Webnet

N1

Swiss Quality

Jakob® INOX LINE

ENGLISH

N1

Swiss Quality

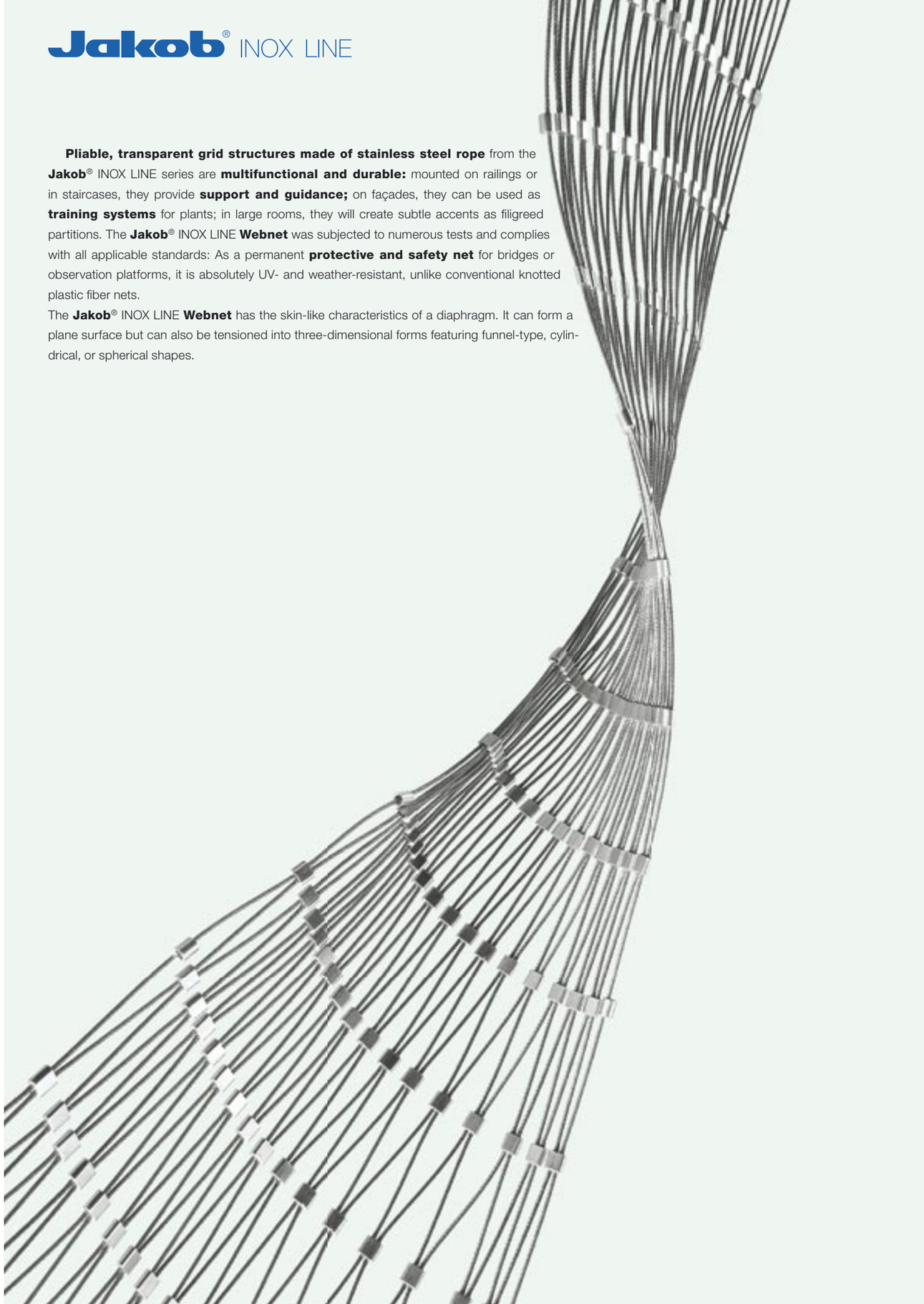
SINCE 1904

Idea / Conception
Atelier Jakob AG / SA, Hannes Jakob SGD
CH-1783 Barberêche, Switzerland

Jakob® INOX LINE

Pliable, transparent grid structures made of stainless steel rope from the **Jakob®** INOX LINE series are **multifunctional and durable:** mounted on railings or in staircases, they provide **support and guidance;** on façades, they can be used as **training systems** for plants; in large rooms, they will create subtle accents as filigreed partitions. The **Jakob®** INOX LINE **Webnet** was subjected to numerous tests and complies with all applicable standards: As a permanent **protective and safety net** for bridges or observation platforms, it is absolutely UV- and weather-resistant, unlike conventional knotted plastic fiber nets.

The **Jakob®** INOX LINE **Webnet** has the skin-like characteristics of a diaphragm. It can form a plane surface but can also be tensioned into three-dimensional forms featuring funnel-type, cylindrical, or spherical shapes.



Webnet: Intelligent solutions in architecture and design

The Jakob® INOX LINE **Webnet is a custom-manufactured, premium-quality product that is highly compatible with creative contemporary architecture. As part of our extensive, easy-to-assemble structural wire-rope series, it is ideal for flexible, intelligent solutions that address a vast variety of requirements: the multifunctional Jakob® INOX LINE Webnet technology combined with stainless steel rope, rods, or tubes with appropriate end connectors (Jakob®** INOX LINE **Basic 5.1 Green Solutions G1, and News X catalogues) not only discreetly fulfills its functions as a protective and supporting structure but also provides appeal as an elegant spatial design element.**

Support and protection function

A lake region in western Switzerland with a safe bird's-eye view: in the **tethered balloon** on a platform **at the Lake of Neuenburg,** visitors can ascend to a height of 150 m. The large "captive balloon" was installed as a tourist attraction in the summer of 2002, when the Swiss National Exposition (Expo) took place. The combined **support and protection structure** made of rods, wire rope, and the **Jakob®** INOX LINE **Webnet** components created an impressive, futuristic takeoff and landing ramp with guaranteed safety factors.

Jakob® INOX LINE

The Crossnet by Jakob® INOX LINE

Crossnet stands for a sophisticated combination of stainless steel wire rope and connecting elements.

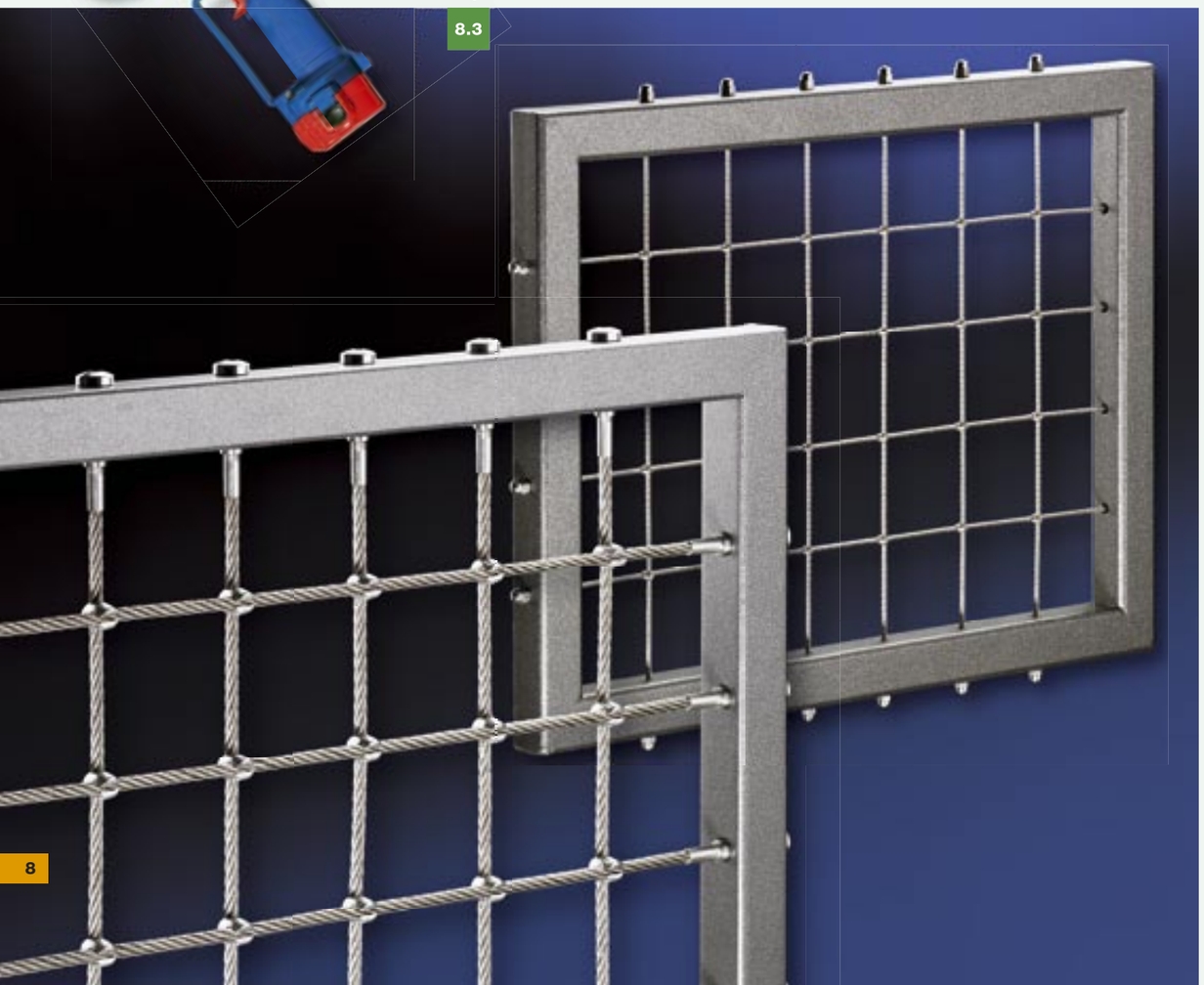
The new cross clamp is both elegant and unobtrusive. The ample configuration latitude provided by **Crossnet,** such as the variable mesh aperture in combination with our proven rope-end connectors, is a challenge to the imagination and will inspire new creations.

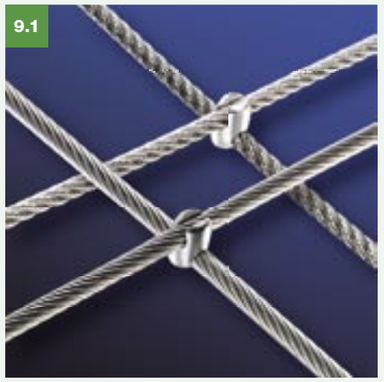
The Crossnet is swaged after the wire-rope lengths have been tensioned.

Crossnet 2 mm, No. 30586-*0200*
- *Minimum mesh aperture: 40 mm*
- *Stainless steel stranded wire, Ø 2.0 mm, 1 × 19*
- *Stainless steel ropes, Ø 2.0 mm, 6 × 7 + core or 6 × 19 + core rope construction*

Crossnet 2 mm, No. 30586-*0300*
- *Minimum mesh aperture: 40 mm*
- *Stainless steel stranded wire, Ø 3.0 mm, 1 × 19*
- *Stainless steel ropes, Ø 3.0 mm, 6 × 7 + core or 6 × 19 + core rope construction*

Crossnet frames
The wire-rope and stranded-wire sections can be combined with the extensive selection of end connectors featured in the **Jakob**® INOX LINE *range.*



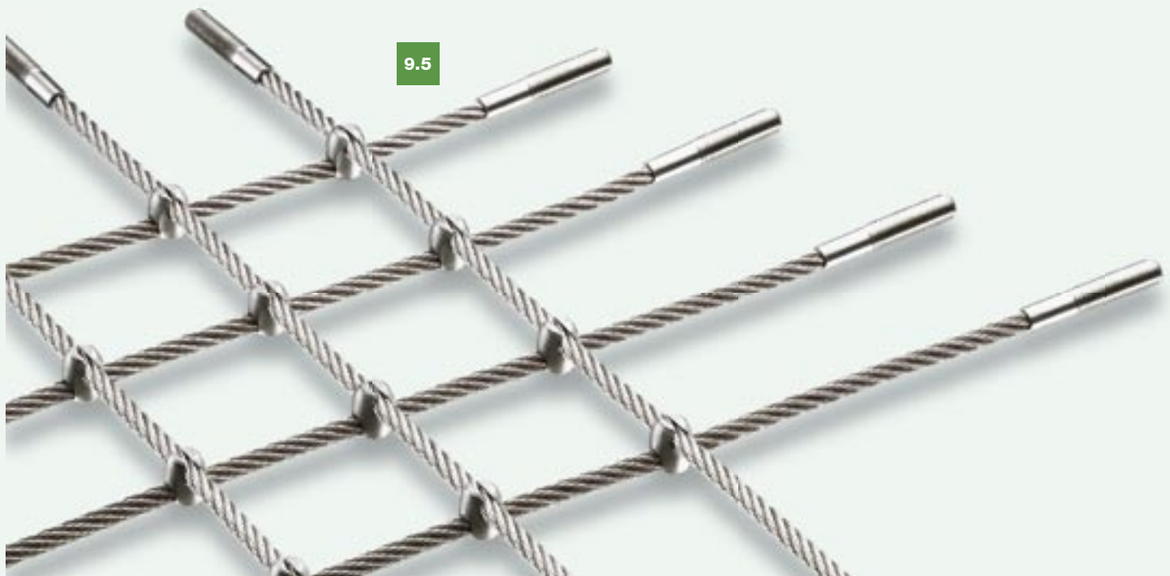


Crossnet 4 mm, No. 30586-*0400*
- *Minimum mesh aperture: 60 mm*
- *Stainless steel stranded wire, Ø 4.0 mm, 1 × 19*
- *Stainless steel ropes, Ø 4.0 mm, 6 × 7 + core or 6 × 19 + core rope construction*

Crossnet 5 mm, No. 30586-*0500*
- *Minimum mesh aperture: 60 mm*
- *Stainless steel stranded wire, Ø 5.0 mm, 1 × 19*
- *Stainless steel ropes, Ø 5.0 mm, 6 × 7 + core or 6 × 19 + core rope construction*

Crossnet 6 mm, No. 30586-*0600*
- *Minimum mesh aperture: 60 mm*
- *Stainless steel stranded wire, Ø 6.0 mm, 1 × 19*
- *Stainless steel ropes, Ø 6.0 mm, 6 × 7 + core or 6 × 19 + core rope construction*

Special Crossnet designs
A combination of stainless steel ropes and stranded wire, with different rope and strand diameters.

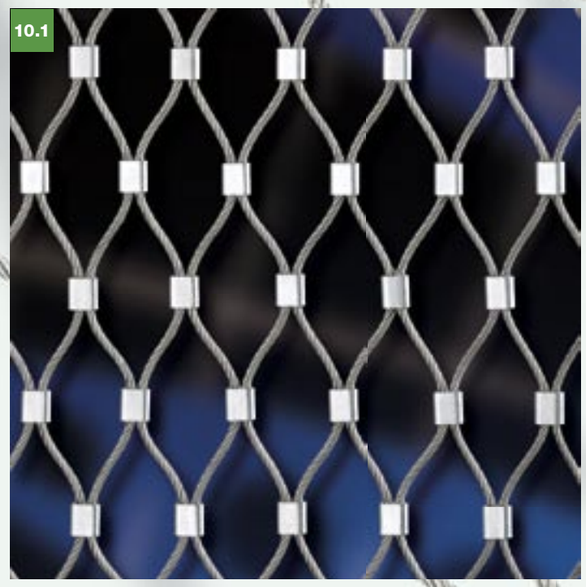


A fabric of particular resilience and flexibility, a “net” whose strands are neither knotted nor crossed: the **Jakob**® INOX LINE **Webnet** is a construction based on stainless steel wire ropes that lie parallel in pairs connected and reciprocally curved by offset sleeves.

The net construction can be pulled apart like an accordion, producing a spring force that varies depending on the mesh aperture and wire-rope thickness.

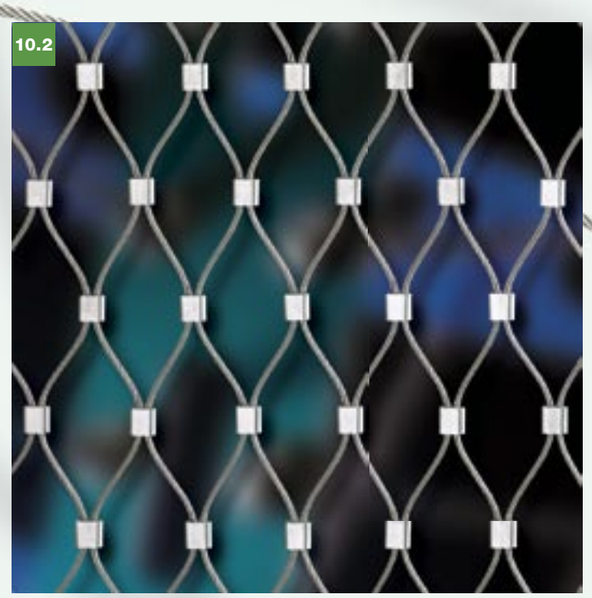
The **Jakob**® INOX LINE **Webnet** is a vibrant, premium-quality product: the **mesh aperture** (variable, from very tight to very wide) and the **wire-rope diameter** (1.0 mm, 1.5 mm, 2.0 mm, and 3.0 mm) determine its functionality and aesthetics. Most **Jakob**® INOX LINE components are made from the AISI 316 material group.

10.1



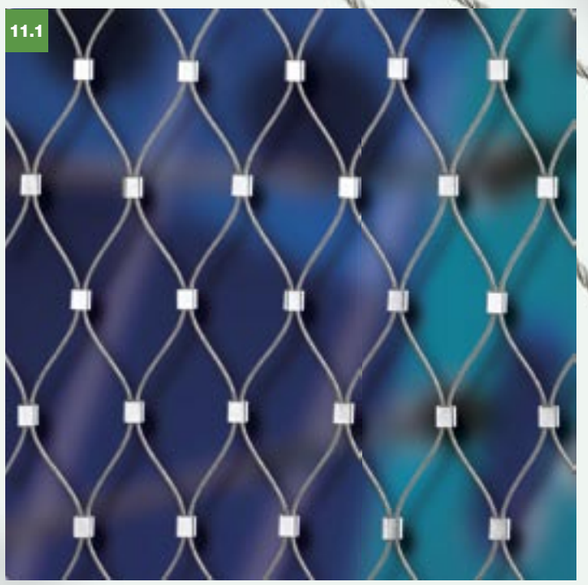
Webnet *with mesh aperture* ***X = 40 mm*** *(custom design) and* ***wire-rope diameter 3.0 mm***

10.2



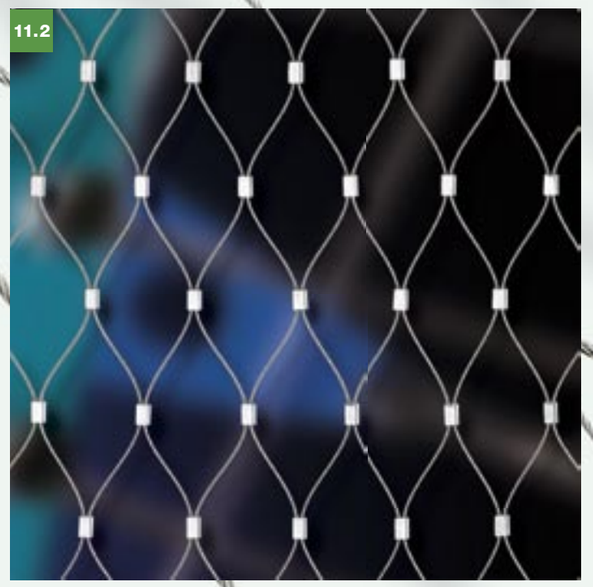
Webnet *with mesh aperture* ***X = 40 mm*** *(custom design) and* ***wire-rope diameter 2.0 mm***

11.1

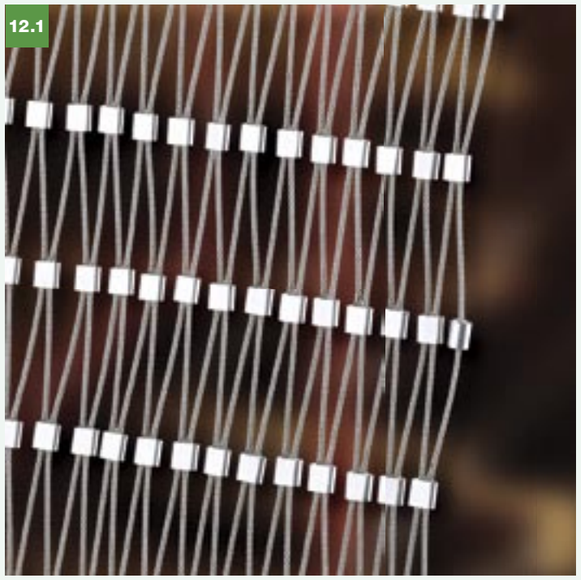


Webnet *with mesh aperture* ***X = 40 mm*** *and* ***wire rope-diameter 1.5 mm***

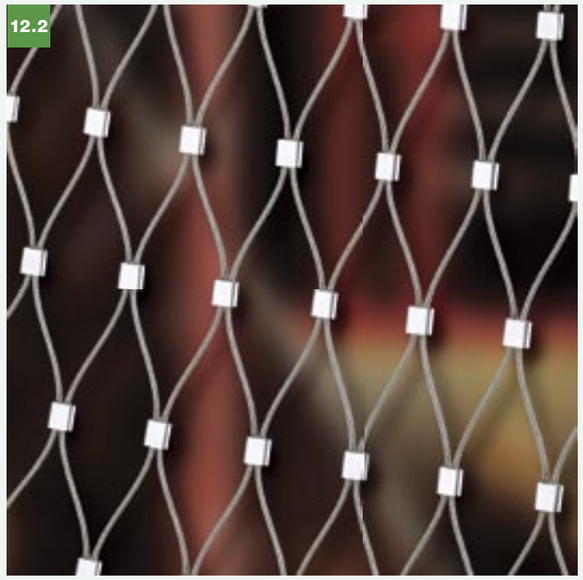
11.2



Webnet *with mesh aperture* ***X = 40 mm*** *and* ***wire rope-diameter 1.0 mm***



Webnet *not tensioned (closed)*



Webnet *with 35° mesh angle*

Webnet test frame for the determination of the force/elongation diagrams

The frame is used to determine the elongation of the **Webnet** in the height **(H)** and width **(W)** directions when exposed to different stretching forces. The insights form the basis of dimensioning and configuring the **Webnet** and the periphery structure.

Webnet *with 50° mesh angle*

Webnet *with 60° mesh angle (**Jakob**® standard)*

The Jakob® INOX LINE **Webnet was tested pursuant to EN 1263-1 for its static and dynamic load-bearing capacity.**

Test data:

- **Webnet** size: length 7 m × width 5 m
- **Webnet** rope Ø 3.0 mm, mesh aperture 60 and 100 mm (horizontal and vertical meshes)
- **Webnet** rope Ø 2.0 mm, mesh aperture 60 and 100 mm (horizontal and vertical meshes)
- Ssuspension rope Ø 10.0 mm
- test object: 500-mm steel sphere, mass 100 kg
- drop height of test object: 7 m

Webnet *with extended mesh angle: when stretched, the wire ropes load the sleeve (breaking limit).*

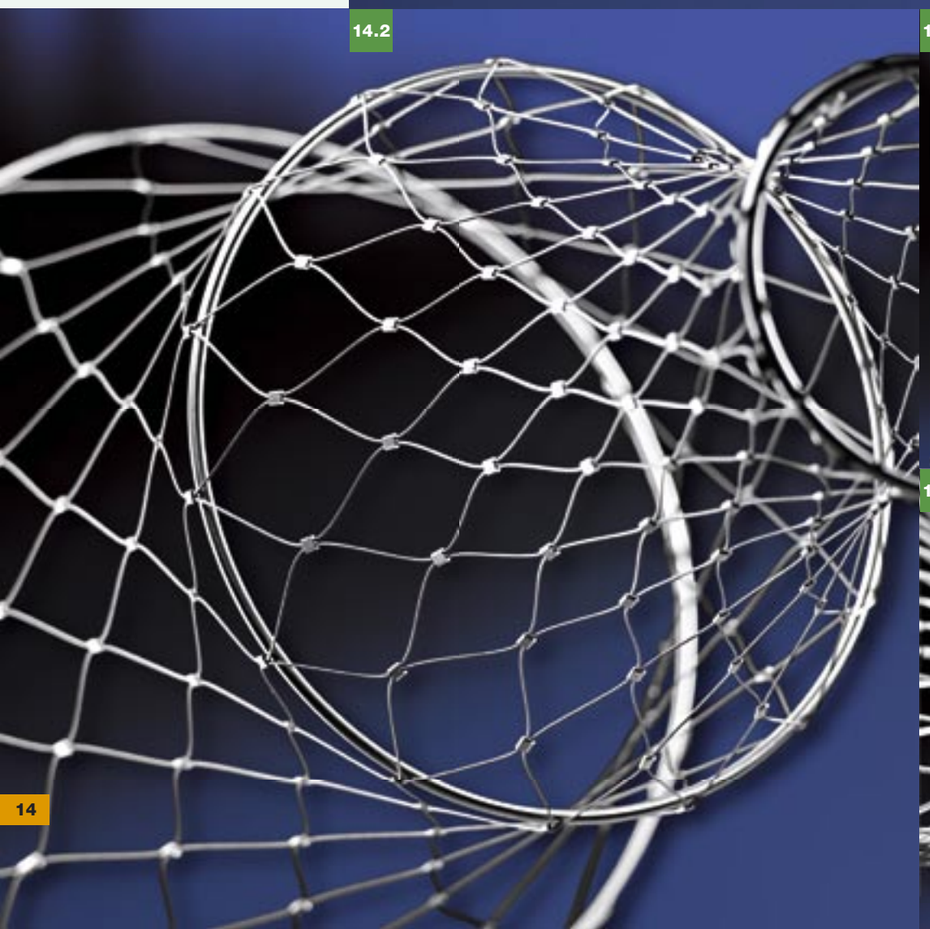
Jakob® INOX LINE

The **Jakob**® INOX LINE **Webnet** has the skin-like characteristics of a diaphragm. It can form a plane surface but can also be tensioned into three-dimensional forms featuring funnel-type, cylindrical, or spherical shapes.

Jakob® INOX LINE, the original:

- custom-manufactured
- filigreed, discreet, elegant, flexible
- multifunctional, compatible with creative architecture
- premium quality, rugged, weather-resistant, non-corroding


14.1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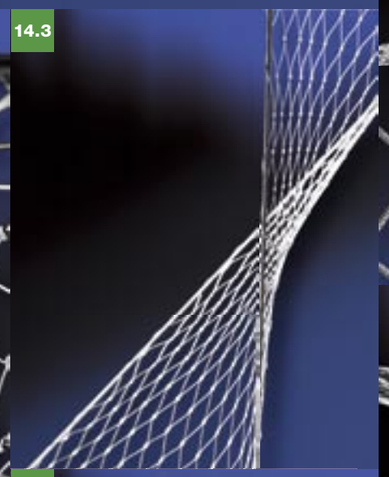
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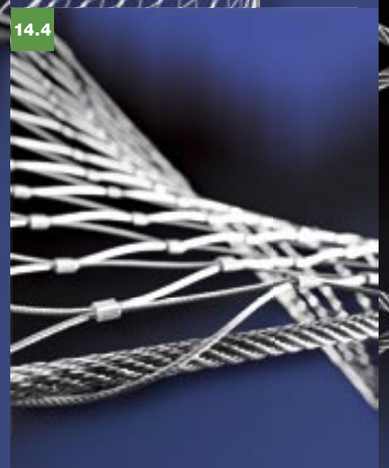
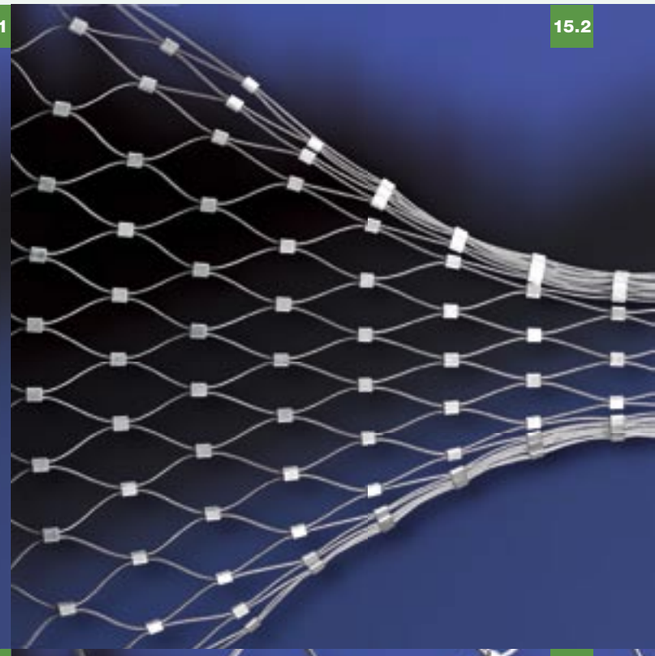

14.4


15.1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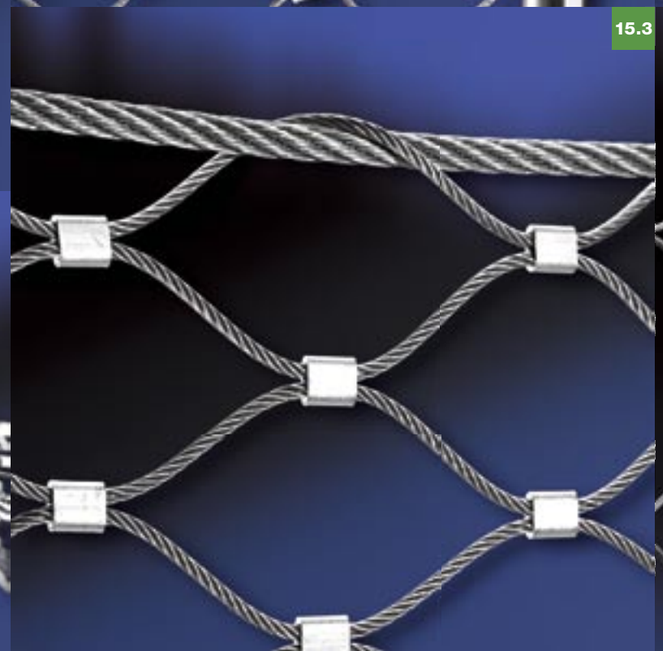
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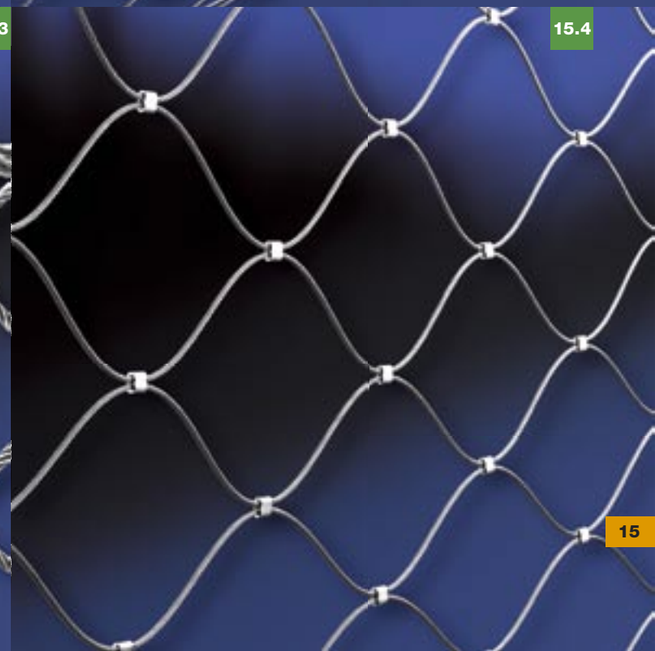
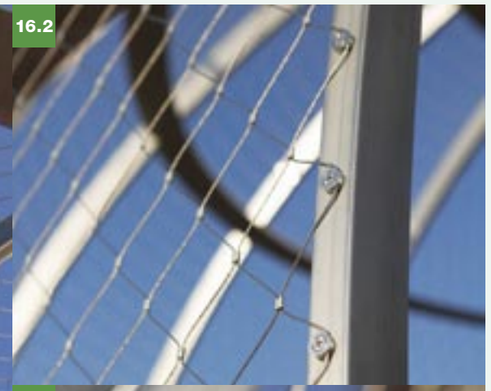
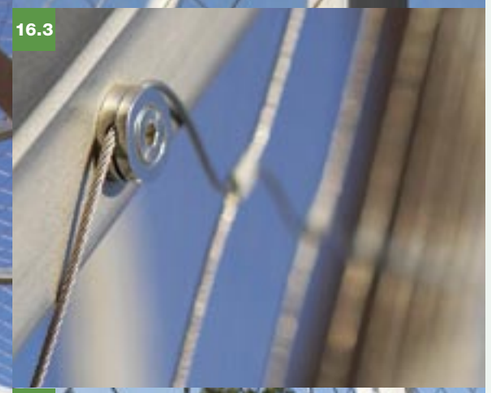
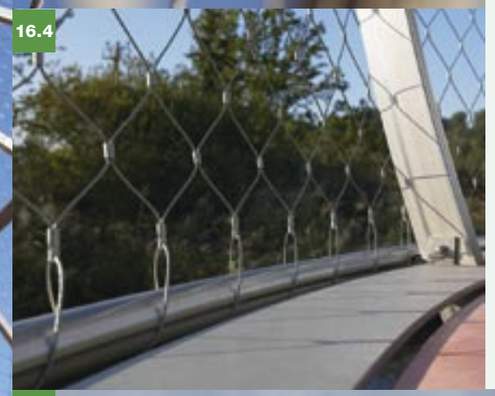

15.4


16.1


16.2


16.3


16.4


16.5


17.1


17.2

The multifunctional structural rope system composed of **Jakob**® INOX LINE **Webnet / Basic 5.1 / Green Solutions G1 / News X** components – stainless steel rope, rods, or tubes with appropriate end connectors – **opens new dimensions** and is fully designed for on-site assembly. However, we can also provide you with turnkey solutions including planning, engineering, installation blueprints, and assembly.

Jakob® INOX LINE, the original:
- custom-manufactured
- filigreed, discreet, elegant, flexible
- multifunctional, compatible with creative architecture
- premium quality, rugged, weather-resistant, non-corroding

Bern-Belpmoos airport (Switzerland)
- *Spherical Webnet shroud*
- *Webnet rope Ø 2.0 mm, mesh aperture 100 mm*

Unit conversion table

Length / Area / Mass

	in.	ft.	yd.	sq.in.	sq.ft.	sq.yd.	lb.
1.0 m	39.37	3.281	1.09				
1.0 m²				1550.0	10.764	1.196	
1.0 kg							2.204
Meter Square meter Kilogram	**1 Inch = 25.4 mm**	**1 foot = 304.8 mm**	**Yard**	**Square inch**	**Square foot**	**Square yard**	**Pound**

Material groups

Table of major alloys

Group	Country standard				Typical composition				Type	Old designation
	EN 10088-3		**AISI**	**AFNOR**	**C** max.	**Cr**	**Ni**	**Div.**		
AISI 301–304 group	1.4301	X5CrNi18-9	304	Z6CN18-09	0.07	18	9		Austenite	V2A
	1.4305	X12CrNiS18-8	303	Z10CNF18-09	0.15	18	8	S	Austenite	V2A
	1.4310	X12CrNi17-7	301	Z12CN17-08	0.12	17	7		Austenite	V2A
AISI 316 group	1.4401	X5CrNiMo18-10	316	Z6CND17-11	0.07	18	10		Austenite	V4A
	1.4404	X2CrNiMo17-12-2	316L	Z3CND17-11-02	0.03	17	11	Mo	Austenite	V4A
	1.4408	GX5CrNiMo19-11-2			0.07	19	10		Austenite	V4A
	1.4435	X2CrNiMo18-12	316L	Z3CND18-14-03	0.03	18	12		Austenite	V4A
	1.4436	X5CrNiMo18-12	316	Z6CND17-12	0.07	18	12		Austenite	V4A
	1.4571	X10CrNiMoTi18-10	316Ti	Z8CNDT17-12	0.10	18	10	Ti	Austenite	V4A
Designation of Webnet components	**European standard**		**US standard**	**French standard**	**Carbon**	**Chromium**	**Nickel**	**S = Sulfur Ti = Titanium Mo = Molybdenum**		

V2A
Easily machinable, corrosion-resistant
V4A
Acid-proof to high strength

18.1

The characteristics of the ambient atmosphere determine the selection of the most suitable materials.

A distinction is made between rural, urban, industrial, and maritime climates.

The urban and industrial atmospheres typically contain aggressive substances in the form of carbon-containing particles and sulfur dioxide (SO_2).

Chloride ion-containing aerosols are found in maritime climates.

The rural atmosphere is comparatively benign.

Most Jakob® INOX LINE components are made from the AISI 316 material group.

Webnet order

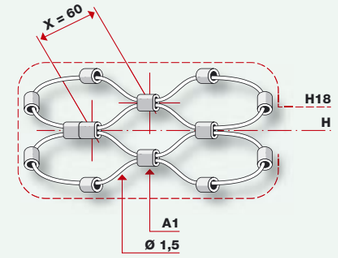
Notes for convenient ordering

Ordering example:

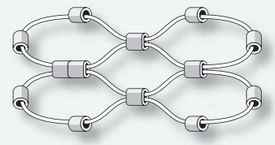
❶ Free clearance: **H** mm × **L** mm

❷ **Webnet type: A1 – H18 – Ø 1,5 – X = 60**
Order No. 20255-0150-060 (see table on page 21)

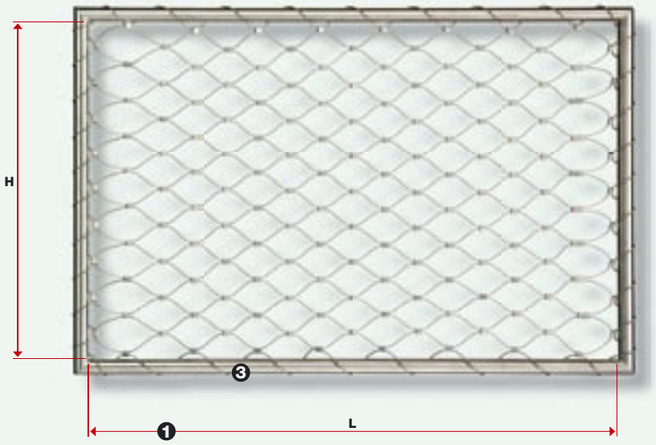
❸ Webnet perimeter rope on page 38
Part No. 10820-0150



❷



A1 **H18** **Ø1,5** **X=60**

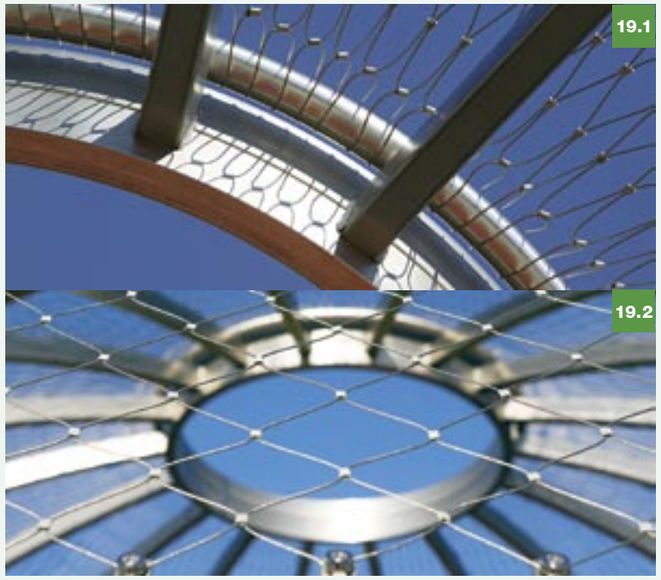


A1 The **Webnet** is available with wire rope and stranded wire. Types **A1, A2, B1,** or **B2** are described on page 20.

H18 The **Webnet** is manufactured with vertical **(V)** or horizontal **(H)** meshes. Different perimeter design configurations are needed depending on the periphery structure **(V1–V24** on page 26 and **H1–H24** on page 28).

Ø1,5 The **Webnet** is manufactured with four wire-rope and stranded-wire diameters (see table on page 21). **Webnet** technical data: see tables on pages 22 to 25.

X=60 The **Webnet** is manufactured with different mesh apertures **(X)** (see table on page 21).



19.1

19.2

The Jakob® INOX LINE Webnet is ideal for filigreed security structures:

- public safety measures
- protection against rockfall along hiking trails
- road barriers and protection in pedestrian zones
- safety net on bridges
- protection on panorama terraces or observation platforms
- protection against thrown objects
- protection in sports stadiums
- retention of floating debris in harbors, rivers, and lakes

Webnet types

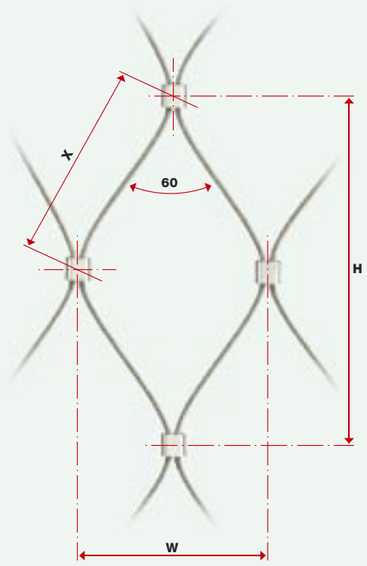
The Jakob® INOX LINE **Webnet,**
made of stainless steel
rope 6 × 7 + core and 6 × 19 + core,
is a multifunctional product for all types of protective applications where aesthetic appearance is also a must.

A

The **Jakob®** INOX LINE **Webnet A,**
made of stainless steel rope 6 × 7 + core
and 6 × 19 + core (AISI 316 material group).

Rope 6 × 7 + core
for Webnet rope ø
1.0 mm, 1.5 mm, and 2.0 mm

Rope 6 × 19 + core
for Webnet rope ø
3.0 mm



X = mesh aperture
60° = standard mesh angle
H = mesh aperture height
W = mesh aperture width

The **Jakob®** INOX LINE **Webnet A,** made of stainless steel rope, is produced with **sleeves** or **clamps.**

A1

Wire rope / sleeve
The closed sleeve is threaded onto the wire ropes and swaged. The sleeve looks the same on both sides.

Material:
DIN E-CU sn (tin-plated copper).
Also available
in the AISI 316 material group.

A2

Wire rope / clamp
The open special clamp is compressed around the wire ropes and therefore looks different on the opposite side (see fig. on page 21).

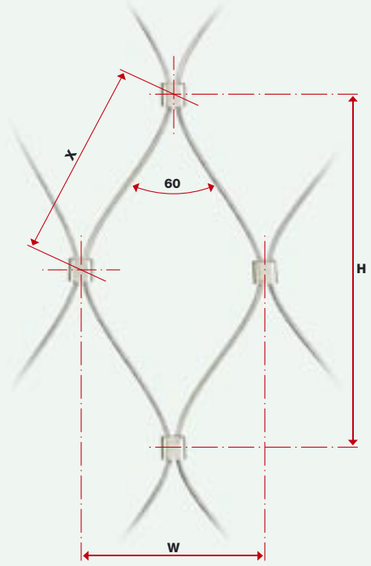
AISI 316 material group

The Jakob® INOX LINE **Webnet,**
made of stainless steel
stranded wire 1 × 19,
is suitable for applications involving high shear/scour forces and/or high tensile forces within the rope structure.

B

The **Jakob®** INOX LINE **Webnet B,**
made of stainless steel stranded wire
1 × 19 (AISI 316 material group).

Stranded wire 1 × 19
for Webnet stranded wire ø
1.0 mm, 1.5 mm, 2.0 mm, and 3.0 mm



X = mesh aperture
60° = standard mesh angle
H = mesh aperture height
W = mesh aperture width

The **Jakob®** INOX LINE **Webnet A,** made of stainless steel stranded wire, is produced with **sleeves** or **clamps.**

B1

Stranded wire / sleeve
The closed sleeve is threaded onto the stranded wire and swaged. The sleeve looks the same on both sides.

Material:
DIN E-CU sn (tin-plated copper).
Also available
in the AISI 316 material group.

B2

Stranded wire / clamp
The open special clamp is compressed around the strands and therefore looks different on the opposite side (see fig. on page 21).

AISI 316 material group

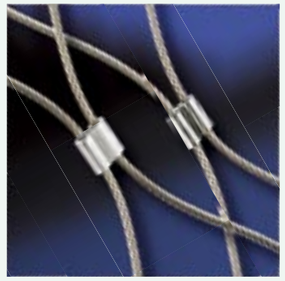
Jakob® INOX LINE

The **Jakob®** INOX LINE **Webnet** is a vibrant, premium-quality product made from the stainless AISI 316 material group: the **mesh aperture X** (variable, from very tight to very wide), the **wire-rope diameter** (1.0 mm, 1.5 mm, 2.0 mm, and 3.0 mm), and the choice of **wire rope or stranded wire** determine functionality and aesthetics.

A1

No. 20255-	Rope ø mm	Mesh aperture X
0100-030	1.0	30
0100-040	1.0	40
0100-050	1.0	50
0100-060	1.0	60
0100-070	1.0	70
0100-080	1.0	80
0150-030	1.5	30
0150-040	1.5	40
0150-050	1.5	50
0150-060	1.5	60
0150-070	1.5	70
0150-080	1.5	80
0150-100	1.5	100
0150-120	1.5	120
0150-140	1.5	140
0150-160	1.5	160
0150-180	1.5	180
0200-050	2.0	50
0200-060	2.0	60
0200-070	2.0	70
0200-080	2.0	80
0200-100	2.0	100
0200-120	2.0	120
0200-140	2.0	140
0200-160	2.0	160
0200-180	2.0	180
0300-060	3.0	60
0300-070	3.0	70
0300-080	3.0	80
0300-100	3.0	100
0300-120	3.0	120
0300-140	3.0	140
0300-160	3.0	160
0300-180	3.0	180

A2



No. 20256-	Rope ø mm	Mesh aperture X
0100-030	1.0	30
0100-040	1.0	40
0100-050	1.0	50
0100-060	1.0	60
0100-070	1.0	70
0100-080	1.0	80
0150-030	1.5	30
0150-040	1.5	40
0150-050	1.5	50
0150-060	1.5	60
0150-070	1.5	70
0150-080	1.5	80
0150-100	1.5	100
0150-120	1.5	120
0150-140	1.5	140
0150-160	1.5	160
0150-180	1.5	180
0200-050	2.0	50
0200-060	2.0	60
0200-070	2.0	70
0200-080	2.0	80
0200-100	2.0	100
0200-120	2.0	120
0200-140	2.0	140
0200-160	2.0	160
0200-180	2.0	180
0300-060	3.0	60
0300-070	3.0	70
0300-080	3.0	80
0300-100	3.0	100
0300-120	3.0	120
0300-140	3.0	140
0300-160	3.0	160
0300-180	3.0	180

B1

No. 20255-	Stranded wire ø mm	Mesh aperture X
0100-041	1.0	40
0100-051	1.0	50
0100-061	1.0	60
0100-071	1.0	70
0100-081	1.0	80
0150-041	1.5	40
0150-051	1.5	50
0150-061	1.5	60
0150-071	1.5	70
0150-081	1.5	80
0150-101	1.5	100
0150-121	1.5	120
0150-141	1.5	140
0150-161	1.5	160
0150-181	1.5	180
0200-061	2.0	60
0200-071	2.0	70
0200-081	2.0	80
0200-101	2.0	100
0200-121	2.0	120
0200-141	2.0	140
0200-161	2.0	160
0200-181	2.0	180
0300-071	3.0	70
0300-081	3.0	80
0300-101	3.0	100
0300-121	3.0	120
0300-141	3.0	140
0300-161	3.0	160
0300-181	3.0	180

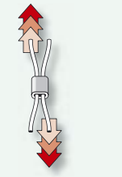
B2

No. 20256-	Stranded wire ø mm	Mesh aperture X
0100-041	1.0	40
0100-051	1.0	50
0100-061	1.0	60
0100-071	1.0	70
0100-081	1.0	80
0150-041	1.5	40
0150-051	1.5	50
0150-061	1.5	60
0150-071	1.5	70
0150-081	1.5	80
0150-101	1.5	100
0150-121	1.5	120
0150-141	1.5	140
0150-161	1.5	160
0150-181	1.5	180
0200-061	2.0	60
0200-071	2.0	70
0200-081	2.0	80
0200-101	2.0	100
0200-121	2.0	120
0200-141	2.0	140
0200-161	2.0	160
0200-181	2.0	180
0300-071	3.0	70
0300-081	3.0	80
0300-101	3.0	100
0300-121	3.0	120
0300-141	3.0	140
0300-161	3.0	160
0300-181	3.0	180

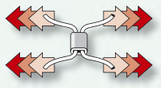
Technical data Webnet A1 and B1 with sleeves

	A1				B1			
Ø mm	**Rope Ø 1.0**	**Rope Ø 1.5**	**Rope Ø 2.0**	**Rope Ø 3.0**	**Strand Ø 1.0**	**Strand Ø 1.5**	**Strand Ø 2.0**	**Strand Ø 3.0**
Construction	6 × 7 + SE	6 × 7 + SE	6 × 7 + SE	6 × 19 + SE	1 × 19	1 × 19	1 × 19	1 × 19
Minimum breaking load kN	0.5	1.4	2.4	5.8	1.0	2.2	3.8	8.4
Material group	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316
Sleeves:								
Swaged dimensions mm	7 × 5 × 2	7 × 7.5 × 3	10 × 9 × 3.8	11 × 11 × 4.2	7 × 5 × 2	7 × 7.5 × 3	10 × 9 × 3.8	11 × 11 × 4.2
Node strength L/kN	0.1	0.1	0.3	0.2	0.1	0.1	0.3	0.2
Node strength Q/kN	1.0	2.0	2.6	4.0	1.0	2.0	2.6	4.0
Material	E-CU sn	E-CU sn	E-CU sn	E-CU sn	E-CU sn	E-CU sn	E-CU sn	E-CU sn
X = 30, 60°								
Standard height H mm	53.6	58.1						
Standard width W mm	30.9	33.5						
Weight kg/m²	0.984	1.848						
Rope length m/m²	80	80						
Number of sleeves/m²	1300	1300						
Light transmission %	95.44	93.16						
X = 40, 60°								
Standard height H mm	70.5	74			70.5	74		
Standard width W mm	40.7	42.7			40.7	42.7		
Weight kg/m²	0.630	1.196			0.698	1.364		
Rope length m/m²	60	60			60	60		
Number of sleeves/m²	760	760			760	760		
Light transmission %	97.33	96			97.33	96		
X = 50, 60°								
Standard height H mm	87.6	90.4	90.4		87.6	90.4		
Standard width W mm	50.5	52.2	52.2		50.5	52.2		
Weight kg/m²	0.445	0.853	1.660		0.500	0.987		
Rope length m/m²	48	48	48		48	48		
Number of sleeves/m²	490	490	490		490	490		
Light transmission %	98.28	97.42	95.58		98.28	97.42		
X = 60, 60°								
Standard height H mm	104.7	107.1	107.1	107.1	104.7	107.1	107.1	
Standard width W mm	60.5	61.8	61.8	61.8	60.5	61.8	61.8	
Weight kg/m²	0.347	0.668	1.294	2.268	0.392	0.780	1.514	
Rope length m/m²	40	40	40	40	40	40	40	
Number of sleeves/m²	360	360	360	360	360	360	360	
Light transmission %	98.73	98.1	96.75	95.63	98.73	98.1	96.75	
X = 70, 60°								
Standard height H mm	121.9	124	124	124	121.9	124	124	124
Standard width W mm	70.4	71.6	71.6	71.6	70.4	71.6	71.6	71.6
Weight kg/m²	0.272	0.528	1.014	1.812	0.310	0.622	1.202	2.155
Rope length m/m²	34	34	34	34	34	34	34	34
Number of sleeves/m²	260	260	260	260	260	260	260	260
Light transmission %	99.08	98.62	97.65	96.84	99.08	98.62	97.65	96.84
X = 80, 60°								
Standard height H mm	139.2	141	141	141	139.2	141	141	141
Standard width W mm	80.3	81.4	81.4	81.4	80.3	81.4	81.4	81.4
Weight kg/m²	0.222	0.435	0.831	1.513	0.256	0.519	0.997	1.815
Rope length m/m²	30	30	30	30	30	30	30	30
Number of sleeves/m²	195	195	195	195	195	195	195	195
Light transmission %	99.31	99	98.23	97.63	99.31	99	98.23	97.63
X = 100, 60°								
Standard height H mm		175.1	175.1	175.1		175.1	175.1	175.1
Standard width W mm		101.1	101.1	101.1		101.1	101.1	101.1
Weight kg/m²		0.334	0.633	1.180		0.404	0.771	1.431
Rope length m/m²		25	25	25		25	25	25
Number of sleeves/m²		130	130	130		130	130	130
Light transmission %		99.31	98.82	98.41		99.31	98.82	98.41

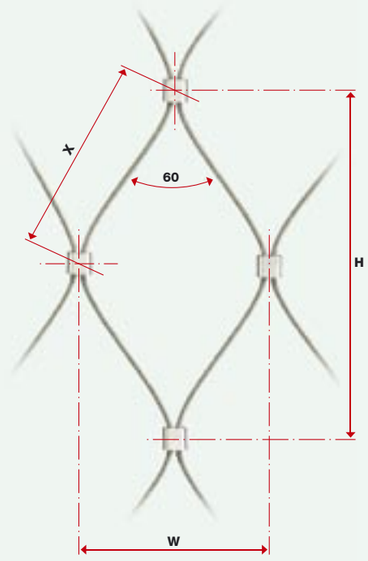
	A1				B1			
Ø mm	**Rope Ø 1.0**	**Rope Ø 1.5**	**Rope Ø 2.0**	**Rope Ø 3.0**	**Strand Ø 1.0**	**Strand Ø 1.5**	**Strand Ø 2.0**	**Strand Ø 3.0**
X = 120, 60°								
Standard height H mm		209.5	209.5	209.5		209.5	209.5	209.5
Standard width W mm		120.9	120.9	120.9		120.9	120.9	120.9
Weight kg/m²		0.268	0.505	0.955		0.327	0.621	1.167
Rope length m/m²		21	21	21		21	21	21
Number of sleeves/m²		95	95	95		95	95	95
Light transmission %		99.5	99.14	98.84		99.5	99.14	98.84
X = 140, 60°								
Standard height H mm		243.9	243.9	243.9		243.9	243.9	243.9
Standard width W mm		140.8	140.8	140.8		140.8	140.8	140.8
Weight kg/m²		0.222	0.417	0.798		0.272	0.517	0.980
Rope length m/m²		18	18	18		18	18	18
Number of sleeves/m²		73	73	73		73	73	73
Light transmission %		99.6	99.33	99.11		99.6	99.33	99.11
X = 160, 60°								
Standard height H mm		278.3	278.3	278.3		278.3	278.3	278.3
Standard width W mm		160.7	160.7	160.7		160.7	160.7	160.7
Weight kg/m²		0.190	0.356	0.689		0.235	0.445	0.850
Rope length m/m²		16	16	16		16	16	16
Number of sleeves/m²		57	57	57		57	57	57
Light transmission %		99.7	99.48	99.3		99.7	99.48	99.3
X = 180, 60°								
Standard height H mm		312.8	312.8	312.8		312.8	312.8	312.8
Standard width W mm		180.6	180.6	180.6		180.6	180.6	180.6
Weight kg/m²		0.162	0.303	0.591		0.202	0.380	0.732
Rope length m/m²		14	14	14		14	14	14
Number of sleeves/m²		45	45	45		45	45	45
Light transmission %		99.76	99.6	99.45		99.76	99.6	99.45



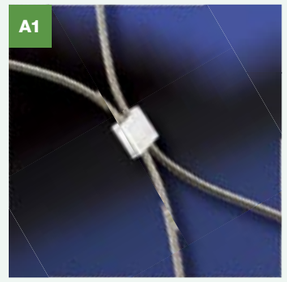
L
Longitudinal
node strength



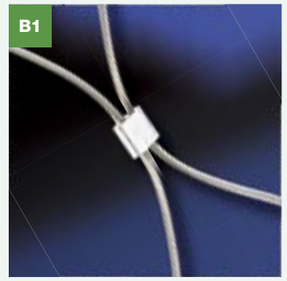
Q
Transversal
node strength
(breaking
load of swage)



X = mesh aperture
60° = standard mesh angle
H = mesh aperture height
W = mesh aperture width



A1:
Sleeve
with wire rope

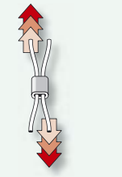


B1:
Clamp
with wire rope

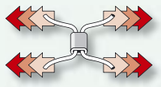
Technical data Webnet A2 and B2 with clamps

	A2				B2			
Ø mm	**Rope Ø 1.0**	**Rope Ø 1.5**	**Rope Ø 2.0**	**Rope Ø 3.0**	**Strand Ø 1.0**	**Strand Ø 1.5**	**Strand Ø 2.0**	**Strand Ø 3.0**
Construction	6 × 7 + SE	6 × 7 + SE	6 × 7 + SE	6 × 19 + SE	1 × 19	1 × 19	1 × 19	1 × 19
Minimum breaking load kN	0.5	1.4	2.4	5.8	1.0	2.2	3.8	8.4
Material group	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316
Clamps:								
Dimensions mm	7 × 5 × 2	7 × 7.5 × 3	10 × 9 × 3.8	11 × 11 × 4.2	7 × 5 × 2	7 × 7.5 × 3	10 × 9 × 3.8	11 × 11 × 4.2
Node strength L/kN	0.1	0.1	0.3	0.2	0.1	0.1	0.3	0.2
Node strength Q/kN	1.0	2.0	2.6	4.0	1.0	2.0	2.6	4.0
Material	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316
X = 30, 60°								
Standard height H mm	53.6	58.1						
Standard width W mm	30.9	33.5						
Weight kg/m²	0.984	1.848						
Rope length m/m²	80	80						
Number of clamps/m²	1300	1300						
Light transmission %	95.44	93.16						
X = 40, 60°								
Standard height H mm	70.5	74			70.5	74		
Standard width W mm	40.7	42.7			40.7	42.7		
Weight kg/m²	0.630	1.196			0.698	1.364		
Rope length m/m²	60	60			60	60		
Number of clamps/m²	760	760			760	760		
Light transmission %	97.33	96			97.33	96		
X = 50, 60°								
Standard height H mm	87.6	90.4	90.4		87.6	90.4		
Standard width W mm	50.5	52.2	52.2		50.5	52.2		
Weight kg/m²	0.445	0.853	1.660		0.500	0.987		
Rope length m/m²	48	48	48		48	48		
Number of clamps/m²	490	490	490		490	490		
Light transmission %	98.28	97.42	95.58		98.28	97.42		
X = 60, 60°								
Standard height H mm	104.7	107.1	107.1	107.1	104.7	107.1	107.1	
Standard width W mm	60.5	61.8	61.8	61.8	60.5	61.8	61.8	
Weight kg/m²	0.347	0.668	1.294	2.268	0.392	0.780	1.514	
Rope length m/m²	40	40	40	40	40	40	40	
Number of clamps/m²	360	360	360	360	360	360	360	
Light transmission %	98.73	98.1	96.75	95.63	98.73	98.1	96.75	
X = 70, 60°								
Standard height H mm	121.9	124	124	124	121.9	124	124	124
Standard width W mm	70.4	71.6	71.6	71.6	70.4	71.6	71.6	71.6
Weight kg/m²	0.272	0.528	1.014	1.812	0.310	0.622	1.202	2.155
Rope length m/m²	34	34	34	34	34	34	34	34
Number of clamps/m²	260	260	260	260	260	260	260	260
Light transmission %	99.08	98.62	97.65	96.84	99.08	98.62	97.65	96.84
X = 80, 60°								
Standard height H mm	139.2	141	141	141	139.2	141	141	141
Standard width W mm	80.3	81.4	81.4	81.4	80.3	81.4	81.4	81.4
Weight kg/m²	0.222	0.435	0.831	1.513	0.256	0.519	0.997	1.815
Rope length m/m²	30	30	30	30	30	30	30	30
Number of clamps/m²	195	195	195	195	195	195	195	195
Light transmission %	99.31	99	98.23	97.63	99.31	99	98.23	97.63
X = 100, 60°								
Standard height H mm		175.1	175.1	175.1		175.1	175.1	175.1
Standard width W mm		101.1	101.1	101.1		101.1	101.1	101.1
Weight kg/m²		0.321	0.607	1.141		0.391	0.745	1.392
Rope length m/m²		25	25	25		25	25	25
Number of clamps/m²		130	130	130		130	130	130
Light transmission %		99.31	98.82	98.41		99.31	98.82	98.41

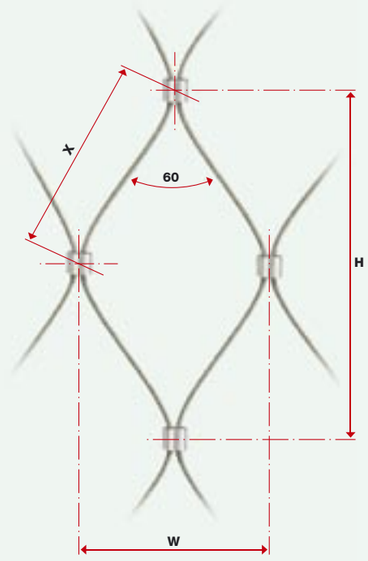
	A2				B2			
Ø mm	**Rope Ø 1.0**	**Rope Ø 1.5**	**Rope Ø 2.0**	**Rope Ø 3.0**	**Strand Ø 1.0**	**Strand Ø 1.5**	**Strand Ø 2.0**	**Strand Ø 3.0**
X = 120, 60°								
Standard height H mm		209.5	209.5	209.5		209.5	209.5	209.5
Standard width W mm		120.9	120.9	120.9		120.9	120.9	120.9
Weight kg/m²		0.258	0.485	0.927		0.317	0.601	1.139
Rope length m/m²		21	21	21		21	21	21
Number of clamps/m²		95	95	95		95	95	95
Light transmission %		99.5	99.14	98.84		99.5	99.14	98.84
X = 140, 60°								
Standard height H mm		243.9	243.9	243.9		243.9	243.9	243.9
Standard width W mm		140.8	140.8	140.8		140.8	140.8	140.8
Weight kg/m²		0.215	0.402	0.776		0.265	0.502	0.958
Rope length m/m²		18	18	18		18	18	18
Number of clamps/m²		73	73	73		73	73	73
Light transmission %		99.6	99.33	99.11		99.6	99.33	99.11
X = 160, 60°								
Standard height H mm		278.3	278.3	278.3		278.3	278.3	278.3
Standard width W mm		160.7	160.7	160.7		160.7	160.7	160.7
Weight kg/m²		0.184	0.344	0.671		0.229	0.433	0.832
Rope length m/m²		16	16	16		16	16	16
Number of clamps/m²		57	57	57		57	57	57
Light transmission %		99.7	99.48	99.3		99.7	99.48	99.3
X = 180, 60°								
Standard height H mm		312.8	312.8	312.8		312.8	312.8	312.8
Standard width W mm		180.6	180.6	180.6		180.6	180.6	180.6
Weight kg/m²		0.157	0.294	0.577		0.197	0.371	0.718
Rope length m/m²		14	14	14		14	14	14
Number of clamps/m²		45	45	45		45	45	45
Light transmission %		99.76	99.6	99.45		99.76	99.6	99.45



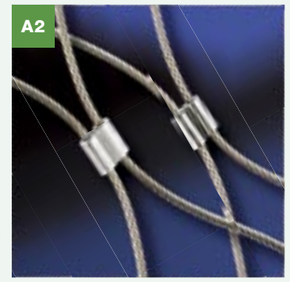
L
Longitudinal
node strength



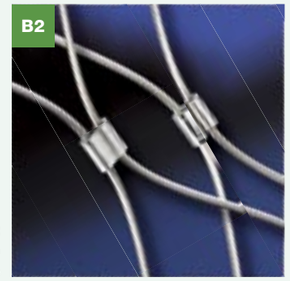
Q
Transversal
node strength
(breaking
load of swage)



X = mesh aperture
60° = standard mesh angle
H = mesh aperture height
W = mesh aperture width

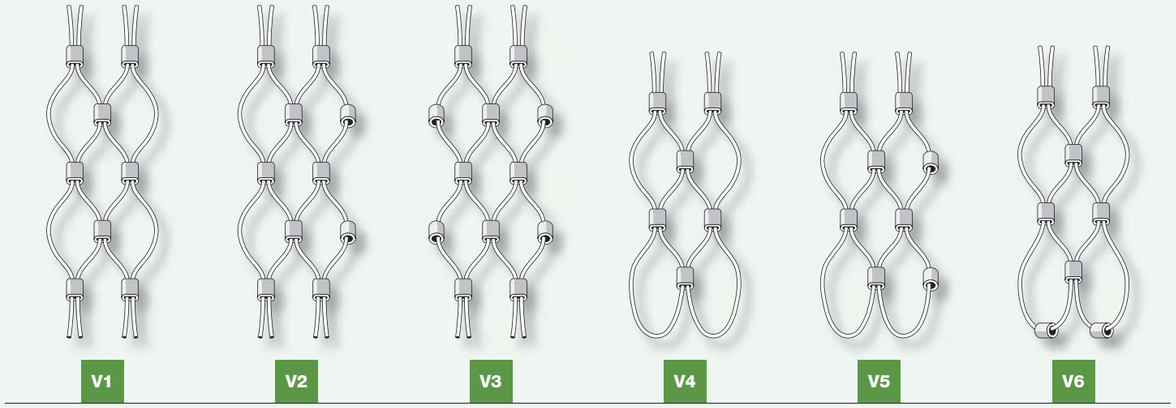


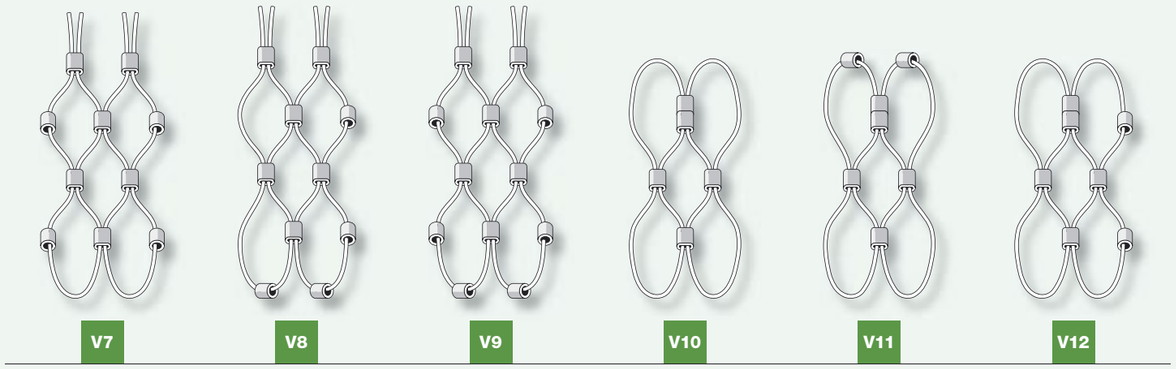
A1:
Sleeve
with wire rope

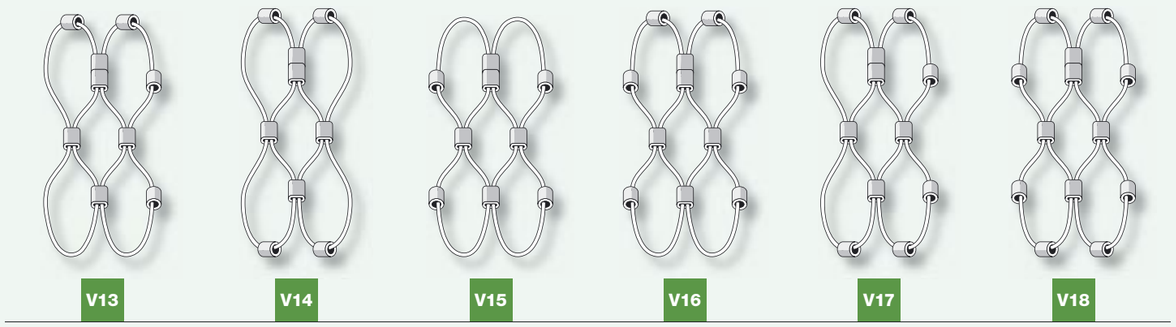


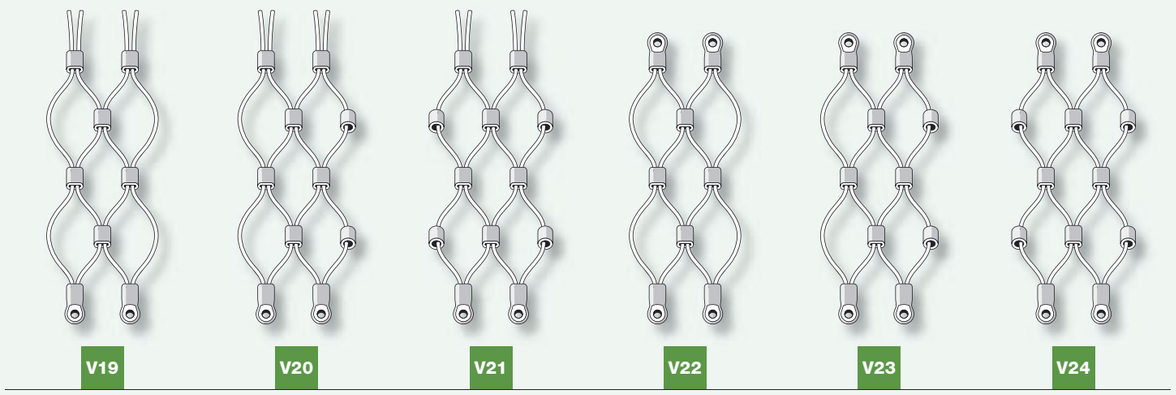
B1:
Clamp
with wire rope

Possible perimeter types for Webnet, vertical mesh









Vertical mesh *perimeter: open at top with wire-rope end pairs*

Vertical mesh *perimeter: closed with uncompressed sleeves at top*

Webnet V: vertical mesh

Selection criteria for perimeter configuration V1 to V24

- Construction of periphery structure, such as suspension ropes (p. 30/31), tubular frame (p. 32/33), rod system (p. 34/35), or Webnet C rail (p. 37)
- Overall dimensions of Webnet
- Assembly-related reasons
- Magnitude of Webnet pretension forces

Some selection criteria for vertical (V) or horizontal (H) Webnet mesh orientation

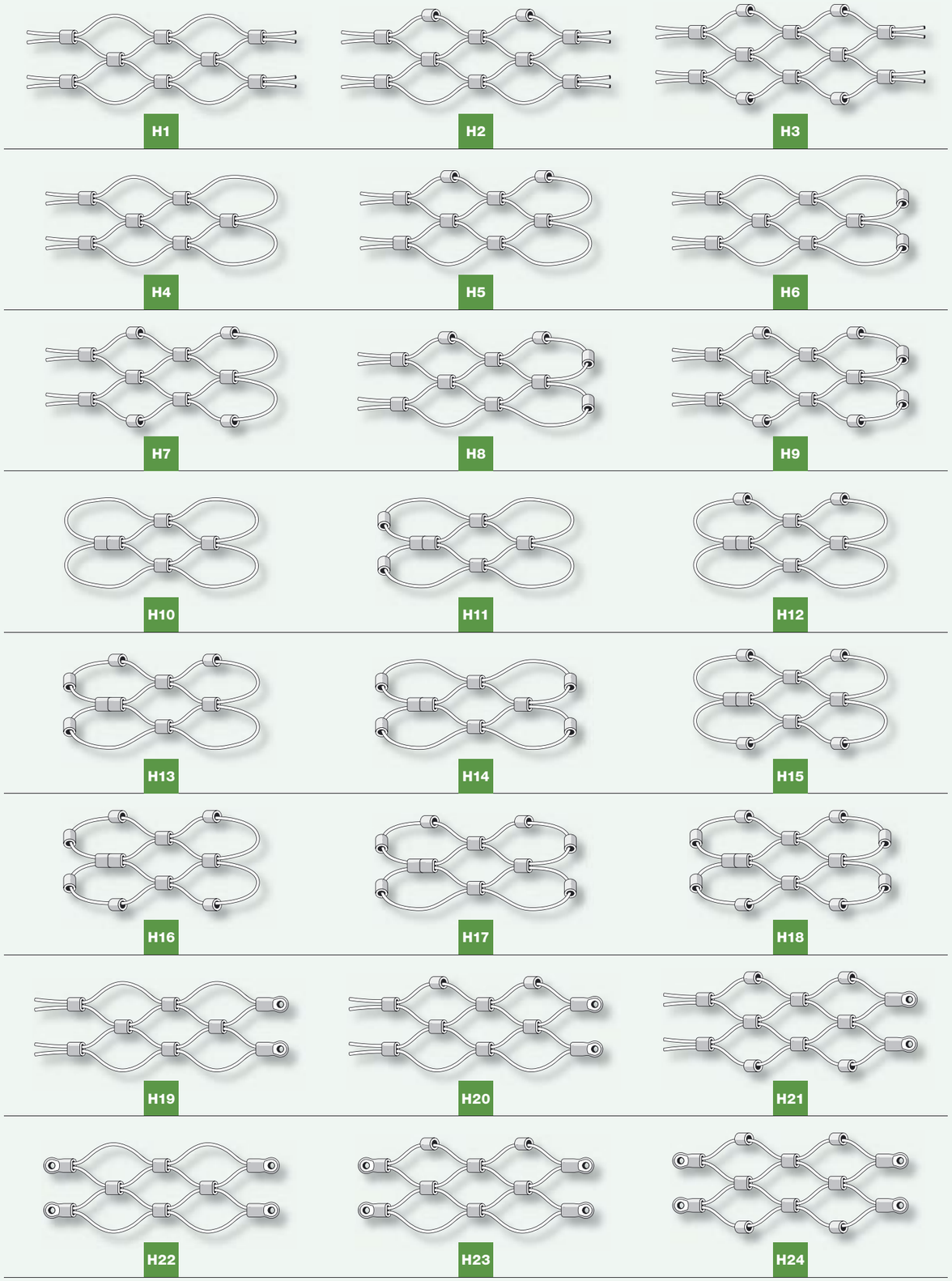
- Architectural considerations
- Vertical meshes are less suitable for climbing (safety factor load)
- Assembly-related reasons (tight radii always require vertical meshes)
- When the Webnet is tensioned, the forces are greater in the mesh height direction than in the mesh width direction.

Vertical mesh *perimeter: with uncompressed sleeves at right*

Vertical mesh *perimeter: closed with uncompressed sleeves at bottom*

Vertical mesh *perimeter: closed with Webnet eye ends at bottom*

Possible Webnet perimeter types, horizontal mesh



Horizontal mesh *perimeter: closed with uncompressed sleeves at right*

Horizontal mesh *perimeter: with uncompressed sleeves at bottom*

Webnet H: horizontal mesh

Selection criteria for perimeter configuration H1 to H24

- Construction of periphery structure, such as suspension ropes (p. 30/31), tubular frame (p. 32/33), rod system (p. 34/35), or Webnet C rail (p. 37)
- Overall dimensions of Webnet
- Assembly-related reasons
- Magnitude of Webnet pretension forces

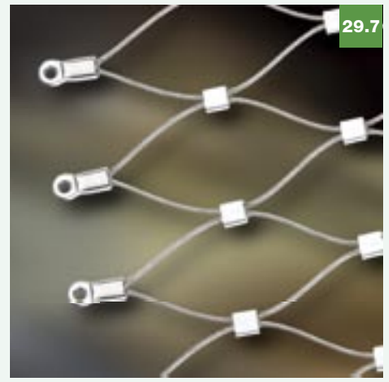
Some selection criteria for vertical (V) or horizontal (H) Webnet mesh orientation

- Architectural considerations
- Vertical meshes are less suitable for climbing (safety factor load)
- Assembly-related reasons (tight radii always require vertical meshes)
- When the Webnet is tensioned, the forces are greater in the mesh height direction than in the mesh width direction.

Horizontal mesh *perimeter: open at left with wire-rope end pairs*

Horizontal mesh *perimeter: closed with uncompressed sleeves at left*

Horizontal mesh *perimeter: closed with Webnet eye ends at left*



Suspension rope

Construction 6 × 7 + core

AISI 316 material group

Part No.	Rope ø mm	Weight kg/100 m	Minimum breaking load kN
10820-0600	**6.0**	13.0	19.0
10820-0800	**8.0**	23.0	38.0

Wire-rope cutter

Type C12

Part No.	Max. rope ø mm	Length mm
30740-0800	**8.0**	500

VISSLINE® external thread end, right-hand

Only for rope No. 10820-
Breaking load: 90% of minimum wire-rope breaking load

AISI 316 material group

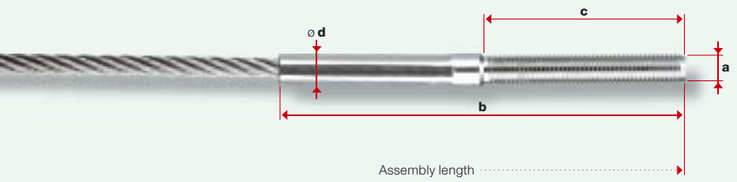
Part No.	For rope ø mm	a mm	b1 mm	b2 mm	c mm	ø d mm
30948-0600-30	**6.0**	M8 × 30	15.0	45	30	7.2
30948-0600-60	**6.0**	M8 × 60	15.0	75	60	7.2
30948-0800-30	**8.0**	M10 × 30	15.0	45	30	9.0
30948-0800-60	**8.0**	M10 × 60	15.0	75	60	9.0

Swaged external thread end, right-hand

Breaking load: 90% of minimum wire-rope breaking load

AISI 316 material group

Part No.	For rope ø mm	Length of thread mm	b mm	c mm	ø d mm
30850-0600-030	**6.0**	M10 × 30	85	30	10
30850-0600-060	**6.0**	M10 × 60	115	60	10
30850-0600-080	**6.0**	M10 × 80	135	80	10
30850-0800-080	**8.0**	M12 × 80	160	80	13
30850-0800-120	**8.0**	M12 × 120	200	120	13



Dimension **b** is **enlarged** by 3 to 6% during the swaging process.

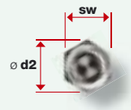
Screwed external thread ends LT1, right-hand

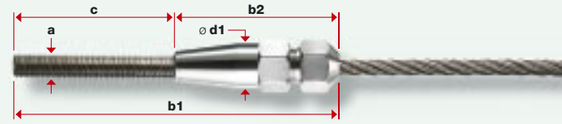
For on-site assembly with rope No. 10820-
Breaking load: 90% of minimum wire-rope breaking load

AISI 316 material group

Part No.	For rope ø mm	a × length of thread mm	ø d1 mm	ø d2 mm	sw mm	b1 mm	b2 mm	c mm
31826-0600-030	**6.0**	M8 × 30	14	17.1	15	92	62	30
31826-0600-060	**6.0**	M8 × 60	14	17.1	15	122	62	60
31826-0600-031	**6.0**	M10 × 30	14	25.4	15	92	62	30
31826-0600-061	**6.0**	M10 × 60	14	25.4	15	122	62	60
31826-0600-081	**6.0**	M10 × 80	14	25.4	15	142	62	80
31826-0800-061	**8.0**	M10 × 60	22	25.4	22	140	80	60
31826-0800-081	**8.0**	M10 × 80	22	25.4	22	160	80	80
31826-0800-082	**8.0**	M12 × 80	22	25.4	22	160	80	80
31826-0800-120	**8.0**	M12 × 120	22	25.4	22	200	80	120

Not suitable for **stranded wire No. 10810-**





Correct assembly and the choice of the proper wire-rope diameter are the responsibility of the user.
Only **Jakob rope No. 10820-** assures full functionality.

Turnbuckle with *MONOFORK*, swaged

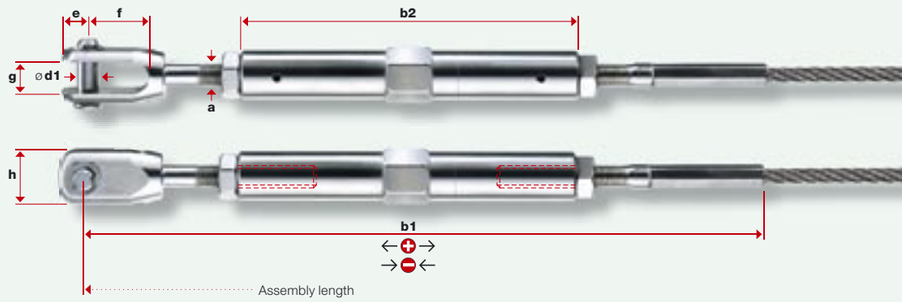
Breaking load: 90% of minimum wire-rope breaking load

AISI 316 material group
Turnbuckle body **(b2):** chrome-plated brass

Part No.	Rope ø mm	a mm	b1 mm	b2 mm	ø d1 mm	e mm	f mm	g mm	h mm	⊕ Range mm ⊖
30870-0600-01	**6.0**	M10	319.5	140	9	10.5	25.5	12	21.5	60 – 50
30870-0800-01	**8.0**	M12	377	160	12	18	32	16.3	30	59 – 49

⊕ ⊖ Tensioning range information: The external thread ends are both screwed in halfway.
Caution: The minimal screw insertion depth is 1.5 × thread Ø (M8 = 12 mm).

←⊕→ = make longer (relax)
→⊖← = make shorter (tension)



Turnbuckle with *MONOFORK*, screwed

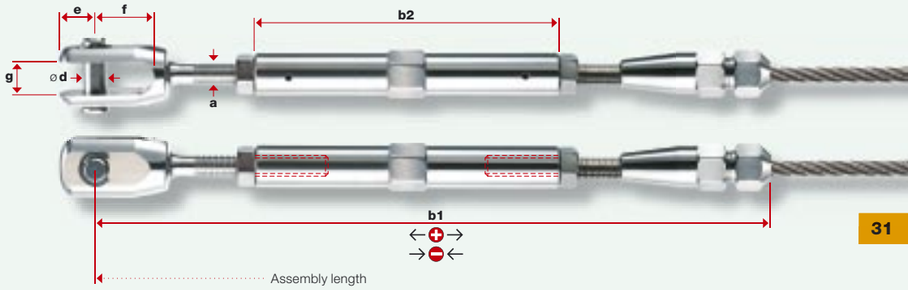
For on-site assembly with rope No. 10820-
Breaking load: 90% of minimum wire-rope breaking load

AISI 316 material group
Turnbuckle body **(b2):** chrome-plated brass

Part No.	Rope ø mm	Gewinde	b1 mm	b2 mm	ø d mm	e mm	f mm	g mm	h mm	⊕ Range mm ⊖
30822-0600-01	**6.0**	M10	327.5	140	9	10.5	25.5	12	21.5	60 – 50
30822-0800-01	**8.0**	M12	385	160	12	18	32	16.3	30	59 – 49

⊕ ⊖ Tensioning range information: The external thread ends are both screwed in halfway.
Caution: The minimal screw insertion depth is 1.5 × thread Ø (M8 = 12 mm).

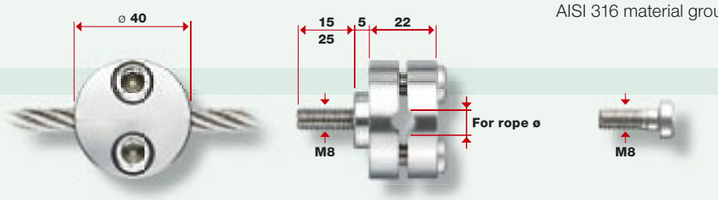
←⊕→ = make longer (relax)
→⊖← = make shorter (tension)



Suspension-rope clamp

AISI 316 material group

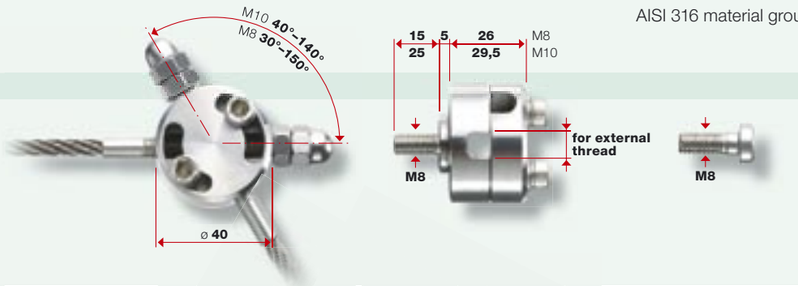
Part No.	For rope ø mm
30858-0600-10	**6.0**
30858-0800-10	**8.0**



Adjustable suspension-rope clamp

AISI 316 material group

Part No.	For external thread mm
30858-0600-11	**M8**
30858-0600-12	**M10**

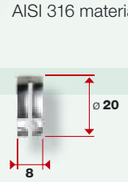


Webnet wire-rope clamp G1

For attachment to mounting structure suspension rope

AISI 316 material group

Part No.	Hole type	For Webnet rope ø mm
30920-0400-00	Through hole for M8	**1.5–3.0**
30920-0400-05	For M5 screw with countersunk head	**1.5–3.0**

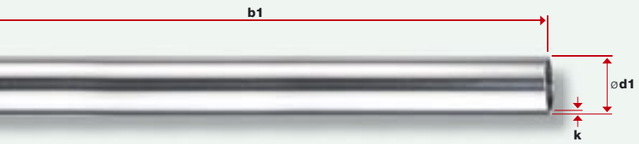


Tube, ground

Plug-in Webnet tubular frame for on-site assembly

AISI 316 material group

Part No.	b1 mm	ø d1 mm	k mm
30924-0017-01	max. 2500	**17.2**	1.6
30924-0026-01	max. 2500	**26.9**	2.0



Tube elbow, ground

Plug-in Webnet tubular frame for on-site assembly

AISI 316 material group

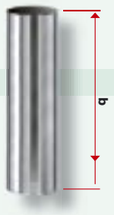
Part No.	ø d1 mm	ø d2 mm	k mm	b2 mm	b3 mm
30924-0017-10	**17.2**	12	1.6	100	50
30924-0026-10	**26.9**	21.7	2.0	100	50

Tube connector

Connects two tubes, removable

AISI 316 material group

Part No.	For tube ø mm	b mm
30924-0017-20	**17.2**	100
30924-0026-20	**26.9**	100

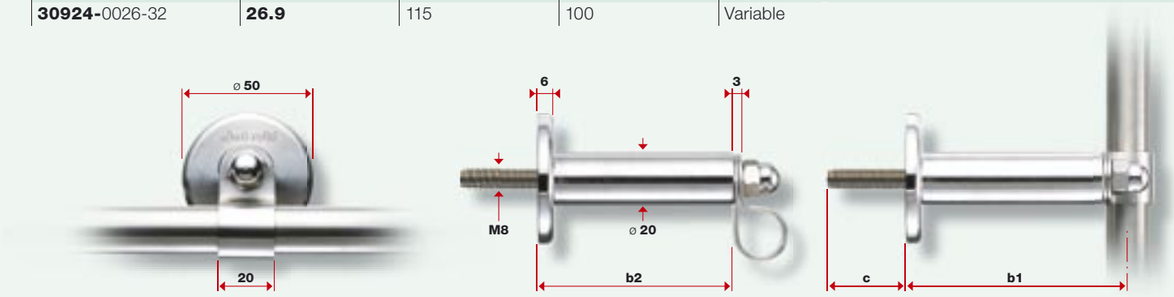


Tube holder

For the assembly of tubes or prefabricated tubular frames

AISI 316 material group

Part No.	For tube ø mm	b1 mm	b2 mm	c mm
30924-0017-30	**17.2**	68.1	58	Variable
30924-0017-31	**17.2**	85.1	75	Variable
30924-0017-32	**17.2**	110.1	100	Variable
30924-0026-30	**26.9**	73	58	Variable
30924-0026-31	**26.9**	90	75	Variable
30924-0026-32	**26.9**	115	100	Variable



Welded Webnet tubular frame

Fully strung tubular frames according to your drawings

AISI 316 material group

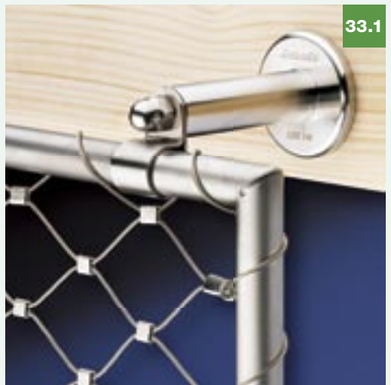
Part No.	For tube ø mm
30924-0017-40	**17.2**
30924-0026-40	**26.9**

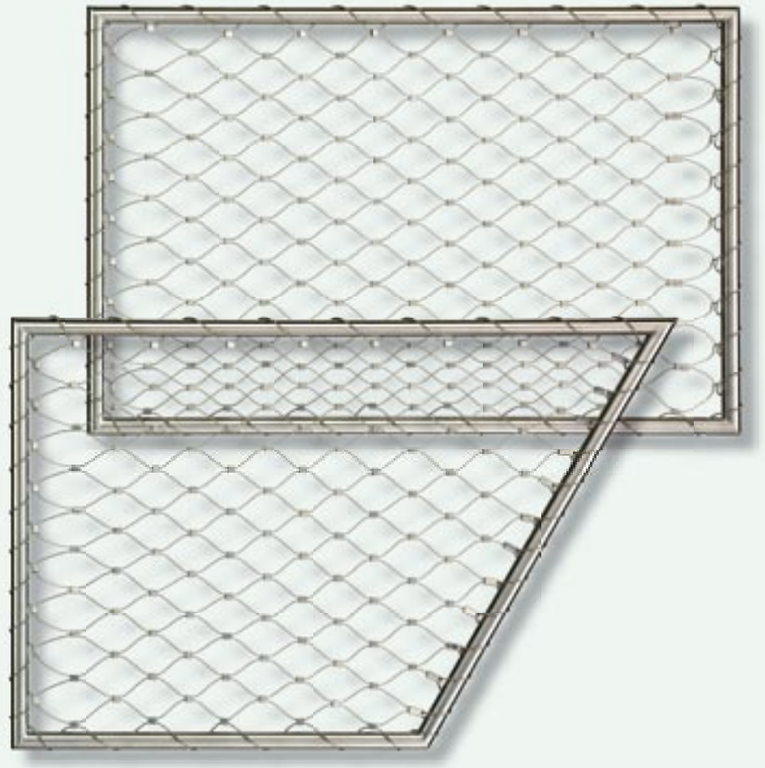
Welded Webnet tubular frame

Fully strung tubular frames according to your needs, with the matching assembly accessories for attachment to mounting structure.

What we need from you:

- dimensioned drawing of frame with tube Ø 17.2 or 26.9 mm
- **Webnet** order No. with rope Ø and mesh aperture **X,** Type **A1, A2** or **B1, B2**
- vertical mesh **V** or horizontal mesh **H**
- number of tube holders and spacers
- description of mounting surface
- see ordering example on **page 19**



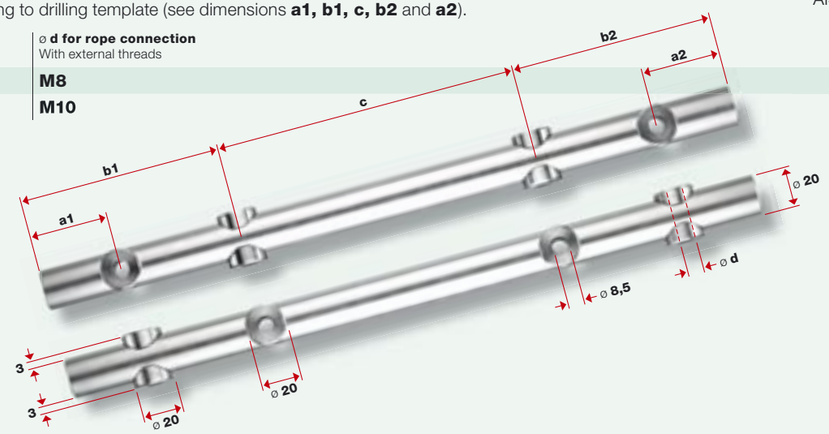


Connecting rod

With post fittings for flat and round posts (round posts: indicate post diameter).
Custom-made according to drilling template (see dimensions **a1, b1, c, b2** and **a2**).

AISI 316 material group

Part No.	ø **d for rope connection** With external threads
30921-0800-20	**M8**
30921-1000-20	**M10**

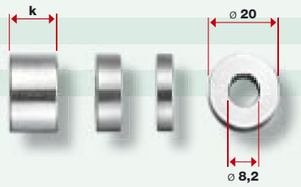


Spacer washers

To match connecting rod

AISI 316 material group

Part No.	k mm
30922-0800-02	**4**
30922-0800-01	**6**
30922-0800	**12**

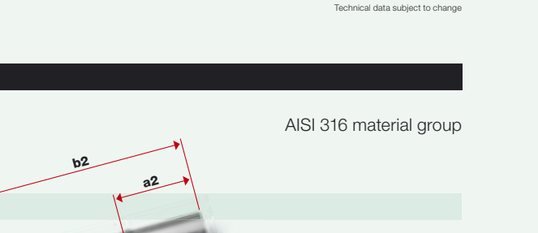


Rod Ø 10 mm

With or without external thread end M10, right-hand

AISI 316 material group

Part No.	b variable mm	Threaded mm
30921-1000	Max. 2500	Not threaded
32884-1000-011	Max. 2500	M10 × 15 at one end
32884-1000-012	Max. 2500	M10 × 15 at both ends

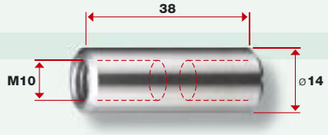


Rod connector with M10 internal threads

Connecting element for rod extensions

AISI 316 material group

Part No.	Internal threads mm
32884-1000-031	2 × M10 × 15

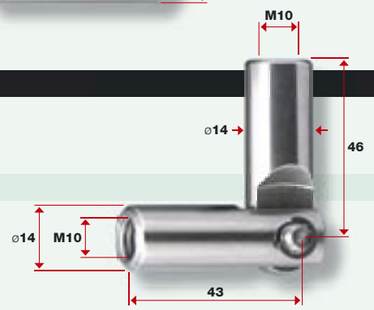


Rod articulation with M10 internal threads

Variable-angle rod-connecting element

AISI 316 material group

Part No.	Internal threads mm
32884-1000-032	M10 × 15

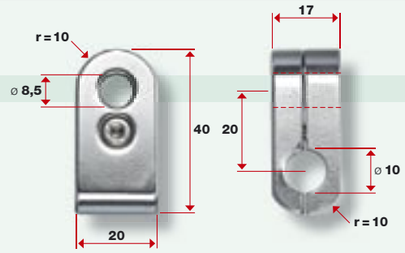


Rod holder

Matches rod ø 10 mm

AISI 316 material group

Part No.
30921-1000-01

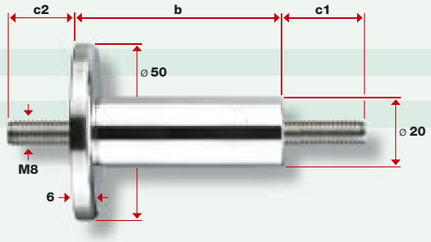


Spacer Ø 20/50

Matches rod holder No. **30921–**1000-01

AISI 316 material group

Part No.	b mm	c1 / c2 mm
30919-0058	58	Variable
30919-0075	75	Variable
30919-0100	100	Variable

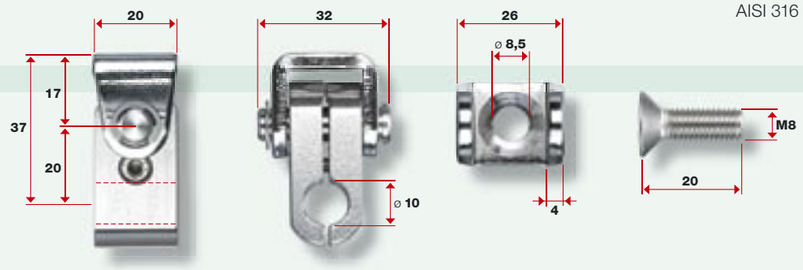


Rod holder with U-mount

Matches rod ø 10 mm

AISI 316 material group

Part No.
30921-1000-10

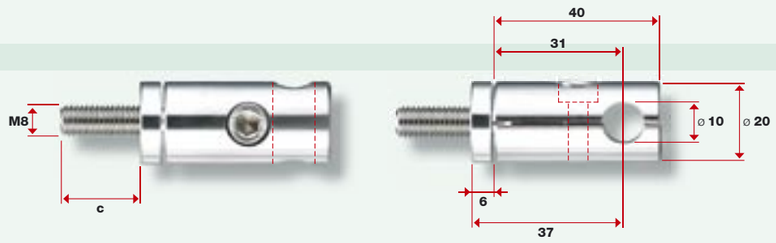


Rotating rod holder with counter washer

Matches rod ø 10 mm

AISI 316 material group

Part No.	c mm
30921-1000-11	14
30921-1000-13	29

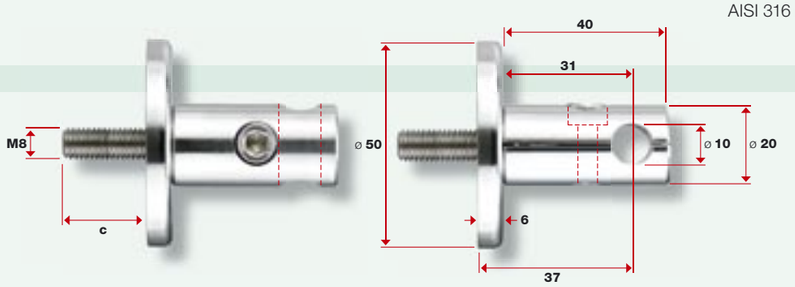


Rotating rod holder with support washer

Matches rod ø 10 mm

AISI 316 material group

Part No.	c mm
30921-1000-12	14
30921-1000-14	29

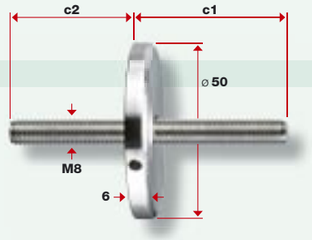


Support washer with threaded rod

Support washer with internal thread M8

AISI 316 material group

Part No.	c1 / c2 mm
30919-0050-01	Variable

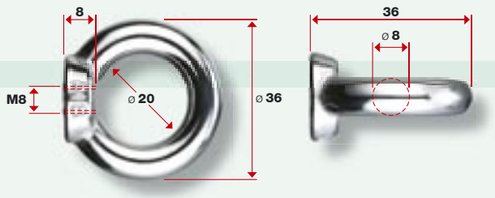


Eye nut

With internal thread M8, DIN 582

AISI 316 material group

Part No.
30838-0800

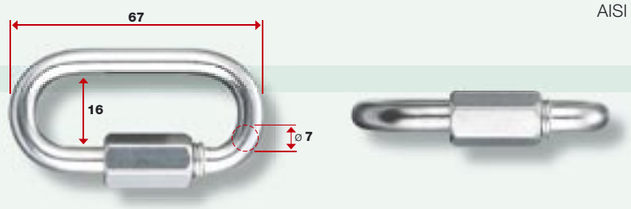


Quick coupling for suspension rope Ø 6 and 8 mm

Load data not guaranteed

AISI 316 material group

Part No.	Permissible load kN
30895-0700	5



Lake of Geneva/Montreux (Switzerland)

Removable floating debris barrier

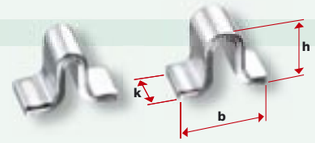
- *Webnet rope Ø 3.0 mm, mesh aperture 50 mm*
- *Fully strung tubular frames*

Webnet clip

Compatible with Webnet rail

AISI 316 material group

Part No.	For rope ø mm	b mm	h mm	k mm
30925-0001	**1.0 – 1.5**	15.5	12	8
30925-0002	**2.0 – 3.0**	15.5	12.5	8

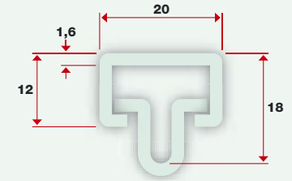


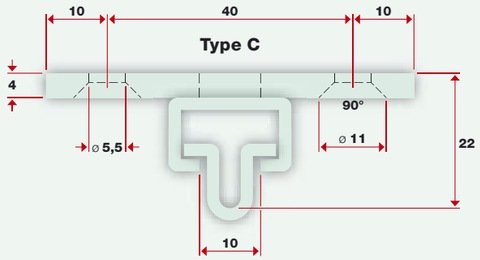
Webnet C rail

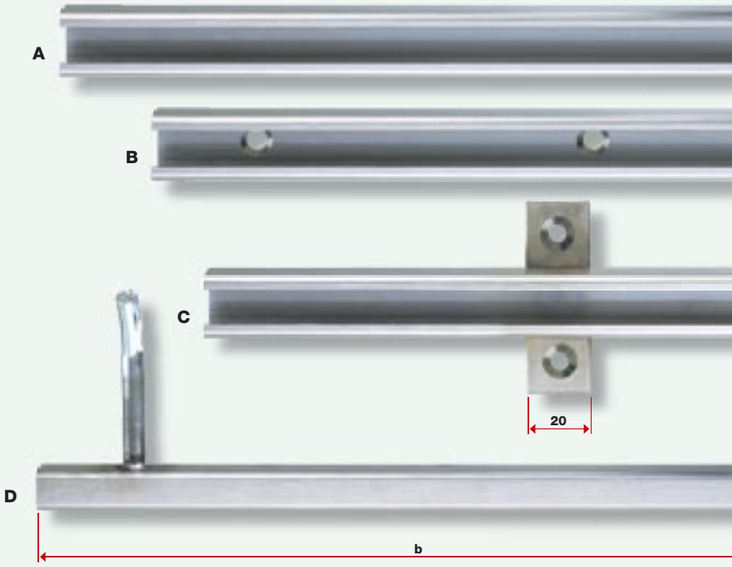
Compatible with Webnet clip

AISI 301–304 material group

Part No.	b mm	Typ
30925-0010	max. 2500	**A** Webnet C rail
30925-0011	max. 2500	**B** Countersunk hole, ø 5.5 mm (positions according to your specifications)
30925-0012	max. 2500	**C** Welded flange (positions according to your specifications)
30925-0013		Separate flange
30925-0014	max. 2500	**D** Welded stud (positions according to your specifications)
30925-0015		Separate stud



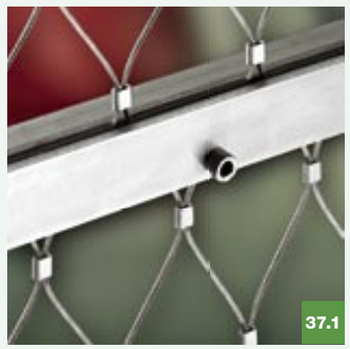




Webnet compression tape

For tension relief: see page 66

Part No.
30917-0001



The Webnet compression tape provides a **tension-relief** function in large-area applications. The compression tape is adhesively affixed to the respective sections. **Stainless flat and L sections** as well as connecting elements are described in our **Jakob®** INOX LINE **Green Solutions G1** catalogue.

⚠ This product is not suitable for perimeter restraint functions.

Illustration: *Webnet compression tape adhesively attached to stainless flat section and screwed to L section*

Webnet perimeter rope

Construction 6 × 7 + core (* Ø 3 mm: 6 × 19 + core) — AISI 316 material group

Part No.	Rope ø mm	Weight kg/100 m	Minimum breaking load kN
10820-0100-42	**1.0**	0.41	0.5
10820-0150	**1.5**	0.88	1.4
10820-0200	**2.0**	1.57	2.4
10830-0300	**3.0 ***	3.60	5.8

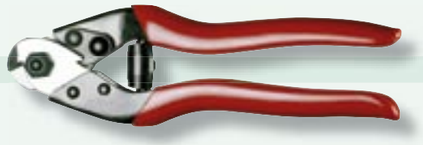
Webnet perimeter strand

Construction 1 × 19 — AISI 316 material group

Part No.	Strand ø mm	Weight kg/100 m	Minimum breaking load kN
10810-0100	**1.0**	0.53	1.0
10810-0150	**1.5**	1.15	2.2
10810-0200	**2.0**	2.12	3.8
10810-0300	**3.0**	4.42	8.4

Wire-rope cutter

Part No.	Max. rope ø mm	Length mm
30740-0500-01	**5.0**	190
30740-0800	**8.0**	500



Webnet sleeves

Matches Webnet perimeter rope and Webnet perimeter strand, available in two materials
AISI 316 sleeves can only be swaged with **Webnet swaging tool type 2**

Materials: E-CU Sn (tin-plated copper) and AISI 316

Part No. Tin-plated copper	Part No. AISI 316	For wire rope and stranded wire ø mm	b mm	ø d mm
30582-0100	**30584-**0100	**1.0**	7.3	4
30582-0150	**30584-**0150	**1.5**	7.3	5.7
30582-0200	**30584-**0200	**2.0**	10	7
30582-0300	**30584-**0300	**3.0**	11	8.3
30582-0300-01	**30584-**0300-01	**3.0**	11	10.7

Webnet swaging tool type 1

For **on-site** swaging of Webnet sleeves made of tin-plated copper (see example on page 49)

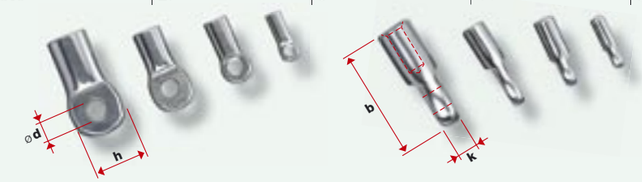
Part No.	Max. rope ø mm	Length mm
30570-1500	**1.5**	170
30570-2000	**2.0 – 3.0**	260
30570-1500-01	Tool inserts for No. **30570-**1500	
30570-2000-02	Tool inserts for No. **30570-**2000	

On-site swaging and the choice of the correct rope or stranded-wire diameter with the matching Webnet sleeves and eye ends are the responsibility of the user.
Full functionality is guaranteed only with **Jakob wire ropes and stranded wire** and **original Webnet swaging tools.**

Webnet eye ends

Matches Webnet rope and Webnet strand — AISI 316 material group

Part No. for one rope	Part No. for two ropes	For wire rope and stranded wire ø mm	b mm	ø d mm	h mm	k mm
30880-0100-02	**30880-**0100-01	**1.0**	13	2	5	2.5
30880-0150-02	**30880-**0150-01	**1.5**	16	3	8.3	3
30880-0200-02	**30880-**0200-01	**2.0**	20	4.5	10	3
30880-0300-02	**30880-**0300-01	**3.0**	27	5	14	5



Webnet swaging tool type 2

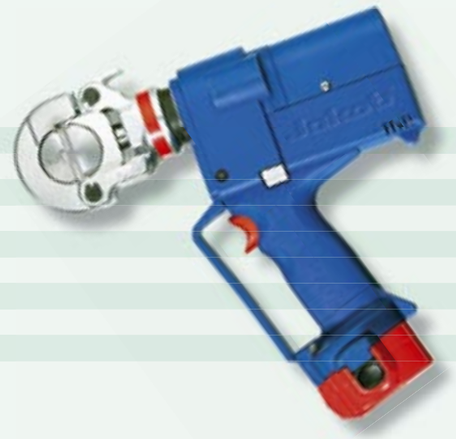
For **on-site** swaging of Webnet sleeves and eye ends

Part No.	Max. rope ø sleeves mm	Max. rope ø eye ends mm	Length mm
30570-2001	**1.0 – 3.0**	**1.0 – 2.0**	400
30570-2001-01	Tool inserts		

Battery-powered swaging tool

For **on-site** swaging of Webnet eye ends.
The battery-powered swaging tool is equipped with interchangeable tools; it can be purchased or rented.

Part No.	For rope ø mm	Weight kg
30570-2004	**1.0 – 1.5**	1.6
30570-2003	**1.0 – 3.0**	4.2
	Tool inserts for swaging tool No. **30570-**2004	
30570-0004-10	**1.0**	
30570-0004-15	**1.5**	
	Tool inserts for swaging tool No. **30570-**2003	
30570-0003-10	**1.0**	
30570-0003-15	**1.5**	
30570-0003-20	**2.0**	
30570-0003-30	**3.0**	



Cable ties

Webnet assembly accessories (see example on page 49) — Nylon white

Part No.	Length mm
30916-0001	120
30916-0002	160
30916-0003	270
30916-0004	330

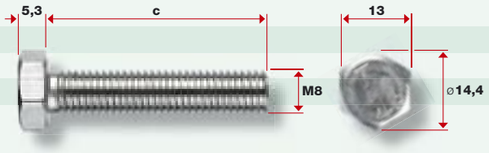
On-site swaging and the choice of the correct rope or stranded-wire diameter with the matching Webnet sleeves and eye ends are the responsibility of the user.
Full functionality is guaranteed only with **Jakob wire ropes and stranded wire** and **original Webnet swaging tools.**

Hexagon head cap screw M8

DIN 933

AISI 316 material group

Part No.	c mm
30843-0800-016	M8 × 16
30843-0800-025	M8 × 25
30843-0800	M8 × 40

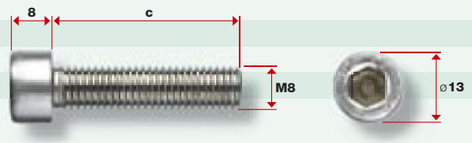


Socket head screw M8

DIN 912

AISI 316 material group

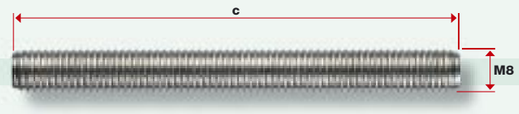
Part No.	c mm
30844-0800-016	M8 × 16
30844-0800-025	M8 × 25
30844-0800	M8 × 35



M8 threaded rod

AISI 316 material group

Part No.	c mm
30882-0800	M8 × variable

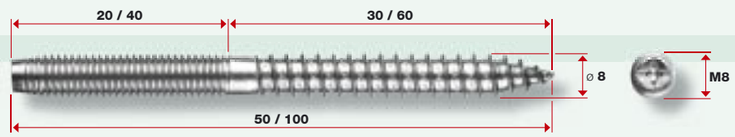


Dual thread screw M8

With Phillips head

AISI 316 material group

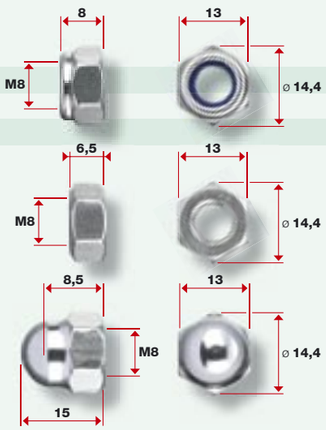
Part No.	Length mm
30990-0010	50
30878-0800	100



M8 nuts

AISI 316 material group

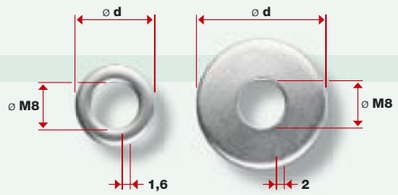
Part No.	Type
30892-0800-02	DIN 985 lock nut
30892-0800	DIN 934 hexagon nut
30894-0800	DIN 1587 dome nut



M8 washers

AISI 316 material group

Part No.	Type
30896-0800	ø **d** 15 mm, DIN 433
30896-0800-24	ø **d** 24 mm, DIN 9021 for wood

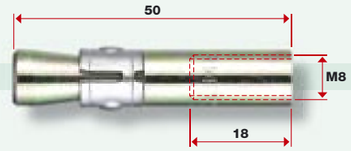


Wall anchor with internal thread RH M8

Suitable exclusively for concrete

Galvanized steel

Part No.	Internal threads
30803-0800-02	M8



FIS VS 150 C injection mortar with perforated sleeve HK

For hollow and solid walls

Part No.	Product
30803-0800-05	1 cartridge 145 ml with plunger disc, 2 mixer nozzles, 6 perforated sleeves HK
30803-0800-052	Mixer nozzle, separate
30803-0800-053	HK perforated sleeve, separate
30803-0800-051	Dispenser gun

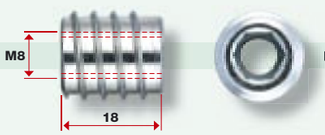
FIS VS 150 C injection mortar is a 2-component resin mortar. The perforated sleeve is needed only for hollow masonry. The threaded rod can be glued directly into the hole of a concrete wall.

Rampa screw-in nut for wood RH M8

With hex socket, type SK, ~DIN 7965

Galvanized steel

Part No.	Internal threads
30803-0800-04	M8



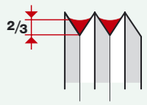
Predrill hole in wood: ø 14.5 mm

Thread lock fluid VC3

Protects screws and nuts against spontaneous loosening

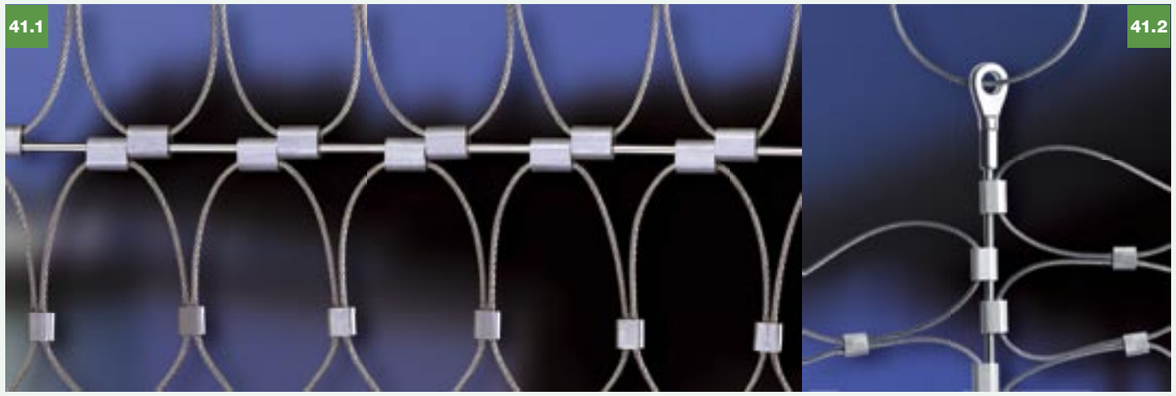
Part No.
30879-0001

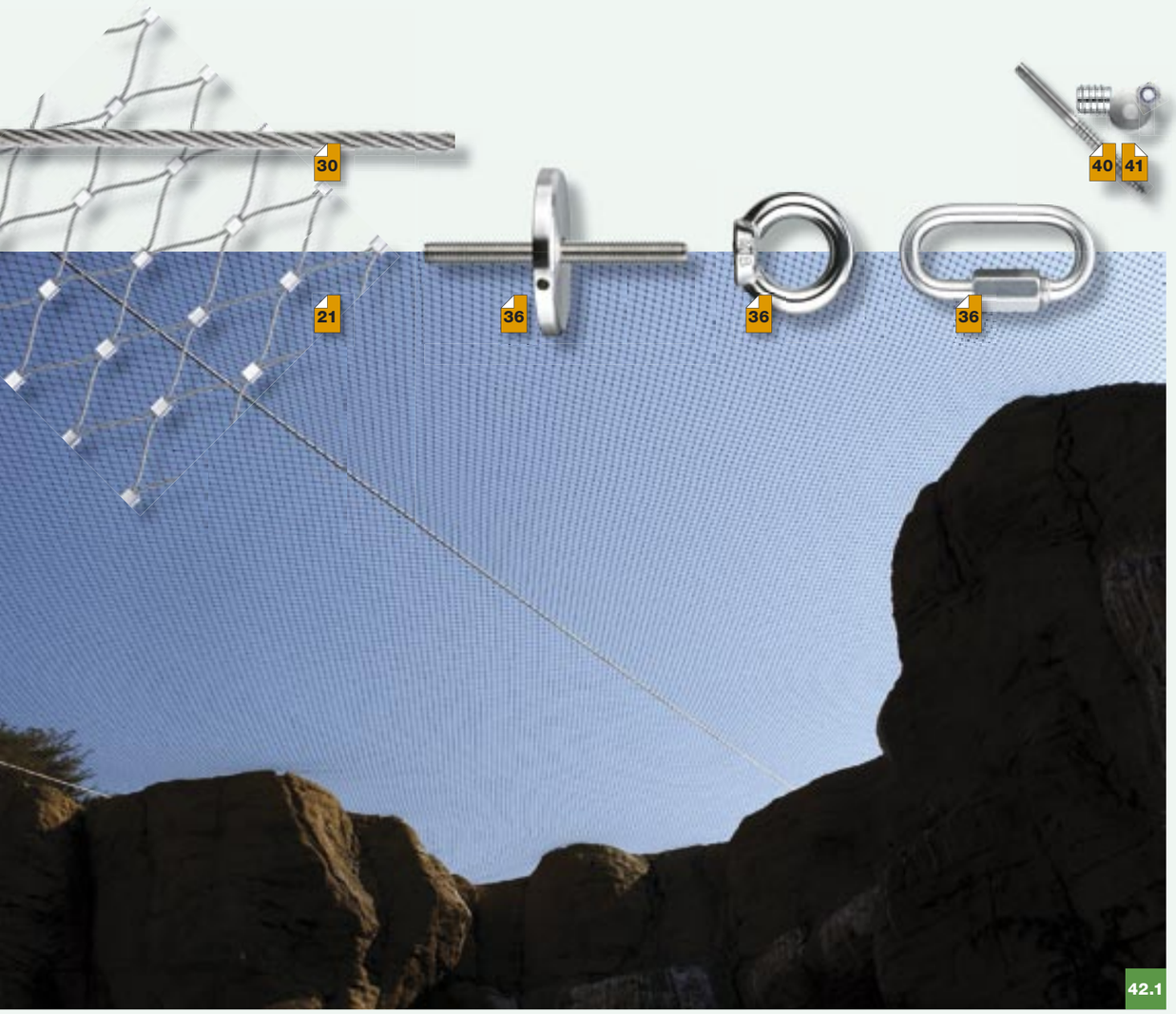
The thread flanks must be filled at least 2/3 of the way.



Thread lock fluid VC3 is a lacquer-like coating that contains two separate, microencapsulated components. The safety function is activated when the fluid is compressed as the threaded fastener is closed. The fastener is then protected against vibration; screws and nuts can no longer work themselves loose.

Illustration:
Custom-made Webnet coupler for the fast disconnection of two nets





42.1

Enclosure at the Dublin Zoo (Ireland)
Webnet size 420 m²
• Periphery structure: stranded wire Ø 10.0 mm
• Webnet rope Ø 1.5 mm
• Webnet mesh aperture 40 mm

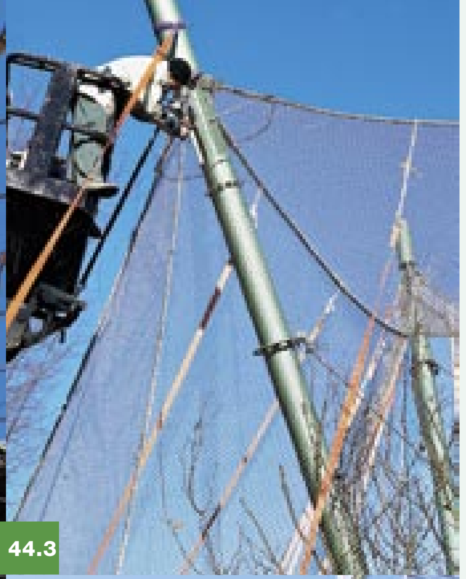
Large-area structures such as aviaries and enclosures for animals.

In its capacity as a general contractor, Jakob AG can serve you with turn-key, all-in-one solutions. On request, you can also obtain separate services such as consulting and planning, engineering, the assembly of complex wire-rope structures, and much more.

43.1

43.2

44.1



44.3

44.4

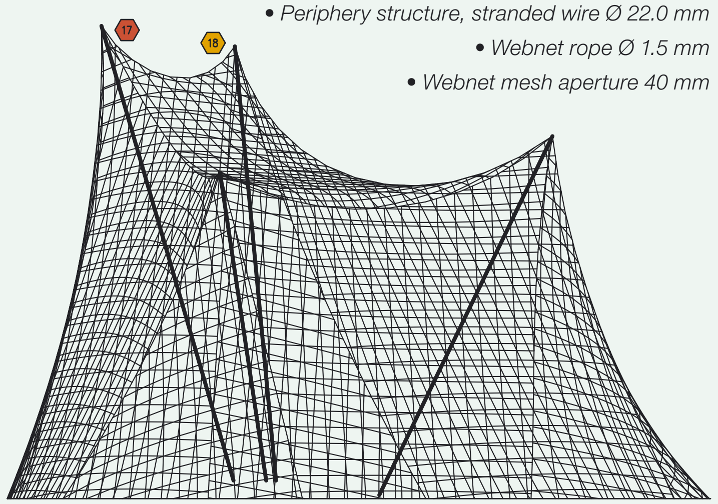
44.5

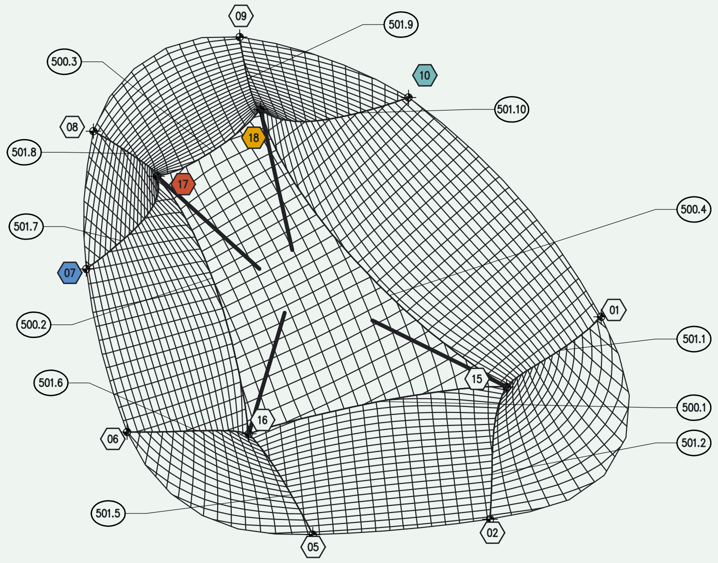
44.2

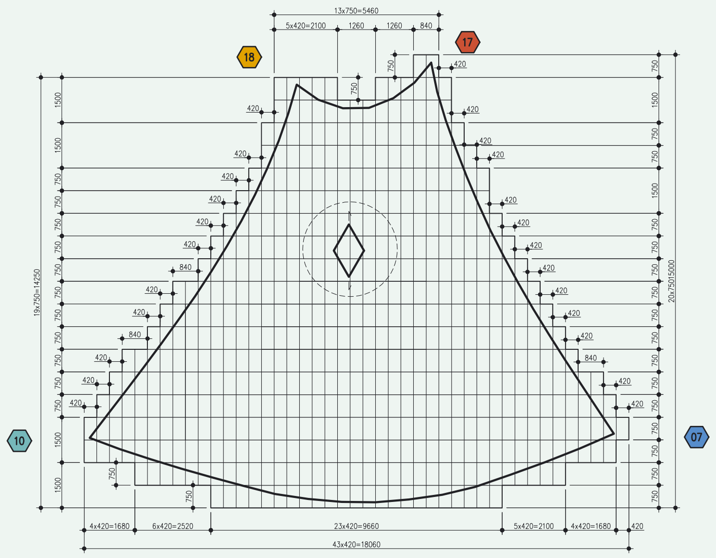
Jakob® INOX LINE

KNIE'S children's zoo, Rapperswil (Switzerland)
Jungle zone, Webnet size 700 m²

- *Periphery structure, stranded wire Ø 22.0 mm*
- *Webnet rope Ø 1.5 mm*
- *Webnet mesh aperture 40 mm*







Webnet projections

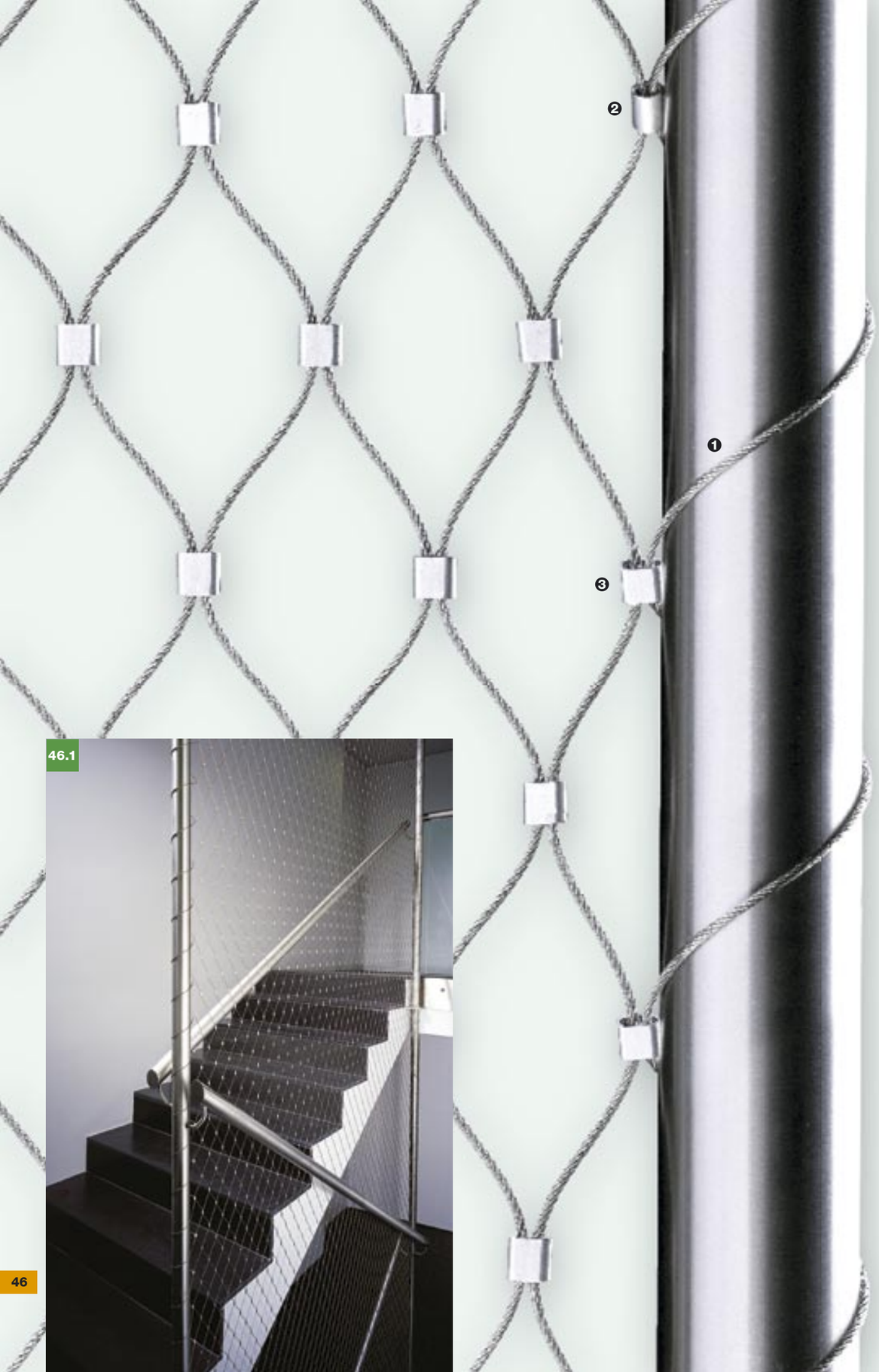
Jakob AG can serve you with turnkey, all-in-one solutions. On request, you can also obtain separate services such as consulting and planning, engineering, or the assembly of complex wire-rope structures.

45.1

45.2

45.3

45.4



46.1

46.2

Jakob® INOX LINE

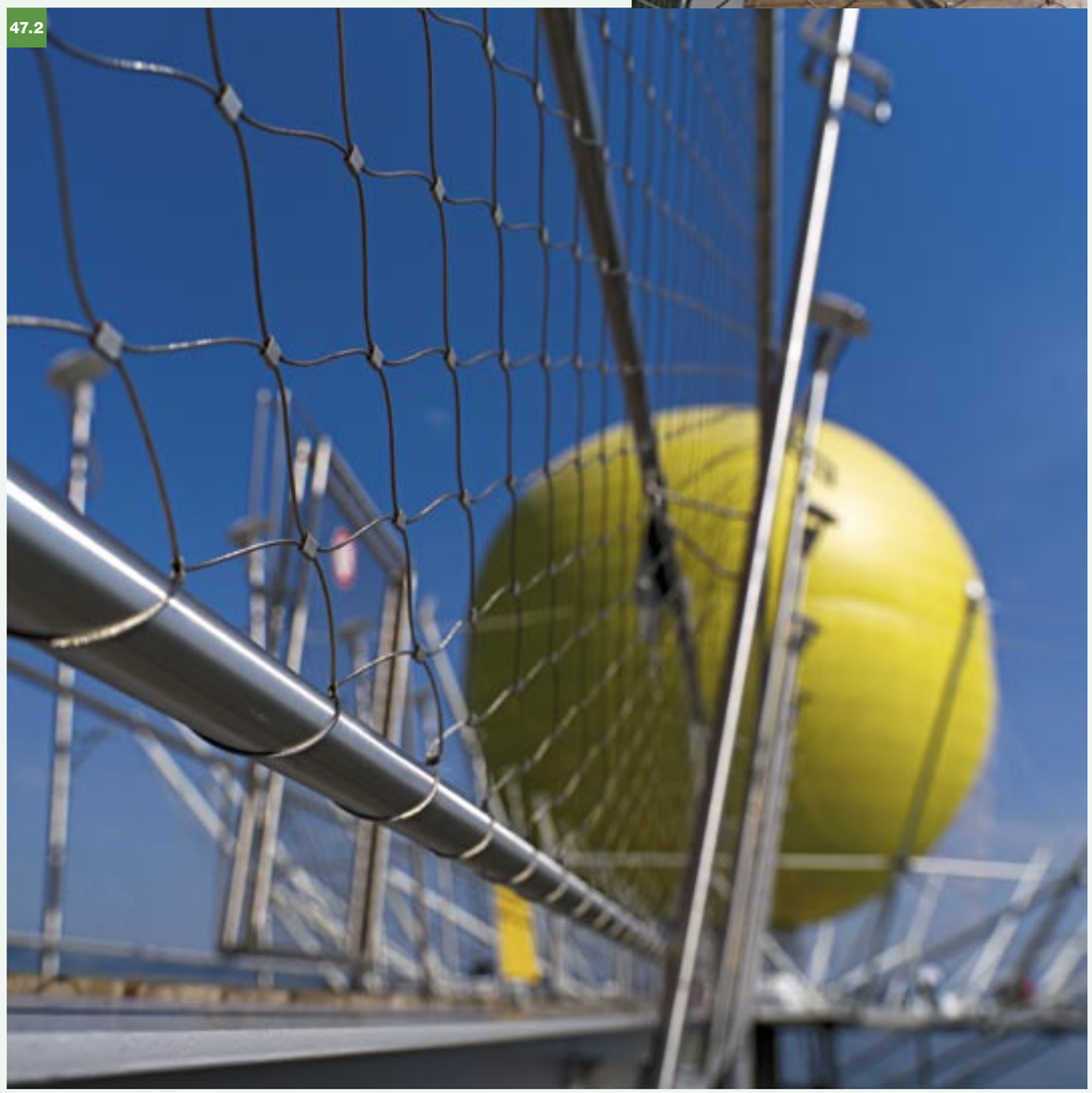
The **Jakob**® INOX LINE **Webnet** is ideal for **protective functions** and offers intelligent solutions for **attachment** and **perimeter design.**

Combined with architectural wire ropes and the acclaimed **Jakob**® INOX LINE **G1** greening system, its range of applications extends beyond protection and support, functioning as a **training system** for plants in façade greening applications. Additionally, the Webnet opens up completely new dimensions for the aesthetic design of multifunctional barriers or as “passive safety systems” wherever rugged but resilient fall-stopping nets are needed.

47.1

Left:
Webnet type V mounted on a tube with perimeter rope ❶ *and hollow sleeves* ❷
The sleeves are swaged on site with a hand-operated tool ❸

47.2



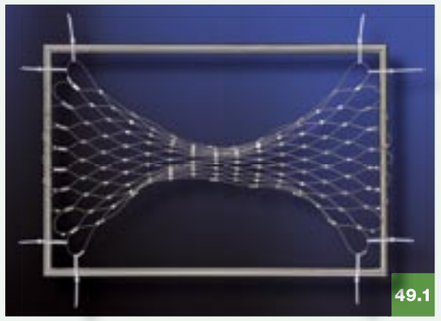
Rankhof Stadium, Basel (Switzerland)

- *Webnet rope Ø 2.0 mm, mesh aperture 40 mm*
- *The Webnet can be retensioned in the horizontal direction*

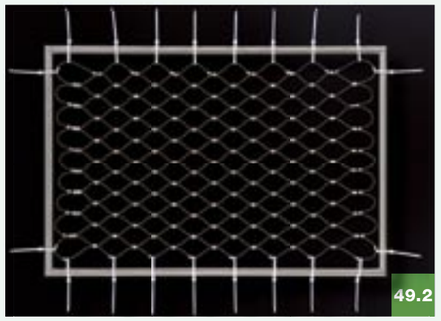
48.1

48.2

Jakob® INOX LINE

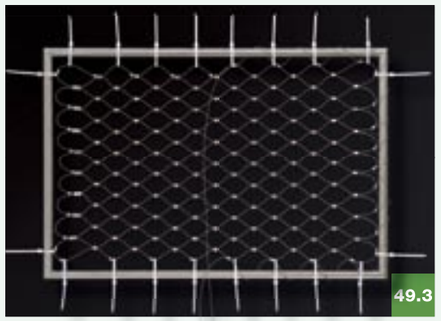


49.1

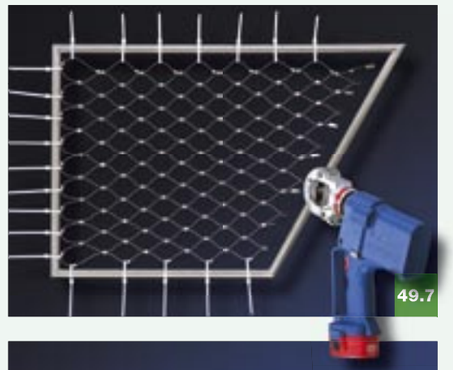


49.2

49.6



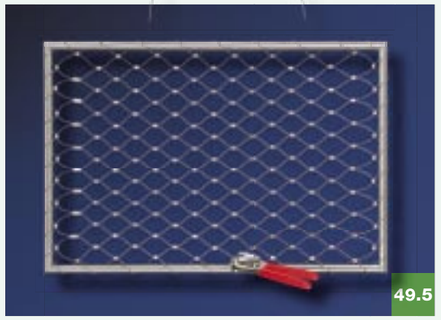
49.3



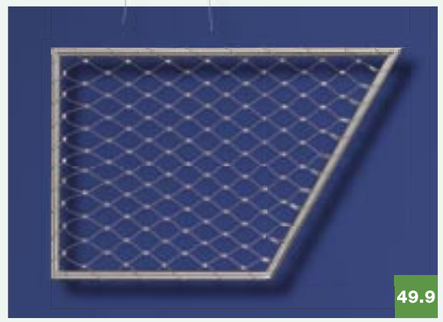
49.7

49.4

49.8



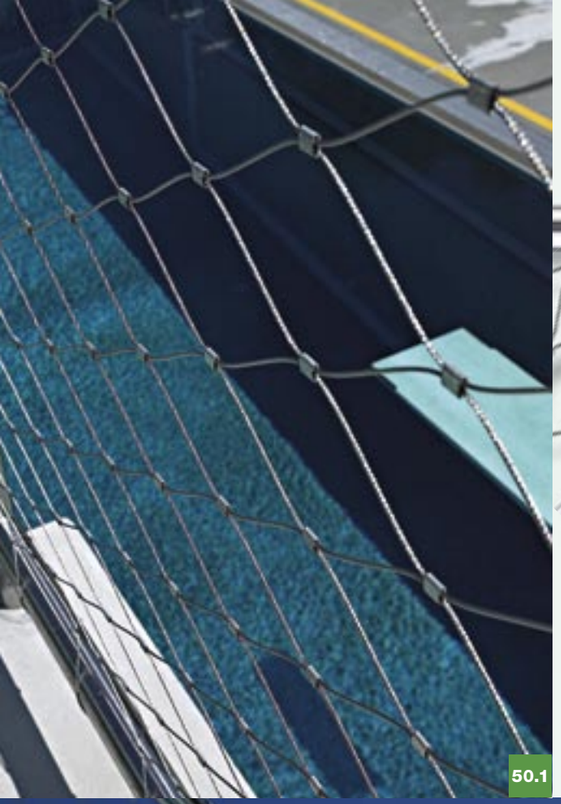
49.5

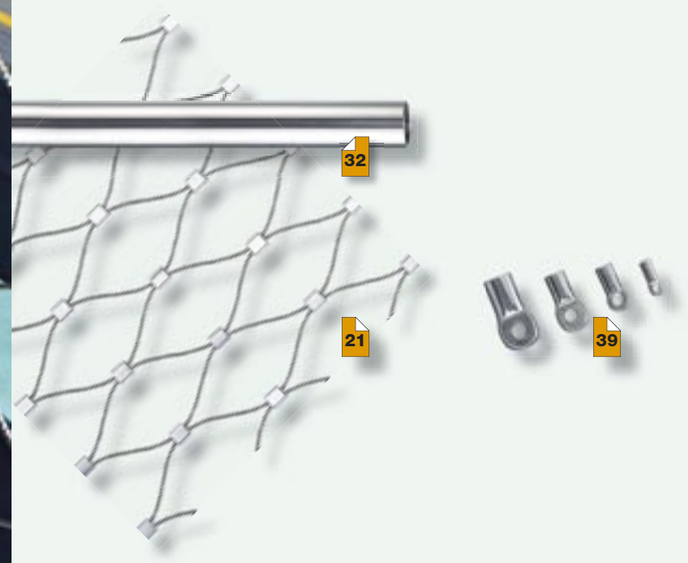


49.9

Webnet assembled in a rectangular tubular frame
Assembly example with horizontal meshes **(type H):**
49.1 Center and attach Webnet at the four corners with cable ties.
49.2 Center and tension Webnet with cable ties.
49.3 On one half of the frame, thread perimeter rope from the middle of the top cross member to the middle of the bottom cross member, going through each Webnet sleeve and around the tubular frame opposite each sleeve. Thread in same direction throughout.
49.4 Thread perimeter rope on the other side of the frame as described in step 49.3. The ends of both perimeter ropes must be threaded through the last sleeve and then pulled taught. Now, all cable ties can be removed.
49.5 Swage the sleeves with the Webnet tool, and cut off loose ends of the perimeter rope.

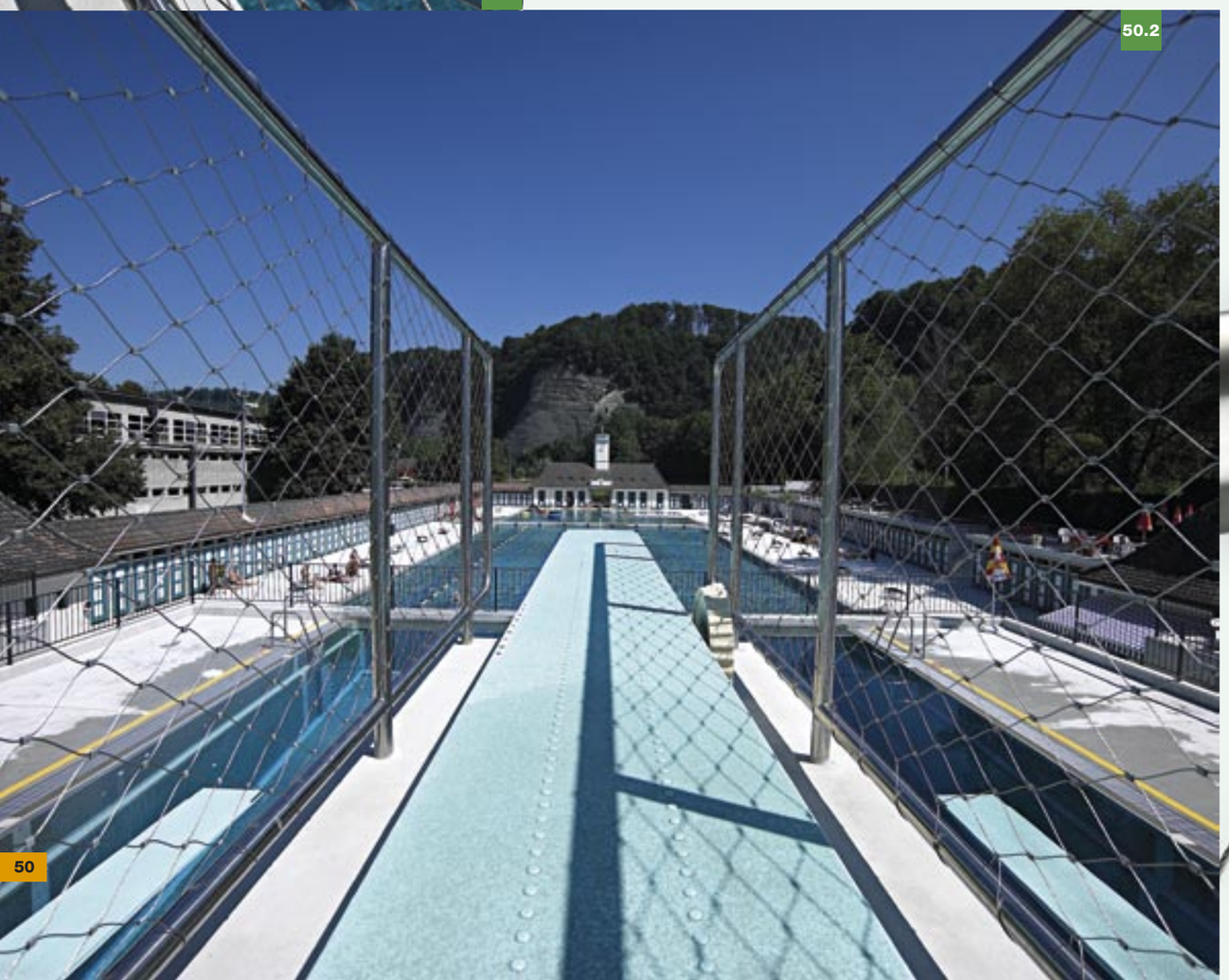
Webnet assembly in a trapezoidal tubular frame
Assembly example with horizontal meshes **(type H):**
49.6 Center and tension Webnet with cable ties. Mark all cutoff points along and parallel to the skew side, and cut.
49.7 Use the battery-powered Webnet swaging tool to swage the Webnet eye ends onto the loose ends of the wire rope.
49.8 and 49.9 Same procedure as in figs. 49.4 and 49.5.





Diving tower, open-air pool in Burgdorf (Switzerland)

- *Webnet rope Ø 1.5 mm, mesh aperture 100 mm*



Welded Webnet tubular frame

Fully strung tubular frames according to your dimension sheets, with matching assembly accessories for attachment on the mounting structure.

What we need from you:

- dimensioned drawing of frame with tube Ø 17.2 or 269 mm
- Webnet order No. with rope Ø and mesh aperture **X,** type **A1, A2** or **B1, B2**
- vertical mesh **V** or horizontal mesh **H**
- number of tube holders and spacers
- description of mounting surface
- see ordering example on **page 19** and items on **page 33**

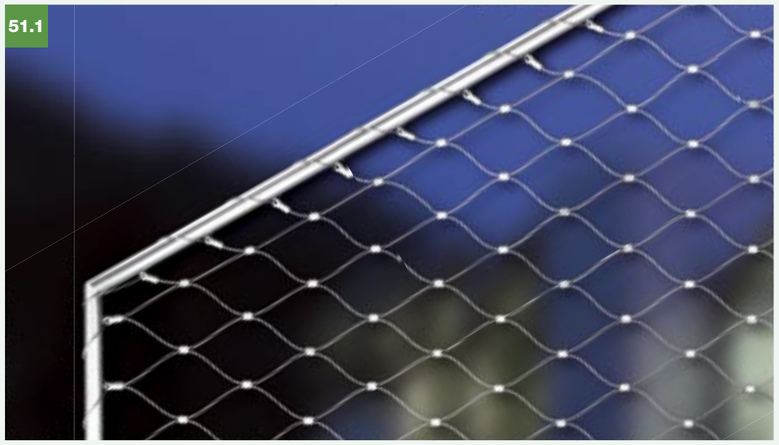
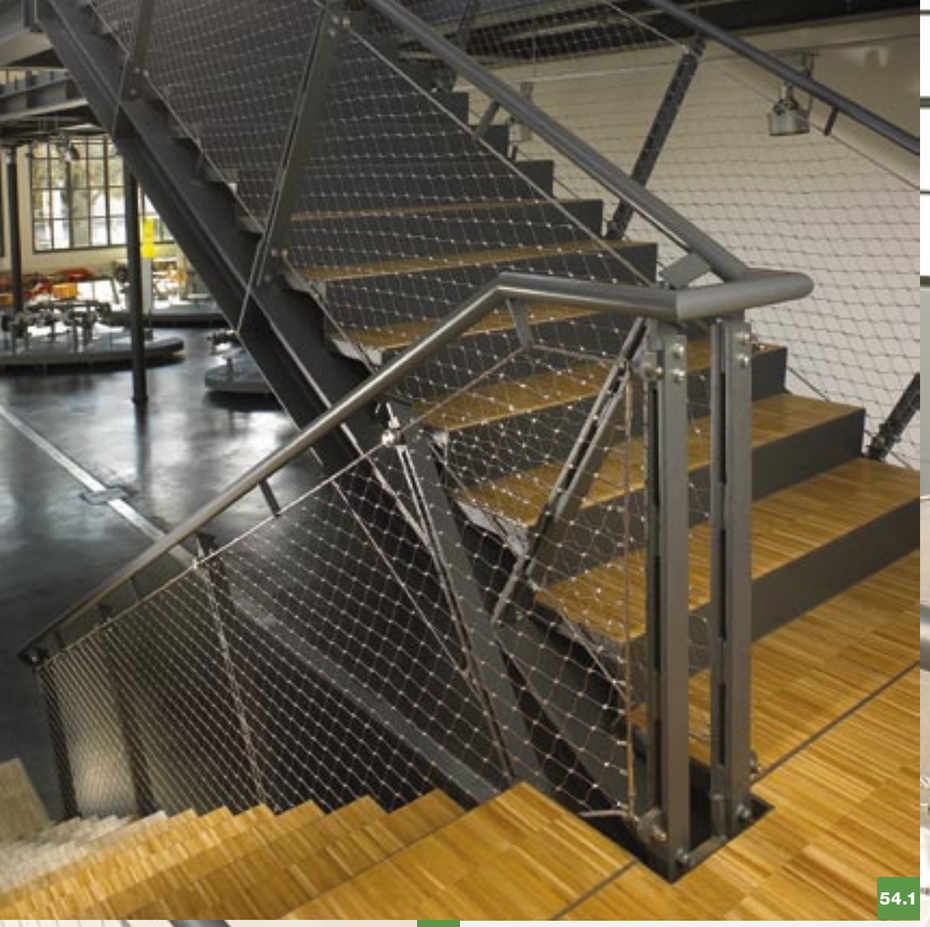


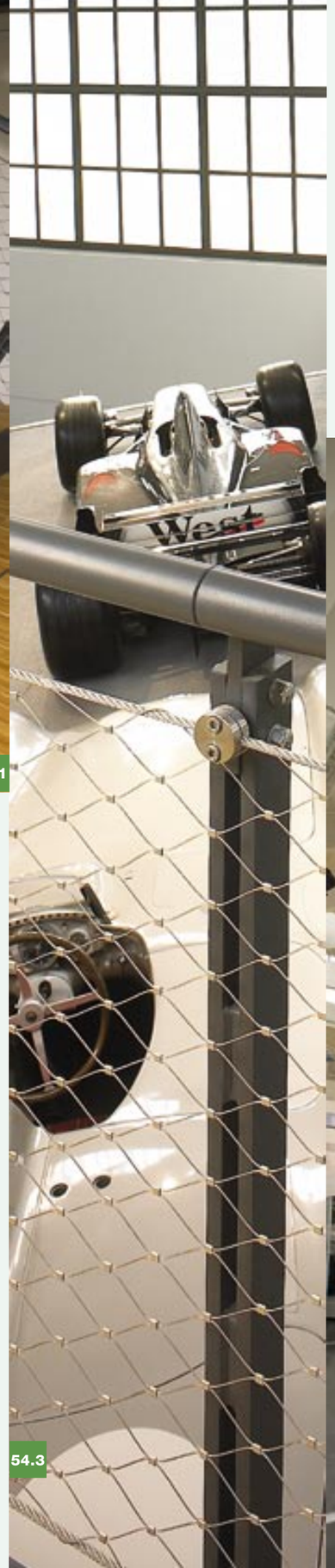
Fig. 51.1
*Trapezoidal tubular frame with Webnet type **H***
Rope ø 1.5 mm, mesh aperture 60 mm

Fig. 51.2
*Rectangular tubular frame with Webnet type **H***
Rope ø 1.5 mm, mesh aperture 60 mm

Design barriers, railings, and planar net structures with **Webnet.** The required periphery structure is created with suspension ropes and appropriate rope-end connectors. Further intelligent components such as suspension-rope clamps or connecting rods from the **Jakob**® INOX LINE series can be used to refine the Webnet periphery structure (see pages 30 to 36).



54.1



54.3

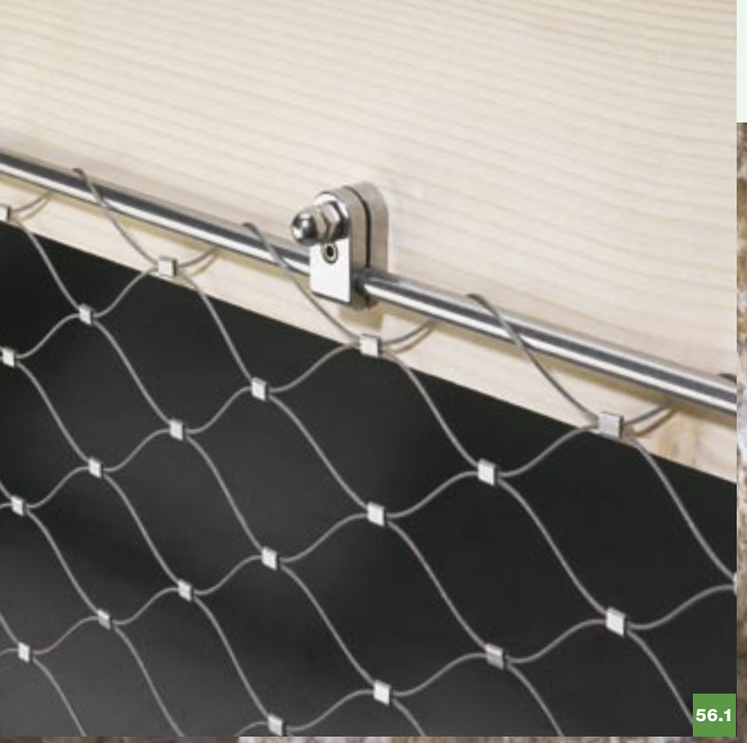
Deutsches Museum, Transportation Center
Munich (Germany)

- *Suspension rope Ø 8.0 mm*
- *Webnet rope Ø 1.5 mm, mesh aperture 60 mm*

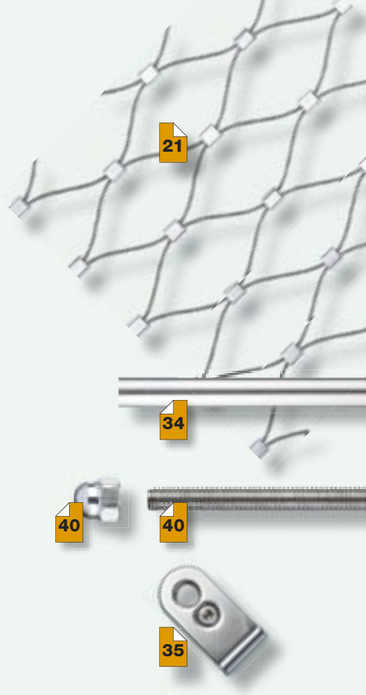
55.1

54.2

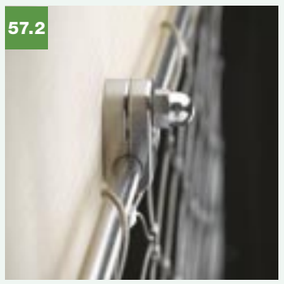
The **Jakob**® INOX LINE **Webnet** is ideal for elegant **protective nets** and offers intelligent solutions for **attachment** and **perimeter design.**

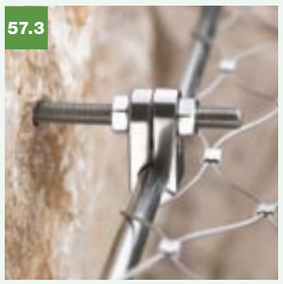

56.1


57.1



The **Webnet** can also be mounted along wavy and irregular surfaces, for instance quarry walls and natural stone walls. Loopholes can be prevented with contour adjustments.


57.2


57.3

59.1

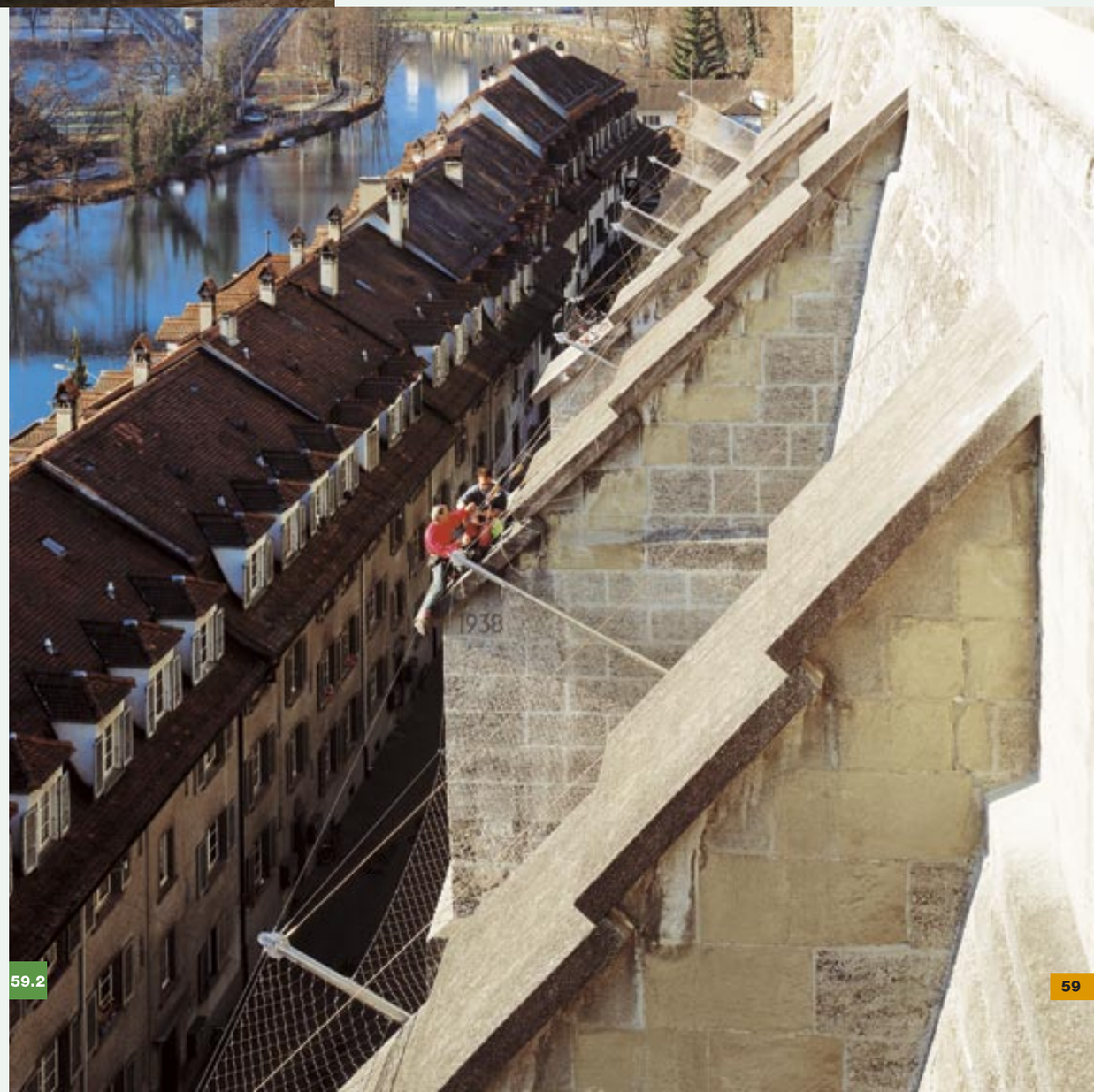
The Jakob® INOX LINE Webnet was tested pursuant to EN 1263-1 for its static and dynamic load-bearing capacity.

Test data:

- **Webnet** size: length 7 m × width 5 m
- **Webnet** rope Ø 3.0 mm, mesh aperture 60 and 100 mm (horizontal and vertical meshes)
- **Webnet** rope Ø 2.0 mm, mesh aperture 60 and 100 mm (horizontal and vertical meshes)
- suspension rope Ø 10.0 mm
- test object: 500-mm steel sphere, mass 100 kg
- drop height of test object: 7 m

Historic city wall, Münsterplattform, Bern (Switzerland)
Safety net as a discreet passive safety system

58.1



59.2

Wooden bridge Sachseln–Kerns (Switzerland)

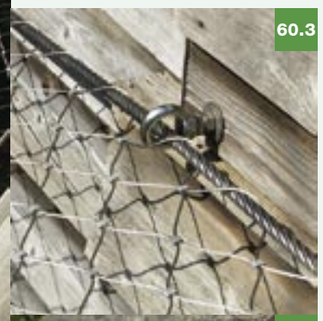
Safety net as a passive safety system

- *Highest bridge of this type in Europe, 120 m above water level*
- *Suspension rope Ø 16.0 mm*
- *Webnet rope Ø 3.0 mm, mesh aperture 100 mm*

60.1

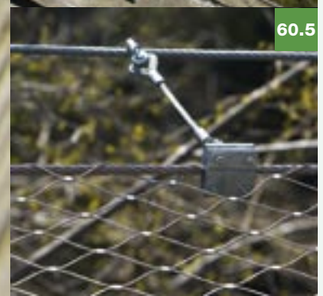
60.2

60.3



60.4

60.5



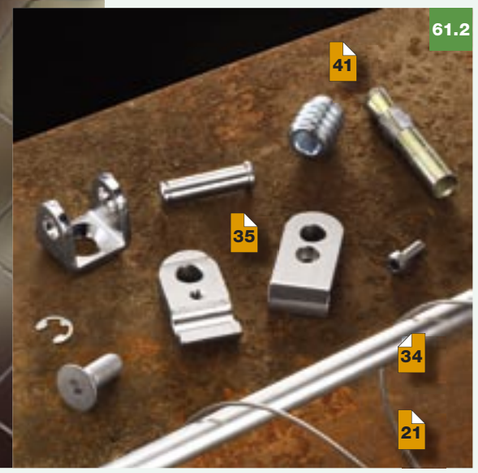
60

Jakob® INOX LINE

61.1

The **Jakob**® INOX LINE **rod system** in combination with **Webnet** sections offers a vast spectrum of configuration options that fulfill both technical and design requirements (see pages 34/35).

61.2



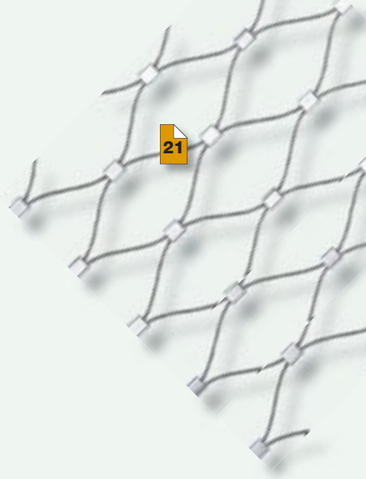
61.3

61.4

61


62.1


63.1


21

The **Jakob**® INOX LINE **rod system** in combination with **Webnet** sections offers a vast spectrum of configuration options that fulfill both technical and design requirements (see pages 34/35).


63.2


64.1

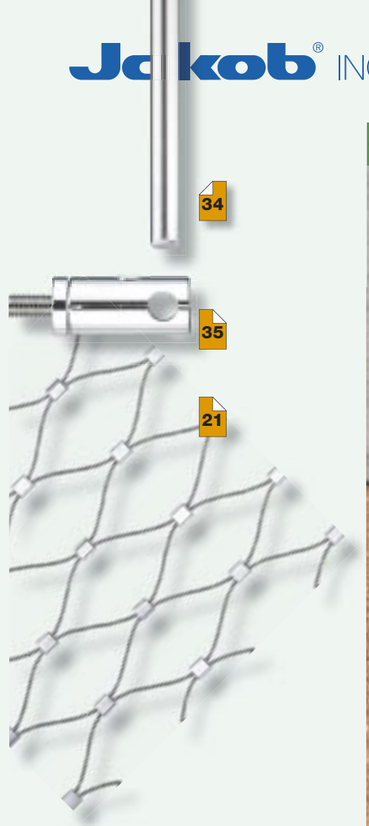

64.4


64.5

64.6


64.2


64.3



The **Jakob**® INOX LINE **C rail system** allows flush mounting of Webnet sections to structural surfaces. Four different C rail types are available for assembly on different kinds of substrates.
Combined with the **Jakob**® INOX LINE **rod system,** these rails allow the development of new and creative solutions with many configuration options (see pages 34 to 37).

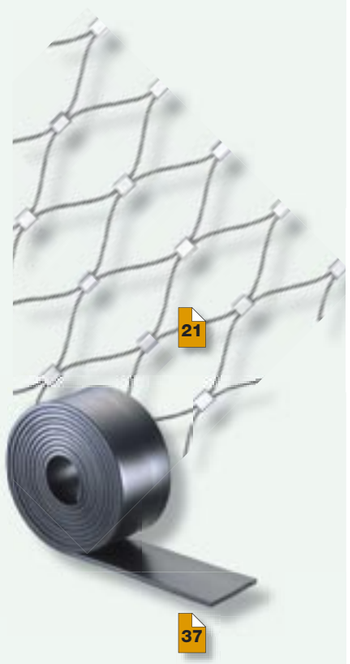

65.1

The Webnet compression tape provides a **positive-action** connection between the Webnet and metal sections. With suitable contact adhesives, the compression tape can be affixed to any type of material to assume a tension relief function.

For **stainless flat and L sections,** as well as connecting elements, please refer to our **Green Solutions G1** catalogue.

Illustration: *Webnet compression tape adhesively attached to stainless flat section and screwed to L section*

This product must not be used for perimeter restraint functions.



The Webnet as an attractive installation aid

Filigreed Webnet structures are insensitive to winds and therefore ideal for the creative suspension of objects such as Christmas decorations.

SINCE 1904