



EZ | Excellence in lifting



The Company

Slingofer has been designing and manufacturing lifting and movement equipment since 1961.

Our team is at your disposal for any information or clarification regarding movement issues in your company.

Experience and innovation

Our vast, deep-rooted experience in the sector **allows us to create customised, certificated, safe and quality equipment**, designed to meet the specific needs of every single client.

The clamps and lifts are entirely built to operate even in working environments characterised by high production, with heavy working conditions and of intense movement frequency always ensuring quality, safety and durability.

Quality first

Quality is a fundamental element for Slingofer and forms the basis of its structure.

The company is committed to **ensuring a high level of quality** in every aspect of the production process, starting from control and testing in every phase of the company life, from selection of raw materials to processing of the end product.

Slingofer's production process is based on quality and the company's staff is committed to completing every order in the best possible way.

Slingofer has always been synonymous with reliability, efficiency, safety, innovation and quality, **certified since 1994 with the UNI EN ISO 9001:2015 system TÜV AUSTRIA cert. No. 20100223013613/2022.**



Technology and professionalism

Slingofer's mission lies in continuous improvement of its products.

- **Innovation** of its products.
- **Quality** in its production process.
- **Materials** used.
- **Professionalism and training** of staff.

These are fundamental to our vision, **the result of continuous, in-depth research in materials, techniques and products**, driven with the help of the most modern and appropriate instruments and machinery.

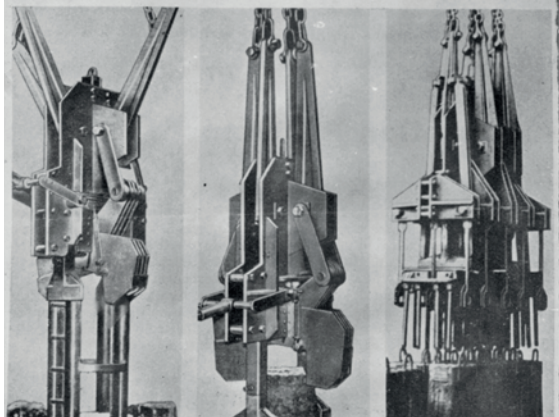
STEEL TIMES OCTOBER 9 1964

Italian Ingot Strippers Introduced to UK

A RANGE of moderately priced ingot strippers, manufactured by Slingofer SAS, Boario Terme, Brescia, Italy, and widely used on the Continent, is now available from Clyde Crane & Booth, Limited, which is acting as UK distributor. It is claimed for these strippers that they have already proved themselves to be extremely economical both in terms of first cost and in savings of time and labour. They operate on a simple lever principle and can be used wherever a crane of suitable capacity is available without any special attachments.

The various versions of the stripper are designed to deal with most types of ingot including "big-end-up" ingots with heads, "big-end-up" ingots without heads, "little-end-up" ingots without heads, and also for use as single and multiple units. According to the makers, users of the strippers have reported increased ingot-mould life, because the hot ingots do not remain so long in the moulds.

The accompanying photographs show (left) tongs-type stripper acting directly on the ingot mould for root breaking and for removal of the ingots from the casting pit; (centre) tongs-type stripper suitable for stripping ingots of any weight and type which taper from top to bottom; and (right) stripper arranged for stripping multiple ingots by lifting the moulds off the ingots. In this example 10 quadruple ingot moulds (40 ingots) are stripped simultaneously.

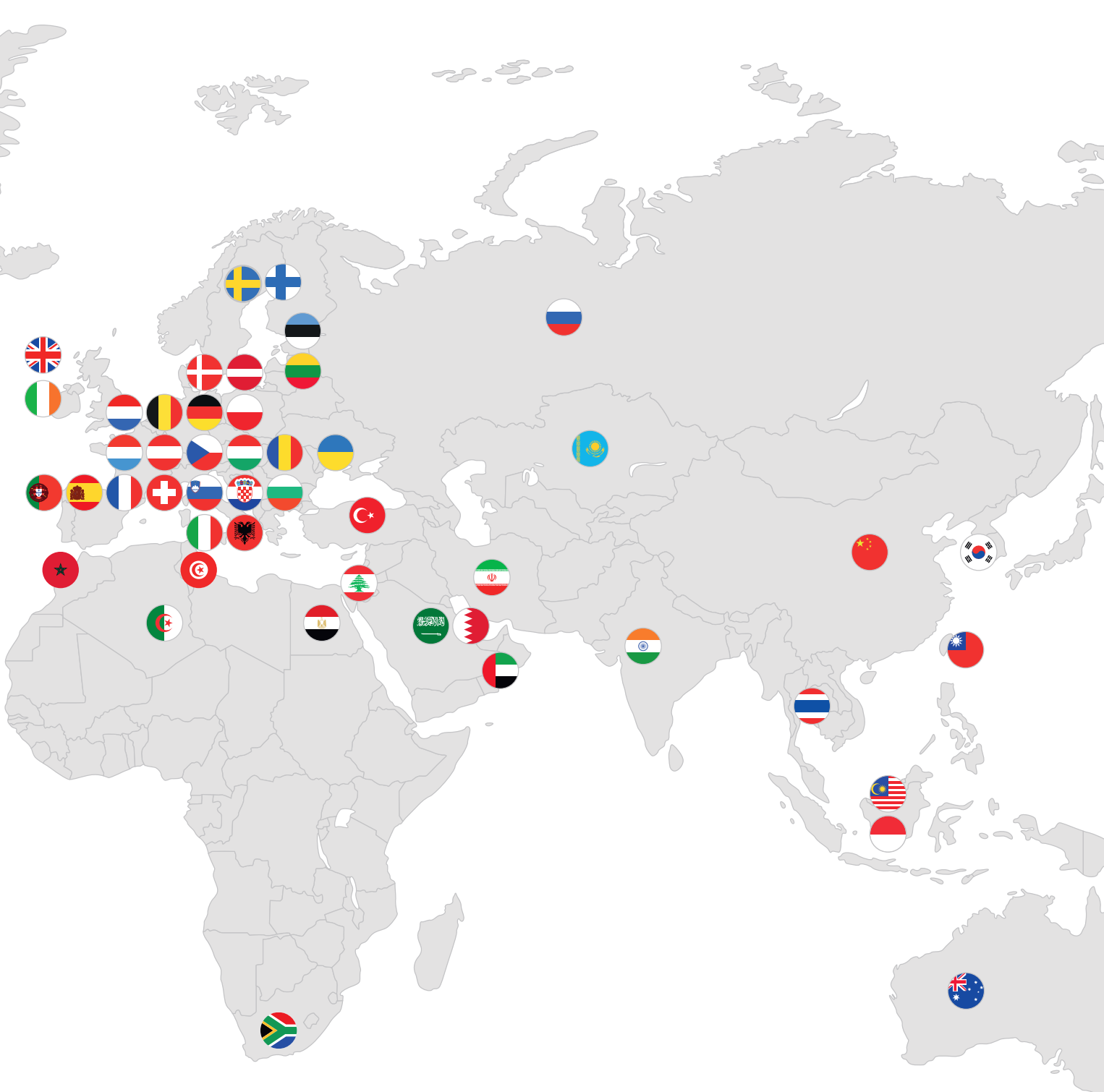


Slingofer around the world

15 **Agents**
operating around
the world

55 **Countries**
where
we work

6500 **Tongs**
working around
the world





Services

We support our clients both in Italy and abroad and we guarantee constant presence and customised services on every occasion.

Customer support

Our routine and extraordinary support structure on purchased products allows the **Slingofer Team to support clients in every phase**, from design to use and maintenance of the machinery.

We offer support and constant presence throughout the life of the equipment.

Our technical office is available to assess and meet every client requirement.

Customised Support

The Slingofer support service represents a thorough and efficient structure created for the routine or **extraordinary testing of the equipment**.

Technical advice and training

For us safety is fundamental and must be for our clients as well.

We pay particular attention to the quality of our products, safety and compliance with regulations, to ensure our clients **high standards of safe lifting and movement of goods, in any situation**.



Delivery and installation

We assist with the delivery of equipment to the clients' plants.

Our technicians are available to assemble, install and start the equipment on site, to avoid errors that can lead to malfunction and damage to the tongs.

Technical support

In case of failure and after a thorough analysis of the equipment, Slingofer provides support, even with an urgent request.

We immediately get involved **ensuring delivery in the least time possible to avoid production downtime for the client.**

Maintenance and inspection

The use and maintenance manual is always updated according to the latest reference standards. It contains all the useful information related to maintenance and routine inspection, from the frequency of performance, to the control methodology, to the parts and elements to be checked.

Servicing and spare parts

Slingofer guarantees spare parts for all machines built and is at your disposal for services and changes to the tongs.

Further details on page 8

**BEFORE**

Servicing

Customised maintenance

We strongly believe in servicing, to bring tongs back to their original condition and guarantee duration over time.

The Slingofer production department, dedicated to servicing, **ensures clients the least time possible for intervention to avoid machine downtime.**

If, during the servicing phase, we have to make changes to the initial design, our technical office provides complete support to meet the needs of each client.

We will:

- **Restore the initial conditions** of the equipment, according to its residual life.
- **Improve the equipment** with the latest technologies, both regarding the materials used and for safety.
- **Redrafting a new user/maintenance manual and the new certification.**
- **Draft and issue the declaration for the residual life of the equipment**, calculated according to the standards and technical reference tables, based on the use cycles declared by the client.



BEFORE



AFTER



BEFORE



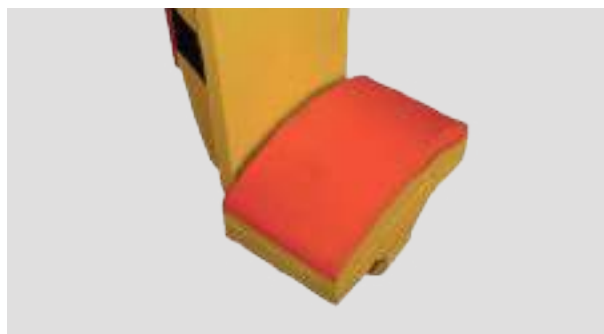
AFTER



Original spare parts

Tongs are an essential tool in many industrial activities and, as such, are subjected to considerable stress, especially when used in aggressive and/or heavy-duty works. As a result, wear of the components **is inevitable and periodic replacement of these elements is essential to guarantee maximum safety.**

Slingofer can provide original spare parts and **has an efficient spare parts service for individual parts.**





Guide to purchasing

Slingofer, in over 60 years of business, has acquired the necessary skills to design and produce tongs that adequately meet client needs, and especially high safety standards.

For us, **safety is fundamental** and it must also be fundamental for our clients; both an accident and a malfunction may entail significant costs in terms of production downtime, damage repair and social impact.

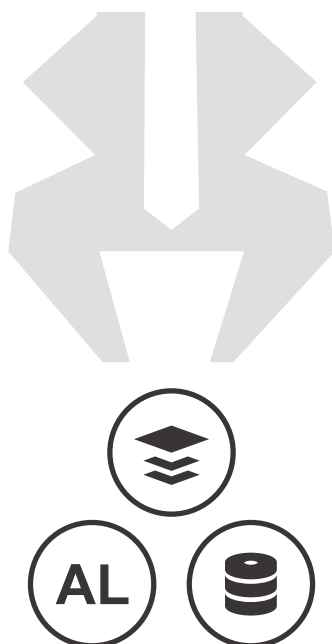
When we start to develop a new project, the starting point is the collection of all the necessary information to correctly classify the tong that will be constructed.

From here, we start the design, making use of our expertise based on experience, knowledge and credibility: from design, to regulations, to materials, to production and final testing.

The contents indicated below are **the main questions we are asked or we ask our clients a guide to find the right product** and, at the same time, the response to your needs, ensuring you obtain maximum efficiency.

1 What do you need to lift and move?

The first step consists in immediately defining **the type of product that needs to be lifted and moved**: ingots, small packages and/or stacked packages, single slabs or slabs in packs, coils, tubes, belts, etc. By doing so, we can identify the type of tong most suited to your needs.



2 What characteristics has the product to lift and move?

Knowing the construction material that needs to be lifted and moved is very important. Therefore, **we must know the characteristics in terms of dimensions, weight, condition of the surface**.

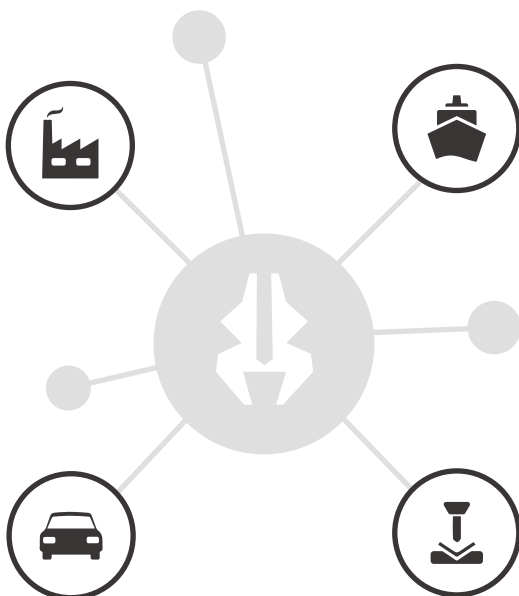
The reasons follow:

- **Material**: knowing it is essential, since the design office implements the right considerations on the accessories to install on the equipment.
- **Dimensions**: it is fundamental to indicate the minimum and maximum dimensions of the part to lift, to calculate openings and closures. In addition, we study the gripping methodology through the size and characteristics of the part.
- **Weight**: it is important to know the minimum and maximum in terms of tons to be lifted, to allow the technical office to design the correct equipment.
- **Surface state**: depending on the surface condition of the product (dry, oiled, wet, shiny), we apply the necessary precautions on the accessories and materials to be used in the design and construction of the tong.



3 In what working environment will the tong be operating?

The temperature, humidity, dust and the surrounding environment are **all factors that influence the performance characteristics** of the materials used to construct the tong. Based on the results, the elements are configured to install on the equipment, as well as the material to construct it.



4 What is the use intensity?

The intensity of use, or rather, **the work cycles to which the tong is subjected allow us to classify it** based on legislation and, therefore, allow design in strict compliance with safety, ensuring performing and suitable use with necessary requirements.

For us it is important to know the number of shifts in a day, the number of parts you intend to move during the activity within a year.

Using this data, **our technical office will design the equipment suitable for the use indicated by the client.** Consulting the regulations and the calculation tables, the useful life cycles for each type of equipment are extrapolated and the class of origin is established.

5 Interference with the product and structures in the environment

Gripping of the part or parts determines contact with some parts of the tong.

It is therefore important to know how and where the product is moved.

Products index

Application sectors



Steelworks



Rolling mills



Forges



Automotive



Ports



Sheet metal service centres

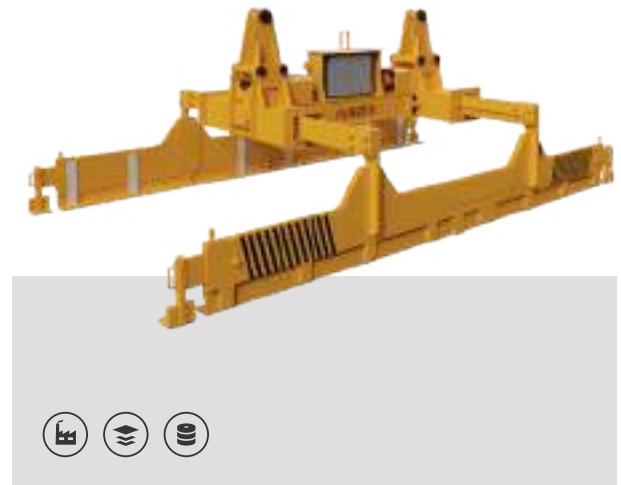


Aluminium industry



Tongs for horizontal coils and hooks

page 18



Tongs for sheet metal packs

page 24



Electro-mechanical tippers

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Tongs for rolls

page 48

Various applications

Our technical office will develop the customised tong according to the specific request.

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page 30



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page 60

Tongs for horizontal coils and hooks






Information

Other than the tongs, the horizontal axis coils can also be moved using simple C hooks, with high resistance and balance.

ELECTRO-MECHANICAL DRIVE STANDARD:
operation of the tong is based on a pinion-rack mechanism where the pinion, driven by a gearmotor, moves the rack with the gripping legs.
By doing so, the tong is opened and closed.

This operation is probably the most requested because it is simple and functional, but not the only one: like all our products the design is developed by our technical office according to the specifications requested by the client.

Application sectors

-  Steelworks
-  Ports
-  Rolling mills
-  Aluminium industry
-  Sheet metal service centre

Characteristics Ref. tongs already in operation

Maximum capacity 70 tons*

Finished/packaged coils

Max temperature 800°C

*Tongs can be constructed with higher capacities, after an in-depth study.

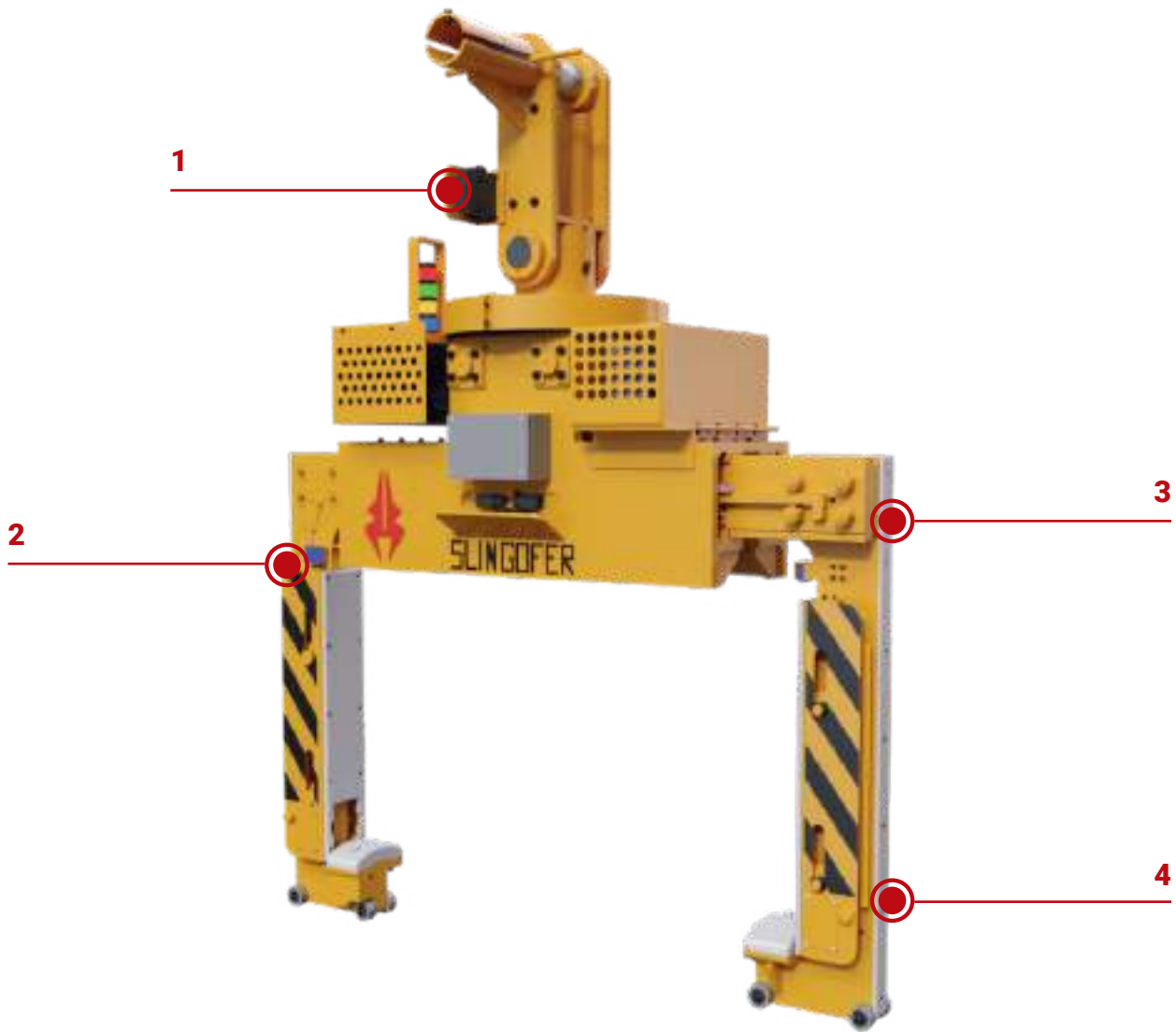






Products

Tongs for horizontal coils and hooks



Strengths

1 Weight and material

The weight of the structure and the material used make the equipment robust.

2 Structure of the tong

The structure of the legs separated from the control shafts facilitating changes and maintenance.

3 Sliding of the shafts

Sliding of the shafts takes place on guide gibs that allow fluid movement, avoiding problems.

4 Use with high temperatures

Possibility of constructing tongs suitable for high temperatures.

Various applications

Our technical office will develop the customised tong according to the specific request.



SCAN THE QR CODE
to view
the product 180°



Products

Tongs for horizontal coils and hooks



Tongs for horizontal
coils and hooks



Tongs for sheet metal packs

Information




Tongs for lifting sheet metal packs in a flat position on a pallet, mainly with electro-mechanical drive.

The tong should be positioned on the long side of the sheet metal pack and coupled to it by closing the gripping legs.

ELECTRO-MECHANICAL DRIVE:
operation of the tong is based on a pinion-rack mechanism where the pinion, driven by a gearmotor, moves the rack attached to the gripping legs. By doing so, the tong is opened and closed.

Usually used in heavy working conditions and intense movements.
Quality and safety are maintained over time.

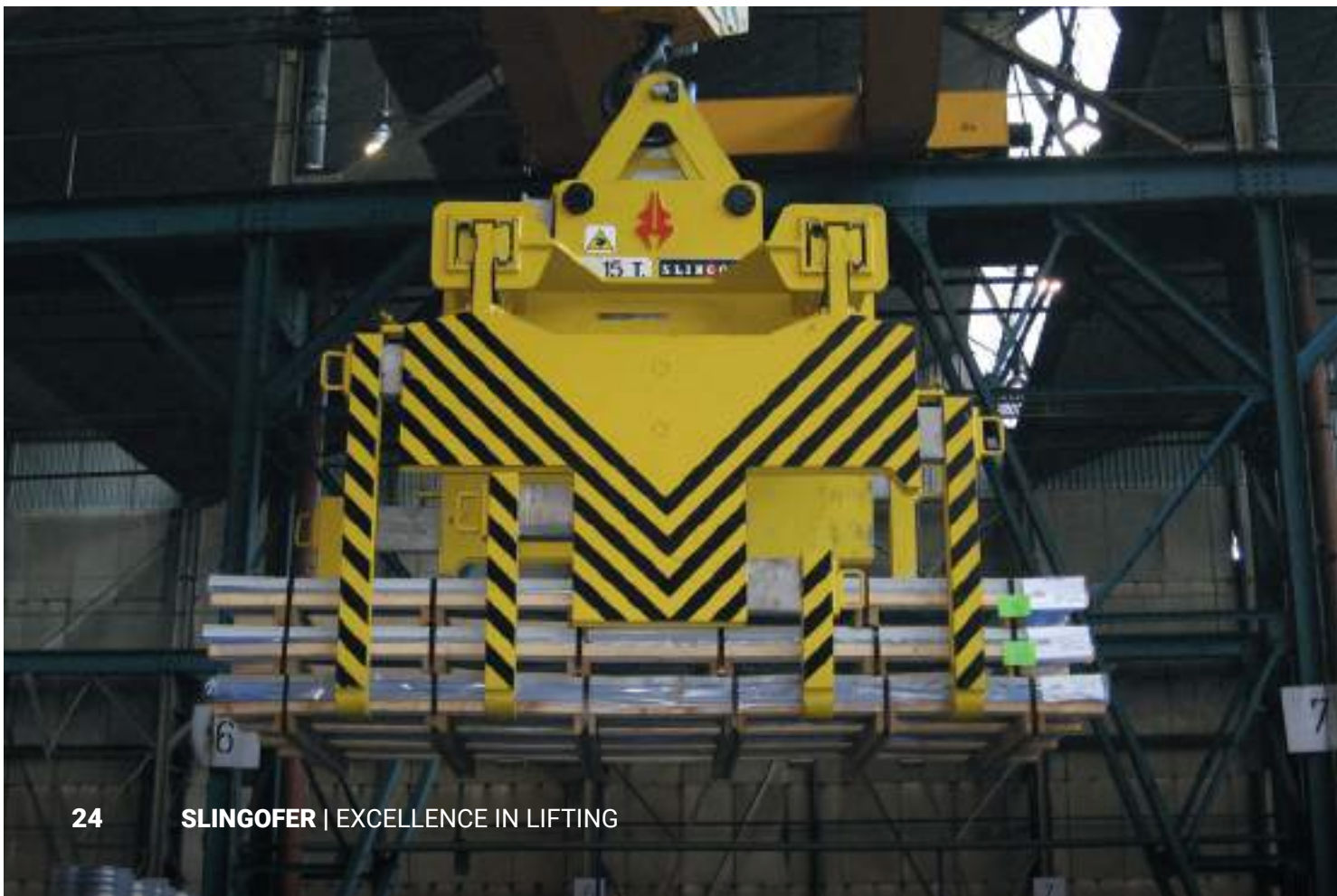
Application sectors

-  Steelworks
-  Rolling mills
-  Sheet metal service centres

Characteristics Ref. tongs already in operation

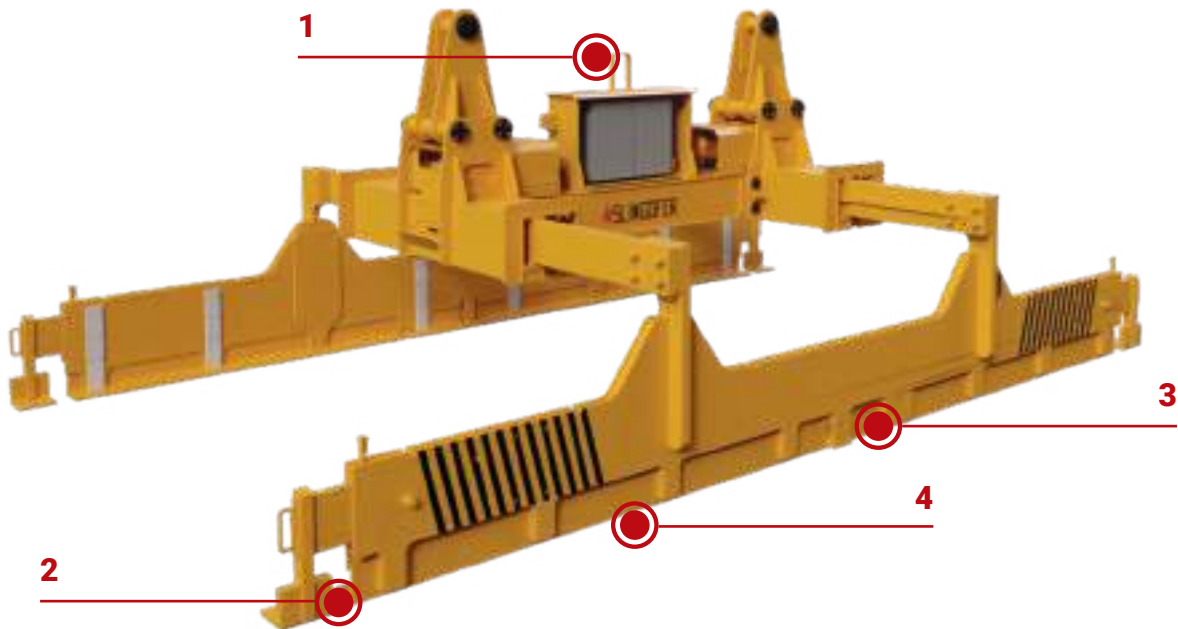
Maximum capacity 35 tons*
Maximum width 4500 mm
Max length 16500 mm
Max temperature 550°C

*Tongs can be constructed with higher capacities, after an in-depth study.









Strengths

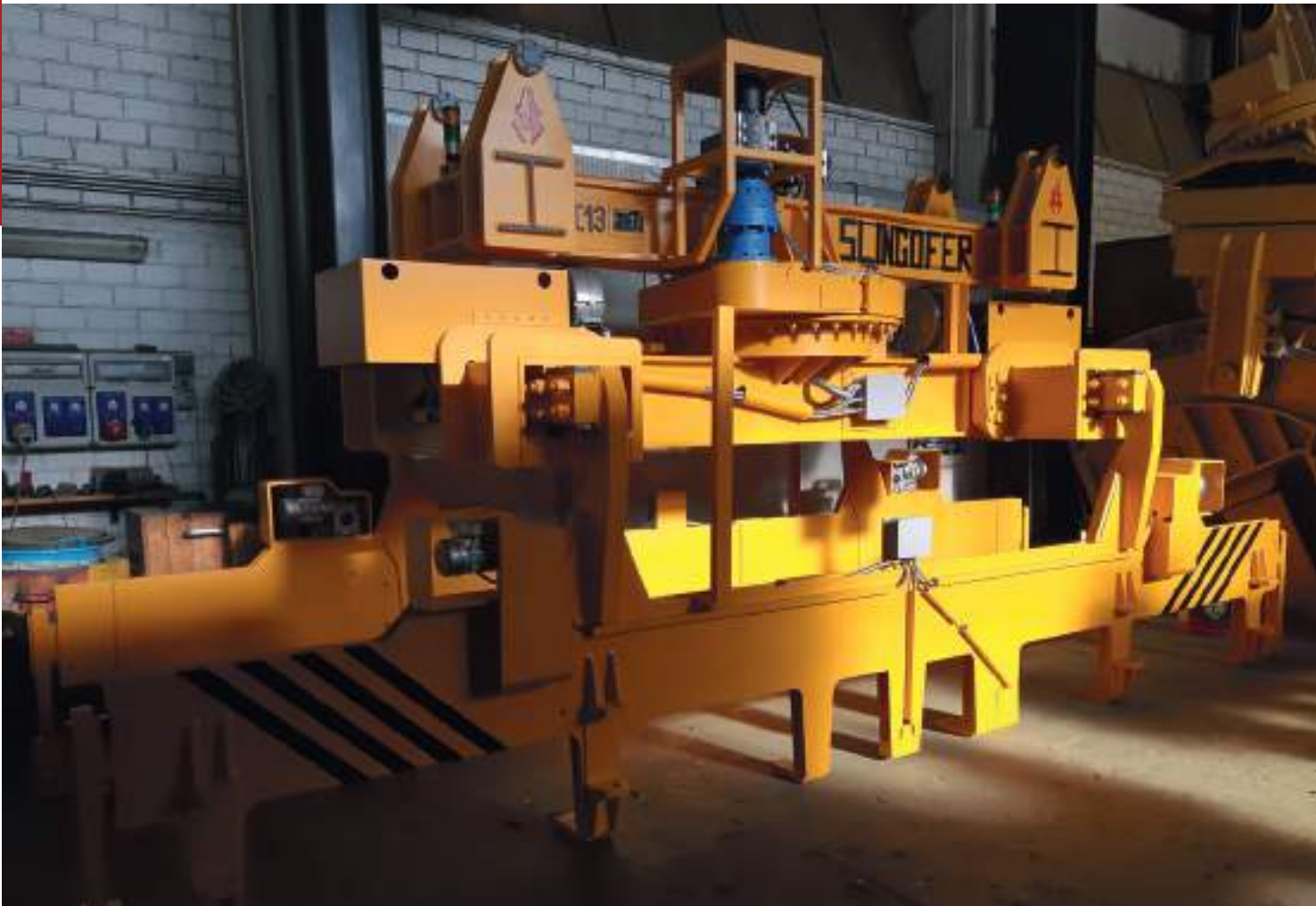
- | | | | |
|----------|---|----------|---|
| 1 | Customisation
Customisation of the tong with the possibility of installing multiple accessories, which allow safe use in any working environment. | 2 | Adjustable extension
The possibility of adjusting the extension of the gripping legs via motorised units makes the tong safer and more efficient. |
| 3 | Material and durability
The use of high strength materials and robustness enable the long life and reliability of the equipment. | 4 | Use with high temperatures
Possibility of creating tongs suitable for the high temperatures of the packs to be moved. |

Various applications

Our technical office will develop the customised tong according to the specific request.



SCAN THE QR CODE
to view
the product 180°





Tongs for vertical coils





Information

Tongs for the lifting and moving coils with a vertical axis, mechanical or electro-mechanical drive.

MECHANICAL SYSTEM: operation based on a lever mechanism. Gripping and releasing the coils is made possible by a rotating mechanical system that allows the tong to open and close. Rotation is obtained mechanically each time the tong rests on the coils.

ELECTRO-MECHANICAL DRIVE: operation of the tong is based on a pinion-chain mechanism where the pinion, driven by a gearmotor, moves the chain with the gripping legs. By doing so, it is opened and closed.

Application sectors

-  Steelworks
-  Ports
-  Rolling mills
-  Sheet metal service centres

Characteristics Ref. tongs already in operation

Maximum capacity 45 tons*

Polished or raw coils

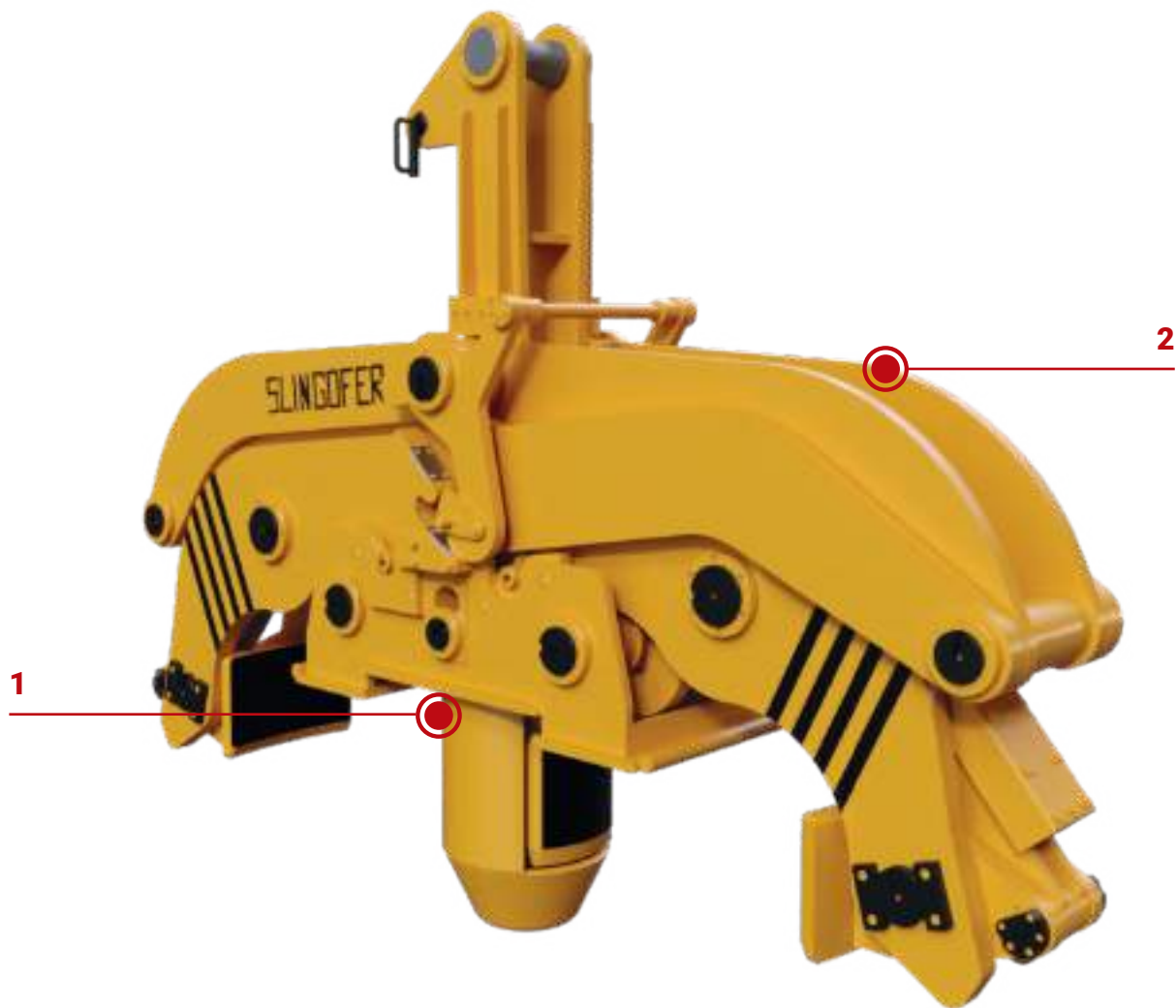
Max temperature 600°C

*Tongs can be constructed with higher capacities, after an in-depth study.









Strengths

1 Resistant sliding

Sliding and rotation of the pivots takes place on bushings or runners in bronze with excellent wear resistance.

2 Resistant material

The material used is high strength steel, a type of alloy steel that offers better mechanical properties and greater corrosion resistance.

Various applications

Our technical office will develop the customised tong according to the specific request.



SCAN THE QR CODE
to view
the product 180°





Tongs for ingots




Information

Tongs for lifting ingots Mechanical or electro-hydraulic drive.

MECHANICAL SYSTEM: operation based on a lever mechanism. Gripping and releasing the of the part is made possible by a rotating mechanical system that allows the tong to open and close. Rotation of the pawl is obtained mechanically every time the tong rests on the component to be lifted.

ELECTRO-HYDRAULIC DRIVE: the tong works mechanically but the closing speed of the levers is regulated by a hydraulic unit that drives a cylinder with the task of exerting a force opposing the spontaneous closure of the levers. Correct adjustment of the hydraulic system allows fluid, accurate and above all safe closure movement.

Application sectors

-  Steelworks
-  Aluminium industry
-  Forges

Characteristics Ref. tongs already in operation

Maximum capacity 550 tons*

Maximum diameter 3000 mm

*Tongs can be constructed with higher capacities, after an in-depth study.









Strengths

1 Hydraulic tong with mechanical grip

The mechanical grip is guaranteed by the geometry of the tong (the equipment is equipped with a cylinder that guarantees opening and closure, to make it more.

2 Durability and resistance

The robustness enables prolonged use over time, safe operation and reduced maintenance.

3 Insulation materials

Being intended only for environments with high temperatures, insulation of the most exposed parts is particularly detailed using appropriate insulating materials.

4 Hydraulic system

With the hydraulic system, the operator can precisely choose the point of engagement of the tips on the part. The cylinder prevents the tong from opening during the tilting phase of the ingots, which guarantees their safety.

Various applications

Our technical office will develop the customised tong according to the specific request.



SCAN THE QR CODE
to view
the product 180°





Electro-mechanical tippers




Information

There are various types of electro-mechanical tippers: the tippers for coils are the most requested, followed by tippers for slabs, for sheet metal packs, for moulds, etc.

OPERATING PRINCIPLE: Tipping movement is electro-mechanical while gripping of the coils takes place using a specific hydraulic cylinder.

They can be used independently or they can be designed within a production line, depending on the needs.

Application sectors

-  Steelworks
-  Rolling mills
-  Sheet metal service centres

Characteristics Ref. tongs already in operation

Fixed tippers: maximum capacity 45 tons*
Aerial tippers: maximum capacity 32 tons
Max temperature 500°C

*Tongs can be constructed with higher capacities, after an in-depth study.

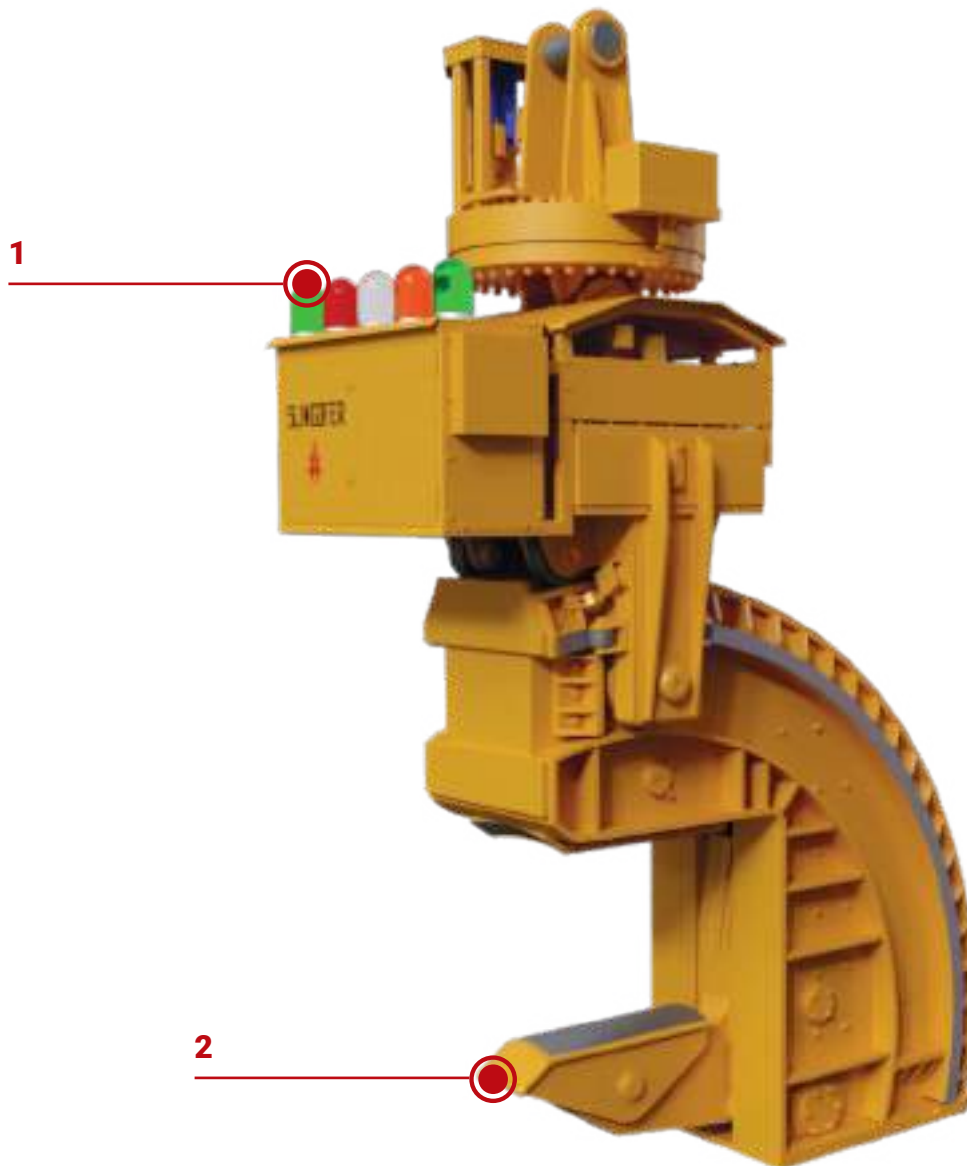




Electro-mechanical
tippers







Strengths

- 1 Modern and resistant**
This type of equipment is compact and resistant, both in terms of management and safety.
- 2 Two pieces of equipment in one**
The aerial tipper automatically manages movement, transport, lifting and rotation. Use of two different types of equipment is therefore avoided.

Various applications

Our technical office will develop the customised tong according to the specific request.



SCAN THE QR CODE
to view
the product 180°





Tongs for rolls

Information

Tongs for lifting rolls.

These tongs are designed to replace the rolls in a safe and efficient manner. The constructive shape is defined according to the system.

They are usually used in heavy and intense working conditions. They maintain high quality and safety features over time.

Application sectors

 Rolling mills

Characteristics Ref. tongs already in operation

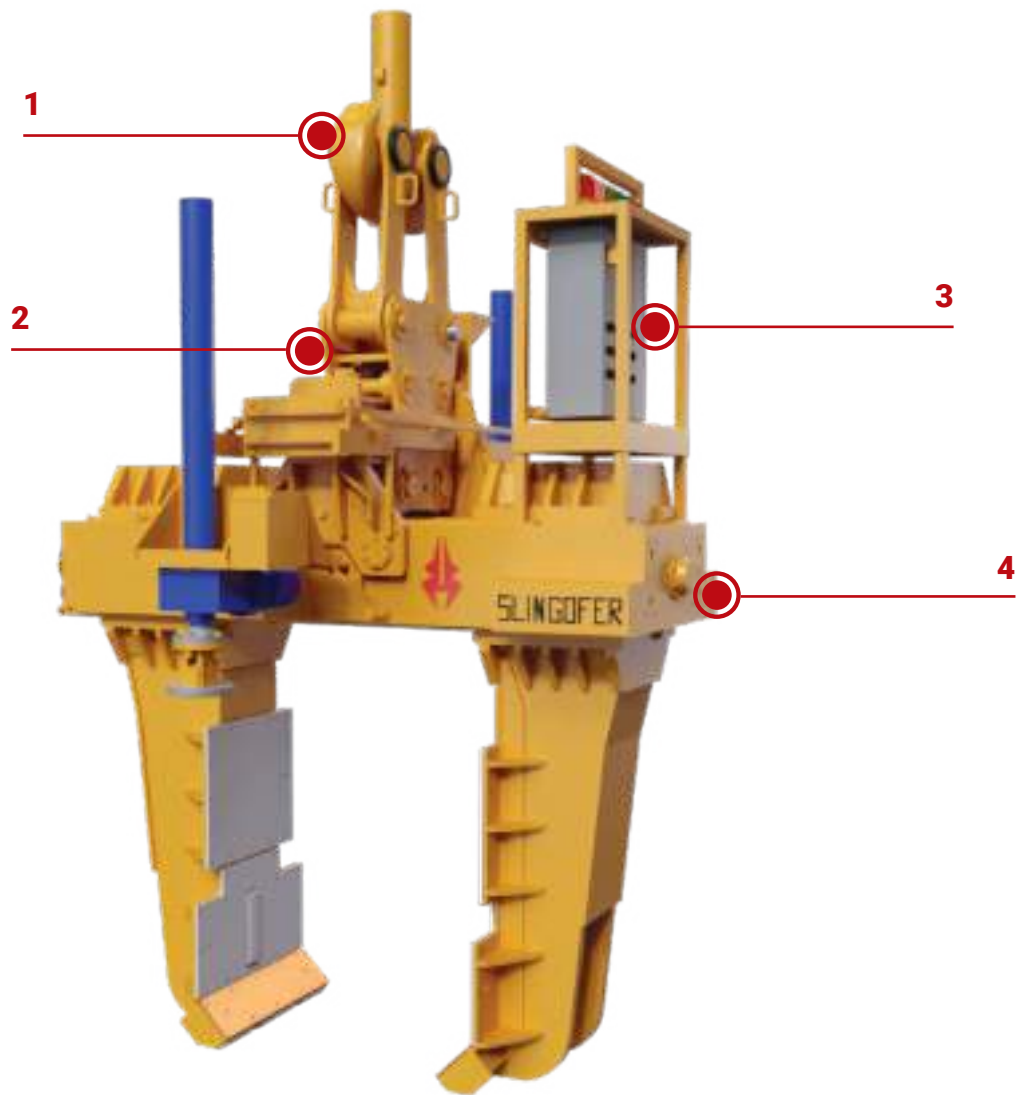
Maximum capacity 140 tons*

*Tongs can be constructed with higher capacities, after an in-depth study.









Strengths

1 Mechanical automatic tong

The automatic mechanical tong allows easy use. Not being hydraulic or electrical, maintenance is reduced to improve efficiency.

2 Motorised tong

The motorised tong allows you to lift and move rolls in different diameters and dimensions, even more than one at a time.

3 Safety

Safe use is guaranteed by the presence of devices such as inclinometers, load cells, sensors, etc.

4 Reliability

The opening/closure command and the hold of the load are guaranteed by an irreversible trapezoidal screw as well as use of high strength materials.

Various applications

Our technical office will develop the customised tong according to the specific request.



SCAN THE QR CODE
to view
the product 180°





Tongs for slabs





Information

Tongs for lifting slabs with mechanical or electro-hydraulic drive.

MECHANICAL SYSTEM:
operation based on a lever mechanism.
Gripping and release are made possible by a mechanical repetition system in which the pawl, by rotating, allows the tong to open and close. The rotation of the pawl is obtained mechanically every time the tong rests on the component to be lifted.

ELECTRO-MECHANICAL DRIVE:
operation of the tong is based on the winch or hoist with rope that adjusts the distance between the top and bottom beam, resulting in opening and closure of the tong.

Application sectors

-  Steelworks
-  Ports
-  Rolling mills
-  Aluminium industry

Characteristics Ref. tongs already in operation

Maximum capacity 150 tons*

Maximum width 2600 mm

Maximum length 12500 mm

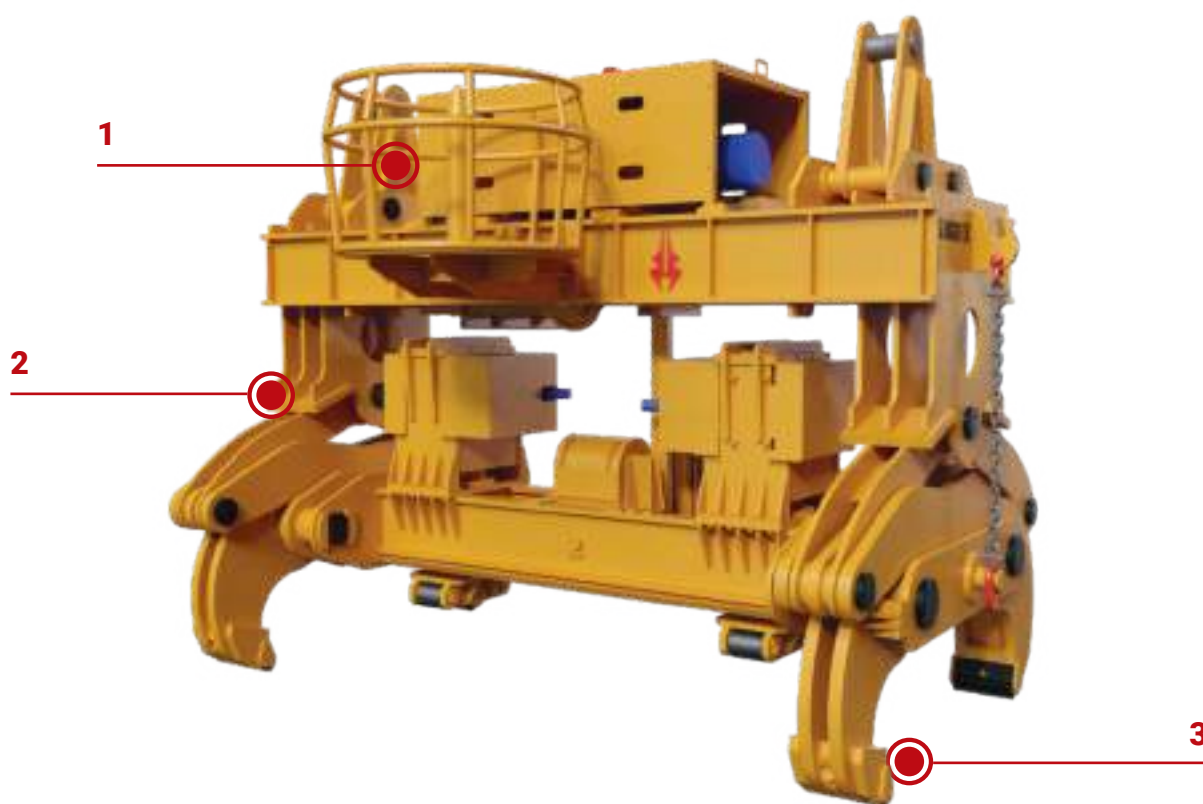
Max temperature 900°C

*Tongs can be constructed with higher capacities, after an in-depth study.









Strengths

1 Flexibility

Use of the hoist with opening and closure function, making equipment more flexible. In addition, motorised feelers can be installed which are useful for lifting multiple slabs as well as other accessories.

2 Durability and resistance

The robustness enables prolonged use over time and reduced maintenance.

3 Insulating material

Since the equipment is intended for high temperature environments, particular care is taken with engineering simulations for the insulation of the most exposed parts and use of appropriate insulation materials.

Various applications

Our technical office will develop the customised tong according to the specific request.



SCAN THE QR CODE
to view
the product 180°





Tongs for moulds

Information

The tong for lifting and moving moulds are generally electro-mechanically driven.

The equipment consists of two tongs that perform the gripping work, driven by a screw system; one is fixed and the other is set on a pivot that allows it to swing and then compensate for any small deformations of the gripping areas.

The drive is controlled by a motor drive.
The tongs can be equipped with a rotating tower and are equipped with different safety systems to allow safe movement.
The gripping centre distance can vary based on the various dimensions of the moulds.

Usually used in heavy working conditions and intense movements.
They maintain high quality and safety features over time.

Application sectors



Automotive

Characteristics Ref. clamps already in operation

Maximum capacity 65 tons*

Max ambient temperature

*Tongs can be constructed with higher capacities, after an in-depth study.









Various applications

Our technical office will develop the customised tong according to the specific request.



SCAN THE QR CODE
to view
the product 180°

Various applications

Information

Customised tongs for all kinds of lifting.
Our technical office will develop the equipment according to the specific request.

Slingofer makes multiple products.
We have in-depth knowledge of mechanical, hydraulic and electrical systems.

We are supported by an archive with over 6500 pieces of equipment supplied in over 60 years of experience.

Application sectors

Any













Some accessories

Some accessories horizontal tong for coils



LOAD CELL, two possibilities:
weighing or anti-opening



ANTI-OPENING SENSOR
Installed on foot of grip



INTERCHANGEABLE FEET
in Vulkollan



INTERCHANGEABLE SAFETY PLATE in Nylon
(Internal or external installation)



LEGS WITH LEATHER PROTECTION
(Internal or external installation)



LEG WITH INTERCHANGEABLE PLATE
in Vulkollan and non-slip



PENDULUM with limit
switch for closure stop



TIPPING FOOT



SIGNAL LIGHTS



EXTERNAL PROTECTION
in Vulkollan

Some tong for packs accessories



INTERCHANGEABLE SAFETY PLATES
in Nylon



**MANUAL OR MOTORISED
EXTENSION OF LEGS**



**ANTI-OPENING
SENSOR**



**PENDULUM WITH CLOSURE
STOP LIMIT SWITCH**

Some hook C tong accessories



OXYFUEL ANCHORAGE



**SPOUT AND FRAME
PROTECTION** in Vulkollan



**FIXED ROTATION
0 360°**



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