

September 2023



| ENG

# DESK

Welding modular tables

[carpano.it](http://carpano.it)

# DESK

## Welding modular tables

DESK is a series of tables conceived to assist the welder in all his operational activities, thanks to the peculiarities described here below:

- The planarity and the orthogonality of the planes guarantee precision of positioning.
- The high precision of the holes, both on the diameter and relative to the drilling center distance, makes it possible that each accessory is always positioned in a repeatable position.
- The nitriding and oxidation treatment, carried out both on the tables and on the main accessories, guarantees surface hardness and avoids the adhesion of the welding projections.
- The availability of a wide range of accessories avoids, or at least reduces, the need to build metal jigs for the different workpieces.
- The locking system by ball pins allows the quick and easy locking of the accessories.



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## 5 reasons to buy a DESK table recovering your expense in a few months of work



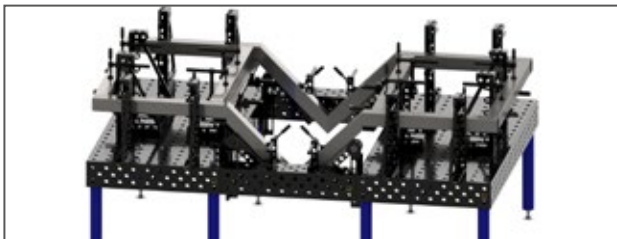
### 1 - Precision.

Planes planarity and orthogonality, together with the tight tolerances on the holes and their positions, guarantee repetitiveness and quality of the assemblies.



### 2 - Locking system by ball pins.

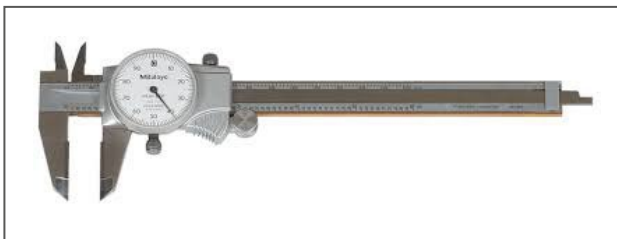
Allows the easy and quick repositioning of the accessories and drastically reduces size changeover times, especially for small series.



### 3 - Savings on the construction of metal jigs.

In many processes it will no longer be necessary to build metal jigs!

By the same accessories you will be able to fix pieces having absolutely different geometries.



### 4 - Big decreasing of waste.

Conspicuous savings on re-execution of workings and on waste, thanks to the reduction of noncompliant pieces.



### 5 - Cleanliness and order.

The nitriding and oxidation treatment avoids the adhesion of the welding projections to the table and protects it from most accidental impacts.

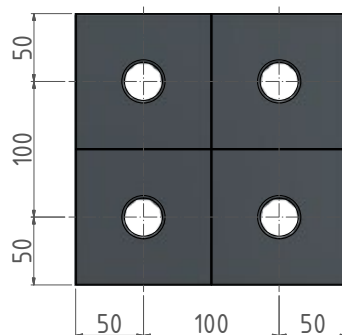
## Tables – main technical features



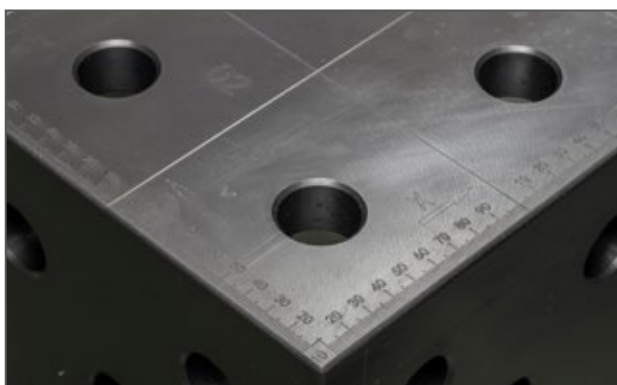
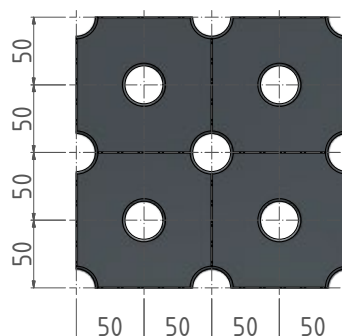
<b>Material</b>	C45
<b>Treatment</b>	Nitriding + oxidation
<b>Material width</b>	24 mm ÷ 27 mm
<b>Holes diameter</b>	28.15 mm
<b>Material hardness</b>	160÷210 Vickers
<b>Superficial hardness</b>	500 Vickers
<b>Table maximum carrying capacity</b>	3000 kg
<b>Ruler</b>	On all four sides, in mm

Code	Dimensions	Drilling scale	Weight kg
<b>DSK28.1510</b>	1500 x 1000 x 200	100x100	520
<b>DSK28. 2010</b>	2000 x 1000 x 200	100 x 100	670
<b>DSK28. 2010H</b>	2000 x 1000 x 200	100 x100 + diagonal	640
<b>DSK28. 1515</b>	1500 x 1500 x 200	100 x100	740
<b>DSK28. 2412</b>	2400 x 1200 x 200	100 x 100	900
<b>DSK28. 2412H</b>	2400 x 1200 x 200	100 x100 + diagonal	860
<b>DSK28. 3015</b>	3000x 1500 x 200	100x100	1400
<b>DSK28. 3015H</b>	3000x 1500 x 200	100x100 + diagonal	1350
<b>DSK28. 4020</b>	4000x 2000 x 200	100x100	2300

#### Drilling with 100x100 mm grid



#### Drilling with 100x100 mm grid + diagonal holes.



All the tabletops are equipped with a ruler on all four sides to assist the operator in positioning the accessories and / or the pieces to be welded.

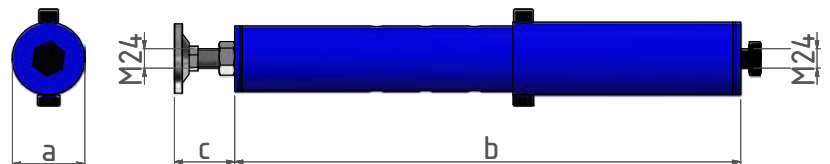
## STANDARD FOOT



Fixed height foot, with adjustable and self-leveling base

Code	Dimensions: a x b + c	Availability
DSK28.620	Ø89 x 620 + (60÷120) mm	Stock
DSK28.200	Ø89 x 200 + (60÷120) mm	On request
DSK28.350	Ø89 x 350 + (60÷120) mm	On request
DSK28.450	Ø89 x 450 + (60÷120) mm	On request

## TELESCOPIC FOOT

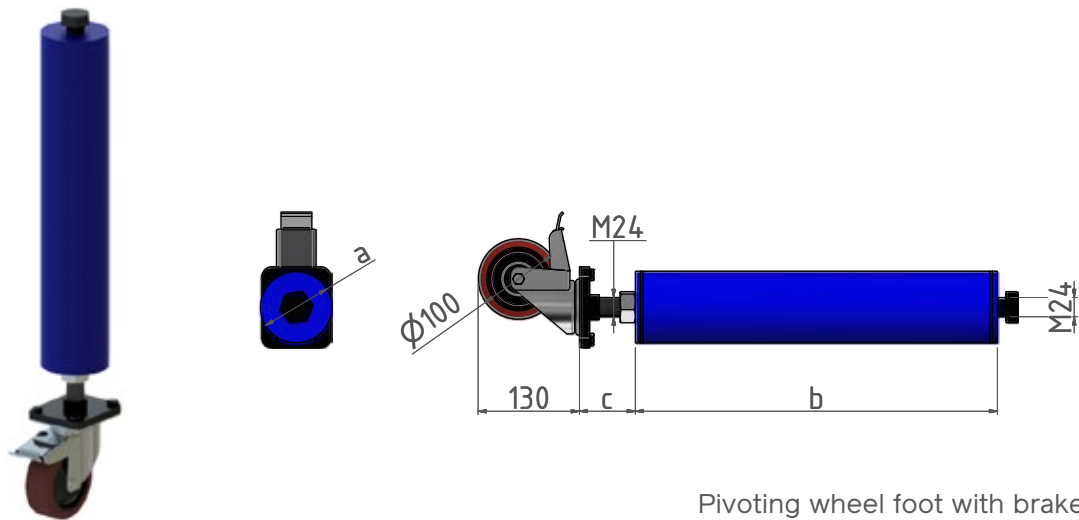


Foot with 60 mm step adjustment, by screw and nut

Code	Dimensions: a x b + c	Availability
DSK28.GDT450	Ø89 x (420÷600) + (60÷120) mm	Stock
DSK28.GDT200	Ø89 x (170÷350) + (60÷120) mm	On request
DSK28.GDT350	Ø89 x (320÷500) + (60÷120) mm	On request
DSK28.GDT620	Ø89 x (590÷770) + (60÷120) mm	On request



PIVOTING  
WHEEL  
FOOT



Pivoting wheel foot with brake

Code	Dimensions: a x b + c	Availability
DSK28.JLT620	Ø89 x 620 + (60÷90) mm	Stock
DSK28.JLT200	Ø89 x 200 + (60÷90) mm	On request
DSK28.JLT350	Ø89 x 350 + (60÷90) mm	On request
DSK28.JLT450	Ø89 x 450 + (60÷90) mm	On request

MODEL:	1510 / 1515 / 2010	: 4 feet
	2412 / 3015	: 6 feet
	4020	: 8 feet

\*JLT feet are suitable only for 1510 / 1515 / 2010 tables



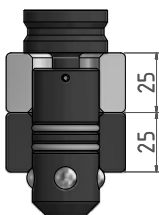
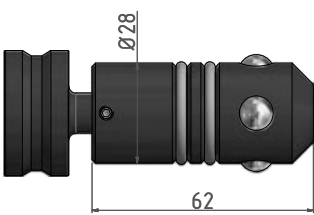
### **Pins are the basic elements of DESK28 system.**

- Ball pins allow operators to lock the elements quickly and without the use of keys.
- Screw pins are useful, however, for semi-permanent accessories that needs greater security in locking.
  - Connection of tables or U-blocks to each other.
  - Fastening of external elements such as separation panels, remote controls or other elements.

All these elements undergo a surface burnishing treatment.



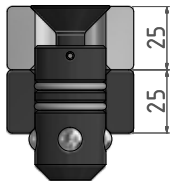
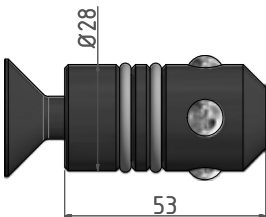
DSK28.KS2850



4 ball locking pin, L= 50 mm

Burnished

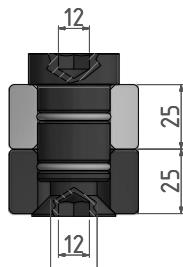
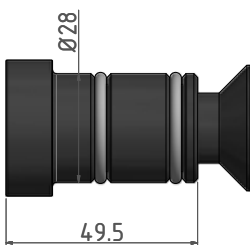
DSK28.CS2850



4 ball locking pin, L= 50 mm, with countersunk screw

Burnished

DSK28.LJ2850

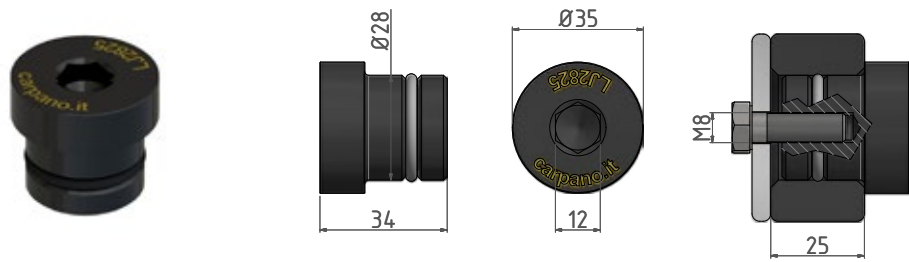


Locking pin, L= 50 mm

Burnished

**Pins**

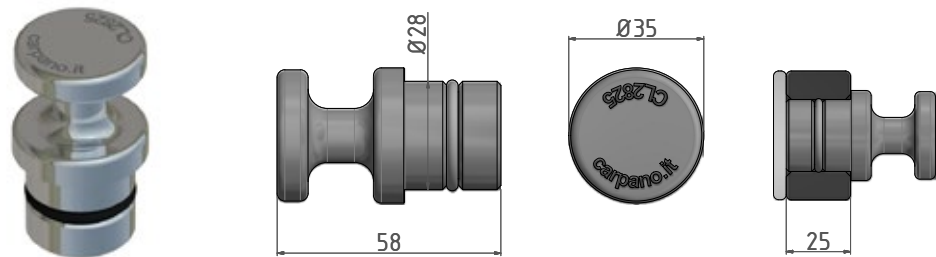
**DSK28.LJ2825**



Locking pin, L= 25 mm

Burnished

**DSK28.CL2825**



Magnetic locking pin, L=25 mm

Aluminum

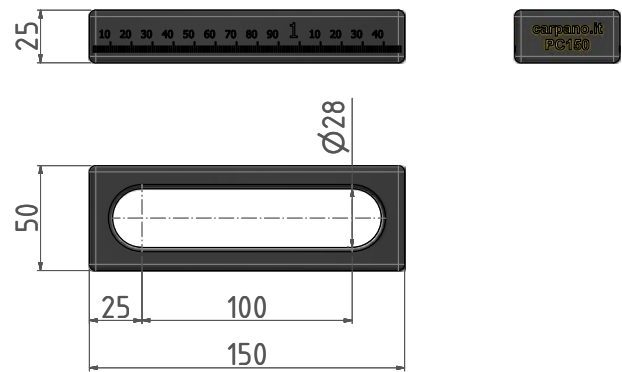


**Positioning brackets are useful to easily create mechanical stops.**

- They are built in C40 steel and undergo nitriding and oxidation treatment.
- All external edges are rounded for a more comfortable grip.
- A ruler is printed on the slotted elements in order to facilitate the positioning of the workpieces.

## Positioning brackets

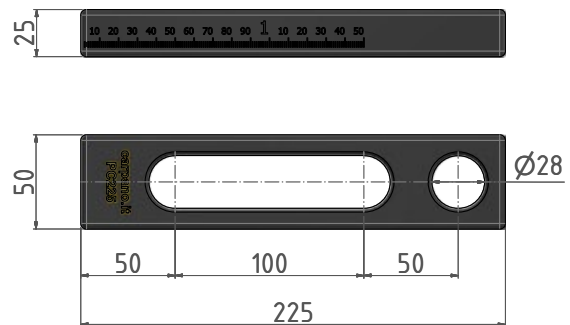
DSK28.PC150



Positioning bar 150 x 50 x 25 mm

Nitr. + Ox.

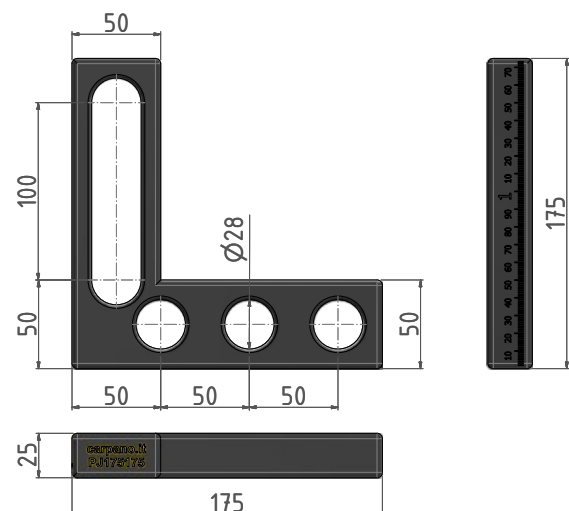
DSK28.PC225



Positioning bar 225 x 50 x 25 mm

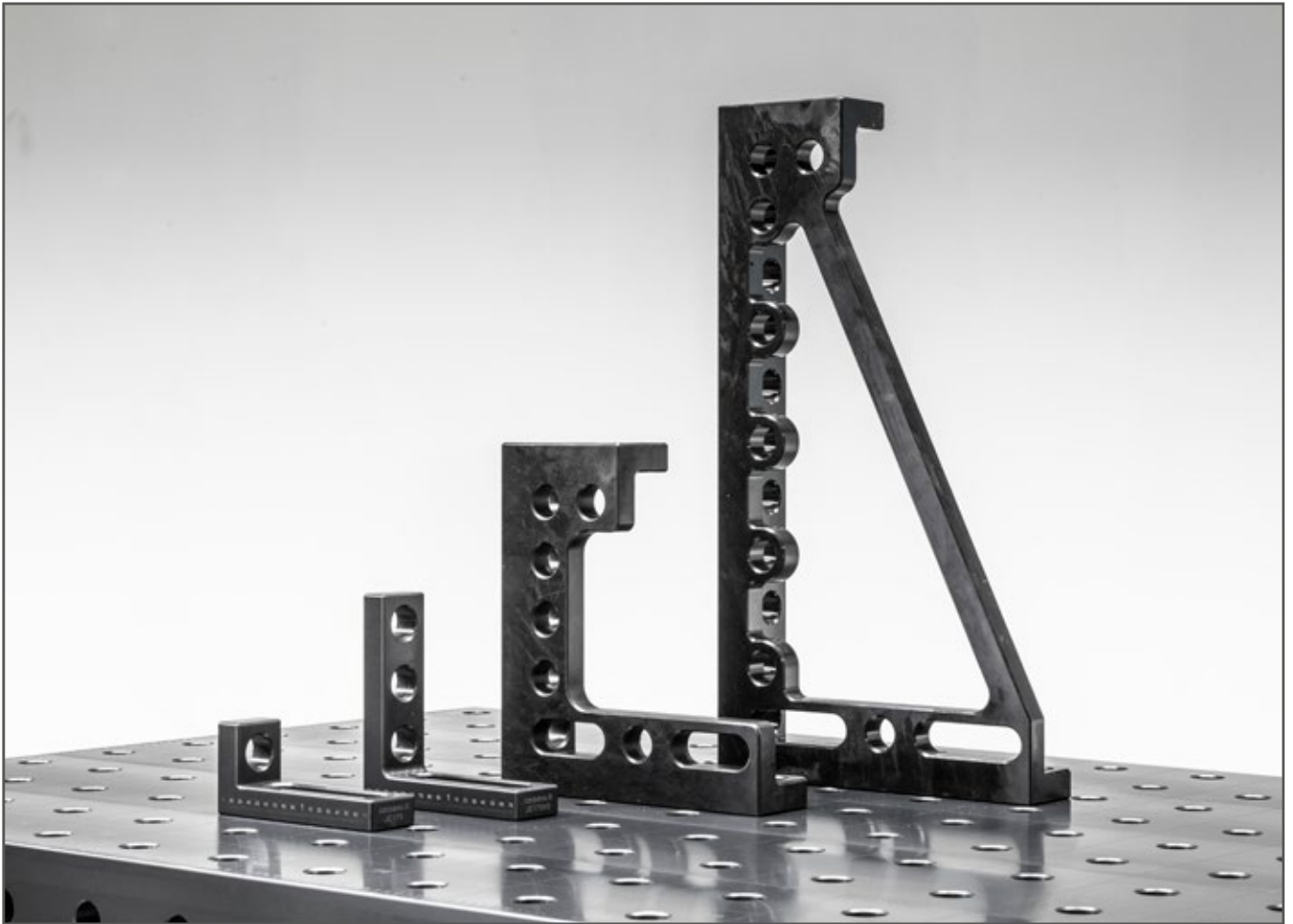
Nitr. + Ox.

DSK28.PJ175175



Flat square corner tool 175 x 50 x 175 x 25 mm

Nitr. + Ox.

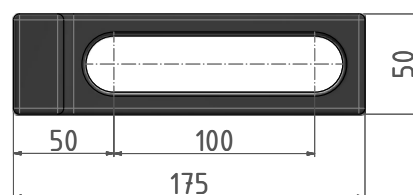
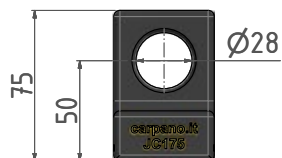


**Square corner tools are useful to create mechanical stops, square the pieces, realize working planes at a different height than the table one.**

- They are built in C40 steel and undergo nitriding and oxidation treatment.
- All external edges are rounded for a more comfortable grip.
- A ruler is printed on the slotted elements in order to facilitate the positioning of the workpieces.

## Square corner tools

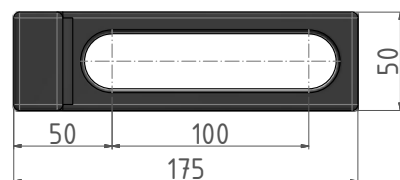
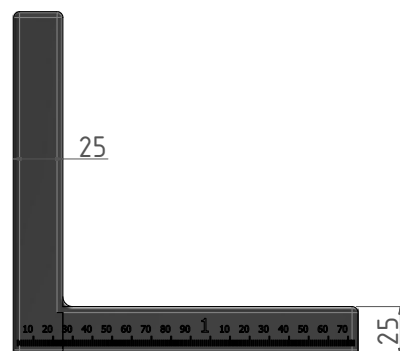
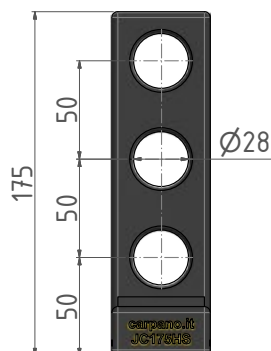
DSK28.JC175



Square corner tool 175 x 50 x 75 x 25 mm

Nitr. + Ox.

DSK28.JC175HS

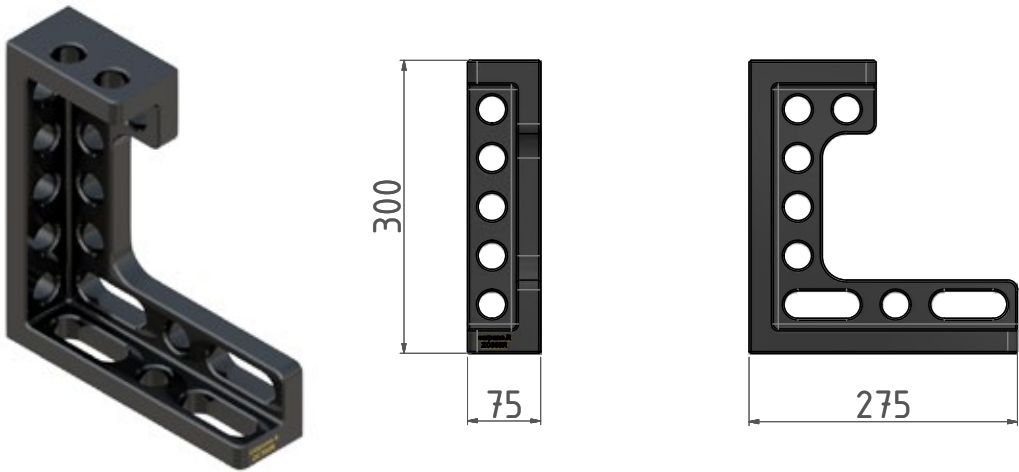


Square corner tool 175 x 50 x 175 x 25 mm

Nitr. + Ox.



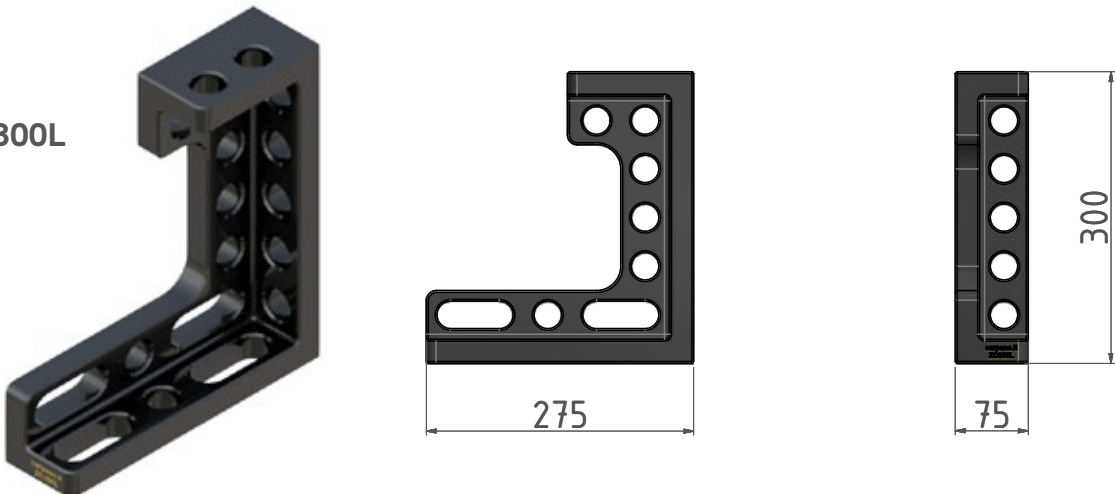
DSK28.ZC300R



Square corners tool 300 x 75 x 275 mm

Nitr. + Ox.

DSK28.ZC300L

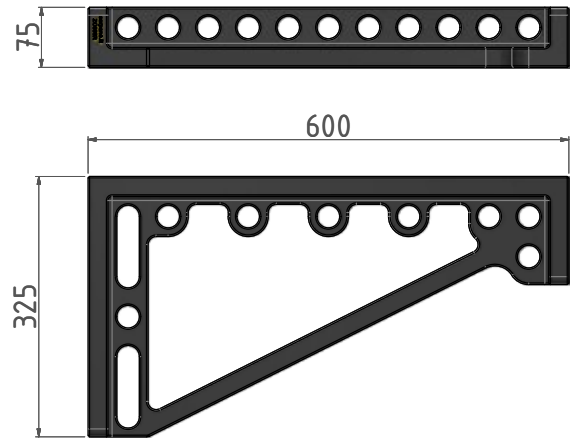


Square corners tool 300 x 75 x 275 mm

Nitr. + Ox.

■ Square corner tools

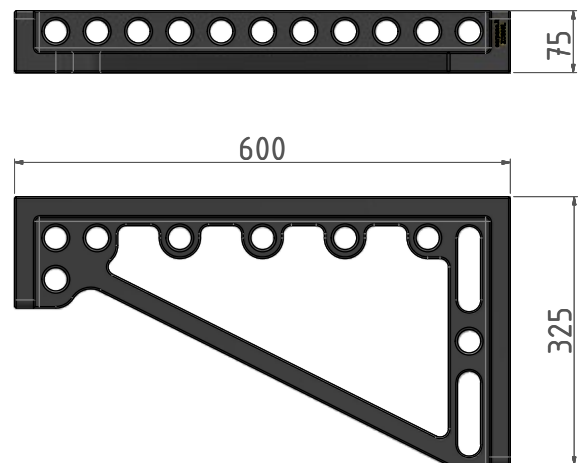
DSK28.ZC600R



Square corners bracket 600 x 75 x 325 mm

Nitr. + Ox.

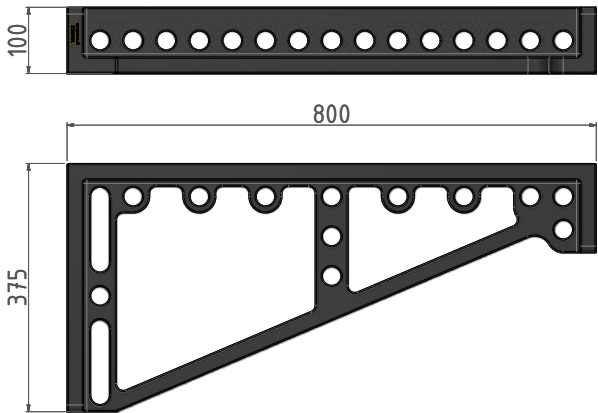
DSK28.ZC600L



Square corners bracket 600 x 75 x 325 mm

Nitr. + Ox.

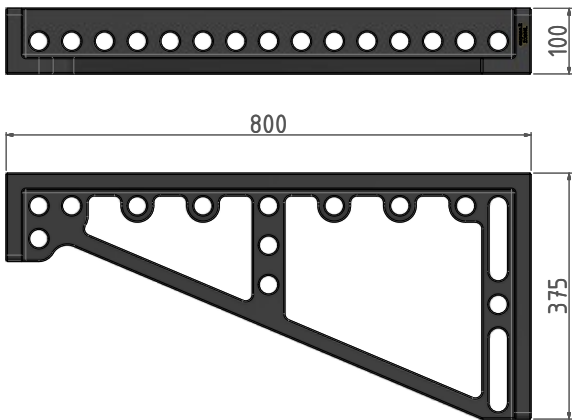
DSK28.ZC800R



Square corners bracket 800 x 100 x 375 mm

Nitr. + Ox.

DSK28.ZC800L



Square corners bracket 800 x 100 x 375 mm

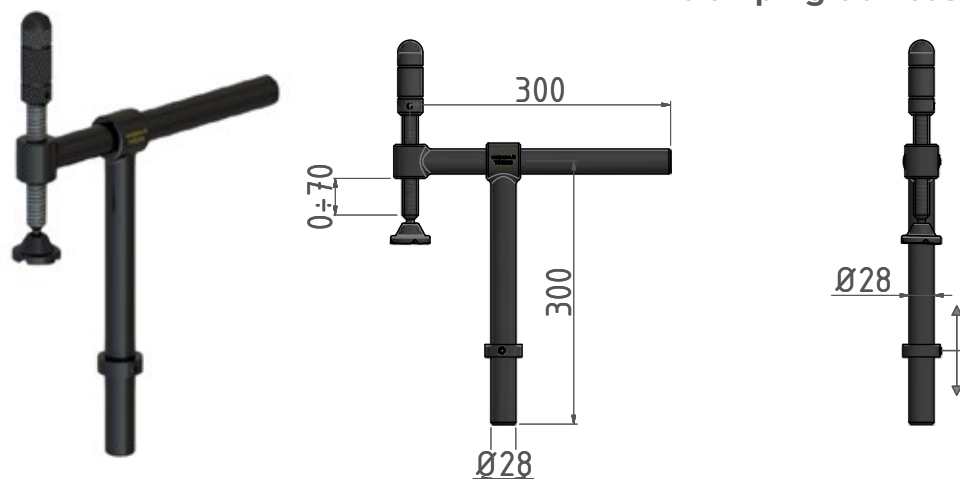
Nitr. + Ox.



**Clamping devices are useful to fix the workpieces to the table against the mechanical stops.**

- They allow a fast fixing of the pieces by means of the locking system by trapezoidal screw and nutscrew.
- The height is adjustable by the stop ring on the table.
- The knurled metal knob eases the operator grip.
- The burnishing treatment avoids oxidation.

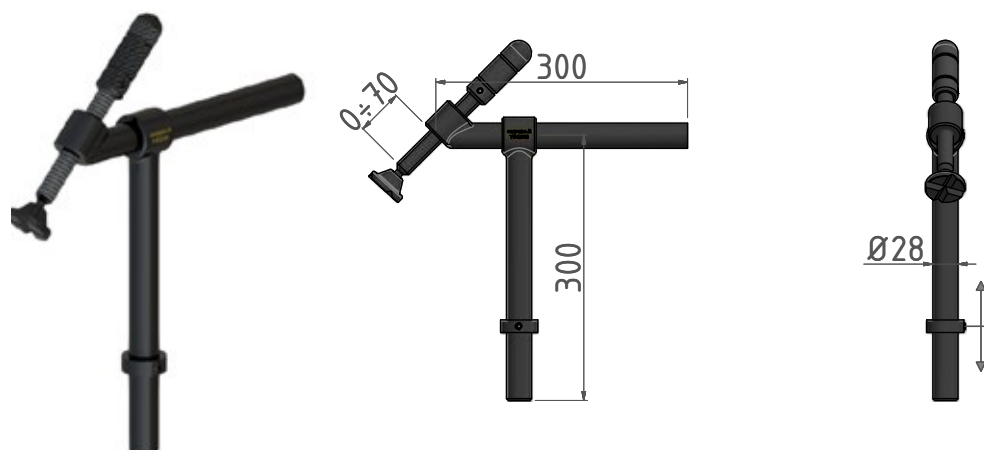
DSK28.YSS300



90° telescopic clamp 300 x 300 x 70 mm

Burnished

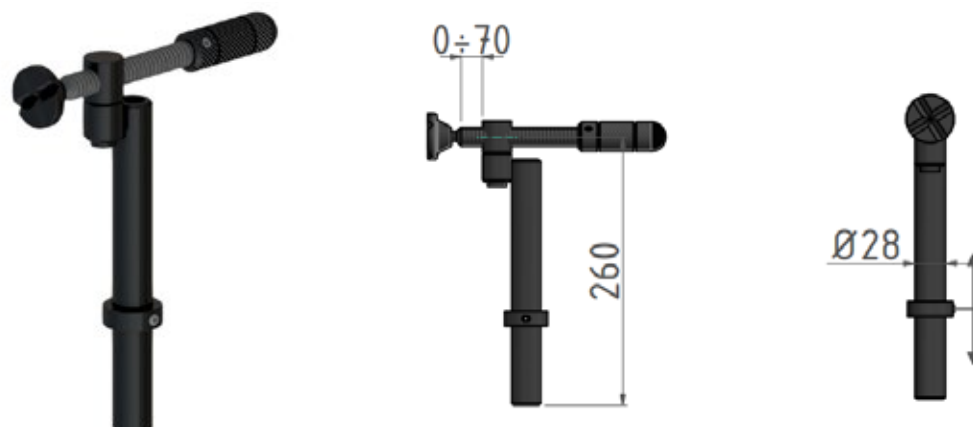
DSK28.YSQ300



45° telescopic clamp 300 x 300 x 70 mm

Burnished

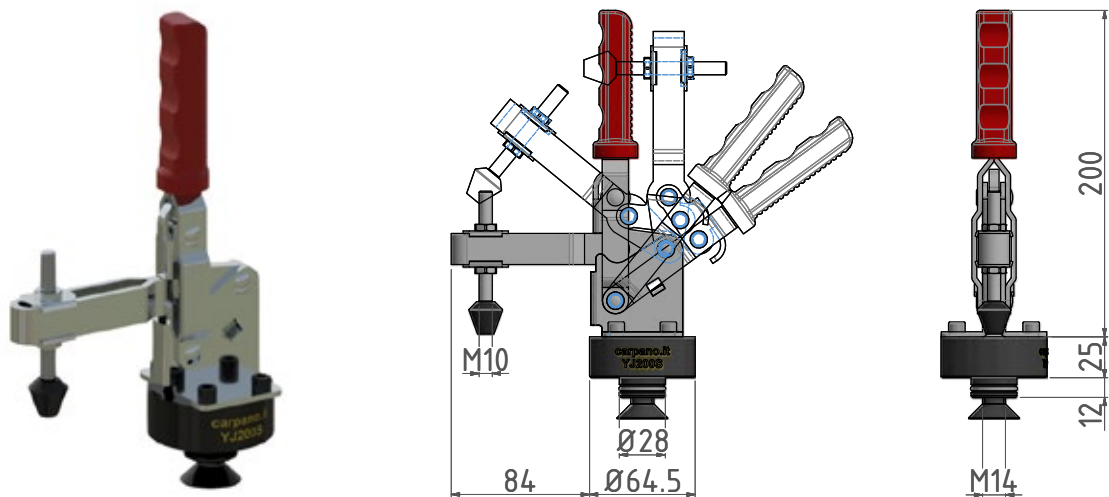
DSK28.YSP300



Horizontal clamp 300 x 70 mm

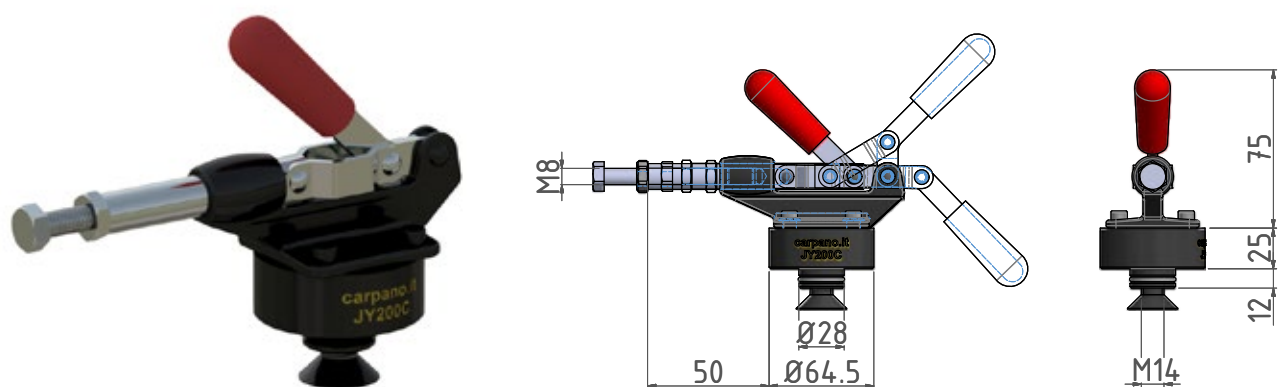
Burnished

## DSK28.YJ200S



### Vertical clamp

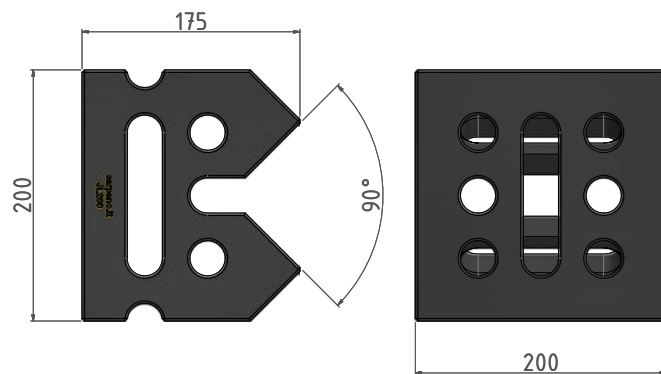
## DSK28.JY200C



### Horizontal clamp



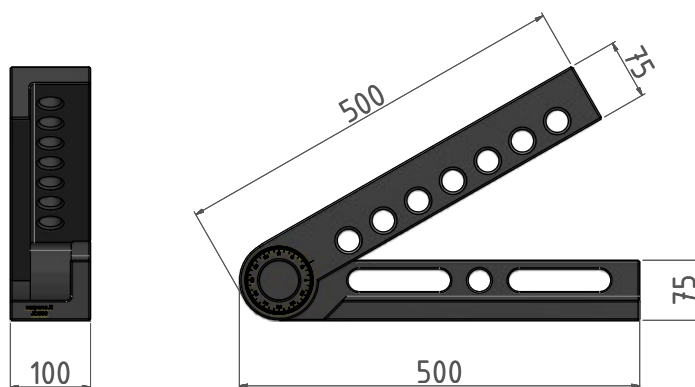
## DSK28.JL200



Fitting for corners 200 x 200 x 175 mm

Nitr. + Ox.

## DSK28.JD500



Adjustable compass 500 x 500 x 100 mm

Nitr. + Ox.

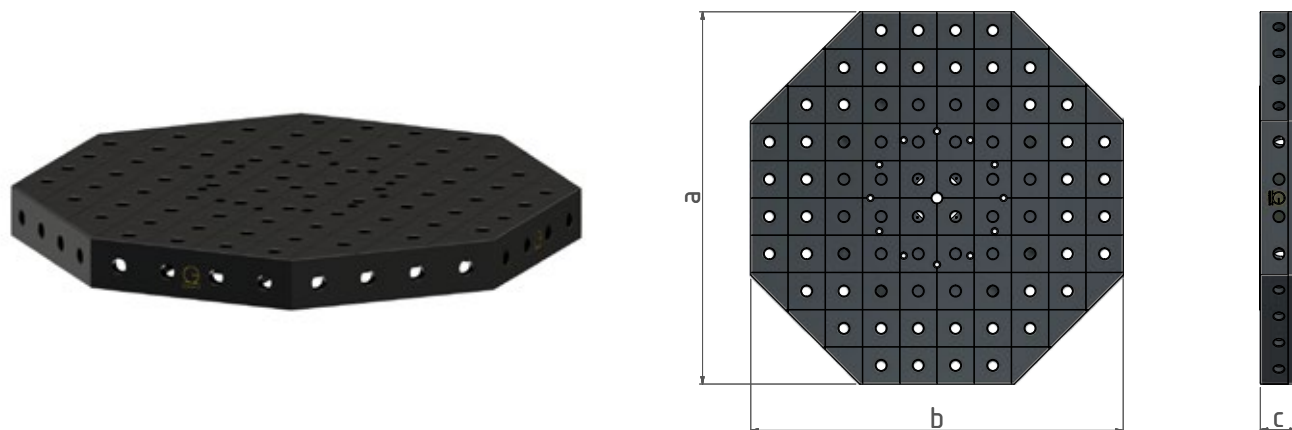


**The octagonal tables are installed on turntable positioners or on head-&-tailstock positioners.**

They are equipped with flanges for fixing to Carpano positioners as, for instance, the OAK model, but all the changes necessary for fixing to other devices are available on request.

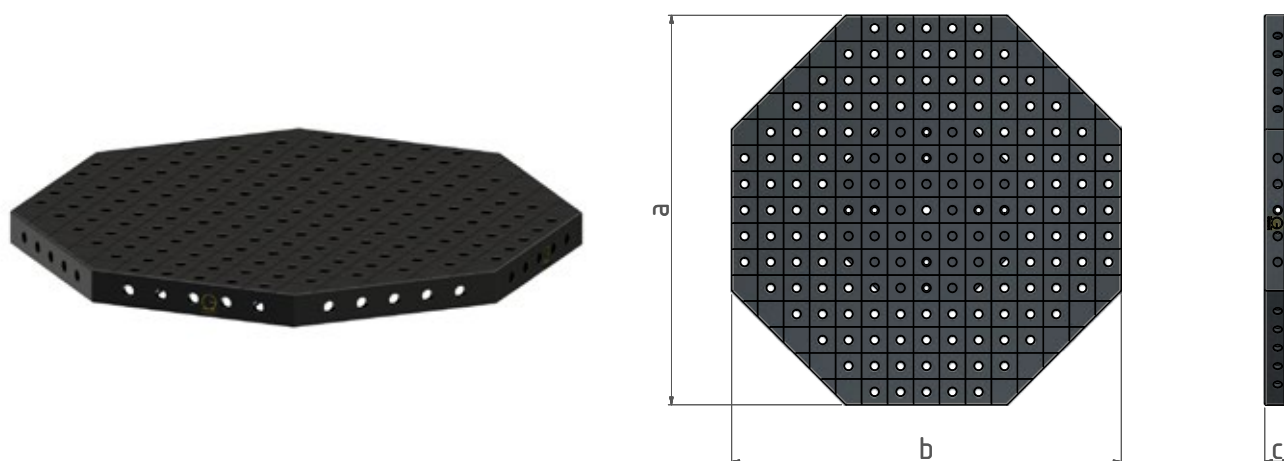
Octagonal tables with Ø16 hole and 12-15 mm thickness are also available.

### OCTAGONAL TABLES DSK28 with Ø28 hole



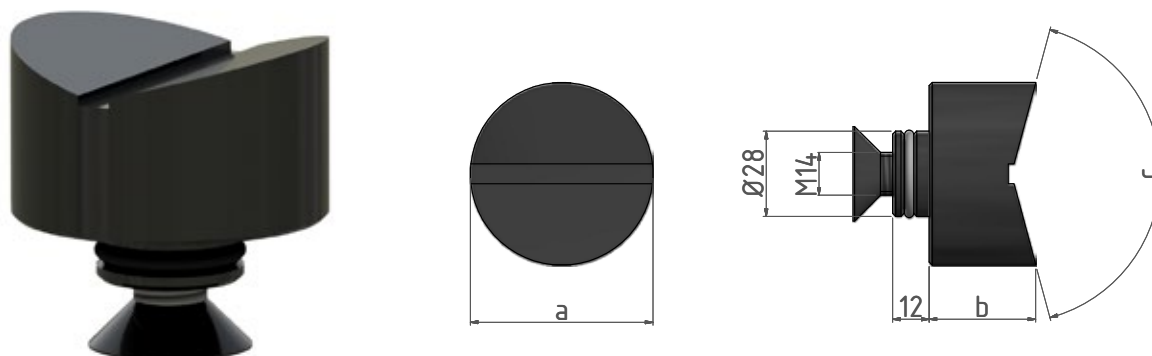
Code	Dimensions: a x b x c	Treatment
DSK28.OCT800	800 x 800 x 100 mm	Nitr. + Ox.
DSK28.OCT1000	1000 x 1000 x 100 mm	Nitr. + Ox.

### OCTAGONAL TABLES DSK16 with Ø16 hole

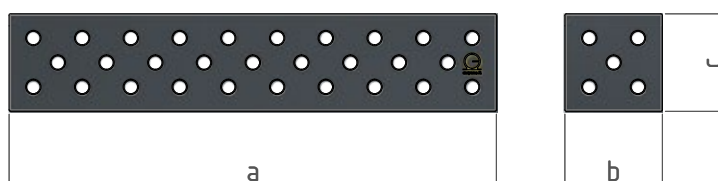
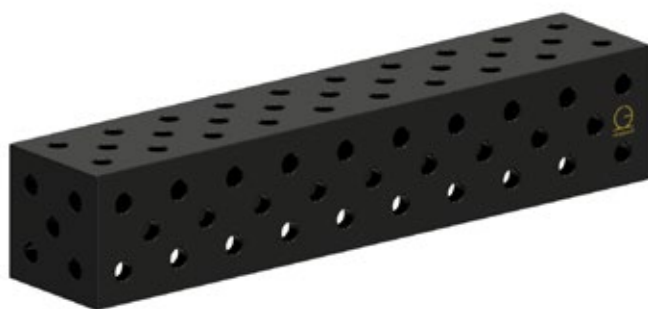


Code	Dimensions: a x b x c	Treatment
DSK16.OCT500	500 x 500 x 50 mm	Nitr. + Ox.
DSK16.OCT750	750 x 750 x 50 mm	Nitr. + Ox.
DSK16.OCT1000	1000 x 1000 x 50 mm	Nitr. + Ox.

## ■ Supports for pipe positioning



Code	Dimensions: a x b x c	Treatment
<b>DSK28.VA60150</b>	60 x 50 mm x 150°	Burnishing
<b>DSK28.VC110120</b>	110 x 60 mm x 120°	Burnishing
<b>DSK28.VC140150</b>	140 x 60 mm x 150°	Burnishing



**These elements can:**

- connect two or more tables together
- increase the table surface sideways
- be used on the table to provide supports at different heights

Code	Dimensions: a x b x c	Treatment
DSK28.U500	500 x 200 x 200 mm	Nitr. + Ox.
DSK28.U600	600 x 200 x 200 mm	Nitr. + Ox.
DSK28.U1000	1000 x 200 x 200 mm	Nitr. + Ox.
DSK28.U2000	2000 x 200 x 200 mm	Nitr. + Ox.
DSK28.U3000	3000 x 200 x 200 mm	Nitr. + Ox.
DSK28.U4000	4000 x 200 x 200 mm	Nitr. + Ox.

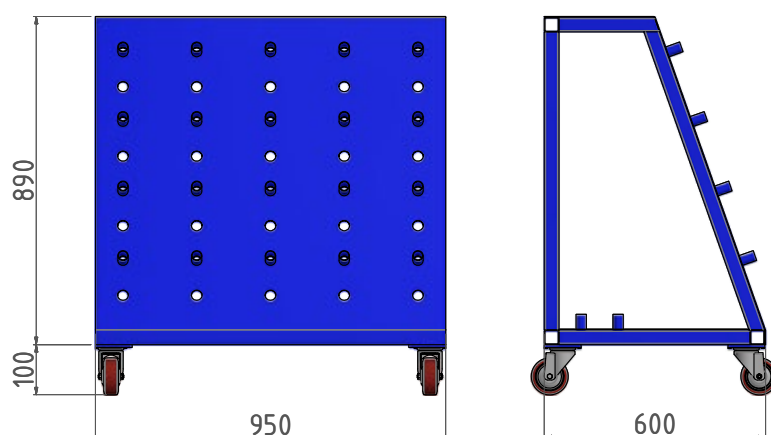


**It allows the operator to keep all the tools in order and clearly visible.**

The large brackets can be accommodated inside the cart frame.

The pivoting wheels allow its easy positioning inside the workshop.

**DSK28.TC1000**



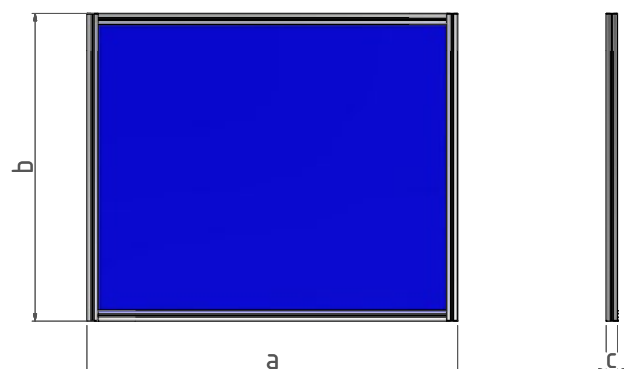
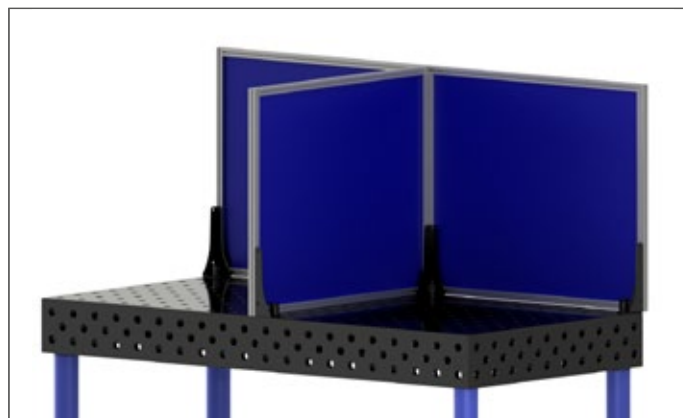
Tool cart



### Separation or ray protection panels

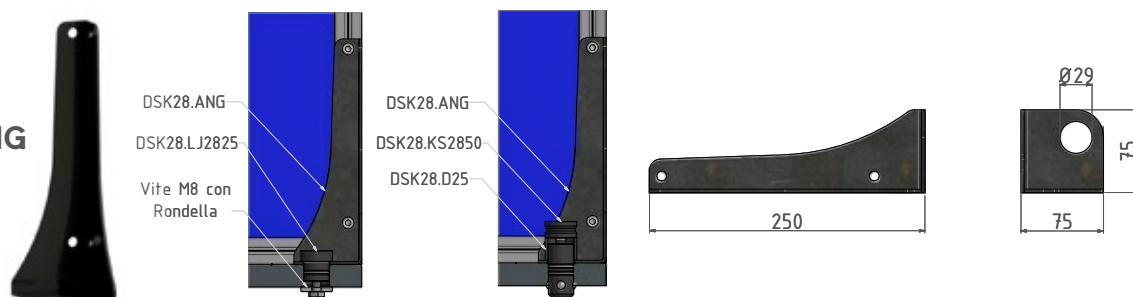
They consist of an aluminum profile frame with a central DIBOND \* panel. They are recommended in robot applications (see the following pages).

(\* composite material consisting of two aluminum sheets with a polyethylene core)



Code	Dimensions: a x b x c	Material
DSK28.P1000	1000 x 830 x 30 mm	Aluminum / Dibond
DSK28.P1200	1200 x 830 x 30 mm	Aluminum / Dibond
DSK28.P2000	2000 x 830 x 30 mm	Aluminum / Dibond
DSK28.P2400	2400 x 830 x 30 mm	Aluminum / Dibond

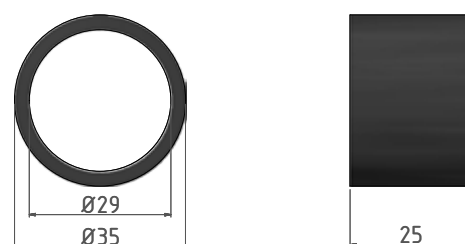
#### DSK28.ANG



Panel support bracket, 250 x 75 x 75 mm

Black paint

#### DSK28.D25

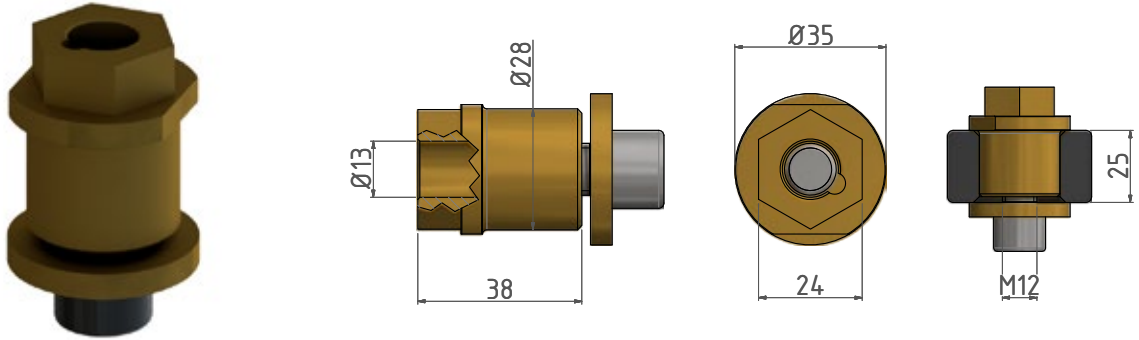


Spacer, 25 mm

Burnished

■ Ground bearing

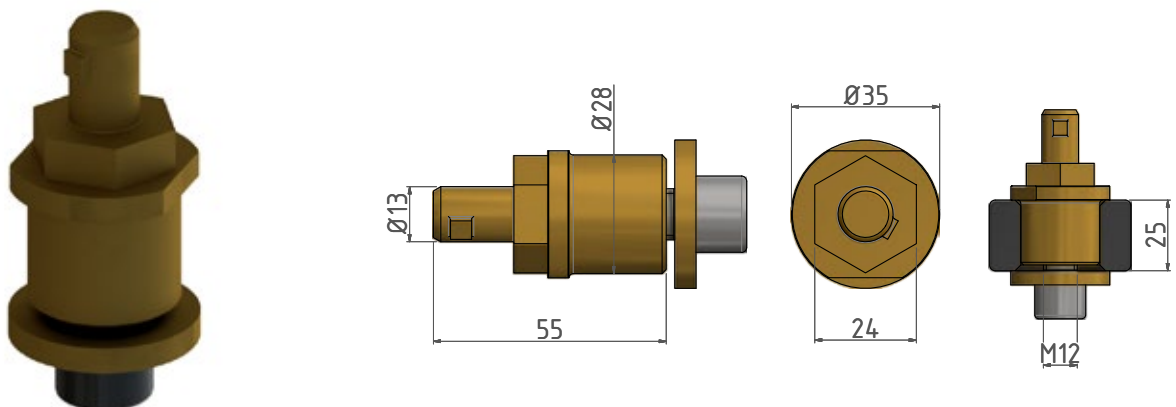
DSK28.WG-F



500A female ground bearing

Brass

DSK28.WG-M



500A male ground bearing

Brass

DSK28.PTC



Blowpipe support L=200

Burnished



#### Code

**ORIZZONTE** Hand wheel coloumn + idle coloumn

**Manual turntable positioner, ideal for frames or light structures where repositioning is necessary to facilitate the welder in his work.**

DESK multi-hole U-shaped bars are available in lengths ranging from 1000 to 3000 mm, with or without nitriding and oxidation treatment.

They are obviously compatible with all the accessories of the DESK series; in particular, all the square corners brackets allow an expansion of the working area.

- Weight: 250 kg (drive unit + idler) – multi-hole U-shaped bar excepted.
- Max carrying capacity: 1500 kg – multi-hole U-shaped bar excepted.
- Rotation torque: 900 Nm.
- Compatible multi-hole U-shaped bars: DSK28 L= 1000 – 2000 – 3000
- Rotation: manual irreversible.

**For further information, download here the pdf file:**

<https://www.carpano.it/wp-content/uploads/2019/09/ORIZZONTE-ITA.pdf>



**OAK is a head-&-tailstock positioners model.**

- The two columns are made of strong steel carpentry with steel guides and guide bearings.
- Lifting is by trapezoidal screw and bronze nut.
- The fall protection system operates through a false nut and the reading of the wear.
- One table is motorized at variable speed, while the other is idler.
- On request, it is possible to motorize and synchronize both.
- Optionally, a remote control with touch-screen is available for programming one positioning sequence.

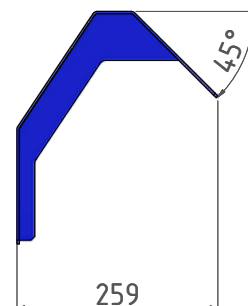
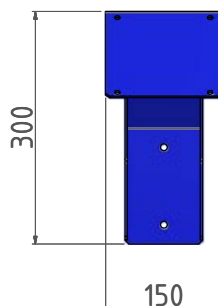
**For further information, download here the pdf file:**

<https://www.carpano.it/wp-content/uploads/2019/09/OAK-ita.pdf>



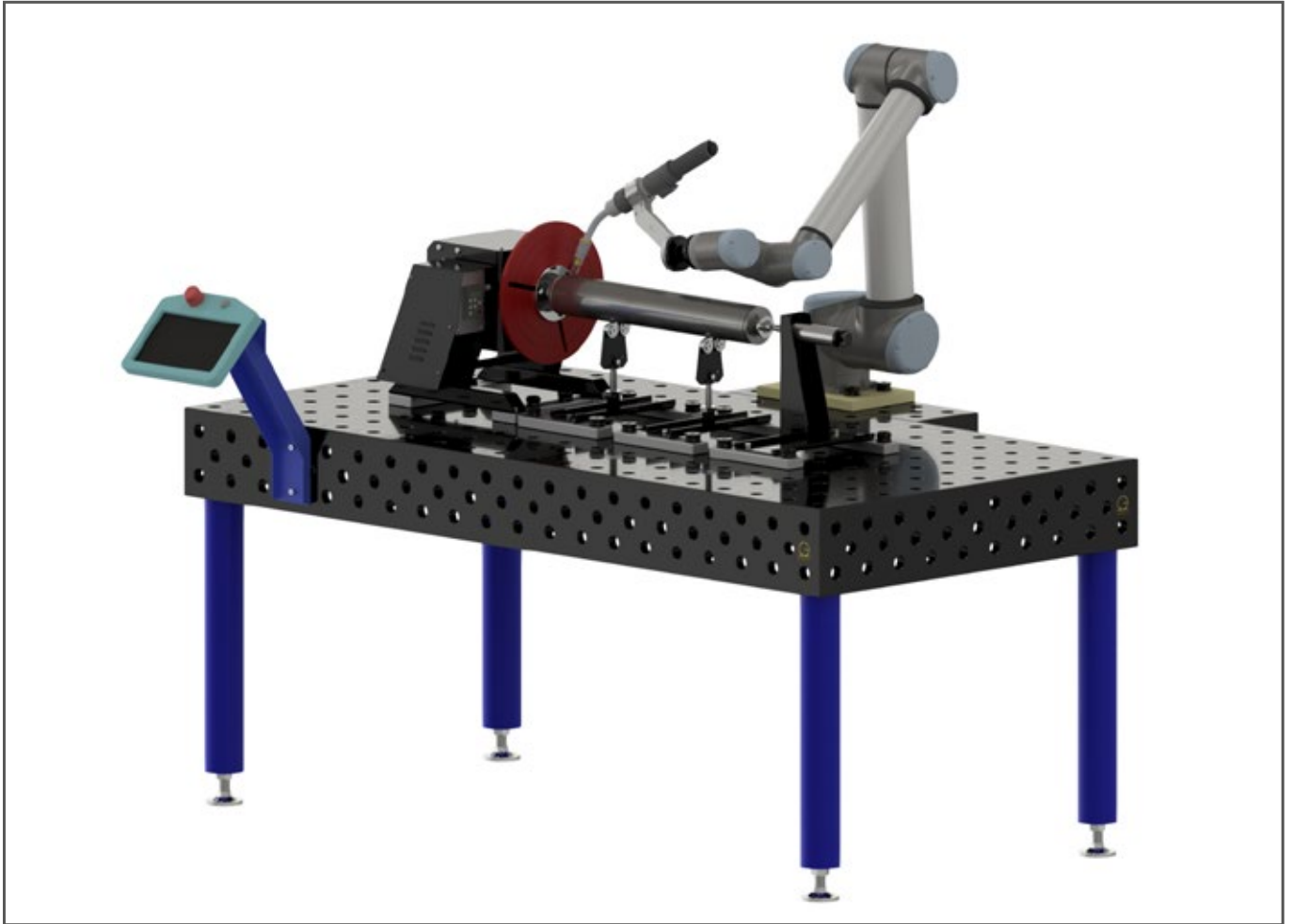
In this application two 2000x1000x200 tables are joined together by 200x200x600 U-bars. The UR10e cobot is fixed between the two tables. On each table it is possible to fix different pieces. This way the Cobot can easily work on both tables and the operator can load and unload in masked time. The protection panels complete the application.

DSK28.SCM



Remote control pendant support

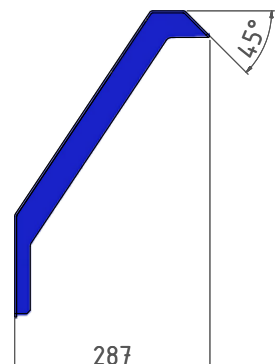
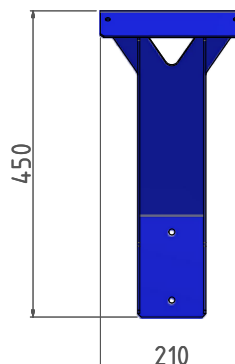




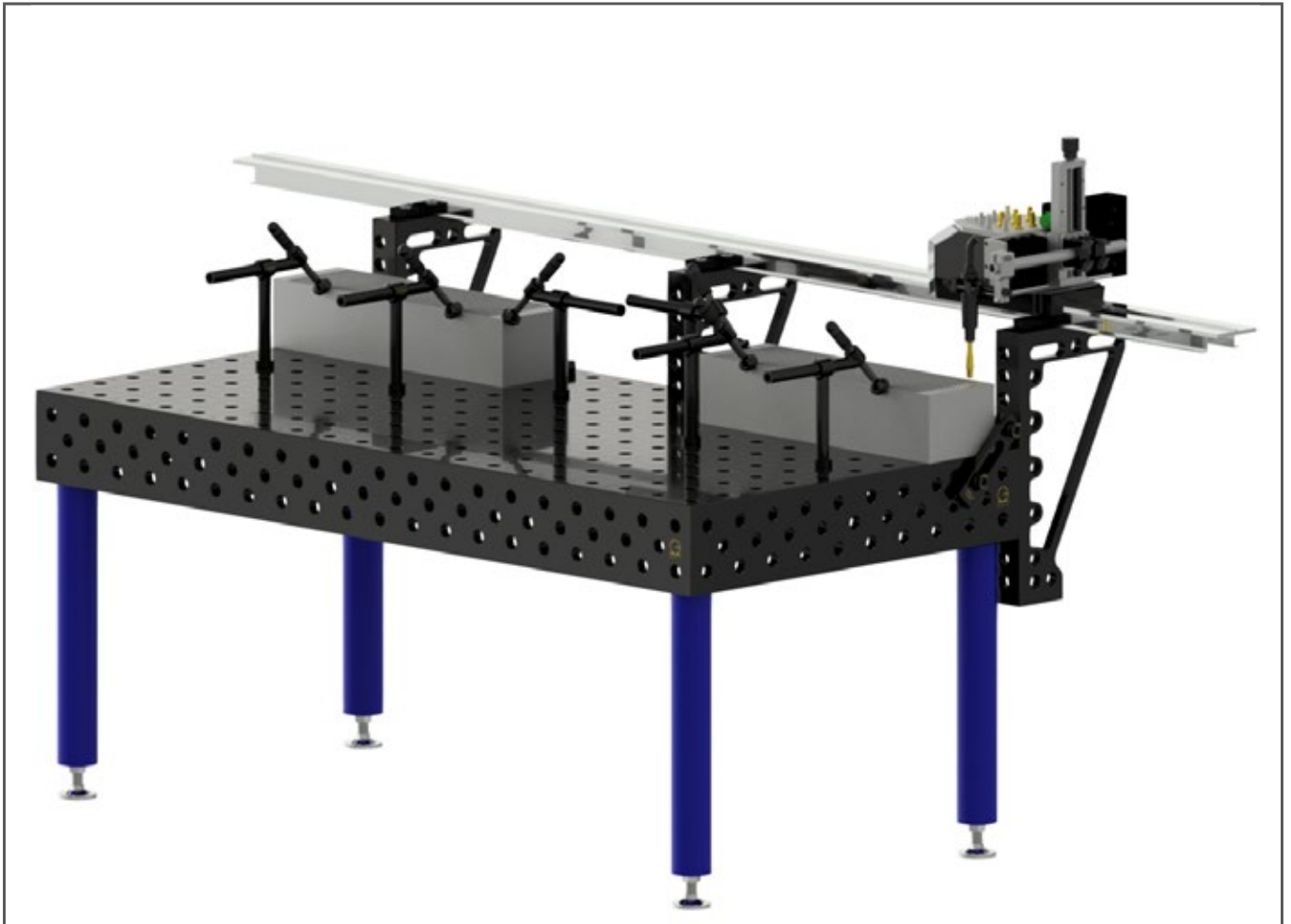
In this application, the table allows an easy repositioning of the tailstock and of the dollies in order to adapt the system to pipes having different length.

In the event of a production change, the positioner and its accessories can be easily removed.

DSK28.SPD

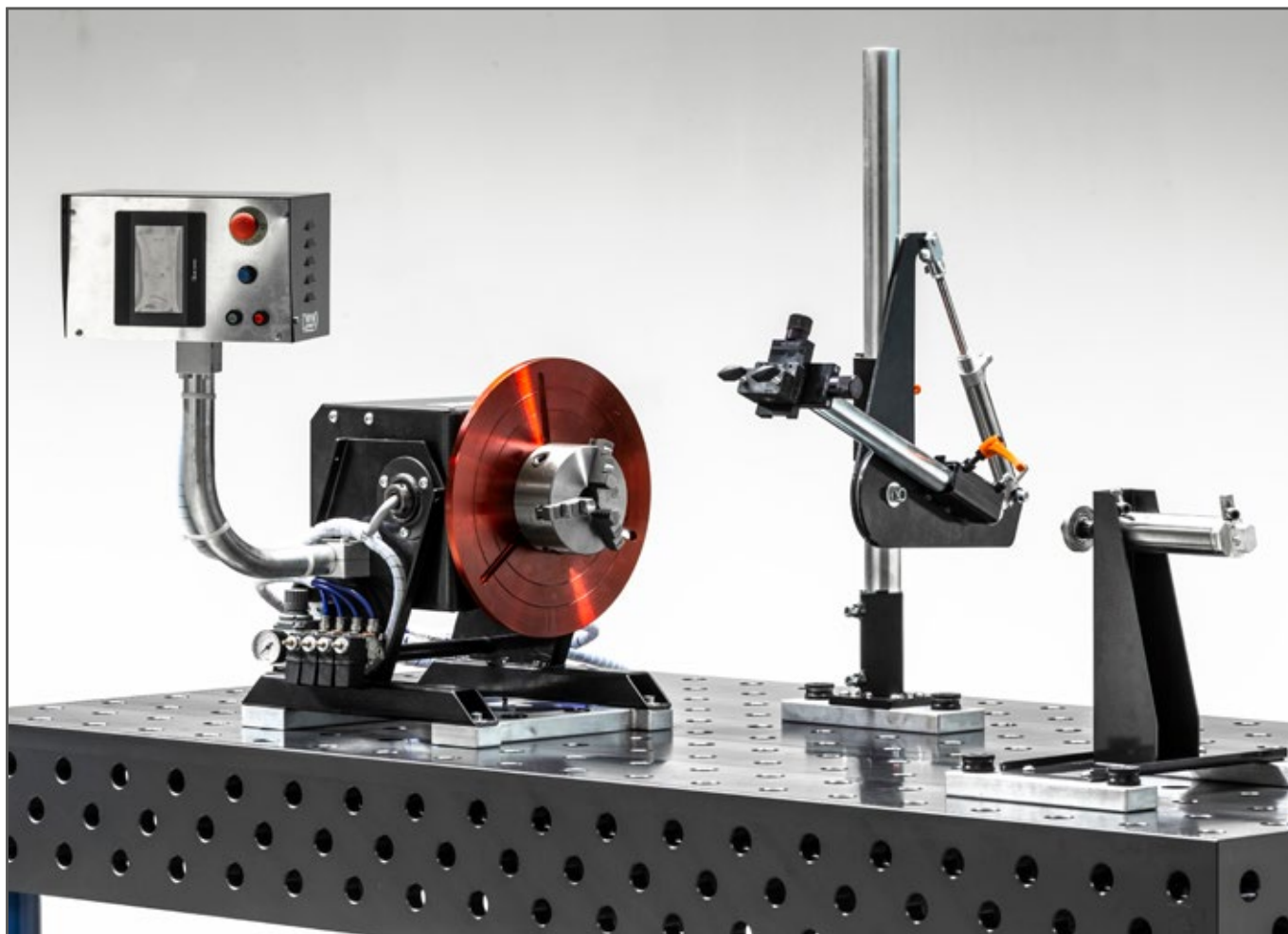


UR remote control pendant support



**Three square corners brackets support the rail of Squirrel carriage, which can thus weld two or three pieces in sequence longitudinally.**

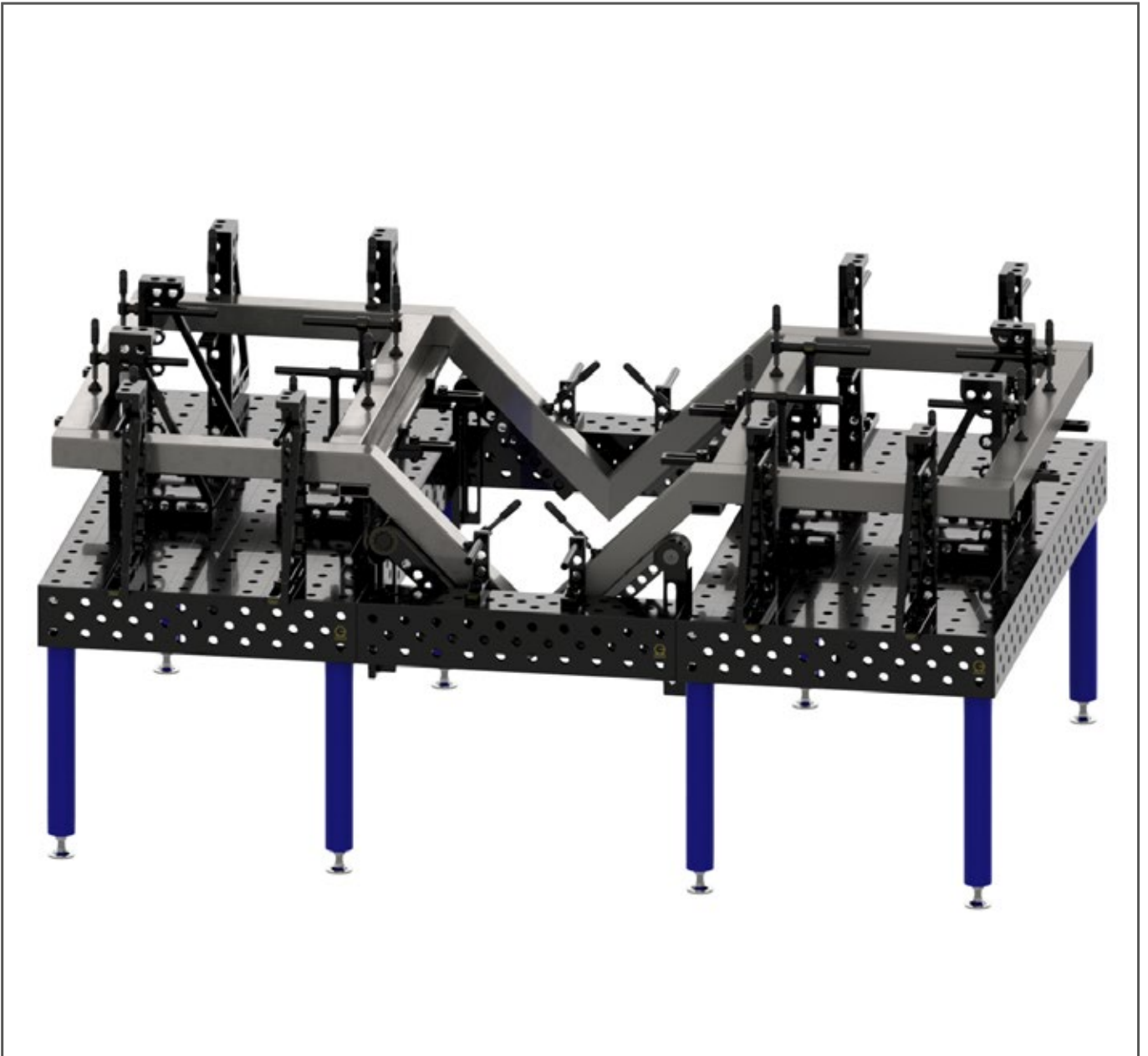
This system allows the easy switching from one format to another of the pieces to be welded, without being forced to use expensive metal jigs to lock them.



**ONE turntable positioner and its accessories can be fixed on flanges with Ø28 holes that allow their easy positioning on the table.**

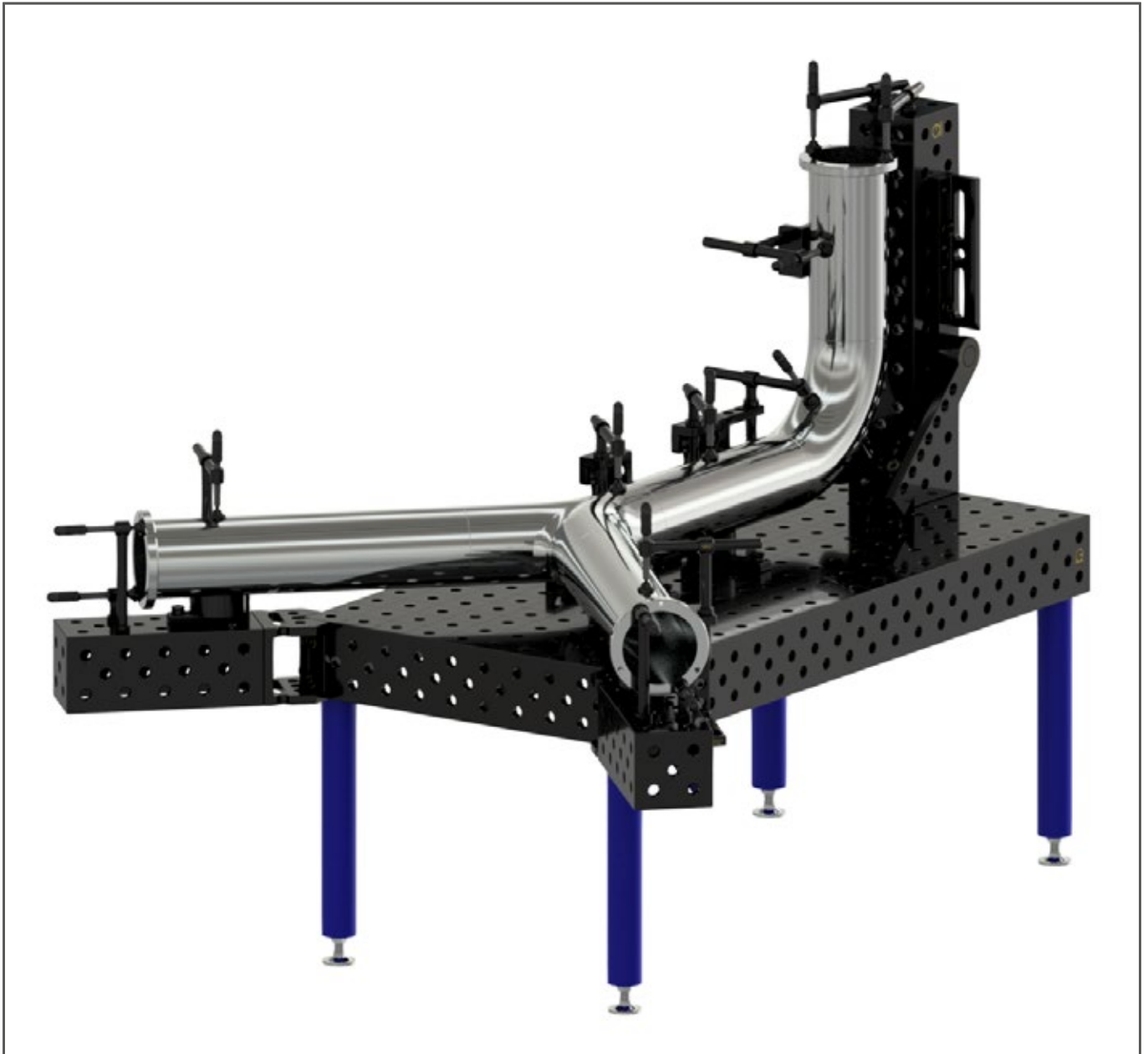
In this case, the operator will be sure that the various elements have coplanar bases and can be easily repositioned at different distances.

When the system is no longer needed, it will be easy to remove it to bring the table back to its manual use.



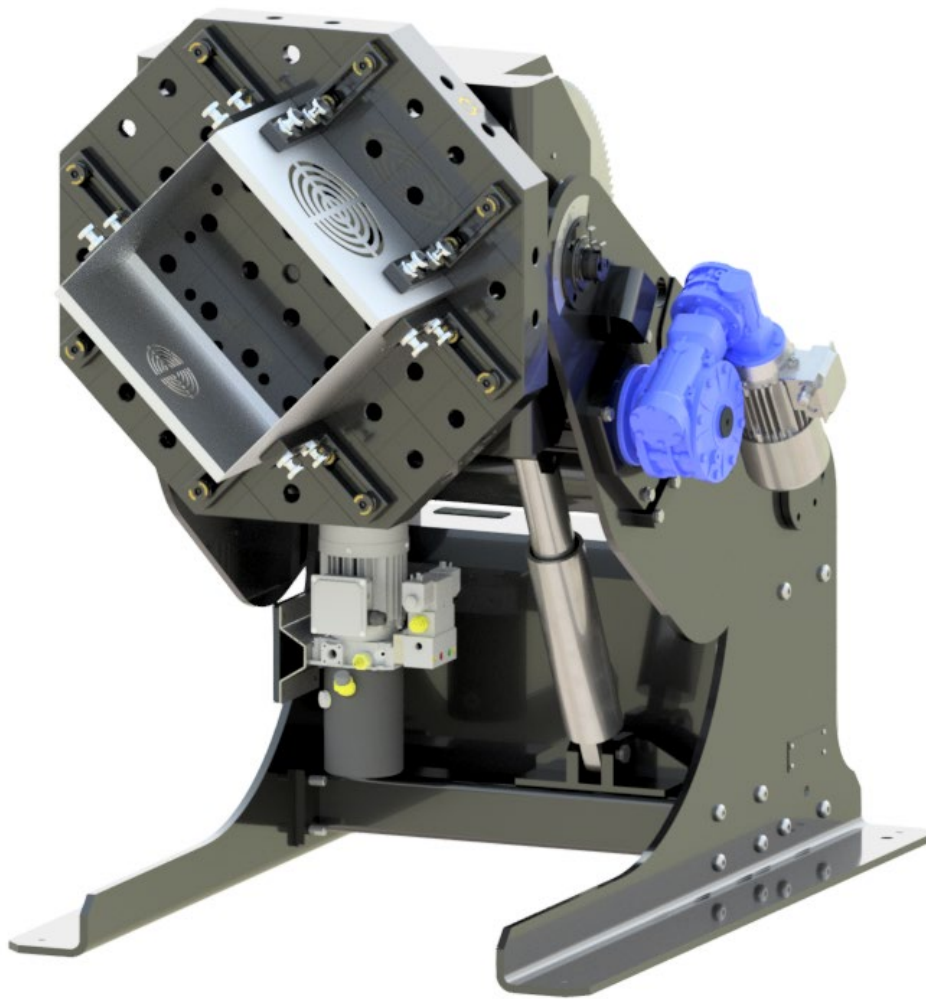
**In this application the components for the realization of a steel frame are blocked and welded.**

Thanks to the U-bars it is possible to connect two or more tables so as to create a larger working area with openings where the pieces can be inserted or the operator can place himself, in order to work more easily.



**In this application a V-joint of a stainless steel tubular is made.**

U-bars joined to the table through fittings for corners allow the positioning of a piece longer than the table itself, in such a way that the points to be welded are easily accessible to the operator.



**Octagonal tabletop, installed on TWELVE-3D positioner, in this example is suitable for fixing a sheet metal structure.**

The possibility to lift, rotate and tilt the piece puts the welder in the best working conditions.





# GENERAL SUPPLY CONDITIONS

## 1. SUPPLY OBLIGATION ARRANGEMENT

The following general terms of business are always to be considered applicable to every order made by the buyer. Therefore, any supply clause written by the buyer on his orders or any other document given to the seller, which may result to be conflicting with the present general conditions, will be considered not written. The buyer has to forward the orders to the seller in writing. The seller reserves the authority to accept telephone and verbal orders. The order is to be considered executed when the buyer receives the written acceptance of the same (order confirmation) by the vendor or, in the absence thereof, automatically 15 days after the order receipt by the seller. All offers and prices are just an indication and are not binding. Therefore the seller considers himself to be bound only to what is declared in his order confirmations.

## 2. TERMS FOR DELIVERY

The delivery dates indicated by the seller as well as the ones written on the buyers' orders have to be considered just as an indication and are not binding and are subject to the punctual supply by the buyer of all the specifics, to the variations due to the availability of the goods with the suppliers or to reasons of force majeure: delays in the delivery due to said availability variations are not attributable to the seller, who is not in duty bound to the compensation for damages suffered by the buyer. Reasons of force majeure have also to be considered the accidents (industrial injury, disease, etc) and any other circumstances which may cause a total or partial job reduction, as well as the lack of raw materials, troubles with transportation, etc. The seller reserves the authority to suspend the delivery of the goods if the buyer has not seen to the payment of the invoices relative to other supplies whose terms of payment are overdue. The goods are understood as being delivered for all intents and purposes to the buyer from the time they were picked up by the carrier or the buyer himself at the seller's warehouse.

## 3. PAYMENT AND TERMS OF PAYMENT

The payments have to be made to the seller's domicile and in accordance with the established conditions. In the event of a delay, the due amounts of money will automatically imply the charge of interests based on the official discount rate plus 5 points. In the event of a non-payment, the buyer is to be considered in default without the necessity of any formal notice by the seller. The presence of possible faults and/or defects in the products does not excuse the buyer for suspending the payment of the invoices. Should the client suspend and/or delay the payments, the seller may suspend the supplies, with the authority to consider the contract automatically terminated by rights and to demand for damages.

## 4. WARRANTY

CARPANO EQUIPMENT guarantees the products for a period of 24 months starting from the delivery date, for a daily work cycle of 8 hours. The warranty is intended ex works CARPANO EQUIPMENT. CARPANO EQUIPMENT guarantees the performance of its products in accordance with the instructions written in the relative manuals. For the products based on job orders, the warranty is pertaining to the specifics agreed with the client.

## 5. VOID WARRANTY

In case of any tampering or unauthorized intervention the warranty shall be deemed void.

## 6. LIABILITY FOR DAMAGE

The seller's liability is limited only to the obligations above and it's expressly agreed that the seller does not accept any liability for damages resulting from any cause connected with the use and utilization of the sold products.

CARPANO EQUIPMENT is not responsible and for no reason whatsoever may the expenses be charged for:

- Machine downtime.
- Direct or in direct damage due to the non-operation of the equipment.
- Working hours spent to solve possible problems on the equipment.

## 7. RESERVATION OF OWNERSHIP

Until the payment in full of any credit resulting from business relations has taken place, included any additional credit and until the payment of bills and cheques has been made, the property in the goods remains in the seller.

## 8. COMPETENT COURT

It's established that the court of Bologna will be the sole competent court for every dispute relative to this contract.

## 9. APPLICABLE LAWS

The applicable law is the Italian law.





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