



IT'S DOWN TO THE WIRE®



# STAINLESS STEEL WIRE ROPE CATALOGUE

2 0 2 3

[arcuswire.com](http://arcuswire.com)



Photo by Dean Cooperman

# Welcome to our 2023 hamma® Wire Rope catalogue.

Supplying the full range of stainless steel wire rope for your needs.

## ARCUS WIRE GROUP

As a recognised leader in stainless steel wire rope and fittings for nearly 60 years, Arcus Wire Group brings a wealth of experience, knowledge and expertise to help customers with wire rope projects of any size or complexity.



We don't just aim to meet your expectations and project requirements; we strive to exceed them while providing remarkable value.

David Sheedy, CEO



### INDUSTRY ACCREDITATION

We are a silver member of the Australian Stainless Steel Development Association (ASSDA) and an ASSDA Accredited Fabricator. This means that we have the knowledge and skills to supply and manufacture custom stainless steel cables to the highest industry standards.



### INDUSTRY LEADING STAINLESS STEEL WIRE ROPE

hamma® stainless steel wire rope is manufactured by the world's leading producer of stainless steel wire rope, Korea Original Stainless (KOS). Ideal for all outdoor uses including marine, industrial and architectural projects, the hamma® range is exclusively distributed by Arcus Wire Group across Australasia.

hamma® stainless steel wire rope features unique characteristics to ensure the highest quality.

The hamma® range is ideal for:

**Marine** - ocean going vessels including yacht rigging for leisure and racing yachts;

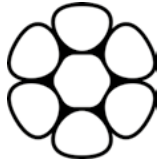
**Architectural** - tensile cable systems for glass facades, cable nets, catenary artworks and lighting, shade sails and lightweight tensile membrane structures; and

**Industrial** - wide range of applications including high-strength, corrosion resistant Duplex 2205 cable assemblies for the most demanding projects.

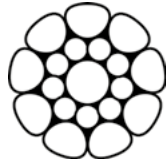
## CONTACT US

Call our expert team for help with selecting the right wire rope for your project needs on 1800 272 879 or email [sales@arcuswire.com](mailto:sales@arcuswire.com)

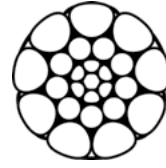
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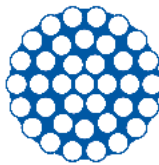
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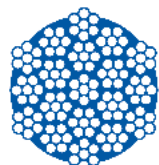
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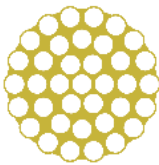


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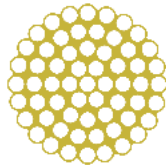


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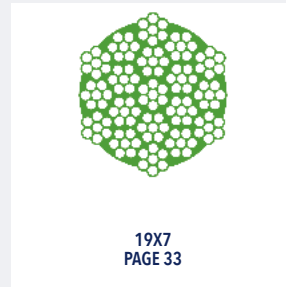
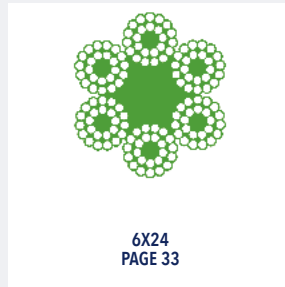
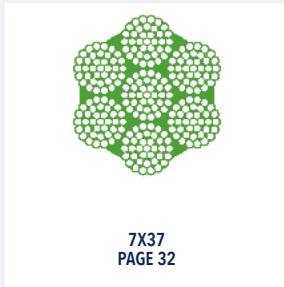
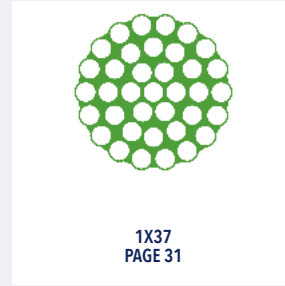
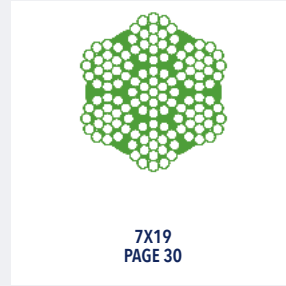
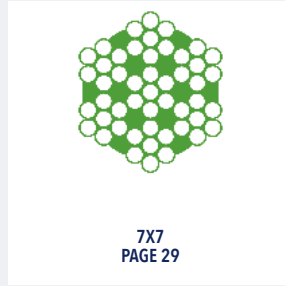
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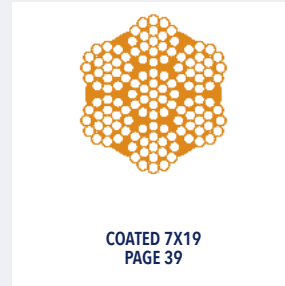
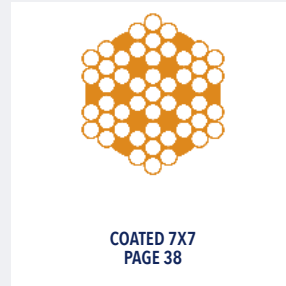
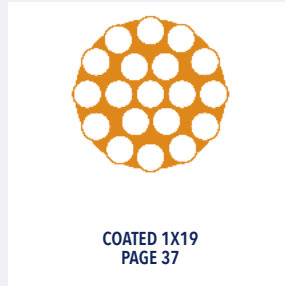
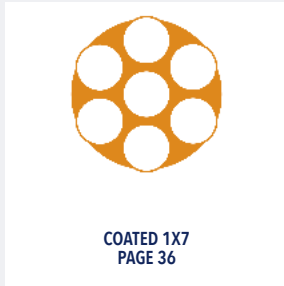
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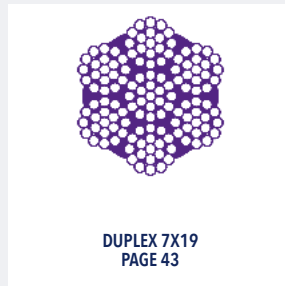
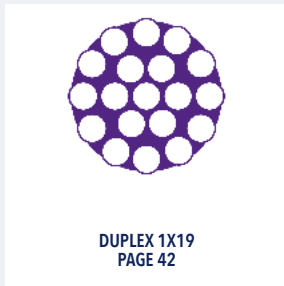
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# hamma<sup>®</sup> Pro Strand

## Quality Compacted Rope

hamma<sup>®</sup> Pro Strand is a market leading compacted strand wire rope. Ideal for Marine applications, the key benefits of hamma<sup>®</sup> Pro Strand include:

- **Extreme Performance** - increased minimum breaking strength resulting in standing rigging that delivers a longer working life;
- **Corrosion Resistance** - explicitly made for the harshest marine conditions, hamma<sup>®</sup> Pro Strand is manufactured from the highest quality raw materials that have been successfully tested in the world's southern oceans for over 20 years;
- **Superior Finish** - the electro-polished smooth, bright finish not only looks and feels great, reducing potential damage to expensive sails and rigging, it also significantly increases corrosion resistance; and
- **Durability** - suitable for dinghy, racing, and cruising markets, ideally combined with the hamma<sup>®</sup> Regatta range of open body turnbuckles and terminals to produce a reliable, high-performance standard rigging solution.

hamma<sup>®</sup> Pro Strand is also ideal for rigid structures or glass façades due to the unique surface finish and high tensile performance.

The low elasticity also means hamma<sup>®</sup> Pro Strand wire ropes don't need to be pre-stretched.

The shiny smooth surface is visually appealing, enabling the compact cables to be located in areas of close proximity to building occupants making greater use of space.

Moreover, its small profile to tensile ratio means that hamma<sup>®</sup> Pro Strand wire ropes offer an unparalleled transparency and performance to the glass facade. Combining ease of maintenance in both outdoor and indoor locations, compact hamma<sup>®</sup> Pro Strand wire ropes are the perfect solution to modern tensile structure design.

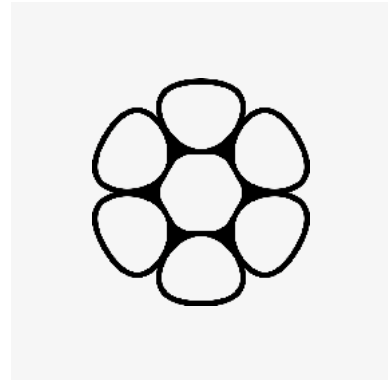
hamma<sup>®</sup> Pro Strand Technical Data:

- Material : AISI316
- Construction: Compacted Strand
- Modulus of Elasticity: 132 +/- 10kN/mm<sup>2</sup>  
Note: Limit tension is calculated at 60% of MBL.

## hamma® Pro Strand 1x7

Quality Compacted Rope

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HMP17016	1.6mm	1x7	250	2.5	0.016
HMP17020	2.0mm	1x7	450	4.4	0.024
HMP17025	2.5mm	1x7	700	6.9	0.036
HMP17030	3.0mm	1x7	1,025	10.1	0.055
HMP17032	3.2mm	1x7	1,130	11.1	0.059
HMP17035	3.5mm	1x7	1,375	13.5	0.075
HMP17040	4.0mm	1x7	1,800	17.7	0.098



hamma® Pro 1x7 strand has been developed to provide the marine and architectural industries with a quality 'compacted' strand that has a smooth clean finish, aesthetically superior to regular wire rope construction whilst maintaining the strength and corrosion resistance of all hamma® stainless steel wire rope.

As hamma® Pro 1x7 is a 'compacted' strand there is no need to pre-stress the wire.

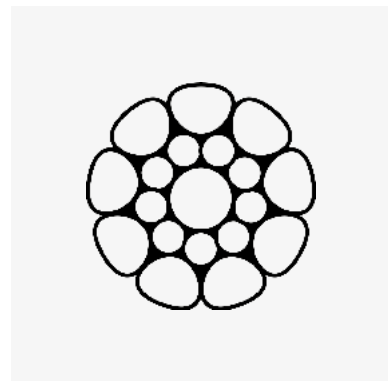
This process of strand compaction decreases the constructional stretch of the wire which also results in breaking loads approximately 30% higher than conventional strands.

hamma® Pro 1x7 is a (6/1) Construction and, used for small diameter applications up to and including 4.0mm.

## hamma® Pro Strand 1x19

Quality Compacted Rope

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HMP19050	5.0mm	1x19	2,600	25.5	0.156
HMP19060	6.0mm	1x19	3,700	36.3	0.218
HMP19070	7.0mm	1x19	5,100	50.0	0.291
HMP19080	8.0mm	1x19	6,500	63.7	0.381
HMP19090	9.0mm	1x19	9,000	88.3	0.484
HMP19100	10.0mm	1x19	10,250	100.5	0.599
HMP19110	11.0mm	1x19	13,500	132.4	0.719
HMP19120	12.0mm	1x19	14,400	141.2	0.810



hamma® Pro 1x19 has been developed to provide the marine and architectural industries with a quality 'compacted' strand that has a smooth clean finish, aesthetically superior to any product currently on the market whilst maintaining the strength and corrosion resistance of all hamma® stainless steel wire rope. As hamma® is a 'compacted' strand there is no need to pre-stress the wire.

This process of strand compaction decreases the constructional stretch of the wire which also results in breaking loads approximately 30% higher than conventional strands.

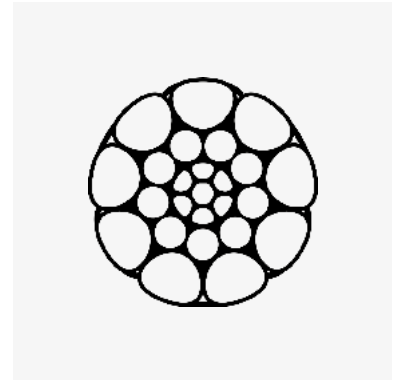
hamma® Pro 1x19 is a (9/9/1) Construction and, used for diameter applications up to and including 12.0mm-



# hamma® Pro Strand 1x25

Quality Compacted Rope

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HMP25140	14.0mm	1x25	19,300	189.7	1.142
HMP25160	16.0mm	1x25	25,600	251.7	1.494
HMP25190	19.0mm	1x25	32,000	314.6	2.105



hamma® Pro 1x25 has been developed to provide the marine and architectural industries with a quality 'compacted' strand that has a smooth clean finish, aesthetically superior to any product currently on the market whilst maintaining the strength and corrosion resistance of all hamma® stainless steel wire rope.

As hamma® is a 'compacted' strand there is no need to pre-stress the wire. This process of strand compaction decreases the constructional stretch of the wire which also results in breaking loads approximately 30% higher than conventional strands.

hamma® Pro 1x25 is a (9/9/6/1) Construction and, used for bigger diameter applications 14-19 mm.





# hamma® X Strand

## Xtreme Outperformance

hamma® X has been the industry leading conventional strand across Australasia for over 10 years. This is primarily due to its minimum breaking strength (MBS).

hamma® X MBS is up to 30% greater than other leading brands. The hamma® X range offers a combination of superior corrosion resistance, solid all-round performance and a strong value proposition. hamma® X wire rope is extensively used in hanger cables for lightweight structures, stabilizing cables for wooden trusses, and balustrade cables for stairways and pedestrian railings.

hamma® X Technical Data:

- Cable material: AISI316
- Construction: Spiral strand
- Modulus of elasticity: 132+/-10 kN/mm<sup>2</sup>

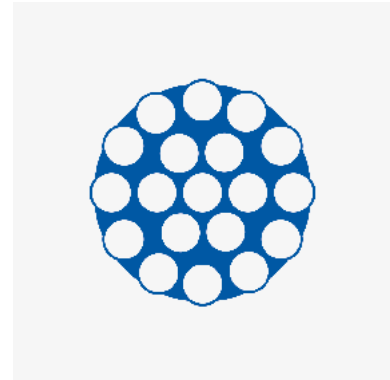
Note: Limit tension is calculated at 60% of MBL.



Lisa Blair's Yacht Climate Action Now  
At the launch of Lisa's next adventure to be the first woman to sail solo, non-stop and unassisted around Antarctica

# hamma® X Strand 1x19 Metric

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HMX19010	1.0mm	1x19	84	0.8	0.005
HMX19015	1.5mm	1x19	189	1.9	0.011
HMX19020	2.0mm	1x19	336	3.3	0.020
HMX19025	2.5mm	1x19	525	5.1	0.031
HMX19030	3.0mm	1x19	756	7.4	0.045
HMX19035	3.5mm	1x19	1,030	10.1	0.073
HMX19040	4.0mm	1x19	1,340	13.1	0.080
HMX19050	5.0mm	1x19	2,100	20.6	0.126
HMX19060	6.0mm	1x19	3,030	29.7	0.180
HMX19070	7.0mm	1x19	4,120	40.4	0.248
HMX19080	8.0mm	1x19	5,380	52.8	0.318
HMX19090	9.0mm	1x19	6,810	66.8	0.407
HMX19100	10.0mm	1x19	8,400	82.5	0.511
HMX19110	11.0mm	1x19	10,574	99.8	0.607
HMX19120	12.0mm	1x19	12,102	119.0	0.739
HMX19140	14.0mm	1x19	16,473	152.0	0.965
HMX19160	16.0mm	1x19	20,500	211.0	1.314
HMX19190	19.0mm	1x19	30,300	298.0	1.781
HMX19200	20.0mm	1x19	33,650	330.0	1.966
HMX19220	22.0mm	1x19	40,687	399.0	2.404



hamma® X 1x19 has been Australasia's number one selling 1x19 wire rope for over 10 years. hamma® X 1x19 consists of a strand with 19 wires. hamma® X 1x19 is a rigid wire and is suitable for rigid rigging only such as mast stays, balustrading, guy ropes and structural applications. Terminal Swaging hamma® Regatta using hydraulic machines is the preferred method. When the two are combined the product quality is optimised.

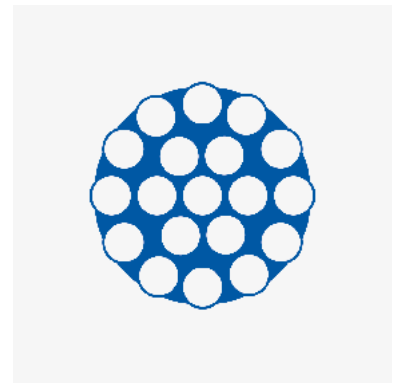
Known for its superior quality hamma® X Strand is an essential product for the following industries:

- Architectural
- Shade Structure's and Tensile Membranes
- Marine
- Yacht Rigging
- Offshore Oil & Gas
- Subsea Engineering
- Mining
- Glass Facade
- Cable Net Structures

Wire lengths are available in the following Cut, 305m, 500m, 1000m. Other lengths are available upon request.

# hamma® X Strand 1x19 Imperial

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HMX19008	1/32"	1x19	53	0.5	0.003
HMX19012	3/64"	1x19	121	1.2	0.007
HMX19016	1/16"	1x19	215	2.1	0.013
HMX19024	3/32"	1x19	483	4.7	0.029
HMX19032	1/8"	1x19	861	8.4	0.051
HMX19048	3/16"	1x19	1,935	19.0	0.115
HMX19055	7/32"	1x19	2,640	25.9	0.157
HMX19064	1/4"	1x19	3,442	33.8	0.204
HMX19072	9/32"	1x19	4,357	42.7	0.259
HMX19096	3/8"	1x19	7,746	76.0	0.460
HMX19110	7/16"	1x19	10,574	99.8	0.607
HMX19127	1/2"	1x19	13,555	132.9	0.806
HMX19143	9/16"	1x19	17,186	168.5	1.020



hamma® X 1x19 has been Australasia's number one selling 1x19 wire rope for over 10 years. hamma® X 1x19 consists of a strand with 19 wires. hamma® X 1x19 is a rigid wire and is suitable for rigid rigging only such as mast stays, balustrading, guy ropes and structural applications. Terminal Swaging either hamma® Industrial or hamma® Regatta using hydraulic machines is the preferred method. When the two are combined the product quality is optimised.

Known for its superior quality hamma® X Strand is an essential product for the following industries:

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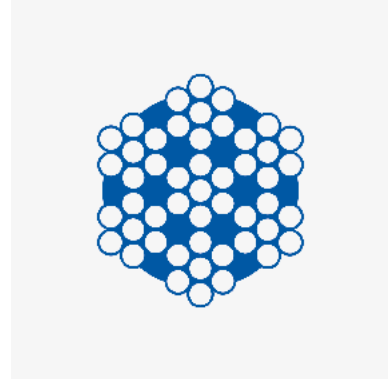
Wire lengths are available in the following Cut, 305m, 500m, 1000m. Other lengths are available upon request.



hamma® Industrial Wire Rope and Fittings, Shade Sail Structure, Ramat Gan National Park, Israel

# hamma® X Strand 7x7 Metric

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HMX77010	1.0mm	7x7	59	0.6	0.005
HMX77020	2.0mm	7x7	258	2.5	0.017
HMX77025	2.5mm	7x7	374	3.7	0.025
HMX77030	3.0mm	7x7	581	5.7	0.037
HMX77040	4.0mm	7x7	1,030	10.1	0.066
HMX77050	5.0mm	7x7	1,620	15.9	0.105
HMX77060	6.0mm	7x7	2,320	22.8	0.151
HMX77070	7.0mm	7x7	2,954	28.9	0.203
HMX77080	8.0mm	7x7	3,674	36.1	0.271
HMX77100	10.0mm	7x7	5,741	56.3	0.410
HMX77120	12.0mm	7x7	8,270	81.1	0.577
HMX77140	14.0mm	7x7	11,217	110.0	0.796
HMX77160	16.0mm	7x7	14,700	144.2	0.997
HMX77190	19.0mm	7x7	21,600	211.8	1.439
HMX77200	20.0mm	7x7	22,944	225.0	1.587
HMX77220	22.0mm	7x7	27,838	273.0	1.947
HMX77240	24.0mm	7x7	33,039	324.0	2.311
HMX77260	26.0mm	7x7	38,851	381.0	2.711
HMX77280	28.0mm	7x7	45,071	442.0	3.146
HMX77320	32.0mm	7x7	58,838	577.0	4.056



hamma® X 7x7 has been Australasia's number one selling 7x7 wire rope for over 10 years. hamma® X 7x7 is made up of 7 strands with 7 wires. hamma® X 7x7 is a Semi-Rigid wire rope and not as easily bent as 7x19. hamma® X 7x7 is an excellent choice for fixed rigging applications such as balustrading and safety barrier rails. 7x7 has very limited applications as a running or working rope.

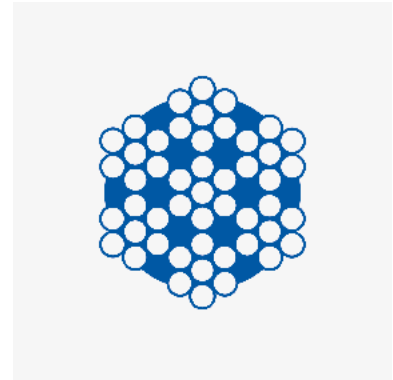
Known for its superior quality hamma® X Strand is an essential product for the following industries:

- Balustrading
- Shade Structure's and Tensile Membranes
- Marine
- Offshore Oil & Gas
- Mining
- Cable Net Structures

Wire lengths are available in the following Cut, 305m, 500m, 1000m and 3000m. Other lengths are available upon request.

# hamma® X Strand 7x7 Imperial

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HMX77012	3/64"	7x7	86	0.8	0.006
HMX77016	1/16"	7x7	153	1.5	0.010
HMX77024	3/32"	7x7	344	3.4	0.023
HMX77032	1/8"	7x7	612	6.0	0.042
HMX77048	3/16"	7x7	1,493	14.6	0.095
HMX77055	7/32"	7x7	1,857	18.2	0.130
HMX77064	1/4"	7x7	2,641	25.9	0.169
HMX77072	9/32"	7x7	3,343	32.8	0.215

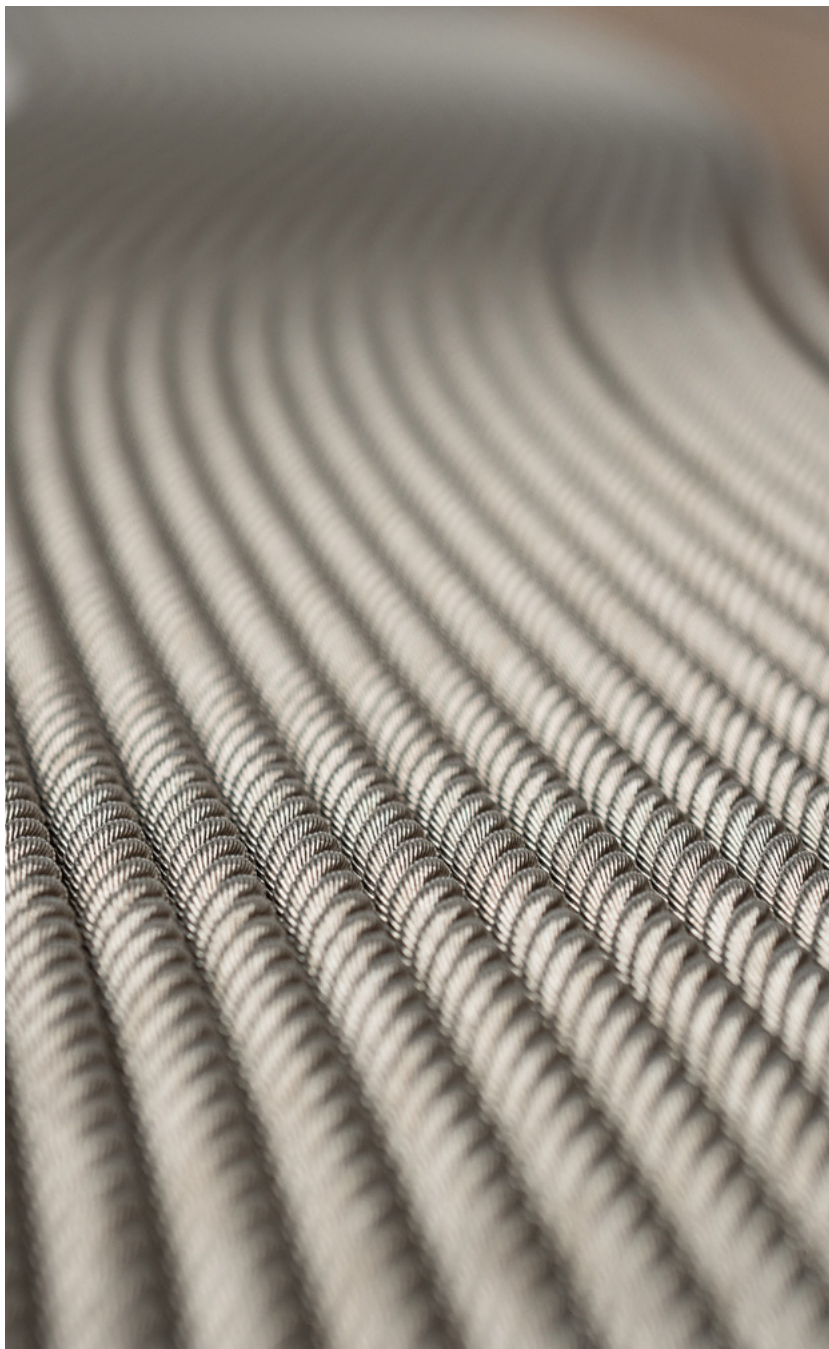


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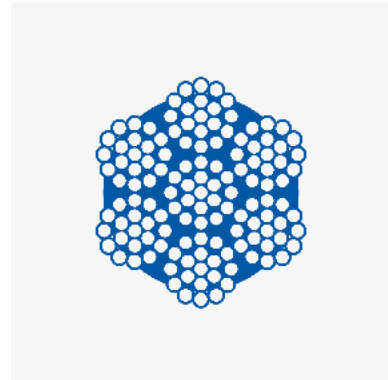
- Balustrading
- Shade Structure's and Tensile Membranes
- Marine
- Offshore Oil & Gas
- Mining
- Cable Net Structures

Wire lengths are available in the following Cut, 305m, 500m, 1000m and 3000m. Other lengths are available upon request.



# hamma® X Strand 7x19 Metric

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HMX79020	2.0mm	7x19	239	2.3	0.017
HMX79025	2.5mm	7x19	373	3.7	0.025
HMX79030	3.0mm	7x19	538	5.3	0.037
HMX79035	3.5mm	7x19	732	7.2	0.052
HMX79040	4.0mm	7x19	956	9.4	0.067
HMX79050	5.0mm	7x19	1,490	14.6	0.104
HMX79060	6.0mm	7x19	2,105	20.6	0.150
HMX79070	7.0mm	7x19	2,800	27.4	0.208
HMX79080	8.0mm	7x19	3,400	33.3	0.262
HMX79100	10.0mm	7x19	5,310	52.1	0.424
HMX79120	12.0mm	7x19	7,650	75.0	0.597
HMX79140	14.0mm	7x19	10,400	102.0	0.790
HMX79160	16.0mm	7x19	13,600	133.0	1.075
HMX79190	19.0mm	7x19	19,300	189.3	1.438
HMX79200	20.0mm	7x19	21,210	208.0	1.628
HMX79220	22.0mm	7x19	25,700	252.0	1.969
HMX79240	24.0mm	7x19	30,600	300.0	2.368
HMX79260	26.0mm	7x19	36,000	353.0	2.758
HMX79280	28.0mm	7x19	41,800	409.0	3.156
HMX79320	32.0mm	7x19	54,500	535.0	4.087



hamma® X 7x19 has been Australasia's number one selling 7x19 wire rope for over 10 years. hamma® X 7x19 is made up of 7 strands with 19 wires. hamma® X 7x19 is a flexible wire rope and easily bent for a thimble eye termination. hamma® X 7x19 is a versatile construction of stainless steel wire rope. hamma® X 7x19 can be used in either fixed rigging or for limited working rope applications such as on a boat winch.

Known for its superior quality, this is an essential product for the following industries.

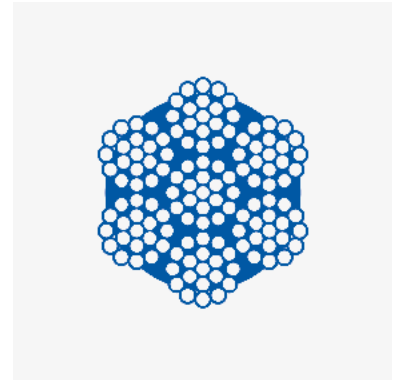
- Balustrading
- Shade Structure's and Tensile Membranes
- Marine
- Yacht Rigging
- Steering Cables
- Offshore Oil & Gas
- Mining
- Cable Net Structures
- Irrigation Bore Pump Cables

Wire lengths are available in the following Cut, 305m, 500m, 1000m. Other lengths are available upon request.



# hamma® X Strand 7x19 Imperial

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HMX79012	3/64"	7x19	86	0.8	0.006
HMX79016	1/16"	7x19	153	1.5	0.010
HMX79020	5/64"	7x19	239	2.3	0.017
HMX79024	3/32"	7x19	344	3.4	0.024
HMX79032	1/8"	7x19	611	6.0	0.043
HMX79040	5/32"	7x19	956	9.4	0.067
HMX79048	3/16"	7x19	1,344	13.2	0.096
HMX79055	7/32"	7x19	1,874	18.4	0.131
HMX79064	1/4"	7x19	2,450	24.0	0.172
HMX79072	9/32"	7x19	3,100	30.4	0.215
HMX79080	5/16"	7x19	3,400	33.3	0.262
HMX79096	3/8"	7x19	4,894	48.0	0.380
HMX79127	1/2"	7x19	8,566	84.0	0.499
HMX79160	5/8"	7x19	13,600	133.0	1.075



hamma® X 7x19 has been Australasia's number one selling 7x19 wire rope for over 10 years. hamma® X 7x19 is made up of 7 strands with 19 wires. hamma® X 7x19 is a flexible wire rope and easily bent for a thimble eye termination. hamma® X 7x19 is a versatile construction of stainless steel wire rope. hamma® X 7x19 can be used in either fixed rigging or for limited working rope applications such as on a boat winch.

Known for its superior quality, this is an essential product for the following industries.

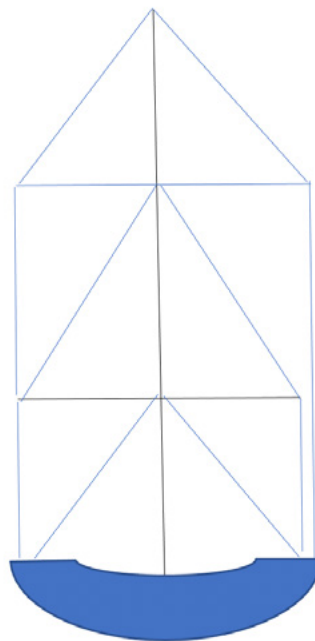
- Balustrading
- Shade Structure's and Tensile Membranes
- Marine
- Yacht Rigging
- Steering Cables
- Offshore Oil & Gas
- Mining
- Cable Net Structures
- Irrigation Bore Pump Cables

Wire lengths are available in the following Cut, 305m, 500m, 1000m. Other lengths are available upon request.

## DIS-CONTINUOUS RIGGING

Dis-continuous rigging is made from individual stays in each panel. A panel is deck to spreader, spreader to spreader, and spreader to mast head and referred to numerically from deck to mast head, V being a vertical stay and D being a diagonal stay. The only catch is the top most stay usually is a D running into a V as a single stay over the top most spreader tip. Mainly used for race boats and superyachts

Tuning is a little more difficult with adjustment required at deck level as well as at spreaders.



## CONTINUOUS RIGGING

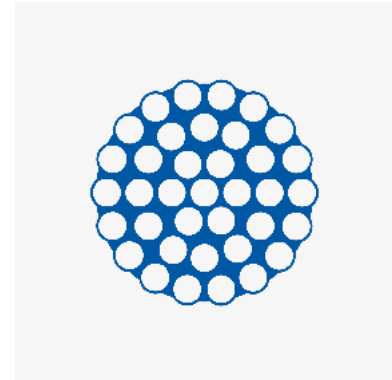
Continuous rigging, the most common rigging, is rigging that runs from the mast top or mid point through spreader ends/ tips down to the deck without any terminal breaks in the rigging. Lower stays will be split with two sets, aft lower and forward lower.

Continuous rigging is simple in design and very straightforward for installation as well as being easy to tune, all being done from deck level.

# hamma® X Strand 1x37

Used extensively in the tensile architecture market

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HMX37050	5.0mm	1x37	2,051	20	0.124
HMX37060	6.0mm	1x37	2,957	29	0.178
HMX37070	7.0mm	1x37	4,018	39	0.242
HMX37080	8.0mm	1x37	5,252	52	0.316
HMX37090	9.0mm	1x37	6,649	65	0.401
HMX37100	10.0mm	1x37	8,209	81	0.494
HMX37120	12.0mm	1x37	11,829	116	0.712
HMX37140	14.0mm	1x37	16,112	158	0.969
HMX37160	16.0mm	1x37	21,006	206	1.266
HMX37190	19.0mm	1x37	26,615	261	1.602
HMX37200	20.0mm	1x37	32,835	322	1.977
HMX37220	22.0mm	1x37	39,667	389	2.393
HMX37240	24.0mm	1x37	44,154	433	2.848
HMX37260	26.0mm	1x37	55,473	544	3.342
HMX37280	28.0mm	1x37	64,344	631	3.876



hamma® X 1x37 AISI 316 stainless steel wire strand is used extensively in the tensile architecture market.

Key features include:

- Long lasting shine and smooth
- Electro-polished clean finish improves corrosion resistance as well as exceeding the aesthetic requirements of the tensile architectural design.

hamma® X 1x37 is used for larger structural projects such as:

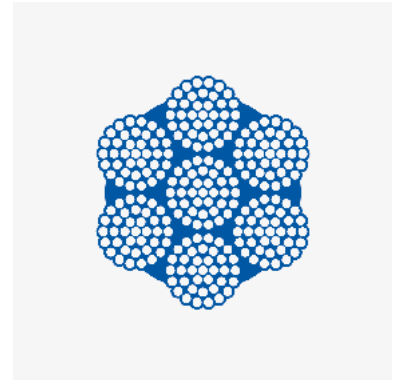
- Cable bridges,
- Swing bridges,
- Hanging Facades,
- Industrial Facades,
- Cable Truss and
- Standing Rigging.

hamma® X 1x37 is a (18/12/6/1) Construction manufactured the same way as 1/19 with additional 18 Strands added.

# hamma® X Strand 7x37

Used extensively in the tensile architecture market

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HMX73050	5.0mm	7x37	1,275	12.5	0.098
HMX73060	6.0mm	7x37	1,835	18	0.144
HMX73070	7.0mm	7x37	2,498	24.5	0.198
HMX73080	8.0mm	7x37	3,263	32	0.269
HMX73090	9.0mm	7x37	4,130	40.5	0.329
HMX73100	10.0mm	7x37	5,099	50	0.409
HMX73120	12.0mm	7x37	7,342	72	0.581
HMX73140	14.0mm	7x37	9,993	98	0.810
HMX73160	16.0mm	7x37	13,052	128	1.027
HMX73180	18.0mm	7x37	16,519	162	1.340
HMX73200	20.0mm	7x37	20,394	200	1.618
HMX73220	22.0mm	7x37	24,677	242	1.856
HMX73240	24.0mm	7x37	29,368	288	2.230
HMX73260	26.0mm	7x37	34,466	338	2.752
HMX73280	28.0mm	7x37	39,973	392	3.184
HMX73320	32.0mm	7x37	52,209	512	4.098



hamma® X 1x37 AISI 316 stainless steel wire strand is used extensively in the tensile architecture market.

Key features include:

- Bright
- Long lasting shine and smooth
- Electro-polished clean finish improves corrosion resistance as well as exceeding the aesthetic requirements of the tensile architectural design.

hamma® X 1x37 is used for larger structural projects such as:

- Cable bridges,
- Swing bridges,
- Hanging Facades,
- Industrial Facades,
- Cable Truss and
- Standing Rigging.

hamma® X 1x37 is a (18/12/6/1) Construction manufactured the same way as 1/19 with additional 18 Strands added.

**hamma**®

PERFORMANCE BY DESIGN

**The industry leader  
in stainless steel  
wire and fittings.**

Supplied exclusively by  
Arcus Wire Group.

ORDER TODAY

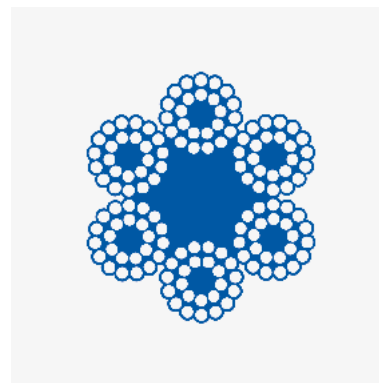
**1800 272 879**

SALES@ARCUSWIRE.COM

## hamma® X Strand 6x24 (FC)

A general purpose flexible fibre core wire rope

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HMX24060	6.0mm	6x24fc	1,387	13.6	0.121
HMX24070	7.0mm	6x24fc	1,886	18.5	0.170
HMX24080	8.0mm	6x24fc	2,876	28.2	0.198
HMX24090	9.0mm	6x24fc	3,630	35.6	0.254
HMX24100	10.0mm	6x24fc	4,487	44.0	0.319
HMX24120	12.0mm	6x24fc	6,455	63.3	0.461
HMX24140	14.0mm	6x24fc	8,790	86.2	0.647
HMX24160	16.0mm	6x24fc	11,523	113	0.813
HMX24180	18.0mm	6x24fc	14,582	143	1.036
HMX24200	20.0mm	6x24fc	17,947	176	1.277
HMX24220	22.0mm	6x24fc	21,720	213	1.571
HMX24240	24.0mm	6x24fc	25,799	253	1.812
HMX24260	26.0mm	6x24fc	30,286	297	2.111
HMX24280	28.0mm	6x24fc	35,180	345	2.448
HMX24320	32.0mm	6x24fc	45,887	450	3.198



hamma® X Strand 6x24(FC) is a general purpose flexible fibre core wire rope.

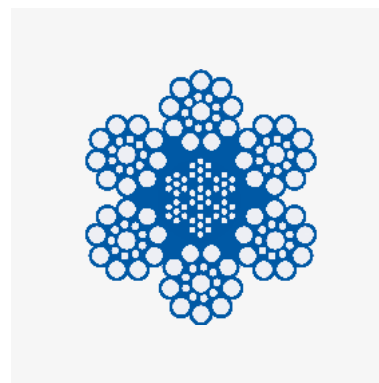
hamma® X Strand 6x24(FC) is typically used in the marine industry due to its flexibility which makes it suitable for mooring lines, lifting slings and small core single layer winches and tow lines.

This product is not widely stocked so please contact your local Arcus Wire Group office for availability.

## hamma® X Strand 6x19(SL) IWRC

A general purpose flexible independent wire rope core

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HMX69120SL	12.0mm	6x19SL	9,265	908.5	0.5942
HMX69160SL	16.0mm	6x19SL	14,641	143.6	1.1925
HMX69200SL	20.0mm	6x19SL	22,877	224.3	1.6505
HMX69220SL	22.0mm	6x19SL	27,681	271.4	1.9971
HMX69240SL	24.0mm	6x19SL	32,943	323.1	2.3767



hamma® X G316, 6x19(SL) IWRC has been supplied by Arcus Wire Group for the past 25 years. Often confused with hamma® 7x19, hamma® the 6x19(SL) IWRC has an independent wire rope core which allows the outer layers of the strand to lock against the 7x7 Wire Rope Core.

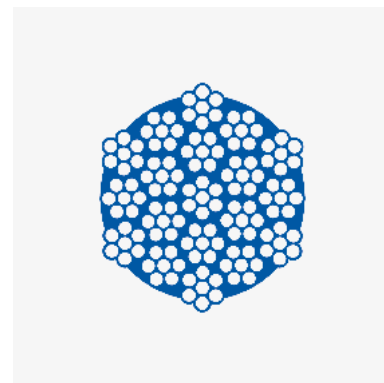
The hamma® 6x19(SL) has a slightly larger diameter. The outer wire that makes the wire rope is flexible.

This product is not widely stocked so please contact your local Arcus Wire Group office for availability.

## hamma® X Strand 19x7 (NR)

Is a non-rotating wire rope

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HMX97032	3.2mm	19x7NR	538	5.3	TBC
HMX97040	4.0mm	19x7NR	840	8.2	TBC
HMX97050	5.0mm	19x7NR	1,275	12.5	0.106
HMX97060	6.0mm	19x7NR	1,835	18.0	0.150
HMX97070	7.0mm	19x7NR	2,498	24.5	0.205
HMX97080	8.0mm	19x7NR	3,263	32.0	0.263
HMX97090	9.0mm	19x7NR	4,130	40.5	0.332
HMX97100	10.0mm	19x7NR	5,099	50.0	0.407
HMX97120	12.0mm	19x7NR	7,342	72.0	0.592
HMX97140	14.0mm	19x7NR	9,993	98.0	0.779
HMX97160	16.0mm	19x7NR	13,052	128.0	0.978
HMX97190	19.0mm	19x7NR	16,519	162.0	1.309
HMX97200	20.0mm	19x7NR	20,394	200.0	1.608
HMX97220	22.0mm	19x7NR	24,677	242.0	1.949
HMX97240	24.0mm	19x7NR	29,368	288.0	2.316
HMX97260	26.0mm	19x7NR	34,466	338.0	2.722
HMX97280	28.0mm	19x7NR	39,973	392.0	3.150



hamma® X G316 19x7(NR) is a non-rotating wire rope, widely used in the Elevator, Crane and Winch industry.

hamma® X G316 19x7(NR) the middle core is laid an opposite way to the outer layer so when put under load the outside layer locks off on itself causing the wire rope not to rotate and therefore unravel.

This product is not widely stocked so please contact your local Arcus Wire Group office for availability.





# hamma<sup>®</sup> Mega

## Developed for the Grandest of Architectural Designs

hamma<sup>®</sup> Mega is extensively used in the architectural sector.

The hamma<sup>®</sup> Mega range delivers stainless wire ropes from 20.0mm upwards.

Previously unavailable in the industry, the hamma<sup>®</sup> Mega range was one of the first large diameter stainless steel wire ropes suitable for tensile architecture.

All hamma<sup>®</sup> products carry a  
**10-year warranty** against  
defects/workmanship from  
date of purchase.

See [www.arcuswire.com](http://www.arcuswire.com) for terms and conditions.



## hamma® Mega 1x37

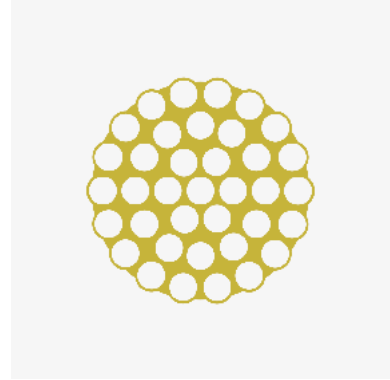
CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HMM37200	20.0mm	1x37	32,835	322	1.977
HMM37220	22.0mm	1x37	39,667	389	2.393
HMM37240	24.0mm	1x37	44,154	433	2.848
HMM37260	26.0mm	1x37	55,473	544	3.342
HMM37280	28.0mm	1x37	64,344	631	3.876

Available in stainless steel Grade 316 with 1×37 configurations for cable diameter 20mm – 28mm.  
hamma® Mega 1x37 Technical Data.

Cable material: AISI 316 Construction: Spiral strand Configuration:

1x 37= 1+ 6+ 12+18

Modulus of elasticity: 132 +/-10 kN/mm<sup>2</sup> Note: Limit tension is calculated at 60% of MBL.



## hamma® Mega 1x61

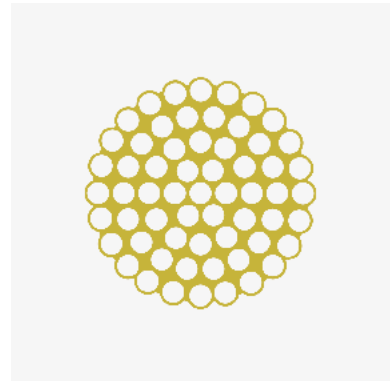
CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HMM61300	30.0mm	1x61	78,824	773	4.510
HMM61340	34.0mm	1x61	96,261	944	5.800
HMM61360	36.0mm	1x61	98,606	967	6.500
HMM61420	42.0mm	1x61	114,208	1,120	8.810

Available in stainless steel Grade 316 with 1×61 configurations for cable diameter 30mm – 42mm.  
hamma® Mega 1x37 Technical Data.

Cable material: AISI 316 Construction: Spiral strand Configuration:

1x 61= 1+ 6+ 12+18+24

Modulus of elasticity: 132 +/-10 kN/mm<sup>2</sup> Note: Limit tension is calculated at 60% of MBL.





## Swage Tolerance Guide

WIRE Ø IN / MM	BEFORE SWAGE Ø MM	AFTER SWAGE Ø MM	TOLERANCE
1/16	4.00	3.50	
1.5mm	4.00	3.50	
3/32	5.54	4.82	
2.5mm	5.54	4.82	
1/8	6.35	5.56	+0.00
3mm	6.35	5.56	-0.12
5/32	7.54	6.35	
4mm	7.54	6.35	
3/16	9.12	7.92	
5mm	9.12	7.92	
7/32	10.84	9.52	
1/4	12.55	11.12	+0.00
6mm	12.55	11.12	-0.18
9/32	14.30	11.12	
7mm	14.30	12.70	
5/16	16.13	12.70	
8mm	16.13	14.30	
9mm	17.85	14.30	+0.00
3/8	17.85	15.87	-0.20
10mm	17.85	15.87	
7/16	19.84	17.47	
11mm	19.84	17.47	
12mm	21.44	19.05	
1/2	21.44	19.05	+0.00
14mm	25.00	22.22	-0.23
9/16	25.00	22.22	
5/8	28.17	25.40	+0.00
16mm	28.17	25.40	-0.25
3/4	34.52	31.75	+0.00
19mm	34.52	31.75	-0.30

## 300t Test Bed

For all testing, pre-stretching and destruction of fittings and assemblies





# hamma<sup>®</sup> G304

## Stainless Steel Wire Rope

Up until the late 1980's, G304 was the standard grade for stainless steel wire ropes and strand.

However, testing conducted by Arcus Wire Group in the late 1980's, found that when compared to G316 (hamma X Strand), the higher breaking strength of G304 was offset by other factors that made G316 more attractive for a wide range of applications.

These factors include:

- Eliminated issues with dissimilar metals when swaging with marine/architectural fittings which are mostly manufactured from G316;
- Lower fatigue rate; and
- More suitable as a Marine grade and less likely to Tea Stain.

Due to these key factors, G304 is ideally suited to applications where strength is important or where there is minimal movement (thereby reducing the impact of fatigue) and in non-coastal locations.

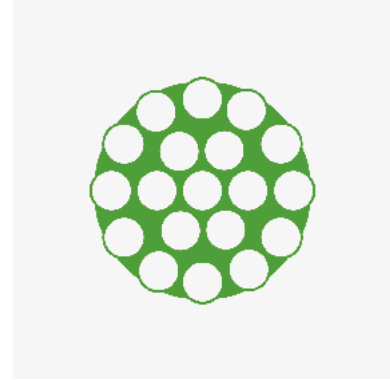
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products!



**hamma® G304 1x19**

hamma® G304 1x19 is a strand containing 19 wires

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HM419020	2.0mm	1x19	378	3.7	0.020
HM419030	3.0mm	1x19	851	8.3	0.045
HM419040	4.0mm	1x19	1,510	14.8	0.080
HM419050	5.0mm	1x19	2,366	23.2	0.126
HM419060	6.0mm	1x19	3,416	33.5	0.180
HM419070	7.0mm	1x19	4,650	45.6	0.248
HM419080	8.0mm	1x19	6,067	59.5	0.318
HM419090	9.0mm	1x19	7,678	75.3	0.407
HM419100	10.0mm	1x19	9,483	93.0	0.511
HM419120	12.0mm	1x19	13,664	134.0	0.739
HM419140	14.0mm	1x19	18,559	182.0	0.865
HM419160	16.0mm	1x19	24,269	238.0	1.314
HM419190	19.0mm	1x19	34,300	338.0	1.966
HM419220	22.0mm	1x19	45,877	450.0	2.404



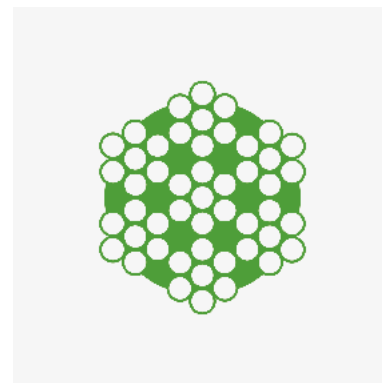
hamma® G304 1x19 is a strand containing 19 wires. 1x19 consists of a single strand with 19 wires. It is very stiff and is suitable for fixed "straight line" rigging only such as for standing rigging, mast stays and applications where there is no flexibility required. hamma® G304 1x19 wire rope has good corrosion resistance and has a higher MBL than G316 in most cases and is best used in industrial applications.

This product is not widely stocked so please contact your local distributor for availability.

# hamma® G304 7x7

hamma® G304 7x7 is made up of 7 strands with 7 wires

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HM477008	0.8mm	7x7	38	0.4	0.003
HM477010	1.0mm	7x7	59	0.6	0.004
HM477012	1.2mm	7x7	86	0.8	0.006
HM477016	1.6mm	7x7	153	1.5	0.010
HM477020	2.0mm	7x7	258	2.5	0.017
HM477024	2.4mm	7x7	344	3.4	0.023
HM477030	3.0mm	7x7	581	5.7	0.037
HM477032	3.2mm	7x7	661	6.5	0.042
HM477040	4.0mm	7x7	1,030	10.1	0.066
HM477050	5.0mm	7x7	1,621	15.9	0.105
HM477060	6.0mm	7x7	2,335	22.9	0.151
HM477070	7.0mm	7x7	3,171	31.1	0.203
HM477080	8.0mm	7x7	4,140	40.6	0.271
HM477090	9.0mm	7x7	5,241	51.4	0.318
HM477100	10.0mm	7x7	6,475	63.5	0.410
HM477120	12.0mm	7x7	9,330	91.5	0.577
HM477140	14.0mm	7x7	12,644	124.0	0.796
HM477160	16.0mm	7x7	16,621	163.0	0.997
HM477180	18.0mm	7x7	21,006	206.0	1.289
HM477200	20.0mm	7x7	25,901	254.0	1.587
HM477220	22.0mm	7x7	31,305	307.0	1.947
HM477240	24.0mm	7x7	37,322	366.0	2.311
HM477260	26.0mm	7x7	43,746	429.0	2.711
HM477280	28.0mm	7x7	50,782	498.0	3.146
HM477320	32.0mm	7x7	66,282	650.0	4.056



hamma® G304 7x7 is made up of 7 strands with 7 wires. hamma® G304 7x7 is a Semi-Rigid wire rope and not as easily bent as 7x19. hamma® G304 7x7 is an excellent choice for fixed rigging applications such as balustrading and safety barrier rails. hamma® G304 7x7 has very limited applications as a running or working rope. Known for its superior quality, this is an essential product for the following applications.

- Balustrading
- Shade Structure's and Tensile Membranes
- Marine
- Offshore Oil & Gas
- Mining
- Cable Net Structures

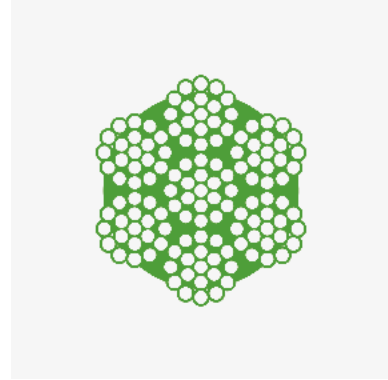
Wire lengths are available in the following Cut, 305m, 500m, 1000m and 3000m. Other lengths are available upon request.

This product is not widely stocked so please contact your local distributor for availability.

# hamma® G304 7x19

hamma® G304 7X19 consists of 7 strands of 19 wires

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HM479016	1.6mm	7x19	153	1.5	0.010
HM479020	2.0mm	7x19	239	2.3	0.017
HM479024	2.4mm	7x19	344	3.4	0.024
HM479030	3.0mm	7x19	538	5.3	0.037
HM479032	3.2mm	7x19	612	6.0	0.043
HM479040	4.0mm	7x19	956	9.4	0.067
HM479048	4.8mm	7x19	1,344	13.2	0.096
HM479050	5.0mm	7x19	1,499	14.7	0.104
HM479060	6.0mm	7x19	2,162	21.2	0.150
HM479070	7.0mm	7x19	2,937	28.8	0.208
HM479080	8.0mm	7x19	3,834	37.6	0.262
HM479090	9.0mm	7x19	4,854	47.6	0.340
HM479100	10.0mm	7x19	5,996	58.8	0.424
HM479120	12.0mm	7x19	8,627	84.6	0.597
HM479140	14.0mm	7x19	11,727	115.0	0.790
HM479160	16.0mm	7x19	15,296	150.0	1.438
HM479180	18.0mm	7x19	19,375	190.0	1.290
HM479200	20.0mm	7x19	23,963	235.0	1.628
HM479220	22.0mm	7x19	28,960	284.0	1.969
HM479240	24.0mm	7x19	34,466	338.0	2.368
HM479260	26.0mm	7x19	40,483	397.0	2.756
HM479280	28.0mm	7x19	47,009	461.0	3.156
HM479320	32.0mm	7x19	61,387	602.0	4.087



hamma® G304 7x19 is a flexible wire rope and easily bent for a thimble eye termination. hamma® G304 7x19 is a versatile construction of stainless steel wire rope. hamma® G304 7x19 can be used in either fixed rigging or for limited working rope applications such as on a boat winch. Known for its superior quality, this is an essential product for the following industries.

- Balustrading
- Shade Structure's and Tensile Membranes
- Marine
- Yacht Rigging
- Offshore Oil & Gas
- Mining
- Cable Net Structures
- Irrigation Bore Pump Cables

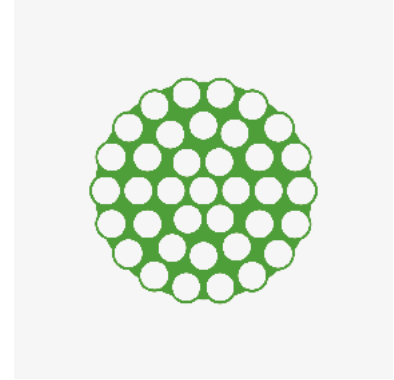
Wire lengths are available in the following Cut, 305m, 500m, 1000m and 3000m. Other lengths are available on request.

This product is not widely stocked so please contact your local distributor for availability.

# hamma® G304 1x37

hamma® G304 1x37 is a rigid low stretch architectural cable with a high MBL

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HM437050	5.0mm	1x37	2,315	22.7	0.124
HM437060	6.0mm	1x37	3,334	32.7	0.178
HM437070	7.0mm	1x37	4,528	44.4	0.242
HM437080	8.0mm	1x37	5,925	58.1	0.316
HM437090	9.0mm	1x37	7,495	73.5	0.401
HM437100	10.0mm	1x37	9,249	90.7	0.494
HM437120	12.0mm	1x37	13,358	131.0	0.712
HM437140	14.0mm	1x37	18,151	178.0	0.969
HM437160	16.0mm	1x37	23,657	232.0	1.266
HM437180	18.0mm	1x37	29,980	294.0	1.602
HM437200	20.0mm	1x37	37,016	363.0	1.977
HM437220	22.0mm	1x37	44,766	439.0	2.393
HM437240	24.0mm	1x37	53,229	522.0	2.848
HM437260	26.0mm	1x37	62,509	613.0	3.342
HM437280	28.0mm	1x37	72,502	711.0	3.876



hamma® G304 1x37 is a rigid low stretch architectural cable with a high MBL. G304 wire rope has good corrosion resistance and has a higher MBL than G316 in most cases and is best used in industrial applications.

#### Applications

- Aircraft cables
- Automotive industry
- Suspension bridges

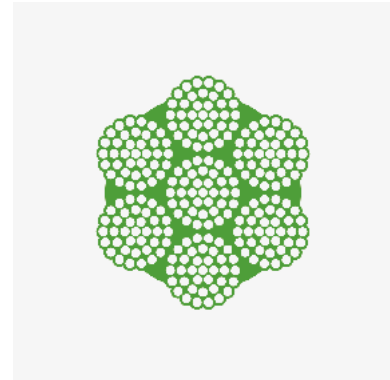
Wire lengths are available in the following Cut, 305m, 500m, 1000m and 3000m. Other lengths are available upon request.

This product is not widely stocked so please contact your local distributor for availability.

# hamma® G304 7x37

hamma® G304 7x37 consists of 7 strands each consisting of 37 wires

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HM473050	5.0mm	7x37	1,438	14.1	0.098
HM473060	6.0mm	7x37	2,070	20.3	0.144
HM473070	7.0mm	7x37	2,814	27.6	0.198
HM473080	8.0mm	7x37	3,681	36.1	0.269
HM473090	9.0mm	7x37	4,660	45.7	0.329
HM473100	10.0mm	7x37	5,751	56.4	0.409
HM473120	12.0mm	7x37	8,280	81.2	0.581
HM473140	14.0mm	7x37	11,217	110.0	0.810
HM473160	16.0mm	7x37	14,684	144.0	1.027
HM473180	18.0mm	7x37	18,661	183.0	1.340
HM473200	20.0mm	7x37	22,944	225.0	1.618
HM473220	22.0mm	7x37	27,838	273.0	1.856
HM473240	24.0mm	7x37	33,141	325.0	2.230
HM473260	26.0mm	7x37	38,851	381.0	2.752
HM473280	28.0mm	7x37	45,071	442.0	3.184
HM473320	32.0mm	7x37	58,838	577.0	4.098



hamma® G304 7x37 consists of 7 strands each consisting of 37 single wires where all wires in all strands have the same diameter. It is a flexible wire rope available in cable diameters 5mm – 32mm. G304 wire rope has good corrosion resistance and has a higher MBL than G316 in most cases and is best used in industrial applications.

#### Applications

- Crane rope
- General engineering applications
- Hoist rope

Wire lengths are available in the following Cut, 305m, 500m, 1000m and 3000m. Other lengths are available upon request.

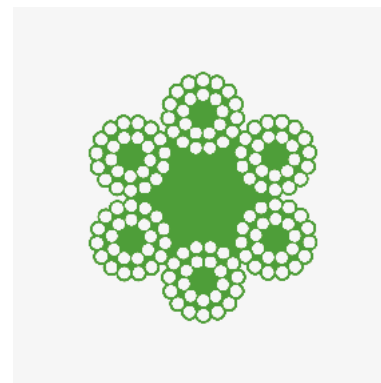
This product is not widely stocked so please contact your local distributor for availability.



## hamma® G304 6x24 (FC)

hamma® G304 6x24fc feature with high flexibility and low unit weight

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HM424060	6.0mm	6x24fc	1,825	17.9	0.121
HM424070	7.0mm	6x24fc	2,478	24.3	0.170
HM424080	8.0mm	6x24fc	3,233	31.7	0.198
HM424090	9.0mm	6x24fc	4,089	40.1	0.254
HM424100	10.0mm	6x24fc	5,048	49.5	0.319
HM424120	12.0mm	6x24fc	7,271	71.3	0.461
HM424140	14.0mm	6x24fc	9,901	97.1	0.647
HM424160	16.0mm	6x24fc	12,930	126.8	0.813
HM424180	18.0mm	6x24fc	16,366	160.5	1.036
HM424200	20.0mm	6x24fc	20,201	198.1	1.277
HM424220	22.0mm	6x24fc	24,443	239.7	1.571
HM424240	24.0mm	6x24fc	29,093	285.3	1.812
HM424260	26.0mm	6x24fc	34,140	334.8	2.111
HM424280	28.0mm	6x24fc	39,596	388.3	2.448
HM424320	32.0mm	6x24fc	51,720	507.2	3.198



hamma® G304 6x24fc feature high flexibility and low unit weight. On the main fibre core (polypropylene) six strands are laid, in which the fibre core is used instead of central wire. G304 wire rope has good corrosion resistance and has a higher MBL than G316 in most cases and is best used in industrial applications.

### Applications

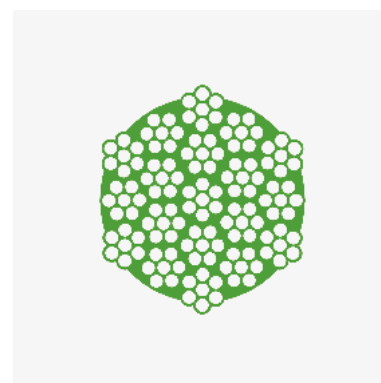
- Springs
- Topping lifts
- Mooring ropes
- Towing ropes
- Winchrope

This product is not widely stocked so please contact your local distributor for availability.

## hamma® G304 19x7 (NR)

hamma® G304 19x7 is Non-Rotating (NR) wire rope

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HM497050	5.0mm	19x7NR	1,438	14.1	0.106
HM497060	6.0mm	19x7NR	2,070	20.3	0.150
HM497070	7.0mm	19x7NR	2,814	27.6	0.205
HM497080	8.0mm	19x7NR	3,681	36.1	0.263
HM497090	9.0mm	19x7NR	4,660	45.7	0.332
HM497100	10.0mm	19x7NR	5,751	56.4	0.407
HM497120	12.0mm	19x7NR	8,280	81.2	0.592
HM497140	14.0mm	19x7NR	11,319	111.0	0.779
HM497160	16.0mm	19x7NR	14,684	144.0	0.978
HM497180	18.0mm	19x7NR	18,661	183.0	1.309
HM497200	20.0mm	19x7NR	23,046	226.0	1.608
HM497220	22.0mm	19x7NR	27,838	273.0	1.949
HM497240	24.0mm	19x7NR	33,141	325.0	2.316
HM497260	26.0mm	19x7NR	38,851	381.0	2.722
HM497280	28.0mm	19x7NR	45,071	442.0	3.150



hamma® G304 19x7 is rotation resistant wire rope. Its rotation-resistant characteristic is achieved by laying six strands around a core strand in one direction, then laying 12 strands around the first operation in the opposite direction. Its general application is where a single-part hoist rope is used to lift a free load or where rotation resistant properties are required.

This product is not widely stocked so please contact your local distributor for availability.



# hamma<sup>®</sup> Coated Wire

## Coated Wire Rope

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Ideal for a variety of applications. hamma<sup>®</sup> Coated is a PVC, Nylon or Polyurethane coated hamma<sup>®</sup> X Strand wire rope.

Applications include balustrading design and installation through to industrial use, construction purposes, and more.

When selecting hamma<sup>®</sup> Coated wire rope it is important to consider the following key factors:

- Breaking strains provided for coated wire rope are indicative only.
- Information should only be used as a guide; products may vary according to manufacturing specifications.
- Check tensile strength (Grade) and Minimum Breaking Strain (MBS) at time of order to confirm appropriateness of application.

# hamma® Coated 1x7

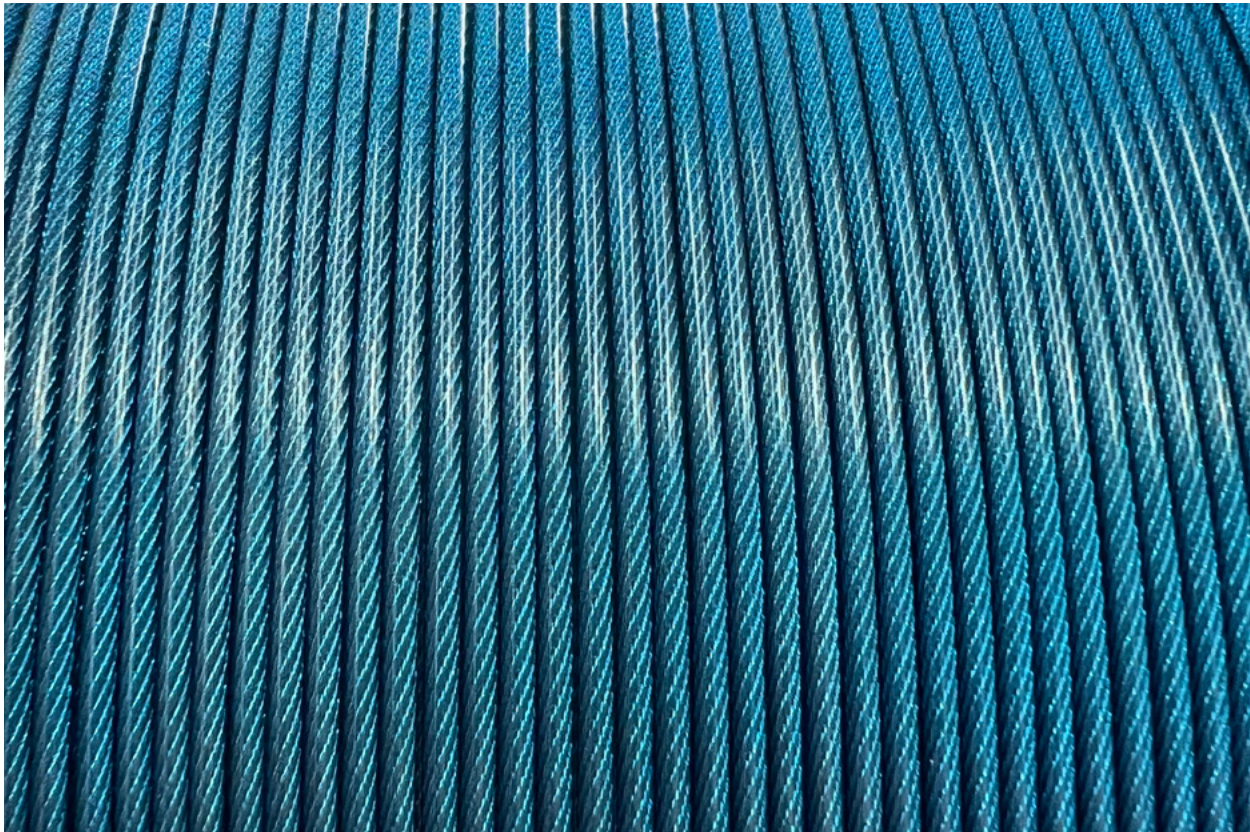
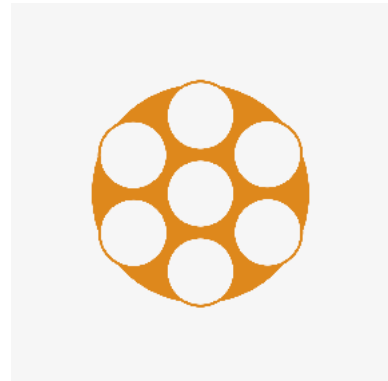
hamma® Coated 1x7 is coated hamma® X Strand Wire

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	WEIGHT P/M (KG)	MBS (KN)	COATING TYPE	COATING COLOUR
HCCL417004	0.4mm - 0.7mm	1x7	16	0.001	0.1	Nylon	Clear
HCCL417006	0.6mm - 0.8mm	1x7	25	0.002	0.2	Nylon	Clear
HCCL417007	0.7mm - 0.8mm	1x7	48	0.003	0.4	Nylon	Clear
HCCL417008	0.8mm - 1.0mm	1x7	63	0.004	0.6	Nylon	Clear
HCCL417010	1.0mm - 1.2mm	1x7	100	0.005	0.9	Nylon	Clear
HCCL417012	1.2mm - 1.5mm	1x7	141	0.008	1.3	Nylon	Clear

hamma® Coated 1x7 is a PVC coated wire which has the hamma® X Strand coated with UV stabilised PVC. The wire strand has the same workings of a 1x7 strand which is non-flexible. It is available in many internal and external diameter combinations.

- Construction 1x7

Available in Nylon coating in clear colour.



# hamma® Coated 1 x 19

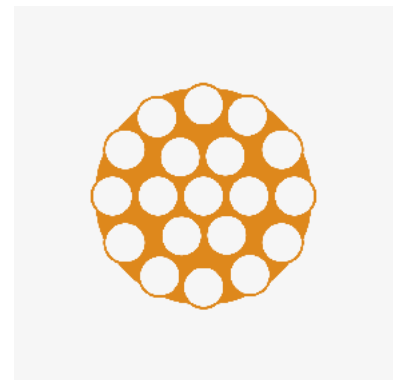
hamma® Coated 1x19 is coated hamma® X Strand Wire

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	WEIGHT P/M (KG)	MBS (KN)	COATING TYPE	COATING COLOUR
HCBK419024	2.4mm - 3.2mm	1x19	545	0.029	5.3	PVC	Black
HCBK419032	3.2mm - 4.8mm	1x19	968	0.053	9.5	PVC	Black
HCBK419040	4.0mm - 5.6mm	1x19	1,510	0.081	14.8	PVC	Black
HCBL419032	3.2mm - 4.8mm	1x19	968	0.053	9.5	PVC	Blue
HCCL419032	3.2mm - 4.0mm	1x19	968	0.052	9.5	PVC	Clear
HCRE419024	2.4mm - 3.2mm	1x19	545	0.039	5.3	PVC	Red
HCRE419032	3.2mm - 4.8mm	1x19	968	0.053	9.5	PVC	Red
HCWH419024	2.4mm - 4.0mm	1x19	545	0.029	5.3	PVC	White
HCWH419032	3.2mm - 4.8mm	1x19	968	0.053	9.5	PVC	White
HCBK619024	2.4mm - 3.2mm	1x19	483	0.029	4.7	PVC	Black
HCBK619032	3.2mm - 4.8mm	1x19	861	0.053	8.4	PVC	Black
HCBK619064	6.4mm - 8.0mm	1x19	3,442	0.211	33.4	PVC	Black
HCCL619020	2.0mm - 2.4mm	1x19	336	0.021	3.3	Nylon	Clear
HCWH619032	3.2mm - 4.8mm	1x19	861	0.053	8.4	PVC	White
HCWH619040	4.0mm - 5.6mm	1x19	1,340	0.081	13.1	PVC	White

hamma® Coated 1x19 is a PVC coated wire which has the hamma® X coated with UV stabilised PVC. The wire strand has the same workings of a 1x19 strand which is non-flexible. It is available in many internal and external diameter combinations.

#### Applications:

- Yacht Lifelines
- Shade Structures
- Architectural Rigging



# hamma® Coated 7x7

hamma® Coated 7x7 is coated hamma® X Strand Wire

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	WEIGHT P/M (KG)	MBS (KN)	COATING COLOUR	COATING TYPE
HCWH677032	3.2mm - 5.6mm	7x7	612	0.043	6	White	PVC
HCWH677040	4.0mm - 6.4mm	7x7	1,030	0.068	10.1	White	PVC
HCWH677048	4.8mm - 7.2mm	7x7	1,493	0.098	14.6	White	PVC
HCWH677064	6.4mm - 8.0mm	7x7	2,320	0.172	22.8	White	PVC
HCBL477020	2.0mm - 4.0mm	7x7	258	0.018	2.5	Blue	PVC
HCBL477024	2.4mm - 3.2mm	7x7	344	0.024	3.4	Blue	PVC
HCBL477032	3.2mm - 4.0mm	7x7	661	0.043	6.5	Blue	PVC
HCCL477012	1.2mm - 1.5mm	7x7	86	0.007	0.8	Clear	PVC
HCCL477016	1.6mm - 2.4mm	7x7	153	0.011	1.5	Clear	PVC
HCCL477024	2.4mm - 3.2mm	7x7	344	0.024	3.4	Clear	PVC
HCCL477032	3.2mm - 4.0mm	7x7	661	0.043	6.5	Clear	PVC
HCWH477032	3.2mm - 5.6mm	7x7	661	0.043	6.5	White	PVC
HCWH477040	4.0mm - 6.4mm	7x7	1,030	0.068	10.1	White	PVC
HCWH477048	4.8mm - 7.2mm	7x7	1,430	0.098	14.1	White	PVC
HCBL677016	1.6mm - 2.4mm	7x7	153	0.011	1.5	Blue	PVC
HCBL677020	2.0mm - 4.0mm	7x7	258	0.018	2.5	Blue	PVC
HCBL677024	2.4mm - 3.2mm	7x7	344	0.024	3.4	Blue	PVC
HCCL677020	2.0mm - 2.4mm	7x7	258	0.018	2.5	Clear	PVC

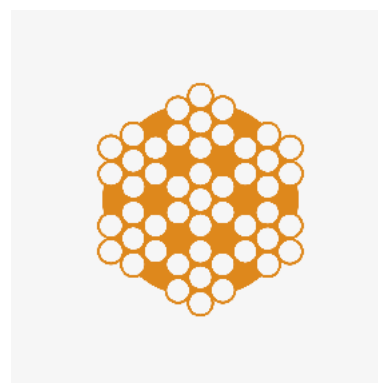
hamma® Coated 7x7 is a PVC coated wire which has the hamma® X Strand coated with UV stabilised PVC. The wire strand has the same workings of a 7x7 strand which is semi-flexible. It is available in many internal and external diameter combinations.

Applications:

- Yacht Lifelines
- Shade Structures
- Architectural Rigging
- Fishing Line
- Shark traces
- Construction 7x7

hamma® Coated 7x7 is available in many internal and external diameter combinations.

Polyurethane is used for applications that have many friction points, the polyurethane coating can protect the wire from overuse, wear and tear in a particular spot. i.e. wire rope used in a pulley.



# hamma® Coated 7 x 19

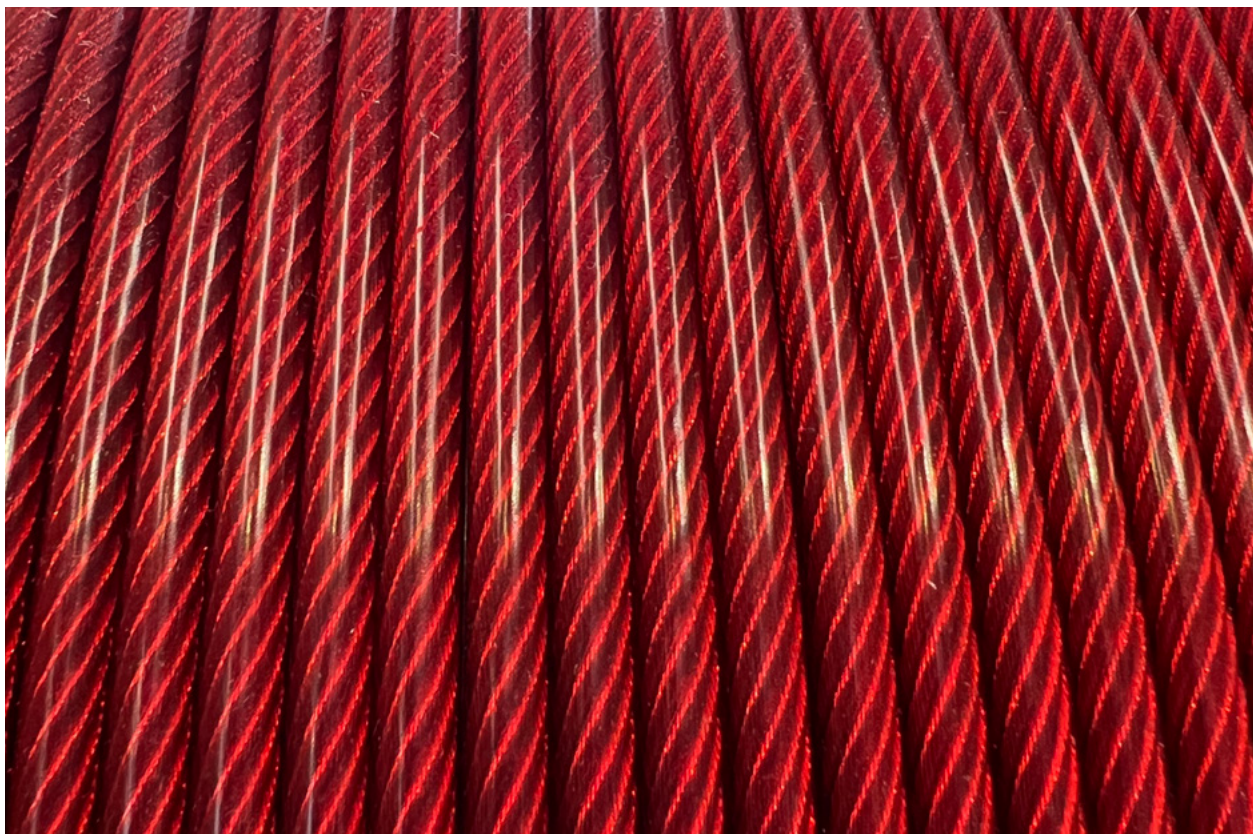
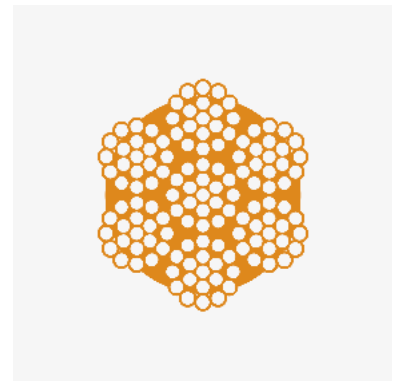
hamma® Coated 7x19 is coated hamma® X Strand Wire

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	WEIGHT P/M (KG)	MBS (KN)	COATING COLOUR	COATING TYPE
HCCL479016	1.6mm - 2.0mm	7x19	153	0.011	1.5	Clear	PVC
HCCL479024	2.4mm - 3.2mm	7x19	344	0.025	3.4	Clear	PVC
HCPRE479030	3.0mm - 5.0mm	7x19	538	0.039	5.3	Red	PUR
HCWH679032	3.2mm - 4.8mm	7x19	611	0.044	6	White	PVC
HCBL679032	3.2mm - 4.0mm	7x19	611	0.044	6	Blue	PVC
HCBL479032	3.2mm-4.0mm	7x19	612	0.044	6	Blue	PVC
HCCL479032	3.2mm - 4.0mm	7x19	612	0.044	6	Clear	PVC
HCCL679055	5.5mm - 7.2mm	7x19	1,807	0.134	17.7	Clear	PVC
HCCL679080	8.0mm - 10.0mm	7x19	3,396	0.370	33.3	Clear	PVC

hamma® Coated 7x19 is a PVC coated wire which has the hamma® X Strand coated with UV stabilised PVC. The wire strand has the same workings of a 7x19 strand which is very flexible. It is available in many internal and external diameter combinations.

Applications:

- Hang gliding
- Light Aircraft
- Construction 7x19







# hamma<sup>®</sup> Duplex

## Heavy Duty Stainless Steel Wire Rope

The latest addition to the hamma<sup>®</sup> range of stainless steel wire rope is hamma<sup>®</sup> Duplex 2205. Duplex is a material suited to applications where high strength, high corrosive resistance and long service life is required.

### Characteristics of hamma<sup>®</sup> Duplex Wire Rope

#### HIGH BREAKING FORCE

(The breaking force shall be specified as a minimum breaking force only)

- hamma<sup>®</sup> Duplex Wire Rope supports the EN 12 385-4: Steel wire rope standard
- Breaking force higher than international standards can be provided upon request. As a guide, hamma<sup>®</sup> Duplex Wire Rope has approximately 20% higher breaking force than AISI 304 grade.

#### HIGH RESISTANCE AGAINST PITTING AND CREVICE CORROSION

- Pitting resistance of hamma<sup>®</sup> Duplex Wire Rope is approximately 30% higher than AISI 316 grade.
- Better crevice corrosion resistance than that of Austenitic grade in similar working conditions. (No crevice corrosion up to 1,000ppm of Chlorine).

#### HIGH RESISTANCE AGAINST STRESS CORROSION CRACKING

- Compared with Austenitic grade, hamma<sup>®</sup> Duplex Wire Rope withstands more than 100°C elevated temperature in similar working conditions.

#### EXTRA BRIGHT AND CLEAN SURFACE.

- Stainless steel provides for ease of maintenance.

#### DUPLEX STANDARD STEEL CHEMICAL REQUIREMENTS

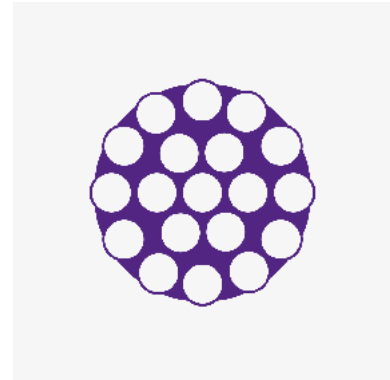
Chemical Composition (Wt.Pct.) (Unit: wt%)

SPEC.	GRADE	RANGE	C	SI	MN	P	S	CR	NI	MO	MO	REMARK
EN10088-3 :2005	X2CrNiMoN22-5- 31.4462	Min						21.0	4.50	2.50	0.10	2205
		Max	0.030	1.00	2.00	0.035	0.015	23.0	6.50	3.50	0.22	
ASTM A240/A240M	S31803	Min						21.0	4.50	2.50	0.08	
		Max	0.030	1.00	2.00	0.030	0.020	23.0	6.50	3.50	0.20	

# hamma® Duplex 1x19

High Resistance Against Stress Corrosion Cracking

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HMD19010	1.0mm	1x19	95	0.9	0.005
HMD19020	2.0mm	1x19	379	3.7	0.020
HMD19030	3.0mm	1x19	853	8.4	0.045
HMD19040	4.0mm	1x19	1516	14.9	0.080
HMD19050	5.0mm	1x19	2,369	23.2	0.126
HMD19060	6.0mm	1x19	3,411	33.5	0.180
HMD19070	7.0mm	1x19	4,643	45.5	0.248
HMD19080	8.0mm	1x19	6,065	59.5	0.318
HMD19090	9.0mm	1x19	7,675	75.3	0.407
HMD19100	10.0mm	1x19	9,476	92.9	0.511
HMD19110	11.0mm	1x19	11,466	112	0.607
HMD19120	12.0mm	1x19	13,645	134	0.739
HMD19130	13.0mm	1x19	16,014	157	0.806
HMD19140	14.0mm	1x19	18,573	182	0.965
HMD19150	15.0mm	1x19	21,321	209	TBC
HMD19160	16.0mm	1x19	24,258	238	1.314
HMD19170	17.0mm	1x19	27,385	269	TBC
HMD19180	18.0mm	1x19	30,702	301	TBC
HMD19190	19.0mm	1x19	34,208	335	1.781
HMD19200	20.0mm	1x19	37,903	372	1.966
HMD19210	21.0mm	1x19	41,789	410	TBC
HMD19220	22.0mm	1x19	45,863	450	2.404



hamma® Duplex Wire Rope 1x19 has been developed for several key applications where Strength and Corrosion resistance are paramount.

- Architectural
- Shade Structure's and Tensile Membranes
- Marine
- Yacht Rigging
- Offshore Oil & Gas
- Subsea Engineering
- Mining
- Glass Facade
- Cable Net Structures
- Zoo Enclosures

hamma® Duplex Wire Rope is a market leader for Subsea, Architectural, Corrosive Environments and Swimming Pool applications.

Please note that MBS quoted is 1770.

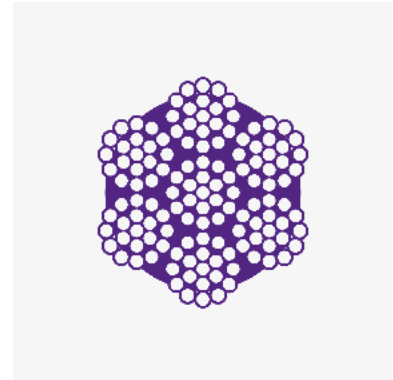
hamma® Duplex Wire Rope 1x19 maximum tensile strength grades N/mm for

- Grade 1960 Max: 2160
- Grade 2160 Max: 2160
- Grade 2300 Max: 2500

# hamma® Duplex 7x19

High Resistance Against Stress Corrosion Cracking

CODE	WIRE SIZE	CONSTRUCTION	MBS (KGF)	MBS (KN)	WEIGHT P/M (KG)
HMD79010	1.0mm	7x19	65	0.6	0.005
HMD79020	2.0mm	7x19	259	2.5	0.017
HMD79030	3.0mm	7x19	583	5.7	0.037
HMD79040	4.0mm	7x19	1,037	10.2	0.067
HMD79050	5.0mm	7x19	1,620	15.9	0.104
HMD79060	6.0mm	7x19	2,333	22.9	0.150
HMD79070	7.0mm	7x19	3,175	31.1	0.208
HMD79080	8.0mm	7x19	4,147	40.7	0.262
HMD79090	9.0mm	7x19	5,248	51.5	0.340
HMD79100	10.0mm	7x19	6,480	63.5	0.424
HMD79110	11.0mm	7x19	7,840	76.9	0.499
HMD79120	12.0mm	7x19	9,331	91.5	0.597
HMD79130	13.0mm	7x19	10,950	107.4	0.677
HMD79140	14.0mm	7x19	12,700	124.5	0.790
HMD79150	15.0mm	7x19	14,579	143.0	0.932
HMD79160	16.0mm	7x19	16,588	162.7	1.075
HMD79170	17.0mm	7x19	18,726	183.6	TBC
HMD79180	18.0mm	7x19	20,994	205.9	TBC
HMD79190	19.0mm	7x19	23,391	229.4	1.438
HMD79200	20.0mm	7x19	25,918	254.2	1.628
HMD79210	21.0mm	7x19	28,575	280.2	TBC
HMD79220	22.0mm	7x19	31,361	307.5	1.969



hamma® Duplex Wire Rope 7x19 has been developed for several key applications where Strength and Corrosion resistance are paramount.

- Architectural
- Shade Structure's and Tensile Membranes
- Marine
- Offshore Oil & Gas
- Subsea Engineering
- Mining
- Glass Facade
- Cable Net Structures
- Zoo Enclosures

hamma® Duplex Wire Rope is a market leader for Subsea, Architectural, Corrosive Environments and Swimming Pool applications.

Please note that MBS quoted is 1770.

hamma® Duplex Wire Rope 7x19 maximum tensile strength grades N/mm for

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ASSDA (Australian Stainless Steel Development Association) Fabricator Project of the Year Award 2022 for hamma® Duplex 2205 Cable Assembly Project - Israel Guiding System for Hydroelectric Power Station.

# Innovation At Our Core

With a focus on continuing to meet the changing needs of our customers and emerging technical developments in our industry, we've utilised our extensive working knowledge to design and develop new solutions.

Over the years our product innovation has included being the first mainstream supplier of G316 wire into Australia (which has now become industry standard) and launching the hamma® range of stainless steel wire rope and fittings in both G316 and Duplex 2205.

## G316

Arcus Wire Group was the first to bring G316 wire rope and strand to Australia. Up until the late 1980's, G304 was the standard grade. In association with Noakes Rigging, a leader in architectural and yacht rigging, Arcus Wire Group determined that G316 was a superior grade for yacht and architectural rigging.

Working in conjunction with KOS (Koreas Original Stainless), Arcus Wire Group designed and developed a new compacted strand to replace Dyform resulting in the release of hamma® Pro Strand in 2007.

Today the hamma® range is a market leader in stainless steel wire rope and fittings.

## LEADING ENVIRONMENTAL ACTION

In 2004 ASSDA (Australian Stainless Steel Development Association) published a technical report highlighting the value of recycling stainless steel. The report focused on the 100% recyclability of stainless steel and its valuable raw materials.

The report was a catalyst to Arcus Wire Group exploring potential solutions to introduce environmental improvements to the distribution of stainless steel wire rope.

At the time Arcus Wire Group used thousands of reels annually which were covered in thousands of metres of corflute plastic to protect the stainless steel during shipping. In addition, the reels were painted blue which required hundreds of litres of paint per year.

The team researched and tested a range of options culminating in a move to unpainted reels (made from sustainable wood) and natural cardboard sleeves for packaging. Both innovations delivered 100% recyclable solutions.

In addition, the team also finalised agreements with suppliers and customers for the removal of plastic din spools for all Arcus Wire Group supplied wire.

Today Arcus Wire Group continues to focus on delivering solutions to improve environmental outcomes. These include a recycling program for all relevant materials and supporting environmental awareness campaigns including Lisa Blair's record breaking sailing expeditions on her yacht 'Climate Action Now' with the supply of hamma® stainless steel wire and fittings.



# About Wire Rope

## What Wire Rope is...

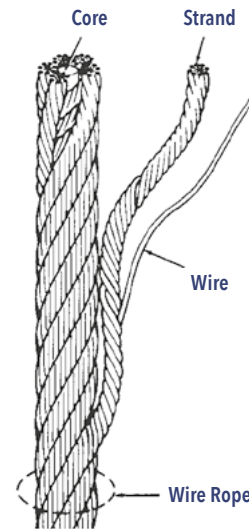
Typically wire rope consists of a core member, around which a number of multi-wired strands are "laid" or helically bent.

There are two general types of cores for wire rope - fiber cores and wire cores. The fiber core may be made from natural or synthetic fibers. The wire core can be an Independent Wire Rope Core (IWRC), or a Strand Core (SC).

The purpose of the core is to provide support and maintain the position of the outer strands during operation.

Any number of multi-wired strands may be laid around the core. The most popular arrangement is six strands around the core, as this combination gives the best balance.

The number of wires per strand may vary from 3 to 91, with the majority of wire ropes falling into the 7-wire, 19-wire, or 37-wire strand categories.



## The "lays" of Wire Rope

"Lay" of a wire rope is simply a description of the way wires and strands are placed during construction. Right lay and left lay refer to the direction of strands.

Right lay means that the strands pass from left to right across the rope. Left lay means just the opposite: strands pass from right to left.

Regular lay and lang lay describe the way wires are placed within each strand. Regular lay means that wires in the strands are laid opposite in direction to the lay of the strands. Lang lay means that wires are laid in the same direction as the lay of the strands.

Most of the wire rope used is right lay, regular lay. This specification has the widest range of applications and meets

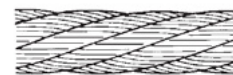
the requirements of most equipment. In fact, other lay specifications are considered exceptions and must be requested when ordering.

### HERE ARE SOME EXCEPTIONS

Lang lay is recommended for many excavating, construction, and mining applications, including draglines, hoist lines, dredgelines and other similar lines. Here's why: Lang lay ropes are more flexible than regular lay ropes. They also have greater wearing surface per wire than regular lay ropes.

Where properly recommended, installed and used, lang lay ropes can be used to greater advantage than regular lay ropes. However, lang lay ropes are more susceptible to the abuses of bending over small diameter sheaves, pinching in undersize sheave grooves, crushing when winding on

drums, and failing due to excessive rotation. Left lay rope has greatest usage in oil fields on rod and tubing lines, blast hole rigs, and spudders where rotation of right lay rope would loosen couplings. The rotation of a left lay rope tightens a standard coupling.



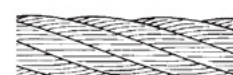
Left Lay REGULAR LAY



Left Lay LANG LAY



Right Alternative Lay



Right Lay REGULAR LAY



Right Lay LANG LAY

# Wire Rope Design & Construction

Wire ropes are composed of independent parts—wires, strands and cores that continuously interact with each other during service.

Wire rope engineers design those parts in differing steel grades, finishes and a variety of constructions to attain the best balance of strength, abrasion resistance, crush resistance, bending fatigue resistance and corrosion resistance for each application.

## STRAND CONSTRUCTIONS

Strands are designed with various combinations of wires and wire sizes to produce the desired resistance to fatigue and abrasion. Generally, a small number of large wires will be more abrasion resistant and less fatigue resistant than a large number of small wires.



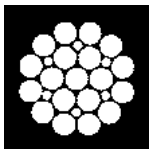
### SINGLE SIZE

The basic strand construction has wires of the same size wound around a centre.



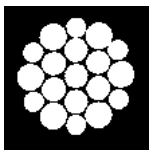
### SEALE

Large outer wires with the same number of smaller inner wires around a core wire. Provides excellent abrasion resistance but less fatigue resistance. When used with an IWRC, it offers excellent crush resistance over drums.



### FILLER WIRE

Small wires fill spaces between large wires to produce crush resistance and a good balance of strength, flexibility and resistance to abrasion.



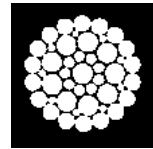
### WARRINGTON

Outer layer of alternately large and small wires provides good flexibility and strength but low abrasion and crush resistance.

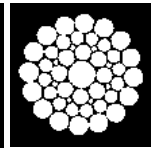
To select the best wire rope for each application, one must know the required performance characteristics for the job and enough about wire rope design to select the optimum combination of wire rope properties.

The following information is presented as a basic guide. Engineers and field service specialists are available to provide more specific recommendations.

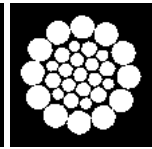
Many commonly used wire ropes use combinations of these basic constructions.



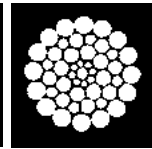
Seale Filler Wire



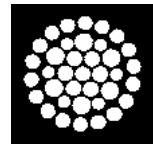
Filler Wire Seale



Warrington Seale



Seale Warrington Seale



### MULTIPLE OPERATION

One of the above strand designs may be covered with one or more layers of uniform-sized wires.

### FINISH

Bright finish is suitable for most applications. Galvanized finish is available for corrosive environments. Plastic jacketing is also available on some constructions.

### WIRE GRADES

The most common steel wire grades are: IPS (Improved Plow Steel), EIP (Extra Improved Plow Steel) and EEIP (Extra Extra Improved Plow Steel). Stainless Steels and other special grades are provided for special applications.

Most wire ropes are made with round wires. Both triangular and shaped wires are also used for special constructions.

Generally, the higher the strength of the wire, the lower its ductility will be.

# Stainless Steel Cleaning and Maintenance Guidelines

## CLEANING AND MAINTENANCE OF STAINLESS STEEL

The visual performance of stainless steel depends on five interrelated factors:

- Surface finish- smooth and clean and free of crevices
- Grade selection- appropriate and economical for the environment.
- Good design-rain washing of exterior surfaces and uniform draining with no ponding.
- Maintenance program- regular cleaning
- End user expectations

These technical guidelines outline and suggest how to perform and implement a maintenance program for the cleaning of stainless steel, for removing common stains and also some recommendations for remedial action if stains occur beyond regular maintenance or where such maintenance has not been performed.

## MAINTENANCE: ROUTINE REMOVAL OF GRIME

Stainless steel holds its appearance best when it is cleaned and washed regularly. When washing it is best to use a soap or detergent or 1% ammonia solution in warm, low chloride water with cloths or soft brushes to avoid the scratching of the surface. Smears will be reduced if the surface is dried afterwards. This treatment best applies to bare stainless steel. Bleaches or abrasive powders or pastes are not recommended. Simply wiping with a damp cloth is not adequate as it smears corrosive deposits without removing them. Routine cleaning prevents stubborn stains building up. As a rule of thumb, if a window nearby is to be cleaned, then so should the stainless.

- Do not use harsh scrubbing tools scourers or chemicals
  - Do not rub with steel wool or scrape with steel tools. Stainless steel wool scouring pads are available for heavy duty work. They will scratch the stainless steel surface but won't leave fragments to go rusty (cross contamination).
  - Do not use scourers or cleaning cloths that have been used on ordinary steel. If using a scourer, test an inconspicuous area first as you could end up with a bright polished spot that doesn't match the rest of the surface. A scourer (such as Scotchbrite™) is simply plastic fibres with abrasive glued to the fibres. It will scratch the surface.
  - Do not rub plastic or other scourers across the grain of brushed or finished surfaces as this will form crevices which will trap contaminants and may cause corrosion.
  - Do not use concentrated bleach or hydrochloric acid-based cleaning products.
  - Do not drag rough items across a stainless surface. Remember that grit under smooth objects can scratch quite badly.
  - Avoid extended contact with salts or carbon steel items especially if wet. All can stain.

## REMOVING SPECIFIC STAINING

The following procedures are recommended for getting rid of the most common types of staining.

## FINGERPRINTS, OIL & GREASE AND OTHER ORGANIC CONTAMINATION

If mild detergents or strong alkaline formulations don't shift finger marks, you can remove them with glass cleaner on a soft cloth. Alternatively, you can use a small amount of alcohol, methylated spirits, acetone, mineral turpentine or eucalyptus oil. Then rinse with water then preferably dry.

You can give longer protection to high traffic areas by lightly rubbing with olive oil or baby oil followed by a polish and shine using a soft cloth. Proprietary formulations including lanolin based gels are available and are used extensively by the marine industry.

## REMOVING PAINT

Apply paint stripper, taking care to follow all safety instructions. You may need to use a nylon brush or a scourer, but avoid metal scrapers as they will damage the surface.

## ADHERENT SCALES AND MORTAR

Cement and mortar splashes should be washed off immediately before they set. Scales from hard water and dried mortar can be removed chemically but not using chemicals that contain hydrochloric acid. Hot 25% acetic acid (vinegar) or warm 10% phosphoric acids are very effective. Following the acid wash, the surface should be neutralised with dilute ammonia or sodium bicarbonate solution, rinsed and dried.

## RUST MARKS (TEA STAIN)

The brown surface stains that can occur on stainless steel during the atmospheric exposure are simply cosmetic rust stains. This brown 'tea staining' on stainless steels will not progress to potential structural damage as could occur with a carbon steel structure. As a first step, apply a chalk based, bleach free, cream cleanser with a soft damp cloth and rub gently. If the mark still won't shift, it might be necessary to use a proprietary stainless steel cleaner. These are usually based on dangerous chemicals (such as phosphoric, oxalic or sulphuric acids) and must be handled with care according to the manufacturer's directions. After cleaning it is important to neutralise the acid with a 1% ammonia or sodium bicarbonate solution, rinse with clean water and wipe dry. If the rust has pitted the surface, it can be repaired with professional polishing and expert advice.

## REMEDIAL WORK: CLEANING RUST STAINED FLAT SURFACES

Early action after the onset of tea staining is desirable, before the appearance of the underlying surface is changed. If the surface is pitted then it is probable that it will require mechanical repolishing. After mechanically cleaning off tea staining, it is preferable to passivate the surface by using nitric acid gel or, if the item is portable, by immersion in a nitric acid bath.

For marine exposures, passivation is very strongly recommended. In contrast to other acids, nitric acid is a strong, oxidising acid cleaner that has the added advantage that it is a passivating agent. The Nickel Institute has suggested that rust may be removed by the use of a 10% phosphoric oxalic acid followed by a 1% ammonia solution neutralisation and then rinse with water.

Alternatively, a mild acid based cleaner such as sulphuric acid (used in some saucepan cleaners) can be used with some care to avoid local changes in appearance.

Never, ever use hydrochloric or sulphuric acids. There are also proprietary chemical cleaning treatments often based on citric acid or other cleaning chelating compounds. Although their agents passivate in the sense of removing free iron and other foreign matter, they do not augment the surface oxide film. Use of liquid acids on site is generally unsatisfactory as contact time is short and the acid may run off and damage adjacent components. Unlike the hydrofluoric acid pickling process used after welding, nitric acid passivation process does not normally change the surface appearance of stainless steel, although it may cloud a mirror polish finish. Careful trials on inconspicuous areas are recommended prior to full scaling. Arcus Wire Group uses electro-polishing and is also used by some contractors to smooth rough edges and both clean and passivate the surface.

## AFTERWARDS- PREVENTION OF RECURRENCE

If tea staining has occurred, one or more of the five factors outlined in the introduction have not been considered carefully enough when the wire was designed or manufactured. To improve the incidence of recurrence you can take the following steps:

- Increase the frequency of maintenance
- Check that the product is suitable for the application

- Replace part with a more suitable product for the application/environment
- Replace the part with a more suitable grade of stainless steel

If consideration of these steps indicates an uneconomic result stainless can then be painted. Paint systems using lacquers and polyurethane top coats are available and have been used successfully, but care and understanding is required. Painting the stainless steel is a step that should only be used as the last option as it is irreversible.

Below is a cleaning schedule that is recommended by the stainless steel industry and also Arcus Wire Group. It is important to note that every environment is different, so if you have any questions about cleaning, care and maintenance of stainless steel make sure you contact Arcus Wire Group and get the right advice.

### STAINLESS STEEL CLEANING SCHEDULE

ENVIRONMENT	DISTANCE FROM COASTLINE	CLEANING SCHEDULE
Mild	15km+	Every 12 months
Moderate	1-5km	Every 4-6 months
Marine/Industrial/Urban	500m	Every 3 months
Severe Marine/Industrial/Busy Urban	500m	Weekly

Email all recorded documentation of inspections including photos to sales@arcuswire.com using the project name and date as the reference.

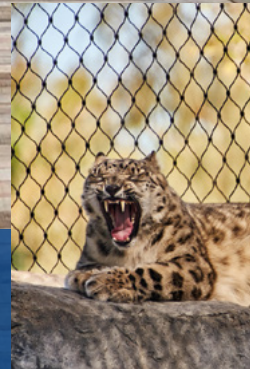
DATE	ACTIONED BY	SUMMARY	TIME STAMPED PHOTO OR EXPERT REPORT





# The go-to product of choice for stainless steel mesh solutions

Available exclusively from Arcus Wire Group – Australia’s leading supplier of stainless steel wire rope and fittings



Our flexi-mesh range is the leading material used to create lightweight structures including balustrades, fall protection screens, greenwalls and facades.

Manufactured from high quality Korean made G316 stainless steel, flexi-mesh has a high tensile strength and relatively low weight.

It’s unique tensile properties and ability to span long distances minimises the requirements for supporting cables and attachments, reducing overall project costs.

Main Image: Port Campbell Pedestrian Bridge  
Client: Parks Victoria

- Fully Engineered
- Structural Design Certification approved
- Meets Australian / New Zealand Standard AS/NZS 1170. 1 :2002 – suitable for areas susceptible to crowding
- Meets the Building Code of Australia (BCA) National Construction Code (NCC) Volume 2 2019 – requirements for barriers and hand rails
- Various fixing details to suit project requirements
- Multiple sizing and aperture types to meet specific project parameters
- Versatility of uses of a single system include balustrading, fall-arrest, anti-climb, enclosure and screening capabilities

FOR MORE INFORMATION

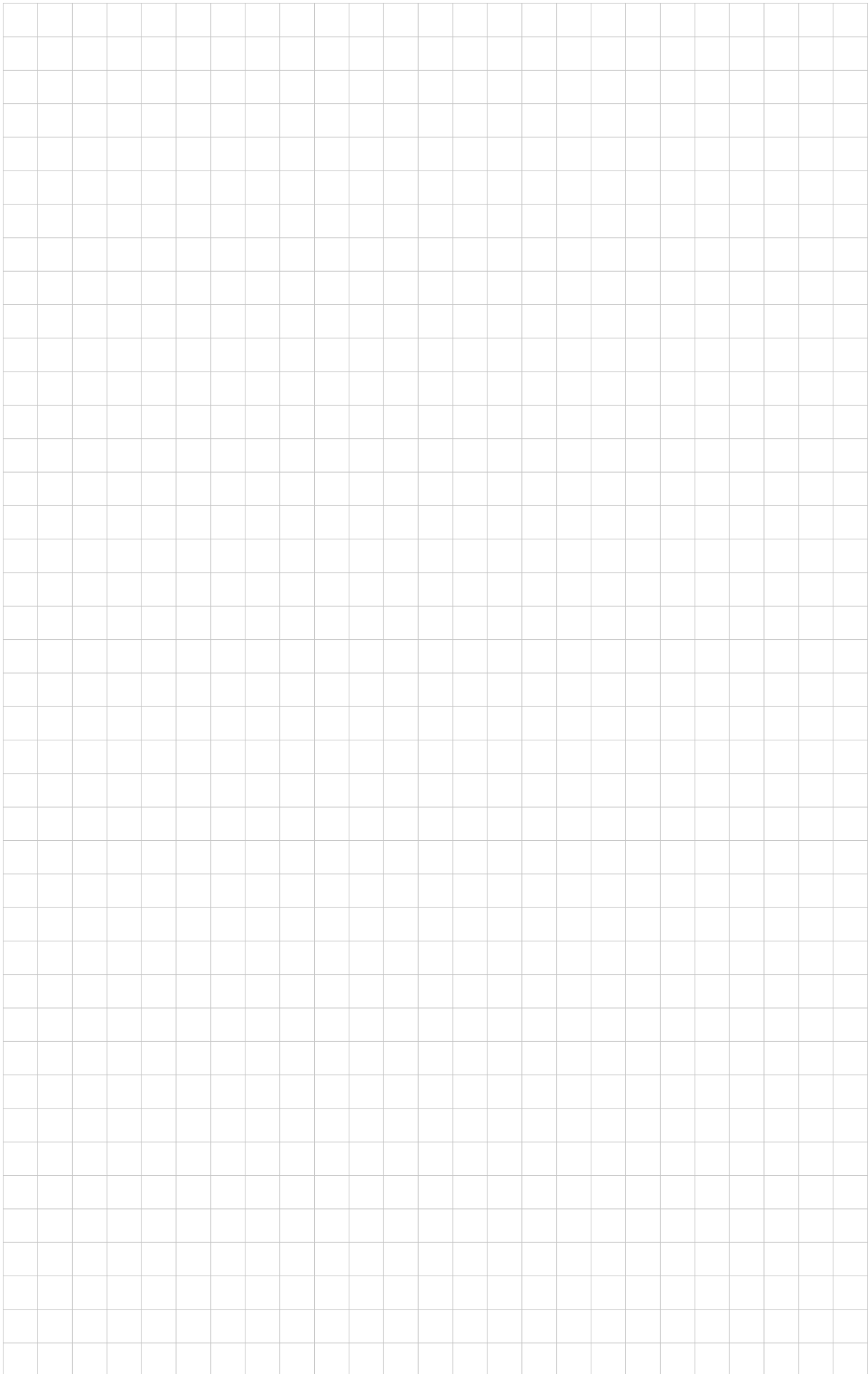
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