



**Axzion**

Engineering  
Lifting Equipment  
Technical Services

# CLAMPS AND TONGS

## AXZION - Intelligent Lifting Equipment

Exact planning guarantees perfect function

AXZION-GKS is a member of the SpanSet Group, the specialists for lifting and securing loads. As a manufacturer, we are able to find and implement the right solution. Certified welders, production support by experienced welding engineers, modern production machines. The right advice is always a question of your own possibilities. More than twenty experienced load-bearing designers with special knowledge in the areas of „statics“, „welding“ and „drive technology“ design the optimum solution for your needs.

### AXZION-GKS offers everything from a single source

Development, production and service are closely interwoven and the design is optimally adapted to modern production possibilities. Our service provides immediate assistance when there are problems. Your employees can be trained personally in the use of the load-bearing equipment we supply.

### We assume responsibility

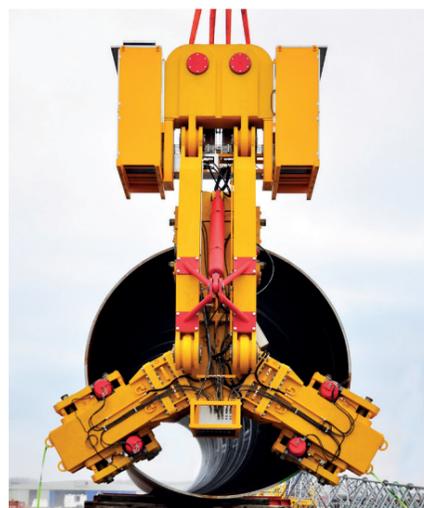
As a manufacturer, we assume „responsibility for the design and manufacture of a product“. From the manufacturer's qualification for welding according to DIN EN ISO 3834-2 and the manufacturer certification according to DIN EN 1090-1 up to factory production control for load-bearing components up to EXC3 according to EN 1090-2 and a quality management system according to DIN EN ISO 9001: you are

buying from a company that operates in complete conformity to standards.

Even full assemblies can be completely delivered in a very short time including acceptance, e.g. by DEKRA or DNV GL and load testing on internal test benches (600 t and 1,800 t).

AXZION-GKS is approved for class EXC 3. Companies within the scope of class EXC 3 must have a qualified welding supervisor and certified welders with a valid welder test certificate according to DIN EN 287-1 resp. DIN EN ISO 9606-1, as well as welding procedures implemented with a valid qualification (WPQR).

**We would like to give you more information**  
Request our company brochure at:  
[info@axzion.de](mailto:info@axzion.de)



### Details for the specialization of the LAM at a glance:

- ✓ Planned service life
- ✓ Number of load changes (> 20 thousand)
- ✓ Load change per lifting operation
- ✓ Additional components
- ✓ Operating temperature
- ✓ Lifting speed (> 10 m / min)
- ✓ Acceptance by test laboratory
- ✓ Other operating conditions

### Unless stated otherwise, the load-bearing device is listed in the following range:

- ✓ Classified according to DIN EN 13155.
- ✓ Designed for a crane speed of „V crane max.“ 10 m / min.
- ✓ And designed for <20,000 load changes.

## The correct configuration of your AXZION load-bearing equipment

How you get the best load-bearing equipment by specializing

### The right design of your load-bearing equipment

#### Designing a load-bearing device

The number of load changes is crucial. The designer of a load-bearing device must, in cooperation with the user, determine whether DIN EN 13155 „Cranes - Safety - Loose load-bearing devices“ can be used or whether the design of the load-bearing devices must be done according to DIN EN 13001 „Cranes - Construction in General - Part 1: General principles and requirements“. A projection of the usage intensity is therefore required for a correct design of the load-bearing device. Factors for the design are the „Planned service life“, „lifting operations per day“ and the „load changes per lifting operation“. Not all load lifting devices are used together with a crane (see „Lifting speed“).

### The right components

Steel, hydraulics, electric, etc. : A safe and good solution can only be manufactured with good components. We have only worked together with the best steel and construction steel suppliers for many years. This always includes the complete documentation of all components in the scope of delivery for load lifting devices. This is just as important as the delivered assembly itself. The manufacturer requires at least one inspection test certificate 3.1 - according to DIN EN 10204 - for all materials used. All material certificates and test reports as well as their cross-references are managed or archived by our IT department.

### The operating conditions of your load-bearing device

#### Operating temperatures

The normal load-bearing device is used in a temperature range of -10° C to +60° C. When used outdoors, temperatures down to - 20 ° C can be reached. In some regions of the world, even down to - 40° C is possible. In this case, low-temperature steels are used.

When transporting hot loads, however, very high application temperatures are possible. Special steels have to be used here which are suitable for these conditions of use.

#### Lifting speed

A load lifting device must be designed for the lifting speeds that occur. Usually max. 10 m/min. In order to speed up the loading process, significantly higher speeds are possible, for example, in cargo shipment companies (ports, steelworks, etc.), which must be known during the design.

An important and widespread use is the use of the load lifting devices together with a **forklift truck**. Here, the dynamic loads of the load lifting devices are significantly higher. The lifting speed is usually much higher than with a normal crane.

Wind and waves occurring as dynamic forces can be enormous. The requirements for load-bearing equipment are particularly high when used on the high seas, i.e. offshore. Construction design and execution are strictly monitored.

### Checking and documentation of your load-bearing equipment

Material and process tests mean additional safety. Our work is checked by our own or independent auditors using the latest test equipment. All certifications are available. During production, we do our own inspections (e.g. magnetic powder testing, dye penetration testing, ultrasonic testing, notch impact bending test). The required final tests are always carried out by a neutral test institute.

#### Load test

AXZION-GKS works closely and in partnership with major testing organisations such as TÜV, DEKRA, Lloyd's Register and DNV GL.

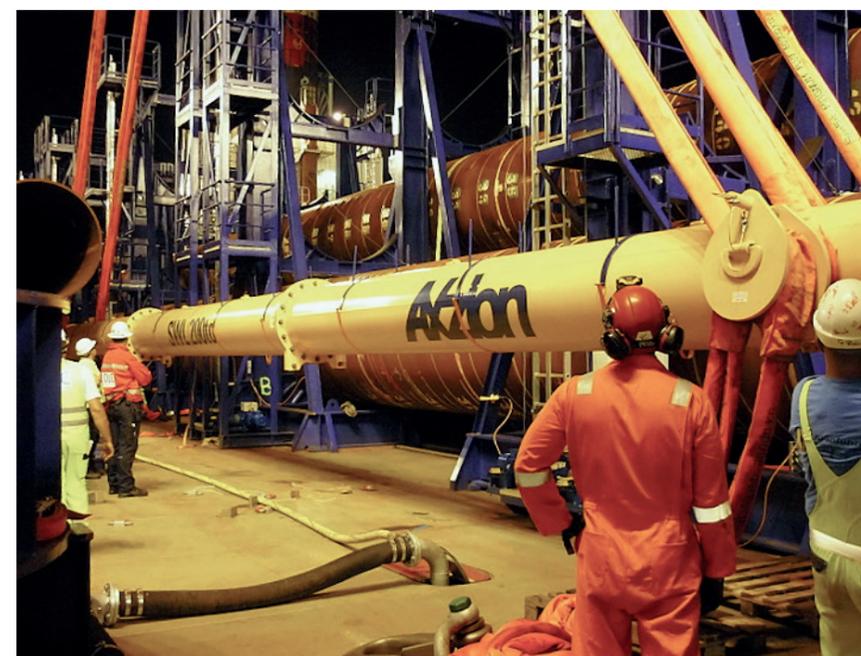
Testing is done on one of the two in-house test benches. The system, which has been located at Langenfeld for many years, has a tensile pulling force of 600 tonnes. At the Neustrelitz site, very large lifting structures can be tested with a tensile force of up to 1,800 tonnes. The load tests are done by manual operation or computer-controlled with analysis. In this way, load-bearing devices can be tested quietly under absolutely realistic operating conditions.

#### Documentation

The documentation is as important as the manufactured product. Complete documentation is always included in the scope of delivery of a load-bearing device. The information and the scope must correspond to the current state of the Lifting Equipment and must include the proof of the quality of the components and materials used and the tests carried out.

#### AXZION-DocuManager

Documents from various sources are combined, documented and archived with the in-house document management system. The partially automated document management includes a ticket system and a sharing interface, which organises the workflow between the customer and the manufacturer.



## Proper checking of your load-bearing device

### DGVU rules 100-500 (BGR500 chapter 2.8): Operating load-lifting devices in lifting operations

DGVU rules are aimed primarily at the employer and are intended to provide him with assistance with the implementation of his obligations under state employment protection regulations or accident prevention regulations as well as methods to prevent such things as accidents at work, occupational diseases and work-related diseases.

Periodic inspections of the delivered load-bearing devices allow safe working and extended use. Type, scope and deadlines are comprehensively regulated in the **DGVU rules 100-500 Chapter 2.8**:

#### Inspections

According to § 3 para. 3 of the Occupational Safety and Health Ordinance, the employer shall determine the nature, scope and deadlines of necessary inspections and tests of the work equipment used. These tests are intended to systematically identify and eliminate safety deficiencies. The employer also establishes the prerequisites that the persons appointed by him have to fulfil („Qualified Persons“). The nature, scope and deadlines of the examinations are the best practice and comply with the rules of technology.

#### Inspection before initial commissioning

The contractor shall ensure that load-bearing equipment is only put into operation when inspected by a qualified person and after any defects have been remedied. The qualified person is someone who, due to his professional training and experience, has sufficient knowledge in the field of load-bearing devices and has knowledge of the relevant state work protection regulations (e.g. union rules, DIN standards, VDI regulations, technical regulations of other member states of the European Union or of other states parties to the Agreement on the European Economic Area)

to the extent that he can assess the safe working condition of load-bearing devices.

The test must be organised by the operator prior to the first commissioning. A hazard assessment and operating instructions must be drawn up within the scope of this test.

#### Periodic inspections

The company shall ensure that load-bearing equipment is inspected at intervals of at least one year by a qualified person. Inspections at intervals shorter than a year may be required depending on the operating conditions of the load-bearing equipment. This applies, for example, in case of particularly frequent use, increased wear, corrosion, heat or if an increased susceptibility to failure is to be expected.

#### Scope of inspection

The inspection before the first commissioning and regular inspections mainly constitutes visual and functional tests. These tests shall extend to the examination of the condition of the components and devices, to the correct assembly, as well as to the completeness and effectiveness of the safety devices:

- breakages, deformations or cracks
  - damage, severe wear
  - corrosion damage
  - malfunction of safety devices
- Before the visual and functional test, the load-bearing device may require cleaning.

#### Proof of inspection and maintenance

The professional association may request proof of inspection for other inspections in some individual cases. For load-bearing devices, the proof should be combined with the test certificate of the hoist. The inspection certificates must be presented at the request of the supervisor. It is therefore necessary to store them within reach at all times. The corresponding regulations for inspection (also see DGVU rules 100-500) apply to the supplied or connected accessory parts such as hoisting means (lifting straps slings, chains, wire cables, etc.) and connecting devices (shackle, hooks, etc.)

The company shall ensure that repair work on load-bearing equipment is carried out only by persons who have the necessary knowledge and abilities.



### Checklist for checking your load-bearing device:

#### 01 Preparation

- ✓ Operating instructions available
- ✓ Documentation available
- ✓ „Qualified person“ has the corresponding knowledge
- ✓ LAM assembled type-approved
- ✓ LAM cleaned for testing

#### 02 Performance of test

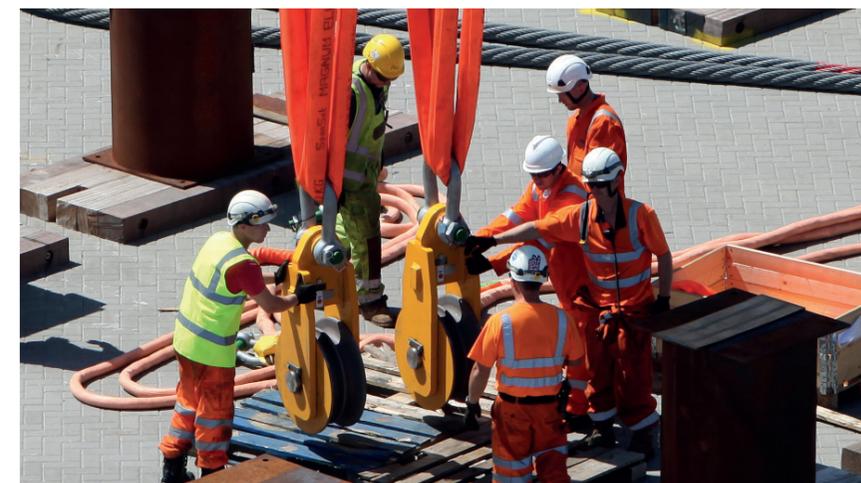
- ✓ No cracks, breaks or deformations
- ✓ No excessive wear
- ✓ No corrosion damage
- ✓ Safety device functional
- ✓ Movable components move freely

#### 03 Regular measures

- ✓ Record the test in the test certificate
- ✓ Check for proper storage
- ✓ Record the next maintenance date
- ✓ Complete the maintenance contract

### Important reminder for repairs to your load-bearing device (DGVU rules 100-500):

The contractor must ensure that repair work on load-bearing equipment is carried out only by persons who have the necessary knowledge and skills.



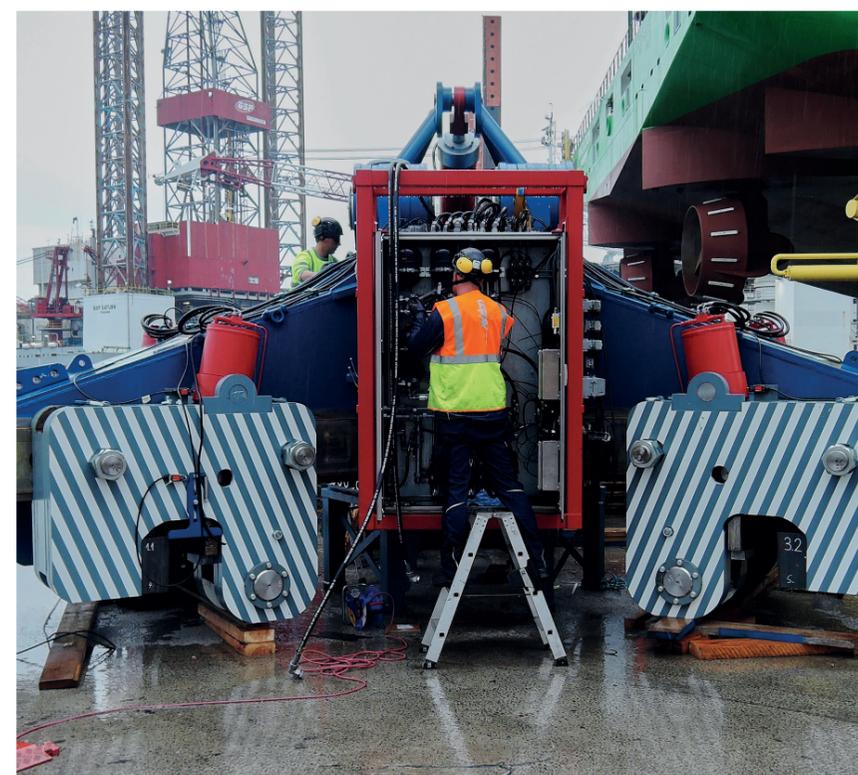
### Information about an AXZION maintenance contract:

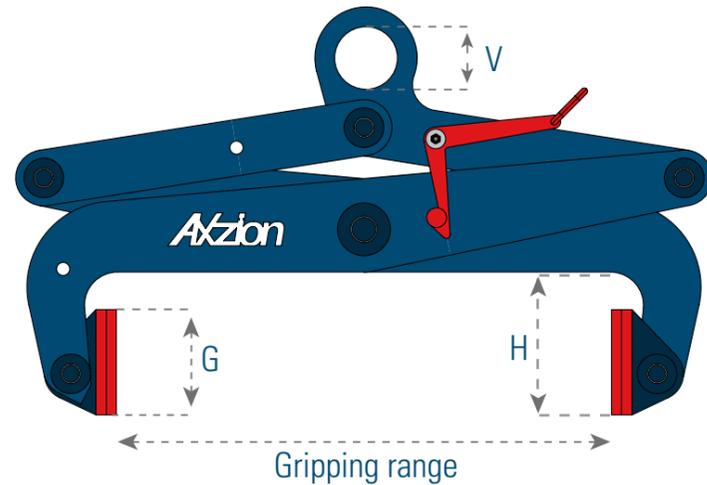
- ✓ Legally prescribed maintenance
- ✓ Reduced downtime
- ✓ Suitable spare parts
- ✓ Long service life of the AXZION LAM
- ✓ Proper rectification of defects
- ✓ Maximum operational reliability
- ✓ Reduced repair costs
- ✓ Emergency assistance (24/7)

### AXZION LAM service

Our technical service team supports you and your load-bearing device on-site. Benefit from the competence of our employees.

We will prepare an individually customised offer for these load-bearing devices. Once the contract has been agreed upon, we will set up the first maintenance appointment and for future maintenance intervals. Benefit from regular, professional inspection of your Lifting equipment.





## Two types of grippers

A basic distinction is made between two types of grippers: driven grippers and non-driven grippers:

### Driven grippers

Driven grippers obtain the necessary gripping force from an external drive (hydraulic cylinder, spindle or the like). In this case, during design it is to be ensured that the load is held safely, even in case of a drive failure.

### Non-driven grippers

Non-driven grippers derive the necessary gripping force from the structural geometry and from the load weight.

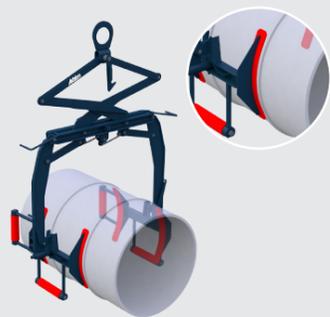
### Attention, please be aware of the following:

When transporting loads with grippers, it must be borne in mind that load collisions with the environment can lead to an opening of the gripper. Collisions when lifting with grippers must be avoided. If collisions cannot be excluded, the gripper must be equipped with an additional safety device.

### Please note:

- ✓ Never use a gripper designed for form-fitting operation as a frictional gripper! The load slips out of the gripper!
- ✓ Worn friction linings or gripping jaws can impair the gripping safety.
- ✓ The gripper may only be operated in the specified gripping range. If the load is too narrow or too wide, the gripping safety is impaired.
- ✓ The load must be dry. Factors such as oil, water and ice reduce friction by a very considerable amount.
- ✓ The load must be suitable to safely and permanently absorb the jaw pressure.

### Shaped grippers



#### Control mechanic grippers:

Form-fitting surface must be perpendicular to the gripping axis.

### Friction grippers



The gripping of the load takes place by frictional engagement. Friction grippers must have a safety factor > 2 against the load slipping out. The coefficient of friction in combination with the surface is relevant.

### The gripping of the load takes place by frictional connection or via a form-fit.

#### Form-fit grippers

These grippers grab the load so that it is gripped under the load or in an existing recess. It should be noted that the form-fitting surface must be perpendicular to the gripper axis.

It must always be determined whether the load to be lifted has the necessary coefficient of friction in combination with the surface of the gripping jaw. It is to be noted that the relative safety against slipping has nothing to do with the load weight, but is dependent exclusively on the coefficient of friction and the geometrical gripping position..

#### Friction grippers

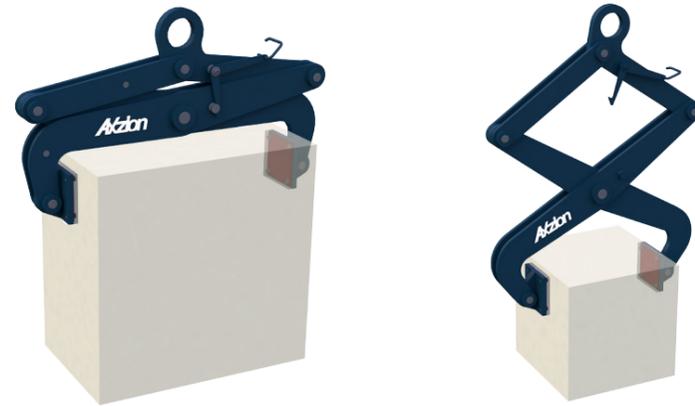
Friction grippers must have a safety factor > 2 against the load slipping out. Whether the gripper works sufficiently safely depends on the jaw pressure and the coefficient of friction.



Optional

- Automatic step-change gear
- Gripping jaws with tothing (observe friction coefficient)
- Gripping range according to individual requirements

Axzion Block grippers



Block grippers safely lift squared loads and blocks

Block grippers for the gentle transport of loads with vertical, parallel side surfaces. The robust lever construction generates a load-dependent clamping force; the load must be pressure-stable. The Axzion block gripper is designed for a coefficient of friction of at least 0.4  $\mu$ , so the material to be transported must be dry and lubricant-free.

- With suspension for single hook DIN 15401.
- Parallel gripping jaws with very robust secutex impact protection
- Open lever, self-locking, with extra large handle
- Additional swivel reinforcement for longer durability
- Clamping protection for the fingers
- Galvanised / powder coating

|                        | Load capacity [kg] | Gripping range max. [mm] | Gripping range min. [mm] | Jaw size G [mm] | Gripping height H [mm] | Eye height V [mm] | Dead weight ca. [kg] |
|------------------------|--------------------|--------------------------|--------------------------|-----------------|------------------------|-------------------|----------------------|
| <b>BLG 0025 0012 0</b> | 250                | 125                      | 50                       | 100x100         | 130                    | 80                | 12                   |
| <b>BLG 0025 0026 0</b> | 250                | 260                      | 150                      | 100x100         | 130                    | 80                | 16                   |
| <b>BLG 0025 0050 0</b> | 250                | 500                      | 250                      | 100x100         | 130                    | 80                | 17                   |
| <b>BLG 0050 0012 0</b> | 500                | 125                      | 50                       | 100x100         | 130                    | 80                | 18                   |
| <b>BLG 0050 0026 0</b> | 500                | 260                      | 150                      | 100x100         | 130                    | 80                | 21                   |
| <b>BLG 0050 0050 0</b> | 500                | 500                      | 250                      | 100x100         | 130                    | 80                | 28                   |
| <b>BLG 0100 0026 0</b> | 1000               | 260                      | 150                      | 120x120         | 160                    | 85                | 33                   |
| <b>BLG 0100 0050 0</b> | 1000               | 500                      | 250                      | 120x120         | 160                    | 85                | 43                   |
| <b>BLG 0100 0075 0</b> | 1000               | 750                      | 480                      | 120x120         | 160                    | 85                | 60                   |
| <b>BLG 0250 0026 0</b> | 2500               | 260                      | 150                      | 160x160         | 190                    | 95                | 78                   |
| <b>BLG 0250 0050 0</b> | 2500               | 500                      | 250                      | 160x160         | 190                    | 95                | 93                   |
| <b>BLG 0250 0075 0</b> | 2500               | 750                      | 480                      | 160x160         | 190                    | 95                | 107                  |

Further sizes available on request!

Further product information can be found at:  
[www.axzion.de/gripper](http://www.axzion.de/gripper)

Axzion block gripper with increased contact pressure



Block gripper with increased contact pressure and secutex gripping jaws

For some loads (steel parts, granite, etc.), the coefficient of friction is low. In this case, a gripper with increased contact pressure is required. The secutex block gripper is designed for a coefficient of friction of at least 0.4  $\mu$ , so the material to be transported must be dry and lubricant-free. Block grippers are designed for the transport of quadratic loads with vertical, parallel side surfaces. The robust construction with extended arms creates a load-dependent clamping force. The load must be pressure-stable.

- With suspension for single hook DIN 15401
- Parallel gripping jaws with very robust secutex impact protection
- Open lever, self-locking, with extra large handle
- Additional swivel reinforcement for longer durability
- Clamping protection for the fingers
- Galvanised / powder coating

|                        | Load capacity [kg] | Gripping range max. [mm] | Gripping range min. [mm] | Jaw size G [mm] | Gripping height H [mm] | Eye height V [mm] | Dead weight ca. [kg] |
|------------------------|--------------------|--------------------------|--------------------------|-----------------|------------------------|-------------------|----------------------|
| <b>BLG 0025 0012 1</b> | 250                | 125                      | 50                       | 100x100         | 130                    | 80                | 20                   |
| <b>BLG 0025 0026 1</b> | 250                | 260                      | 150                      | 100x100         | 130                    | 80                | 25                   |
| <b>BLG 0025 0050 1</b> | 250                | 500                      | 250                      | 100x100         | 130                    | 80                | 30                   |
| <b>BLG 0050 0012 1</b> | 500                | 125                      | 50                       | 100x100         | 130                    | 80                | 30                   |
| <b>BLG 0050 0026 1</b> | 500                | 260                      | 150                      | 100x100         | 130                    | 80                | 35                   |
| <b>BLG 0050 0050 1</b> | 500                | 500                      | 250                      | 100x100         | 130                    | 80                | 45                   |
| <b>BLG 0100 0026 1</b> | 1000               | 260                      | 150                      | 120x120         | 160                    | 85                | 50                   |
| <b>BLG 0100 0050 1</b> | 1000               | 500                      | 250                      | 120x120         | 160                    | 85                | 65                   |
| <b>BLG 0250 0026 1</b> | 2500               | 260                      | 150                      | 160x160         | 190                    | 95                | 120                  |
| <b>BLG 0250 0050 1</b> | 2500               | 500                      | 250                      | 160x160         | 190                    | 95                | 140                  |

Further sizes available on request!

Further product information can be found at:  
[www.axzion.de/gripper](http://www.axzion.de/gripper)

## AXZION CLAMPS AND TONGS

### Information

- With suspension for single hooks according to DIN 15401
- Robust gripping plates with secutex impact protection for gentle load transport
- Galvanised / painted

### Optional

- Gripping range according to individual requirements

Further product information can be found at:  
[www.axzion.de/gripper](http://www.axzion.de/gripper)

Further sizes available on request!

Axzion universal grippers for ISO profiles  
Axzion grippers for ISO profiles



### Universal grippers for ISO plates

Universal grippers for horizontal and vertical plates. This newly developed Axzion gripper has an innovative gripping function. The adjustment of the gripping jaws takes place via the robust spindle drive in combination with the mechanical adjustment. A load-dependent clamping force is then generated by the mobile bearing pressure plate. The load must, of course, be pressure-stable.

|                        | WLL [kg] | Gripping range max. [mm] | Gripping range min. [mm] | Dead weight ca. [kg] |
|------------------------|----------|--------------------------|--------------------------|----------------------|
| <b>UGI 0150 0150 0</b> | 2000     | 170                      | 50                       | 50                   |



### Gripper for ISO profiles

This gripper is used to adjust the gripping jaws via the robust spindle drive. Due to the large pressure plates, only a small pressure force is required so that sensitive ISO profiles are not damaged.

|                        | WLL [kg] | Gripping range max. [mm] | Gripping range min. [mm] | Dead weight ca. [kg] |
|------------------------|----------|--------------------------|--------------------------|----------------------|
| <b>GRI 0030 0185 0</b> | 300      | 185                      | 55                       | 31                   |
| <b>GRI 0040 0240 0</b> | 400      | 240                      | 55                       | 40                   |
| <b>GRI 0100 0240 0</b> | 1000     | 240                      | 95                       | 120                  |

Further product information can be found at:  
[www.axzion.de/gripper](http://www.axzion.de/gripper)

Further sizes available on request!

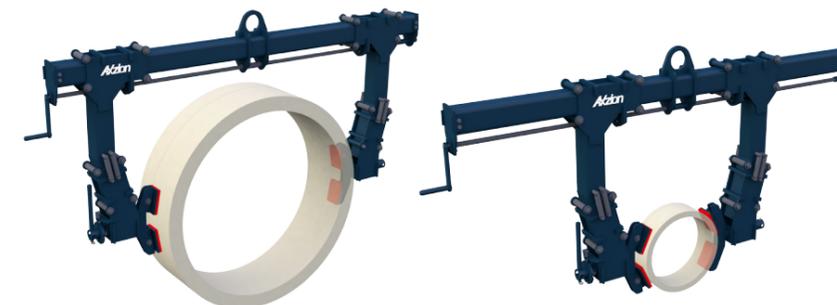
Round material gripper  
Round material - Turning grippers



### Round material gripper, round materials lifted gently

Round material gripper for the horizontal transport of round material and pipes. The robust lever construction generates a load-dependent clamping force. The load must be pressure-stable.

|                        | Load capacity [kg] | Gripping range max. [mm] | Gripping range min. [mm] | Eye height V [mm] | Dead weight ca. [kg] |
|------------------------|--------------------|--------------------------|--------------------------|-------------------|----------------------|
| <b>RUG 0025 0025 0</b> | 250                | 250                      | 60                       | 65                | 16                   |
| <b>RUG 0050 0020 0</b> | 500                | 200                      | 40                       | 75                | 14                   |
| <b>RUG 0050 0035 0</b> | 500                | 350                      | 100                      | 65                | 30                   |
| <b>RUG 0050 0050 0</b> | 500                | 500                      | 200                      | 75                | 53                   |
| <b>RUG 0100 0025 0</b> | 1000               | 250                      | 60                       | 80                | 33                   |
| <b>RUG 0100 0035 0</b> | 1000               | 350                      | 100                      | 80                | 36                   |
| <b>RUG 0100 0050 0</b> | 1000               | 500                      | 200                      | 80                | 68                   |
| <b>RUG 0100 0080 0</b> | 1000               | 800                      | 300                      | 80                | 123                  |
| <b>RUG 0100 0120 0</b> | 1000               | 1200                     | 800                      | 80                | 165                  |
| <b>RUG 0250 0025 0</b> | 2500               | 250                      | 60                       | 95                | 58                   |
| <b>RUG 0250 0035 0</b> | 2500               | 350                      | 100                      | 95                | 53                   |
| <b>RUG 0250 0050 0</b> | 2500               | 500                      | 200                      | 95                | 91                   |
| <b>RUG 0250 0080 0</b> | 2500               | 800                      | 300                      | 95                | 189                  |
| <b>RUG 0250 0120 0</b> | 2500               | 1200                     | 800                      | 95                | 300                  |



### Round material - Turning grippers

Round material grippers for horizontal and vertical round materials and pipes. This newly developed Axzion gripper has an innovative gripping function. The adjustment of the gripping jaws takes place via the robust spindle drive. A load-dependent clamping force is then generated by the obliquely mounted gripping jaws. The load must, of course, be pressure stable.

Prices and Productinformation available on request!

## AXZION CLAMPS AND TONGS

### Information

- With suspension for single hooks according to DIN 15401
- Robust gripping shells for gentle transport of the load
- Safe grip thanks to guaranteed 3-point contact of the gripping arms
- Open lever, self-locking, with extra large handle
- Additional swivel reinforcement for longer durability
- Clamping protection for fingers
- Galvanised / painted

### Optional

- Gripping range according to individual requirements
- Extra wide gripping shells suitable for long material

Further product information can be found at:  
[www.axzion.de/gripper](http://www.axzion.de/gripper)

Further sizes available on request!

### Information

- With suspension for single hooks according to DIN 15401
- Robust gripping plates with secutex impact protection for gentle transport of the load
- Secure grip thanks to guaranteed 4-point contact of the gripping arms
- Galvanised / painted

Further product information can be found at:  
[www.axzion.de/gripper](http://www.axzion.de/gripper)

## AXZION CLAMPS AND TONGS

### Information

- Non-rotating design due to positively guided central pipe
- Interchangeable gripping spreaders made of highly wear-resistant fine-grained steel
- Automatic stepping gear
- Large eye suspension
- Low and robust design

Further product information can be found at:  
[www.axzion.de/gripper](http://www.axzion.de/gripper)

Further sizes available on request!

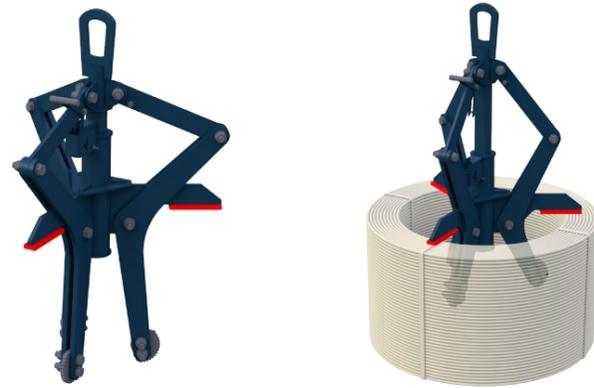
### Information

- Robust, twist-resistant construction
- Interchangeable gripping claws made of highly wear-resistant fine-grained steel
- Automatic step-switch
- Large eye-suspension

Further product information can be found at:  
[www.axzion.de/gripper](http://www.axzion.de/gripper)

Further sizes available on request!

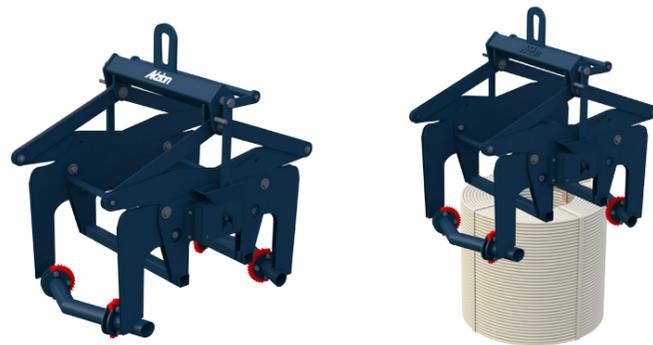
Axzion wire coil internal gripper  
Axzion wire coil external gripper



Wire coil internal gripper, safely grips wire coils from the inside

Wire coil internal grippers for fast and gentle transport in the steel industry. The robust design with central pipe and particularly wear-resistant gripping claws ensure safe operation during continuous use.

|                        | Load capacity [kg] | Gripping range max. [mm] | Gripping range min. [mm] | Dead weight ca. [kg] |
|------------------------|--------------------|--------------------------|--------------------------|----------------------|
| <b>DBI 0300 0000 0</b> | 3000               | 800                      | 550                      | 210                  |
| <b>DBI 0500 0000 0</b> | 5000               | 950                      | 650                      | 340                  |



Wire coil external grippers, safely grip wire coils from the outside

Wire coil external grippers for steel traders during large goods sales in continuous operation. The elaborate design ensures a safe and gentle grip of the wire coils.

|                        | Load capacity [kg] | Gripping range max. [mm] | Gripping range min. [mm] | Dead weight ca. [kg] |
|------------------------|--------------------|--------------------------|--------------------------|----------------------|
| <b>DBA 0300 0000 0</b> | 3000               | 1250                     | 850                      | 440                  |
| <b>DBA 0300 0000 0</b> | 5000               | 1250                     | 850                      | 620                  |

Block tongs for finished concrete parts  
Concrete pipe hangers



Block tongs for finished concrete parts

Adjustable tongs for transporting concrete or stone blocks. The robust lever construction generates a load-dependent clamping force. The load must be pressure-stable. The load centre must be balanced. The gripper is designed for a friction coefficient of at least 0.4  $\mu$ . Different sizes, load carrying capacity up to 20 t.

|                        | WLL [kg] | Gripping range max. [mm] | Gripping range min. [mm] | Dead weight ca. [kg] |
|------------------------|----------|--------------------------|--------------------------|----------------------|
| <b>BFZ 0040 0020 0</b> | 400      | 200                      | 100                      | 31                   |
| <b>BFZ 0040 0040 0</b> | 400      | 400                      | 200                      | 53                   |
| <b>BFZ 0040 0060 0</b> | 400      | 600                      | 400                      | 87                   |



Concrete pipe hanger

Hanger for the vertical transport of concrete pipes and shaft rings. The robust lever construction generates a load-dependent clamping force.

|                        | WLL [kg] | Gripping range max. [mm] | Gripping range min. [mm] |
|------------------------|----------|--------------------------|--------------------------|
| <b>BRG 0150 0025 0</b> | 1500     | 250                      | 80                       |
| <b>BRG 0250 0025 0</b> | 2500     | 250                      | 80                       |
| <b>BRG 0150 0012 0</b> | 1500     | 120                      | 80                       |
| <b>BRG 0250 0012 0</b> | 2500     | 120                      | 80                       |

## AXZION CLAMPS AND TONGS

### Information

- With suspension for single hook DIN 15401.
- Gripping jaws with very robust secutex impact protection
- Open lever, self-locking, with extra large handle
- Additional swivel reinforcement for longer durability
- Clamping protection for the fingers
- Galvanised / painted

### Optional

- Automatic step shifting
- Gripping jaws with tothing (consider friction value)
- Gripping range according to individual requirements

Further product information can be found at:  
[www.axzion.de/block-tongs](http://www.axzion.de/block-tongs)

### Information

- Suspension for single hooks according to DIN 15401
- Chain suspension galvanised
- Clamps galvanised

Further product information can be found at:  
[www.axzion.de/concrete-pipe-hanger](http://www.axzion.de/concrete-pipe-hanger)

Further sizes available on request!

Drum tongs top  
Drum tongs side



Drum tongs top

For the vertical lifting of beading or clamping ring drums. Also suitable for the use of sealed vertical drums.

|                 | Load capacity [kg] | Gripping range max. [mm] | Eye height V [mm] | Dead weight ca. [kg] |
|-----------------|--------------------|--------------------------|-------------------|----------------------|
| FTN 0030 0060 0 | 300                | 600                      | 95                | 5                    |



Drum tongs side

For horizontal lifting and transporting of bead or clamping ring drums.

|                 | Load capacity [kg] | Gripping range max. [mm] | Eye height V [mm] | Dead weight ca. [kg] |
|-----------------|--------------------|--------------------------|-------------------|----------------------|
| FSI 0030 0090 0 | 300                | 900                      | 95                | 6                    |

Further product information can be found at:  
[www.axzion.de/drum-tongs](http://www.axzion.de/drum-tongs)

Further sizes available on request!

Further product information can be found at:  
[www.axzion.de/drum-tongs](http://www.axzion.de/drum-tongs)

Further sizes available on request!

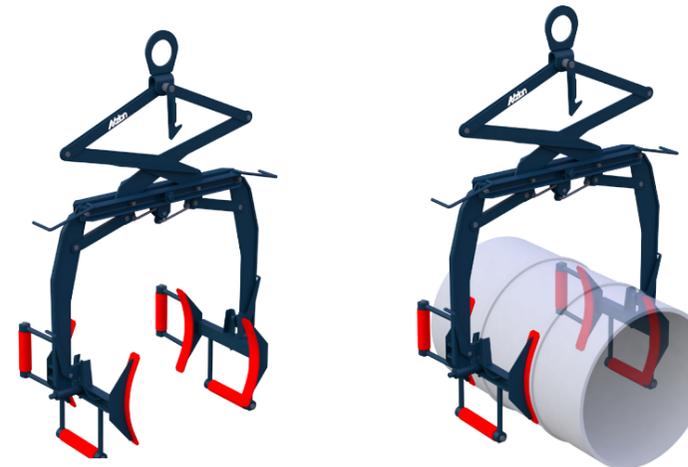
Drum tongs top-side  
Drum turning tongs



Drum tongs top-side

For lifting beading or clamping ring drums. Open drums can also be transported because they are always kept in a vertical position. With automatic locking.

|                 | Load capacity [kg] | Gripping range max. [mm] | Eye height V [mm] | Augenbreite W [mm] | Dead weight ca. [kg] |
|-----------------|--------------------|--------------------------|-------------------|--------------------|----------------------|
| FTS 0030 0060 0 | 600                | 600                      | 65                | 55                 | 10                   |



Drum turning tongs

For safe lifting of self-supporting bead or tension ring drums. Thanks to the placement rollers, the drums can be safely picked up and lowered in the horizontal or vertical position, which eliminates difficult manual positioning.

|                 | Load capacity [kg] | Gripping range max. [mm] | Eye height V [mm] | Dead weight ca. [kg] |
|-----------------|--------------------|--------------------------|-------------------|----------------------|
| FWZ 0030 0060 0 | 300                | 600                      | 95                | 58                   |

Further product information can be found at:  
[www.axzion.de/drum-tongs](http://www.axzion.de/drum-tongs)

Further sizes available on request!

### Information

- Suspension for single hooks DIN 15401
- Open lever, self-locking, with extra large handle
- Clamping protection for the fingers
- Galvanised / powder coated

Further product information can be found at:  
[www.axzion.de/drum-tongs](http://www.axzion.de/drum-tongs)

Further sizes available on request!

## AXZION CLAMPS AND TONGS

### Information

- Suspension for single hooks DIN 15401
- Adjustment by means of studs
- Single toothed jaws
- Open lever, self-locking, with extra large handle
- Clamping protection for fingers
- Galvanised / powder coated

Further product information can be found at:  
[www.axzion.de/tongs](http://www.axzion.de/tongs)

Further sizes available on request!

### Information

- Crane side with 3 pieces VLBS, suitable for 3-strand suspension
- Adjustable by revolving chain drive with a hand crank
- With 3 pieces gripping spreaders, interchangeable
- Locking via detent pins

Further product information can be found at:  
[www.axzion.de/gripper](http://www.axzion.de/gripper)

Further sizes available on request!

Axzion block tongs  
Axzion synchro gripper



Axzion block tongs

Adjustable tongs for the transport of concrete or stone blocks. The robust lever construction generates a load-dependent clamping force. The load must be pressure-stable. The load centre must be balanced.

|                        | Load capacity [kg] | Gripping range max. [mm] | Gripping range min. [mm] |
|------------------------|--------------------|--------------------------|--------------------------|
| <b>BGS 0060 0054 0</b> | 600                | 540                      | 300                      |
| <b>BGS 0100 0058 0</b> | 1000               | 580                      | 300                      |
| <b>BGS 0120 0045 0</b> | 1200               | 450                      | 140                      |

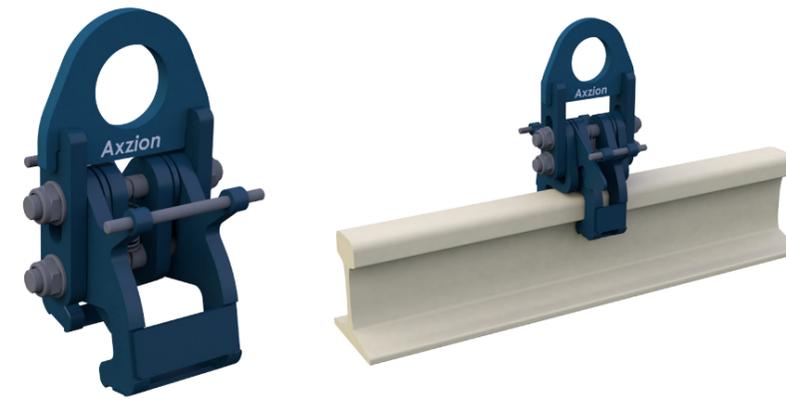


Synchro gripper internal / external gripper, suitable for horizontal rings

This gripper is suitable for the lifting of horizontal rings. The gripping spreaders are mounted on the trolley and are synchronised via a revolving chain drive with a hand crank.

| Designation   | WLL [kg] | Gripping range max. [mm] | Gripping range min. [mm] | Dead weight ca. [kg] |
|---|----------|--------------------------|--------------------------|----------------------|
| <b>SYC 0100 0150 0</b> Synchro Gripper for rings 2 arms | 1000     | 1000                     | 600                      | 100                  |
| <b>SYC 0150 0150 0</b> Synchro Gripper for rings 3 arms | 1500     | 1500                     | 600                      | 120                  |

Axzion Rail Grip



Axzion, easy handling, extremely low dead weight

Semi-automatic pick-up of the rail without manual intervention (just taking the rails from a rail stack is often accident-prone). Suitable for „pulling“ the rail.

|                        | Load capacity [kg] | Gripping range max.  | Dead weight [kg] |
|------------------------|--------------------|----------------------|------------------|
| <b>RGA 0200 0000 0</b> | 2000               | S49, R50, S54, UIC60 | 10               |



For further information request our special catalogue!

## AXZION CLAMPS AND TONGS

### Information

- Safety lock against unintentional opening of the gripper
- Super robust construction, 45° diagonal pull permitted!
- With suspension for single hooks according to DIN 15401
- Galvanised

Further product information can be found at:  
[www.axzion.de/gripper](http://www.axzion.de/gripper)

Further sizes available on request!



## AXZION CLAMPS AND TONGS

### Optional

- Secutex protection on the gripper arms and gripping claws
- With turning mechanism
- With electromechanical shut-off bars in the tong arms
- Crane side with cable pulleys
- Additional hooks

Further product information can be found at:  
[www.axzion.de/gripper](http://www.axzion.de/gripper)

### Optional

- secutex protection at the gripper arms and gripping claws
- With turning mechanism
- Additional hooks
- Equipment for hot operation

Further product information can be found at:  
[www.axzion.de/gripper](http://www.axzion.de/gripper)

Coil tongs with robust mega-spindle  
Parallelogram coil gripper



Coil tongs with robust Mega-Spindle

Coil tongs are the safe and fast solution for lifting standing coils. The drive is electromechanically operated by a robust drive with a self-locking mega spindle and geared motor.

- Drive via self-locking mega-spindle (considerably improved service life)
- Robust construction
- Suspension suitable for a crane hook according to DIN 15401 or double hook
- With electronic switch-off (no susceptible sensor) to switch off the tong arm drive when the load is fully under load.
- With switch-off sensors on both arms, to prevent the load from unintentionally opening the tong arms under load.
- With locking mechanism via signal lamps on the tong housing

Prices and Productinformation available on request!



Parallelogram coil gripper

Very robust welding design with parallelogram arms. The special advantage of these grippers is the small side space requirement, which allows optimum utilisation of the warehouse space.

- Drive via hydraulic cylinder
- Robust construction with generously dimensioned pipe guide
- Low-maintenance slide bearing
- Suspension suitable for a crane hook according to DIN 15401 or double hooks
- With electronic switch-off (no susceptible sensor) to switch off the tong arm drive when the load is fully under load.
- With electromechanical shut-off bars in the tong arms, to secure the load against unintentional opening of the tong arms under load.
- With closing signalling via signal lamps on the tong housing

Prices and Productinformation available on request!

Sheet metal tongs  
Mechanical vertical coil tongs



Sheet metal tongs

Sheet metal tongs are the safe and fast solution for lifting sheet metal packs. The drive is electromechanically operated by a robust drive with a self-locking mega spindle and geared motor.

- Drive via self-locking mega-spindle (considerably improved service life)
- Very robust construction
- Suspension suitable for a crane hook according to DIN 15401 or double hook
- With electronic switch-off (no susceptible sensor) to switch off the tong arm drive when the load is fully under load.
- With switch-off sensors on both arms, to prevent the load from unintentionally opening the tong arms under load.
- With locking message display via signal lamps on the tong housing

Prices and Productinformation available on request!



Mechanical vertical coil tongs

Mechanical vertical coil tongs are used for the cost-effective handling of horizontal coils everywhere in the steel processing industry. The coils can be stacked, for example, for the annealing process. The solid, generously angled centring mandrel and the slim design make it easier for the user to pick up the coil. The automatic open-lock system works reliably and safely.

- Suspension suitable for a crane hook according to DIN 15401 or double hook
- Suitable for many coil sizes
- Compact design due to FEM construction
- Very robust design

Prices and Productinformation available on request!

## AXZION CLAMPS AND TONGS

### Optional

- Drive via hydraulic cylinders
- Secutex protection on the gripper arms and gripping claws
- With turning mechanism
- With electromechanical shut-off bars in the tong arms
- Crane side with cable pulleys
- Additional hooks

Further product information can be found at:  
[www.axzion.de/tongs](http://www.axzion.de/tongs)

Further product information can be found at:  
[www.axzion.de/tongs](http://www.axzion.de/tongs)



Multi-slider grippers



Stone gripper



Tree trunk grippers



Paper roll grippers



Turning grippers for films



Cable drum grippers



Universal turning grippers



Turning grippers for spools



Chip grippers



Grabbers for track thresholds



Grabbers for track thresholds



Turning grippers for concrete profiles



Paper roll lifters



Turning grippers for stone slabs