

# Wire clamp BG-100



## IronGrip BG-100 – Secure fastenings for modern wire ropes

- Only 2 wire clamps per fastening – with older, more basic types of wire clamp, 3-7 wire clamps are required per fastening
- Adapted to modern wire ropes – today's standard wire ropes can carry loads up to 40% higher than a few decades ago. Modern wire ropes require modern wire clamps.
- Fully symmetrical and can be mounted in any direction – other clamps have to be

mounted in the right direction, resulting in greater uncertainty and higher costs.

- Irrespective of whether the rope has a right-hand or left-hand lay.
- Exhaustively tested by independent, accredited testing bodies.
- Full documentation from design data to quality assurance, traceability and mounting instructions.

## Modern wire ropes require modern wire clamps!

IronGrip's first wire clamp was launched in the middle of the 20th century, and soon became an industry standard within lifting. It was originally developed as a safer alternative to U-bolt wire fittings, which had previously been used for all types of wire rope fastening.

Even though the old wire clamp has worked well for decades, steel wires have been developed to become ever stronger and more specialised, with entirely new properties. Today's wire ropes need new wire clamps that match these properties.

The BG-100 is our new wire clamp, based on IronGrip's long experience and fundamental technology, which satisfies modern demands for durable wire ropes and simplified mounting. The BG-100 is the safest wire clamp on the market, yet it is an excellent alternative from an economic perspective thanks to the reduced number of wire clamps required per fastening, which reduces mounting time, maintenance and space requirements.

**TECHNOLOGY** – The development of the BG-100 is based on IronGrip's experience extending over more than 50 years, on state of the art tools to assist in analysis and design, as well as on meticulous practical testing. The fundamental principle is based on forcing the wire into an S-shape, which means an increase in friction without any damage to the wire.

**MATERIALS** – The materials have been chosen in consultation with leading technical experts in order to optimise the material to the application. Hot-dip galvanising of the castings ensures a long life, enabling the clamps to be re-used. Electrically galvanised standard bolts ensure more secure tightening, and if necessary they can be replaced with bolts with better corrosion properties.

**QUALITY** – The BG-100 is manufactured subject to IronGrip's stringent quality requirements in accordance with ISO-9001 standards.

**DOCUMENTATION** – The design and testing are well documented. Traceability means that each wire clamp can be traced back to the time and place of manufacture.

**SAFETY** – The clamps ensure fastening of the wire to a degree of at least 90% in accordance with the current European standard for e.g. ferrules.

**ECONOMY** – Thanks to the increased efficiency of each clamp, fewer clamps are required per fastening. This means both reduced material costs and cheaper installation. The clamps also take up

less space on the wire.

**APPROVED FOR LIFTING** – The wire clamps are tested by accredited bodies in accordance with EN 13411-3:2004 and are approved for general lifting applications up to strength class 1960 N/mm<sup>2</sup>, with two wire clamps per fastening for all dimensions.

**WORLD LEADER** – The BG-100 is the most important new product for wire rope fastenings for several decades. No other wire clamps feature the same performance as the BG-100. It is protected by design patents.

**AREAS OF USE** – Suitable for all types of lifting and fastenings, including lifts, cranes and suspended loads.

### TECHNICAL INFORMATION:

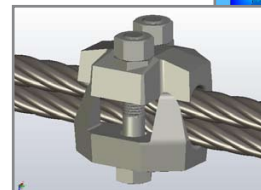
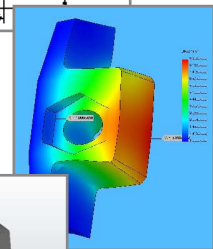
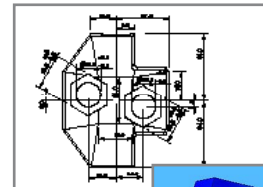
Strength class for bolts: 8.8 in accordance with ISO 3506

Rustproofing of castings: Hot-dip galvanisation in accordance with ISO 1461

Rustproofing of bolts: Electrically galvanised in accordance with ISO 2081

Temperature range for use: -50 - +250 C

Wire clamp	Wire Ø (mm)	Number of clamps	Weight (kg/100)
BG-600	5–6	2	9
BG-800	6,5–8	2	12
BG-1000	8,5–10	2	20
BG-1200	11–12,5	2	39
BG-1600	13–16	2	72
BG-2000	17–20	2	120
BG-2500	21–25	2	280
BG-3400	26–34	2	770



#### Note:

- Follow the mounting instructions for the wire clamps. See the website or contact us.
- The teeth on each half of the clamp absorb small displacements in the clamp. If the teeth break, this is a sign that the displacements have become abnormally large. Replace the clamp immediately and ensure that the recommended tightening torque is followed.
- The above recommendations regarding load and the number of wire clamps apply provided that the wire rope is new and undamaged when the clamps are applied.
- The wire clamps should be tightened after a period of use.

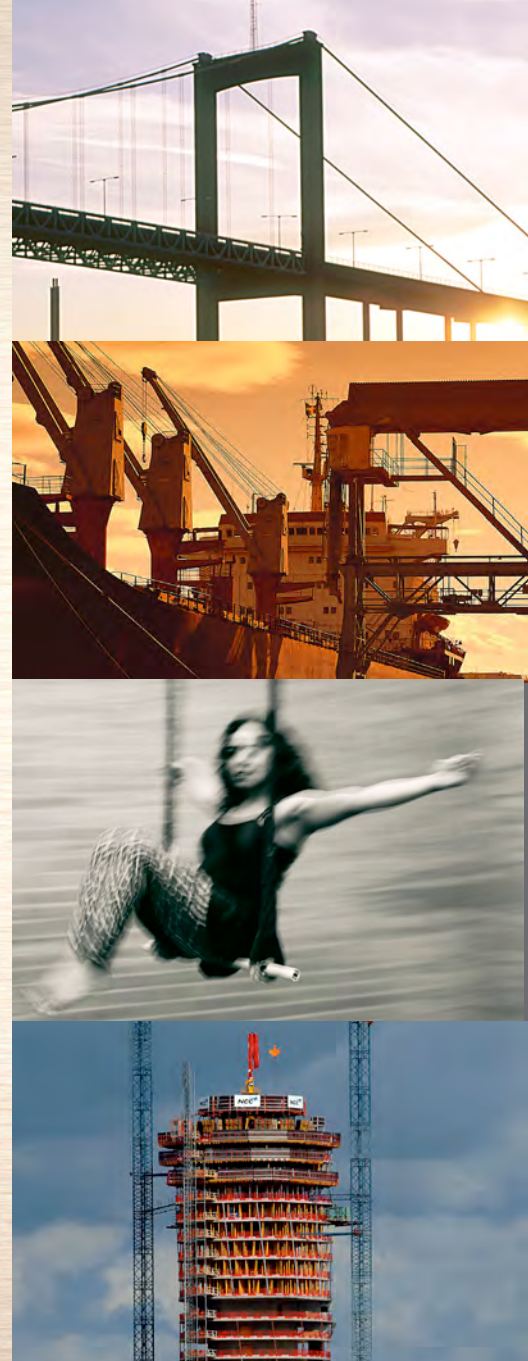
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# Wire Clip BG-S



## Wire Clip BG-S – Secure fastening for small dimensions

- A smart design, materials and construction of the high quality makes this the safest wire clip available on the market.
- It lifts the entire capacity of the wire rope. A BG-S wire clip can handle 100% of the rope's breaking force, but for reasons of safety use two wire clips for dynamic lifts.
- More environmentally friendly than old electro-galvanized wire clips. BG-S is rust protected with KTL, which gives better protection against rust and is friendlier to the environment. Also available in a stainless steel design.
- The quality of IronGrip's wire clips is better than standard throughout: material, thickness, manufacture and bolts. 8.8 strength grade is not available on any other wire clips on the market.
- The superior price/performance of IronGrip's wire clips make them extremely cost effective.
- Look out for the black clip with the IronGrip fist!

Even simple wire rope fastenings need secure wire clamps. IronGrip's wire clips have a unique design that makes smarter use of the tightening force. It is as easy to mount as any other wire clip, yet efficiency is significantly better. Tension tests show that IronGrip's wire clips can handle double the loads as other wire clips. This is due to the smarter design. And of course, the quality of every part. Pick it up and discover the robust, sturdy design of our wire clip. The bolts withstand greater torque than other wire clips.

**TECHNOLOGY** – IronGrip wire clips force the rope into a loop, which increases friction. The greater the tightening torque the larger the loop and with that the higher the efficiency.

**ENVIRONMENT** – Environmental impact is reduced thanks to the KTL surface treatment both during manufacture and use as KTL provides better protection against rust than electro-galvanising. The ability to re-use the wire clip also further reduces the impact on the environment.

**SAFETY** – The wire clip fully secures the wire rope fastening without damaging the wire rope. A robust design and high quality manufacturing make the IronGrip wire clip the safest and most secure available. Use double wire clips for lifting applications to ensure a good margin of safety (3-5 mm rope).

**ECONOMY** – The IronGrip wire clip is cost effective as it is easy to mount and the high degree of efficiency means that fewer clips are required on short wire ropes. In addition, both the wire clip and wire rope are reusable. Price/performance for IronGrip's wire clip is therefore extremely competitive.



**FITTING** – The clip is easy to fit as the nuts are easily accessible with standard tools. Since the wire clip gives a tractive force even when only tightened a little, it's ideal for use when taut steel ropes are needed for restraints, bracings, etc.

**QUALITY** – The wire clip is manufactured with IronGrip's high quality standards according to ISO-9001 standards. Highest quality in design, materials and surface treatment ensure the safety of each wire clip from IronGrip. For example, a strength grade 8.8 bolt is used, which means it can withstand high tightening torques.

**CORROSION PROTECTION** – IronGrip wire clips are available KTL treated (BG-S) or in stainless steel (BG-S SS) designs depending on the environment it is to be used in.

**APPLICATION** – IronGrip's wire clips are used in all applications where steel ropes brace or support: interiors, facade anchors, sailing boats, construction sites, gyms, etc. They are approved to lift with wire ropes max 5 mm up to and including strength grade 1960 N/mm<sup>2</sup>.

**NEW IMPROVED DESIGN**

IronGrip invited an independent testing lab to carry out comparison tests with competing wire clips on the market. The results, at the recommended tightening torque for each wire clip, were as follows:

Wire Clip	Wire rope diameter (mm)	Efficiency for 1 clip
BG-S3	3	100%
Duplex	3	48,8%
BG-S5	5	100%
Duplex	5	66,3%

**TECHNICAL DATA:**

STEEL IN BODY:  
STRENGTH GRADE BOLTS:  
ROSTSKYDDSBEBHANDLING:  
TEMPERATURE RANGE:

EN 10 130 – DC01 for BG-S and EN 10 088 – 2 (AISI 316) for BG-S SS  
8.8 according to ISO 3506  
KTL (BG-S)  
–50 – +100 °C

Wire Clip	Wire rope diameter (mm)	Weight (kg/100)	No. of wire clips for stays and the like	No. of wire clips for lifting applications
BG-S2, BG-S2 SS	2	1.2	1	2
BG-S3, BG-S3 SS	3	1.6	1	2
BG-S4, BG-S4 SS	4	2.2	1	2
BG-S5, BG-S5 SS	5	4.1	1	2
BG-S6, BG-S6 SS	6	5.0	1	Not rec.



**Note:**

- For all assembly, it is important to follow the instructions for the wire clip.
- The recommendations above regarding load and number of wire clips applies provided that the wire rope is new and undamaged.

