplex



TURNBUCKLE WITH ROLL SWAGED FITTING

Part Number	Rope		Dimensions in mm					
	Right threaded	Ø mm	A	B	B _{max}	B _{min}	C	D
IR-180-004-00		4	M6	194	206	162	65	7.5
IR-180-006-00		6	M10	271	284	230	80	12.5
IR-180-008-00		8	M12	361	376	298	104	16
IR-180-010-00		10	M14	456	476	378	136	17.8
IR-180-012-00		12	M16	548	568	444	158	21.4
IR-180-014-00		14	M20	686	716	560	190	25
IR-180-016-00		16	M24	796	822	648	230	28
IR-180-018-00		18	M27	833	873	683	245	34.5
IR-180-020-00		20	M30	983	1023	806	271	40
IR-180-022-00		22	M30	1011	1051	822	271	40
IR-180-024-00		24	M36	1040	1090	866	290	46
IR-180-026-00		26	M36	1060	1110	886	290	46
IR-180-028-00		28	M42	1200	1250	980	340	50
IR-180-030-00		30	M48	1330	1390	1070	400	58
IR-180-032-00		32	M48	1350	1410	1090	400	58
IR-180-034-00		34	M52	1375	1440	1113	425	65
IR-180-036-00		36	M52	1419	1484	1143	425	65
IR-180-038-00		38	M56	1450	1530	1200	430	72
IR-180-040-00		40	M56	1470	1550	1220	430	72

Material AISI 316 / 1.4462 Duplex

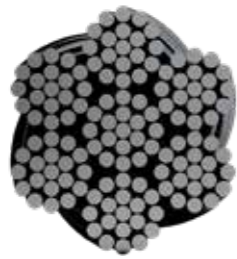


CHARACTERISTICS OF WIRE ROPES

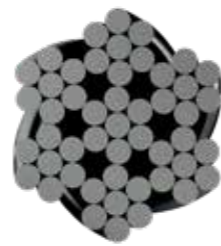
Explanation and Application of Wire Ropes



rope sample



7x19



7x7

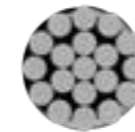
Type of Wire Rope	Explanation
Strand Ropes	Wire ropes consist of a number of strands twisted together. This construction makes them very flexible. The code for this type of wire depends on the number of strands and the number of wires per strand.
	<p>Applications</p> <p>Tensioning cables for lightweight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

CHARACTERISTICS OF WIRE ROPES

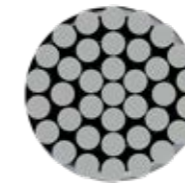
Explanation and Application of Wire Ropes



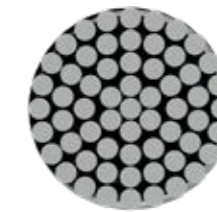
rope sample



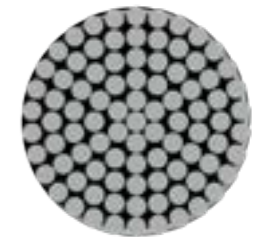
1x19



1x37



1x61



1x91

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.
	<p>Applications</p> <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>

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 mm	Minimum Breaking Force F _{min} [kN]	Charact. Breaking Force F _{uk} (1) [kN]	Tension Strength FRd (2) [kN]	Metallic Cross Section A [mm ²]	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_{min}: Minimum Breaking Force.

F_{uk}: 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. Thus 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;

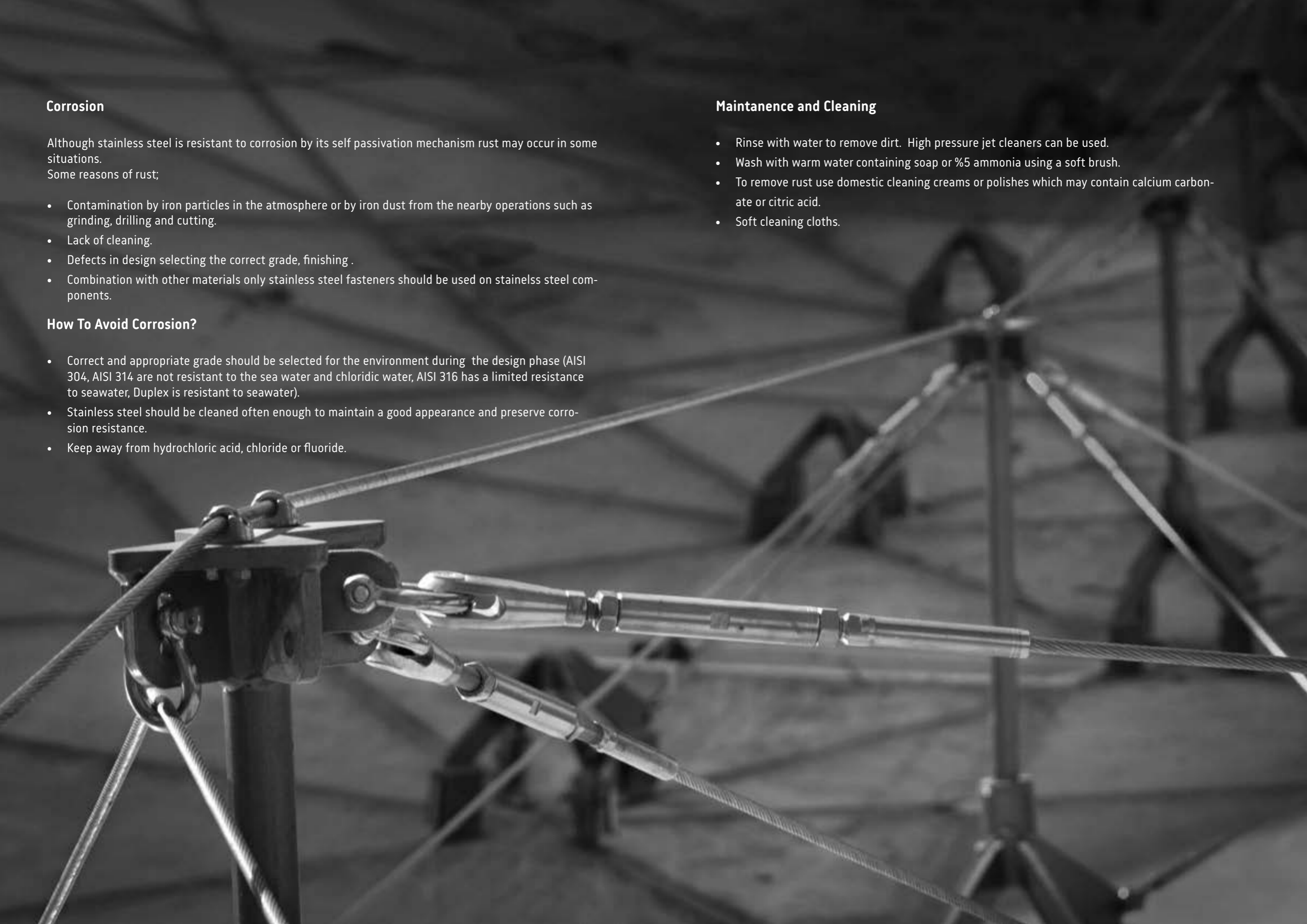
- Contamination by iron particles in the atmosphere or by iron dust from the nearby operations such as grinding, drilling and cutting.
- Lack of cleaning.
- Defects in design selecting the correct grade, finishing .
- Combination with other materials only stainless steel fasteners should be used on stainless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

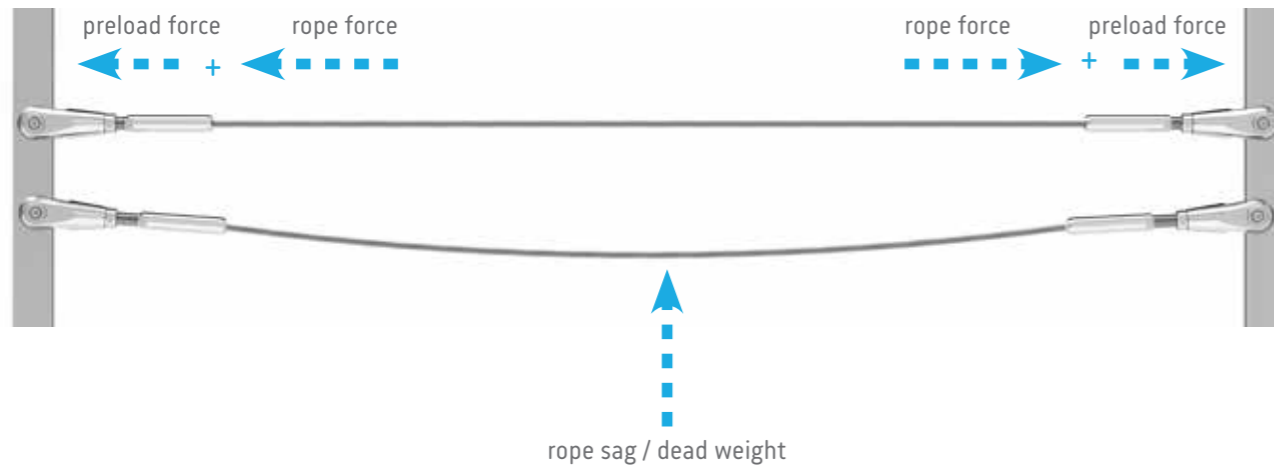
- Rinse with water to remove dirt. High pressure jet cleaners can be used.
- Wash with warm water containing soap or %5 ammonia using a soft brush.
- To remove rust use domestic cleaning creams or polishes which may contain calcium carbonate or citric acid.
- Soft cleaning cloths.



TECHNICAL TIPS

ROPE FORCES AND TENSIONING

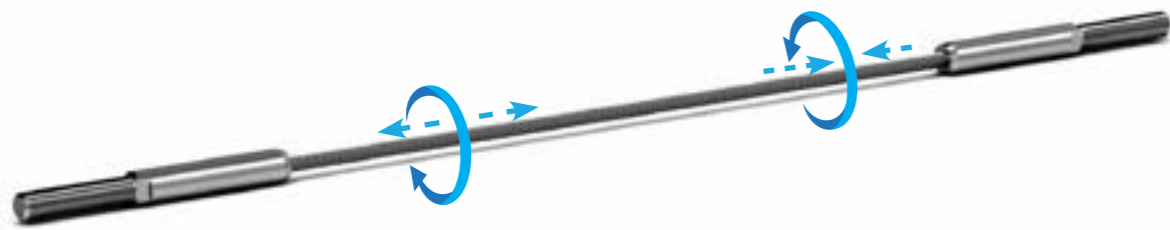
To make up an effective total, rope force and preload force should be applied as a combination. The ropes are held by means of fittings such as end stops and nuts. The length of the rope can be adjusted by the help of this joints.



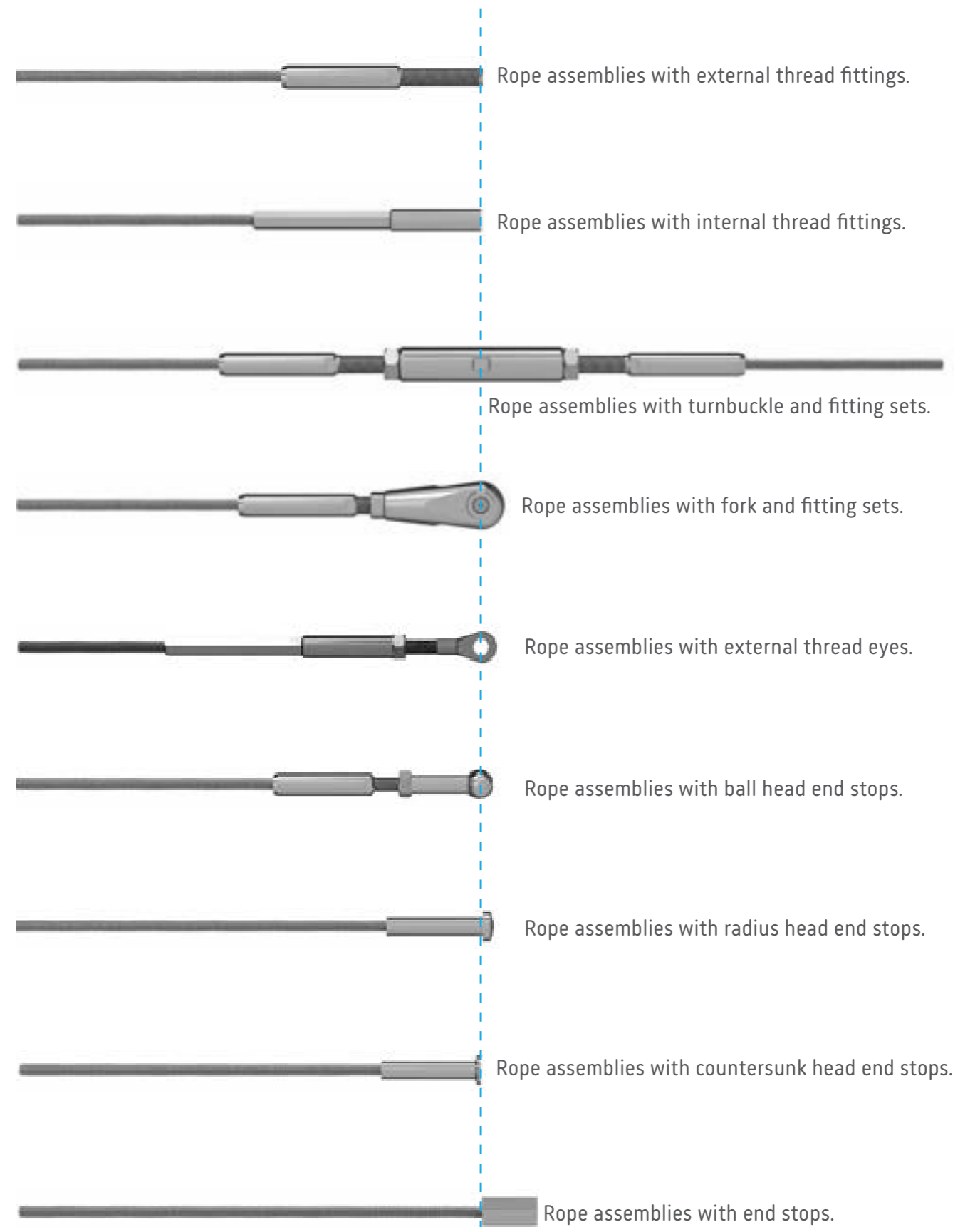
Tightening and Loosening Descripton of Rope System

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*



OUR GOALS

As INOX-NET 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 INOX-NET 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.

