

| ENG

# ROTATORS

from 12.5 to 460 Ton capacity

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

# ROTATORS

**from 12.5 to 460 Ton capacity**

## **The state of art since 1962**

That's when PASSERINI designed and built the first rotator.

Since then, it has been developed a complete range of products with such distinguished features as:

- construction top quality
- product long lasting duration
- wide choice of accessories and of custom built executions

We owe to a/m features our renown and the durable appreciation of the most important European and extra-European Customers for our rotators.

Ask them and they'll confirm you how reliable and trouble free are their PASSERINI rotators, some of which are still at work after 30 to 40 years of honourable performance.



We reserve the right of modifying the technical features of machinery as stated herein and we do not respond for any printing mistake.

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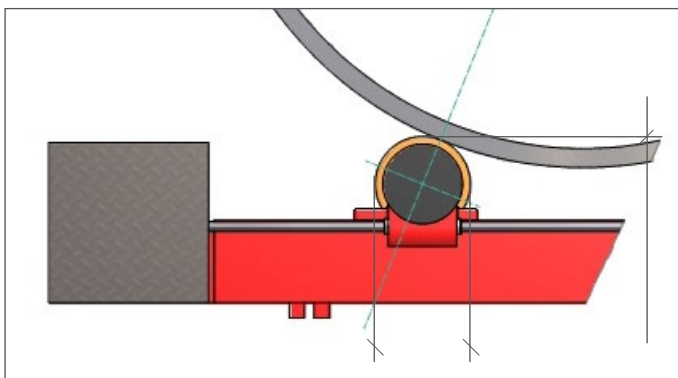
- The updated version is the one in our web site

# ROTATORS MODEL R from 12.5 to 460 Ton

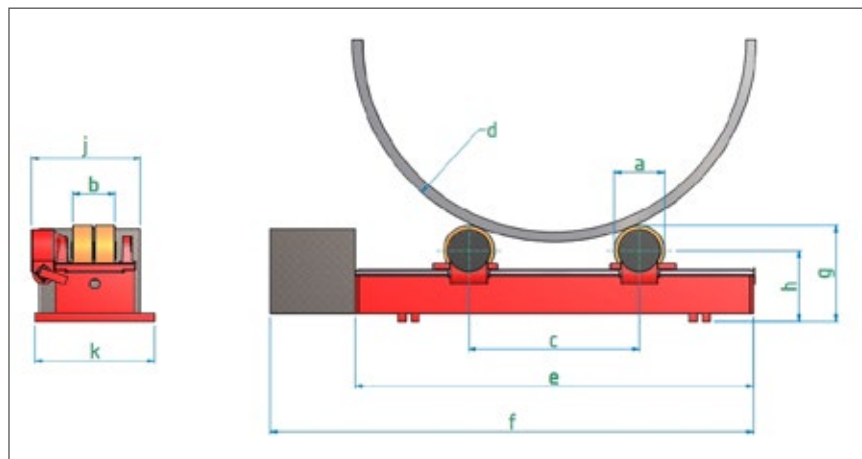


## WHY OUR ROTATORS ARE THE BEST CHOICE:

- 1.** Worm screw gearings coaxial to wheels are specially designed and built by PASSERINI so that:
  - the diameter of the casing being smaller than the one of any commercial product, height G results lower than any rotator of the same capacity built by competitors;
  - owing to the bronze crown and worm screw special executions, the torque is greater than the one quoted by most competitors;
  - the case is made of cast iron or steel and not of aluminium as the one of common gearings;
  - thanks to the small height G, the projection of load falls on the wheel bracket and doesn't stress the screw that adjusts the wheels centre-to-centre distance.
- 2.** Wheels are available:
  - made of solid steel (superficially tempered upon request)
  - coated with rubber or with polyurethane
  - made of high density synthetic material
- 2a.** The polyurethane coating is laid on a toothed metal core in order to double the face contact and to prevent any breakaway of the polyurethane layer.
- 3.** Drive wheels are mechanically synchronized by a transmission shaft and the motor is protected by a strong carter made of chequered steel plate
- 4.** Frames are extremely robust and machined on their upper face
- 5.** Lead screw to adjust centre-to-centre distance of wheels is made of one single piece without any in-between joint.



# ROTATORS MODEL R from 12.5 to 70 Ton



## STANDARD FEATURES

- DC or AC drives depending on the model
- Interface to automatic welder
- Remote control (24V) of all functions on portable pendant
- Centre-to-centre distance of wheels adjustable by screw
- Transmission statically and dynamically irreversible granted by worm screw gearings manufactured by us
- Feeding 230/400V 50 Hz

## OPTIONS

- Different speed ranges
- Synchronization of 2 or more drive units
- Anti-drift systems
- Wheels made of solid HDN/T resistant at very high specific pressure
- Brushless motor with encoder and interface to PLC for plants highly automated
- Lorries for traversing on rails with idle flanged wheels (with/without brakes) or motorized

## KEY OF READING

### Material of rolls:

**F** = Polyurethane

**A** = Steel

**G** = Rubber

**M** = Mixed rubber/steel

**CTR** = Max. drive capacity (concentric tons)

**P** = Weight capacity

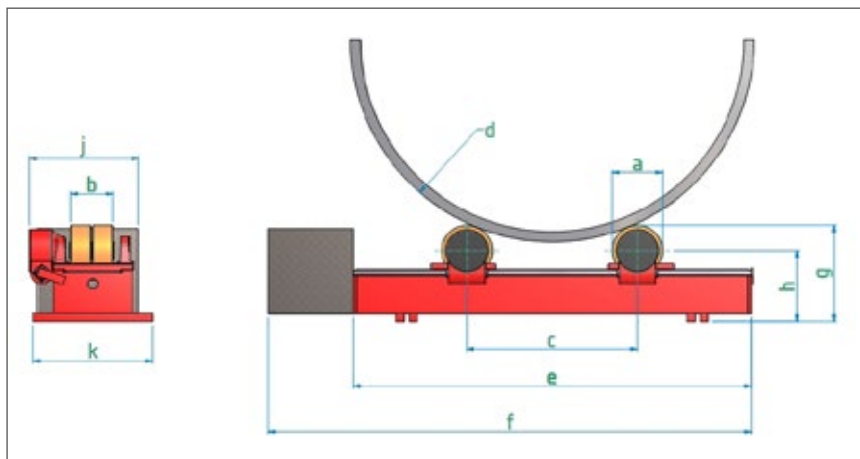
**E1, E2, E3** = Minimum /maximum speed

**W** = Net weight

D Drive Unit		R125_G	R200_F	R300_F	R500_M	R07C_A	R07C_M
<b>_ E1</b>	mm/min	94-945	100-1000	100-1000	100-1000	85/850	85/850
<b>_ E2</b>	mm/min	170-1700	130-1300	170-1700	130-1300	130/1300	130/1300
<b>_ E3</b>	mm/min		200-2000				
<b>CTR</b>	Ton	18	30	45	90	100	100
<b>C Idle unit</b>		R125N-G	R200N-F	R300N-F	R500N-M	R07CN-A	R07CN-M
<b>P (1D+1C)</b>	Ton	12,5	20	30	50	70	70
<b>P (1D+2C)</b>	Ton	18	30	45	70	100	100
<b>P (1D+3C)</b>	Ton				90		
<b>Øa x b</b>	mm	250x320	250x210	350x210	350x335	350x150	350x450
<b>c min/max</b>	mm	290/1540	290/1540	380/1850	412/1986	425/2167	425/2167
<b>d min/max</b>	mm	180/4000	180/4000	600/4700	700/5000	700/5000	700/5000
<b>e</b>	mm	1970	1970	2490	2640	2780	2780
<b>f</b>	mm	2690	2690	3360	3680	3810	3810
<b>g</b>	mm	477	477	513	542	605	605
<b>h</b>	mm	352	352	338	367	430	430
<b>j</b>	mm	500	755	950	1050	1050	1050
<b>k</b>	mm	700	590	620	750	750	1000
<b>W D</b>	Kg	520	550	1000	1300	2000	2200
<b>W C</b>	Kg	350	380	700	900	1400	1600

# ROTATORS MODEL R

## from 100 to 460 Ton



### STANDARD FEATURES

- AC drives controlled by vector inverter
- Interface to automatic welder
- Remote control (24V) of all functions on portable pendant
- Centre-to-centre distance of wheels adjustable by screw
- Transmission statically and dynamically irreversible granted by worm screw gearings manufactured by us
- Feeding 230/400V, 50Hz

### KEY OF READING

#### Material of rolls:

**F** = Polyurethane

**A** = Steel

**G** = Rubber

**M** = Mixed rubber/steel

**CTR** = Max. drive capacity (concentric tons)

**P** = Weight capacity

**E1, E2, E3** = Minimum /maximum speed

**W** = Net weight

### OPTIONS

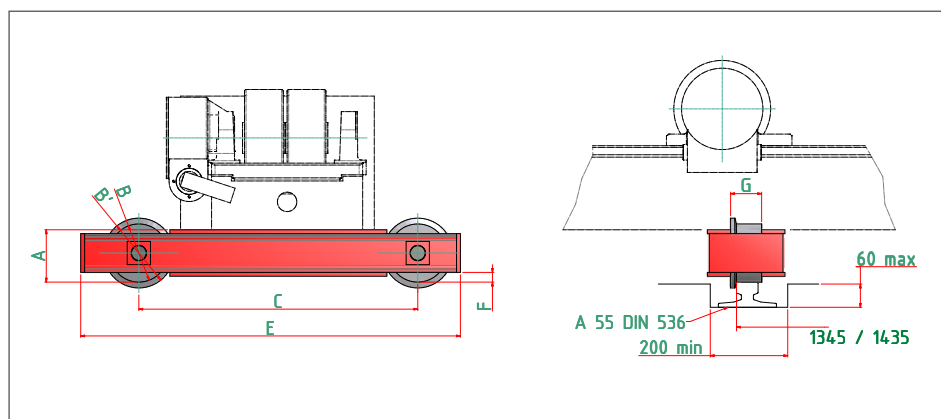
- Different speed ranges
- Synchronization of 2 or more drive units
- Anti-drift systems
- Wheels made of solid HDN/T resistant at very high specific pressure
- Brushless motor with encoder and interface to PLC for plants highly automated
- Lorries for traversing on rails with idle flanged wheels (with/without brakes) or motorized

D Drive Unit		R10C	R14C_A	R14C_M	R20C_M	R23C_A	R35C_A	R46C_A
<b>_E1</b>	mm/min	100/1000	60/600	60/600	70/700	70/700	70/700	70/700
<b>_E2</b>	mm/min		78/780	78/780	85/850	85/850	85/850	85/1200
<b>_E3</b>	mm/min		120/1200	120/1200	120/1200	120/1200	120/1200	
<b>CTR</b>	Ton	140	200	200	280	330	500	650
<b>C Idle unit</b>		R10CN-A	R14CN-A	R14CN-M	R20CN-M	R23CN-A	R35CN-A	R46CN-A
<b>P (1D+1C)</b>	Ton	100	140	140	200	230	350	460
<b>P (1D+2C)</b>	Ton	140	200	200	280	330	500	650
<b>Øa x b</b>	mm	360x150	500x200	515x520	710x555	690x250	690x250	690x250
<b>c min/max</b>	mm	440/2650	610/2710	610/2710	810/2760	790/2740	790/2740	790/2740
<b>d min/max</b>	mm	700/6000	900/6000	900/6000	1300/6000	1300/6000	1300/6000	1300/6000
<b>e</b>	mm	4200	3490	3490	4040	4040	4040	4040
<b>f</b>	mm	4777	4520	4520	5315	5315	5315	5315
<b>g</b>	mm	669	745	755	1005	1034	1080	1140
<b>h</b>	mm	489	495	495	649	689	735	795
<b>j</b>	mm	856	1200	1200	1370	1275	1380	1420
<b>k</b>	mm	920	900	1000	1000	1200	1200	1200
<b>W D</b>	Kg	2400	2900	3400	7300	6700	8600	10400
<b>W C</b>	Kg	1600	2200	2700	5700	5200	6600	8100



# IDLE WHEEL UNDERCARRIAGES FOR ROTATORS MODEL R from 12.5 to 70 Ton

Model	R125	R200	R300	R500	R07C
Cart Type	CR240U	CR488U	CR488U	CR488U	CR750U
A	135	135	135	135	135
B	150	150	150	150	150
B*	180	180	180	180	180
C	720	720	720	720	720
D	170	170	170	170	170
E	980	980	980	980	980
F	25	15	15	15	135
G	80	80	80	80	1250
Weight kg.	70	120	120	120	160



## OPTIONS

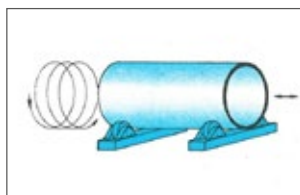
- Shoe brakes on 2 wheels
- Jaw brakes on 2 wheels
- Motorized lorries (2WD and 4WD)
- Lorries for rotators with capacity greater than 70 Ton/set



## ROTATORS WITH HYDRAULIC ADJUSTMENT OF THE UPPER ROLL

It is a new typology of rotators with the ability to adjust the upper roll position hydraulically.

This machine allows you to hold better the circular shape of the workpiece, distributing the load on several rolls. Moreover, by adjusting hydraulically the pressure angle you will be able to align better the two edges of the joint during tack welding.

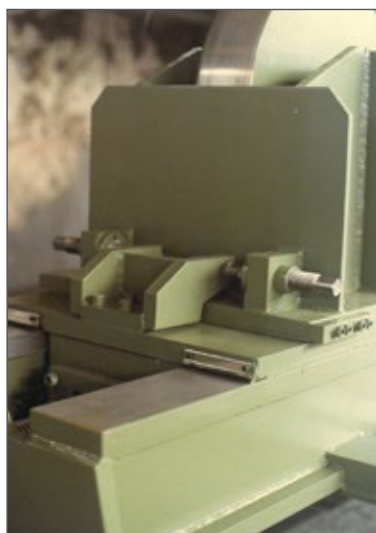


# ANTI-DRIFT SYSTEMS



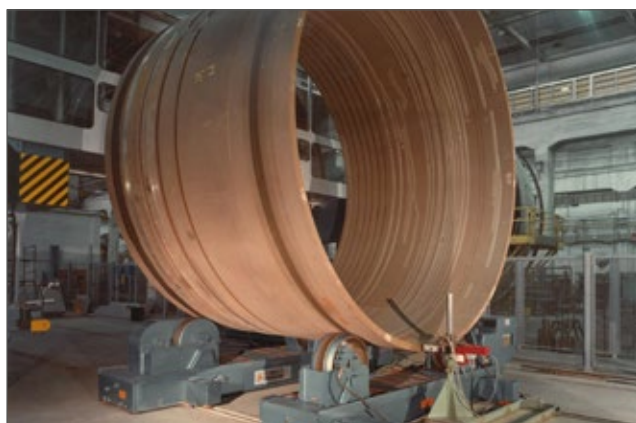
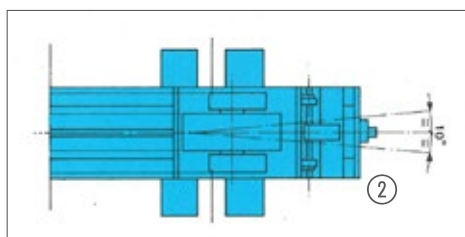
## Bumper anti-drift system

An idle roll fixed to one or both units prevents the axial drift of the workpiece. (1)



## Steering anti-drift system, manual or automatic

Example of manual anti-drift system: the system is applied to the idle unit whose wheels are steered (2) to counteract the drift of the workpiece.



## Automatic anti-drift system

An inductive or laser sensor detects the drift and an electro-hydraulic jack steers the basement of the idle unit.



### **R10C with bumper**

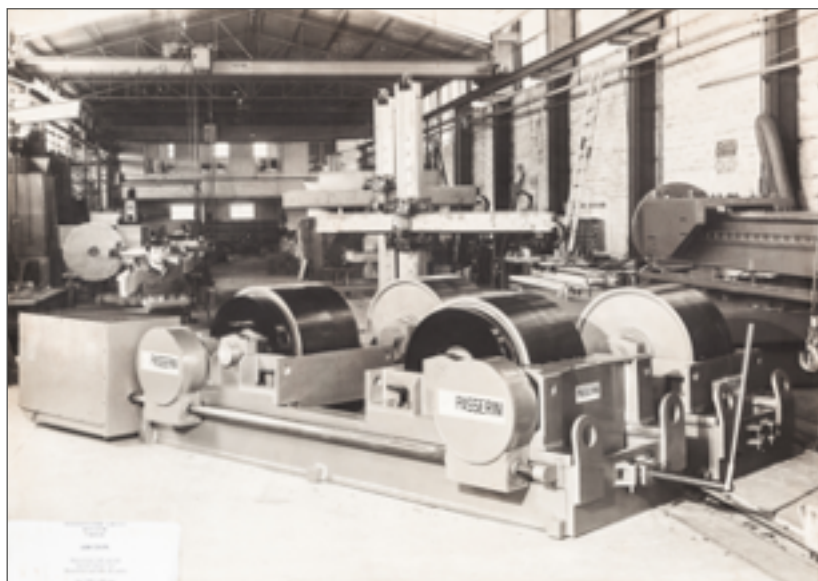
Anti-drift system with manual adjustment of the idle roll position by holes and screws.

The support is bolted to the basement on its axis.



### **R23C with manual anti-drift system**

Idle saddle provided with steering anti-drift system that allows to steer the roll of  $\pm 5^\circ$  with respect to the longitudinal axis of the machine by means of screws and racket levers.

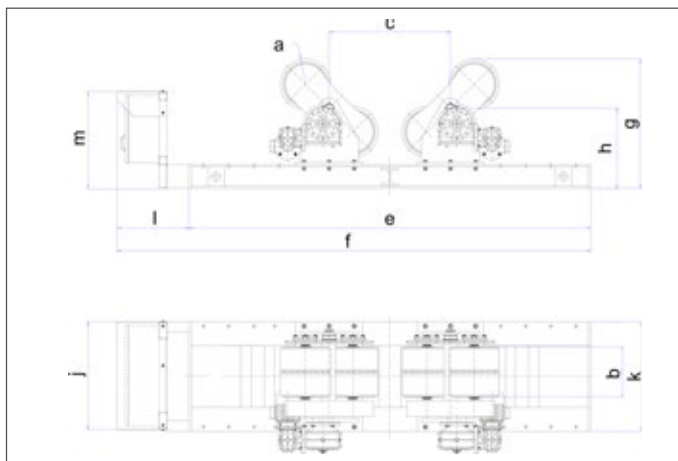


### **R600 manufactured in 1971**

Set of 600 Ton capacity rotators.



# SELF-ALIGNING ROTATORS MODEL RB from 6 to 50 Ton



## STANDARD FEATURES

- Feeding 400V, 50Hz
- AC motors with vector inverter
- Chain or gearings transmission in accordance with the model
- 100% of load on coated rolls
- Centre-to-centre distance of rolls adjustable by holes and pins

## OPTIONS

- Undercarriages for traversing on rails, with idle/motorized wheels

## KEY OF READING

**E1** = Speed range

**P** = Capacity on 4 rolls (upper and lower)

**P/2** = Capacity on 2 rolls (lower)

**d min/max** = Workpiece diameter under full load (P)

**d1** = Minimum workpiece diameter on the lower rolls only (50% of the capacity, P/2)

**WD** = Drive unit weight

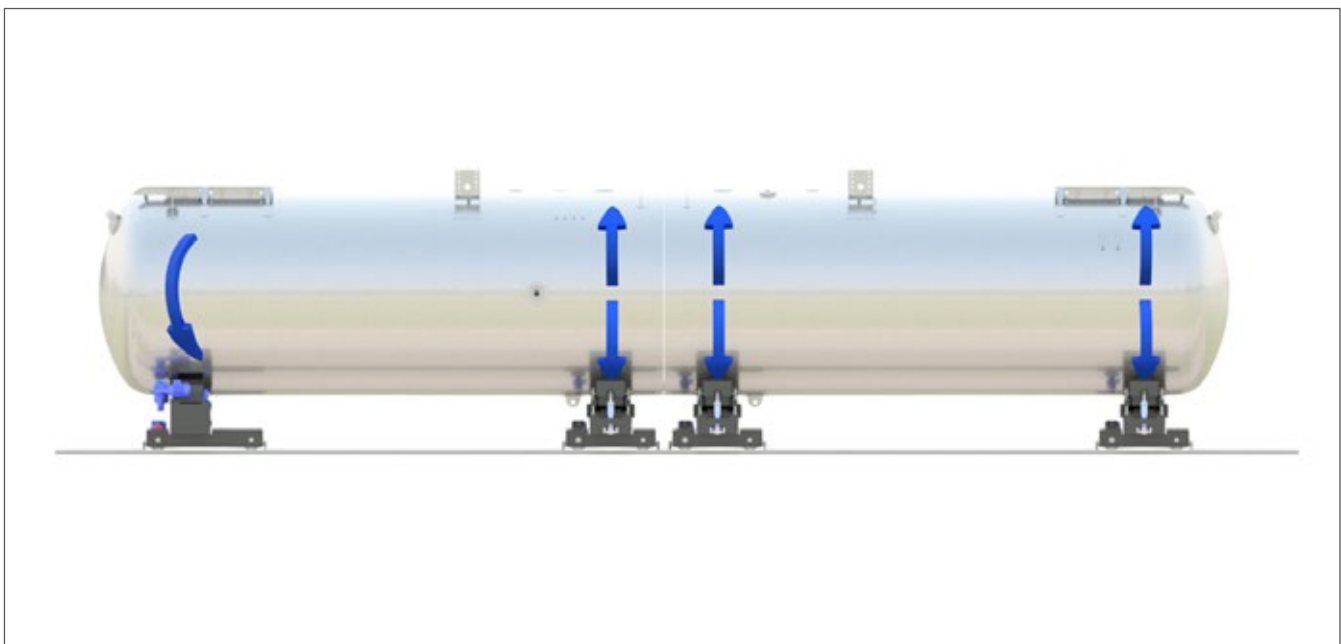
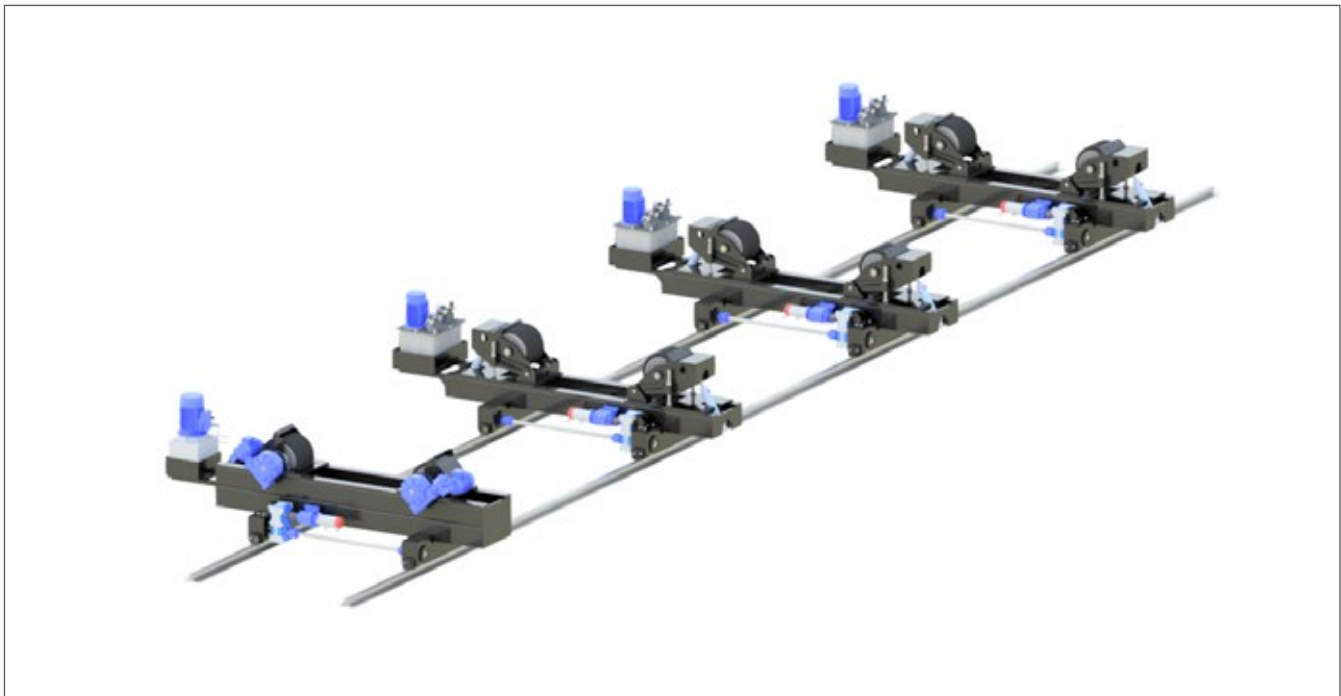
**WC** = Idle unit weight

TYPE		RB60	RB120	RB200	RB300	RB500
<b>E1</b>	mm/1'	120 -1200	100 - 1000	100 - 1000	100 - 1000	80 - 800
<b>P</b>	Ton	6	12	20	30	50
<b>P/2</b>	Ton	3	6	10	15	25
<b>Øa x b</b>	mm	250x150	300x150	320x250	400x300	500x300
<b>c min/max</b>	mm	210/1500	210/1500	290/1550	290/1550	290/1540
<b>d min/max</b>	mm	800/3000	800/4000	1000/4000	1250/4500	1500/5000
<b>d1</b>	mm	400	400	500	500	500
<b>e</b>	mm	2000	2060	2180	2350	2920
<b>f</b>	mm	2420	2610	2645	2850	3520
<b>g min/max</b>	mm	525/725	705/780	780/860	740/910	850/1070
<b>h</b>	mm	450	480	455	515	575
<b>k</b>	mm	600	700	900	950	1100
<b>l</b>	mm	630	750	920	1000	1140
<b>m</b>	mm	550	625	670	670	670
<b>W D</b>	Kg	510	650	1150	1350	2400
<b>W C</b>	Kg	360	450	850	1000	1600

# FIT-UP ROTATORS

**FIT-UP rotators are generally used for approaching for welding purpose of circular sheets whose junction allows to manufacture long tanks/pipes of medium/large diameter**

The typical configuration of a set of rotators used for this work generally consists of: a conventional drive unit, a conventional idle unit plus two idle FIT-UP units, all provided with motorized undercarriages for traversing on rails. FIT-UP rolls vertical adjustment is operated by hydraulic cylinders with side screws for maintaining the position.





# 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.



## **CARPANO EQUIPMENT Srl**

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**carpano.it**