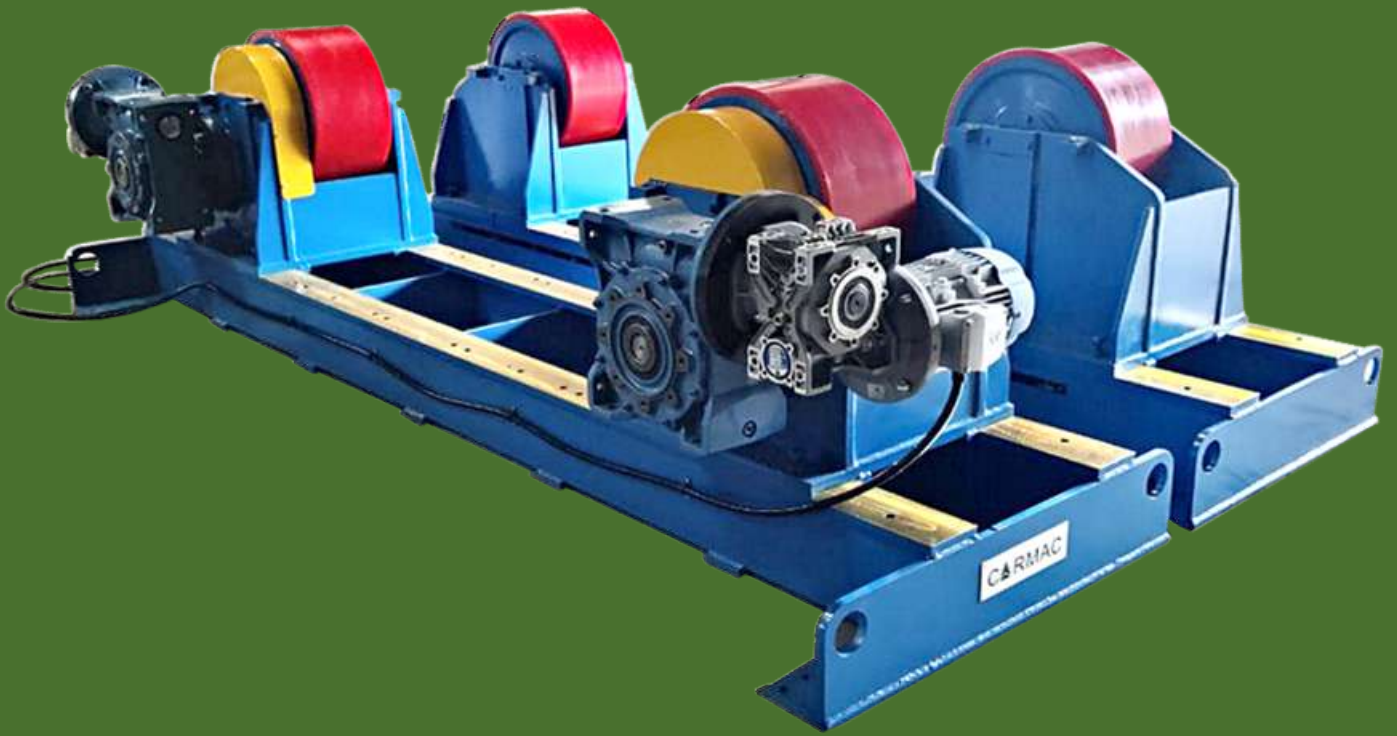




**C**  **ARMAC** <sup>TM</sup>

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# WELDING ROTATORS



## Overview

Welding Rotators are versatile tools used across light and heavy fabrication industries. They rotate and position cylindrical workpieces, like pipes, tanks, and wind towers, for efficient circumferential welding (TIG/MIG/SUBARC) or intricate assembly tasks.

These specialized machines enhance productivity and operator comfort by providing consistent access to the weld seam as the workpiece rotates. This leads to improved weld quality, faster production, and reduced operator fatigue. Featuring drive and idler units, a control panel, and often a variable frequency drive (VFD) for speed control, welding rotators are vital equipment for achieving precise, efficient, and safe welds in various fabrication projects.

# Features

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## Improved weld quality

Consistent access to the weld seam allows for precise control of bead deposition and penetration, resulting in stronger and more aesthetically pleasing welds.



## Increased productivity

Rotators significantly reduce the need for manual workpiece manipulation, enabling faster welding speeds and higher production outputs.



## Reduced operator fatigue

Eliminates the need for welders to physically move heavy workpieces, leading to less physical strain and improved worker comfort.



## Enhanced safety

Controlled workpiece movement minimizes the risk of accidents and injuries associated with manual handling.



## Versatility






Suitable for a wide range of welding processes, including MIG, TIG, SAW, and arc welding.








## Integration options

Can be integrated with other welding equipment, such as positioners and manipulators, for complete weld station automation.

# Advantages

-  **Cost-effective**  
Increased productivity and improved weld quality often offset the initial investment in a rotator.
-  **Improved workplace safety**  
Reduces the risk of injuries associated with manual workpiece handling.
-  **Higher production capacity**  
Enables faster welding speeds and increased throughput.
-  **Wider range of weldable projects**  
Allows for the welding of larger and heavier workpieces.
-  **Improved weld consistency**  
Minimizes variations in weld quality due to inconsistent access to the weld seam.

# Applications

-  **Pipe welding**  
Ideal for welding pipelines, pressure vessels, and other cylindrical structures.
-  **Tank and vessel fabrication**  
Used for welding tanks, boilers, and other pressure vessels.
-  **Wind tower construction**  
Rotates wind tower sections during welding and assembly.
-  **Ship building**  
Facilitates welding of various ship components such as hulls and decks.
-  **General fabrication**  
Applicable to any cylindrical workpiece welding projects.

# Technical Specifications

MODEL	ROTATING CAPACITY - DRIVE UNIT (Kg)	LOAD CARRYING CAPACITY - DRIVE UNIT (Kg)	LOAD CARRYING CAPACITY - IDLER UNIT (Kg)	JOB DIAMETER RANGE (mm)	SPEED RANGE (SURFACE SPEED OF ROLLER) (mm / minute)	PU ROLLER FOR DRIVE SIZE ('R' DIA x 'T' WIDTH) (mm)
5 Ton	5,000	2,500	2,500	500 to 3,000	125 to 1250	250 x 75
10 Ton	10,000	5,000	5,000	500 to 3,000	125 to 1250	300 x 100
20 Ton	20,000	10,000	10,000	500 to 4,000	125 to 1250	300 x 150
30 Ton	30,000	15,000	15,000	500 to 4,000	125 to 1250	350 x 150
40 Ton	40,000	20,000	20,000	500 to 4,000	125 to 1250	400 x 150
50 Ton	50,000	25,000	25,000	500 to 4,000	125 to 1250	500 x 200
60 Ton	60,000	30,000	30,000	500 to 4,000	125 to 1250	500 x 250
80 Ton	80,000	40,000	40,000	500 to 4,000	125 to 1250	500 x 250
100 Ton	1,00,000	50,000	50,000	500 to 4,000	125 to 1250	500 x 250
150 Ton	1,50,000	75,000	75,000	500 to 4,000	125 to 1250	600 x 250 (FORGED)
200 Ton	2,00,000	1,00,000	1,00,000	500 to 4,000	125 to 1250	600 x 250 (FORGED)
300 Ton	3,00,000	1,50,000	1,50,000	500 to 4,000	125 to 1250	600 x 250 (FORGED)



# SELF ALIGNING ROTATOR



## Model - SAR

Capacity : 1 Ton - 300 Ton

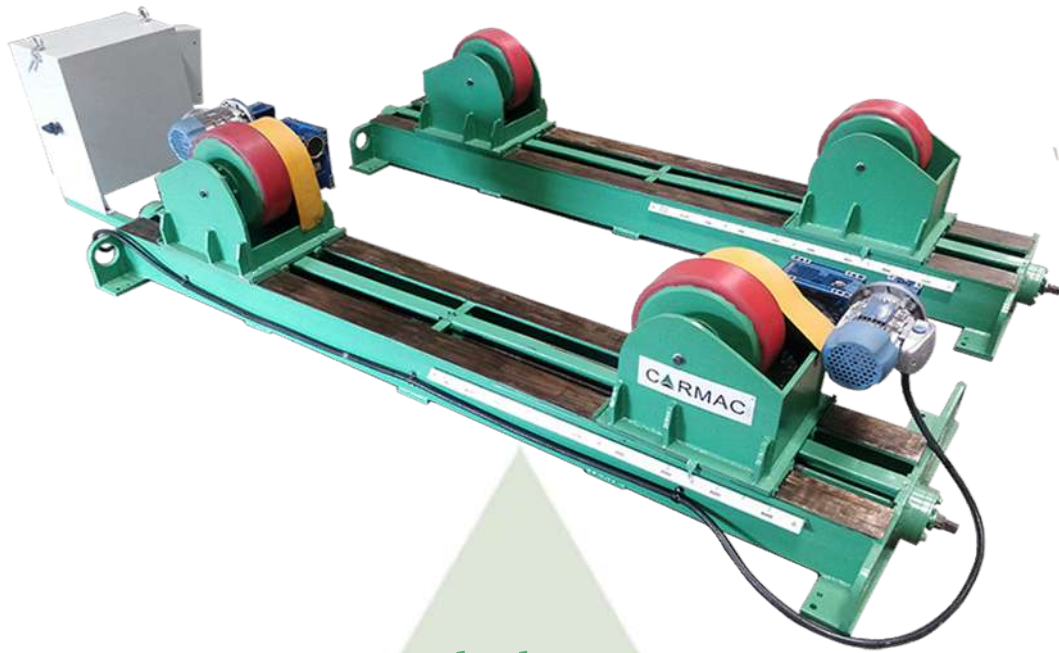
### Features

- ▲ Independently moving rollers that automatically adjust to variations in workpiece diameter, ensuring smooth rotation and preventing distortion.
- ▲ Ideal for workpieces with slight ovality or irregularities.
- ▲ Reduce setup time and operator intervention.

### Applications

- ▲ Pipe welding, especially large-diameter pipes with minor imperfections.
- ▲ Tank and vessel fabrication with slight out-of-roundness.
- ▲ General welding of cylindrical workpieces with potential shape variations.

# SELF CENTERING ROTATOR



## Model - SCR Capacity : 1 Ton - 300 Ton

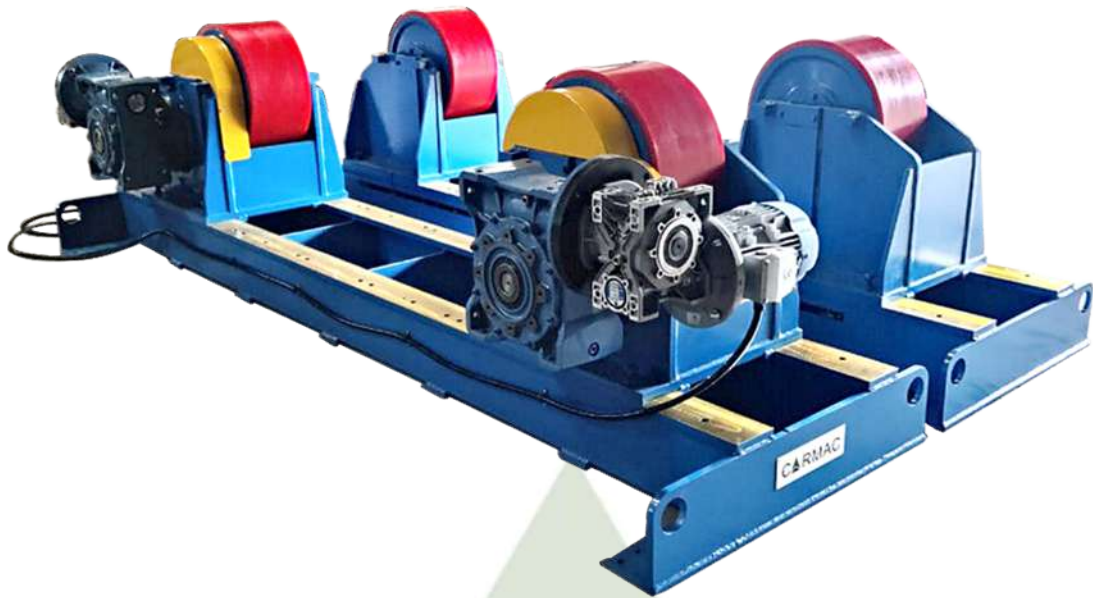
### Features

- ▲ Rollers mounted on pivoting arms that automatically center the workpiece for optimal welding access.
- ▲ Suitable for workpieces with significant variations in diameter or cross-section.
- ▲ Improve weld quality and consistency.

### Applications

- ▲ Fabrication of tapered or conical vessels.
- ▲ Welding of pipes with significant diameter changes along their length.
- ▲ Rotational welding of irregularly shaped workpieces.

# CONVENTIONAL ROTATOR



## Model - CR Capacity : 1 Ton - 300 Ton

### Features

- ▲ Fixed roller configuration requiring precise pre-alignment of the workpiece for proper rotation.
- ▲ Simple and cost-effective design.
- ▲ Suitable for workpieces with consistent diameters and minimal shape variations.

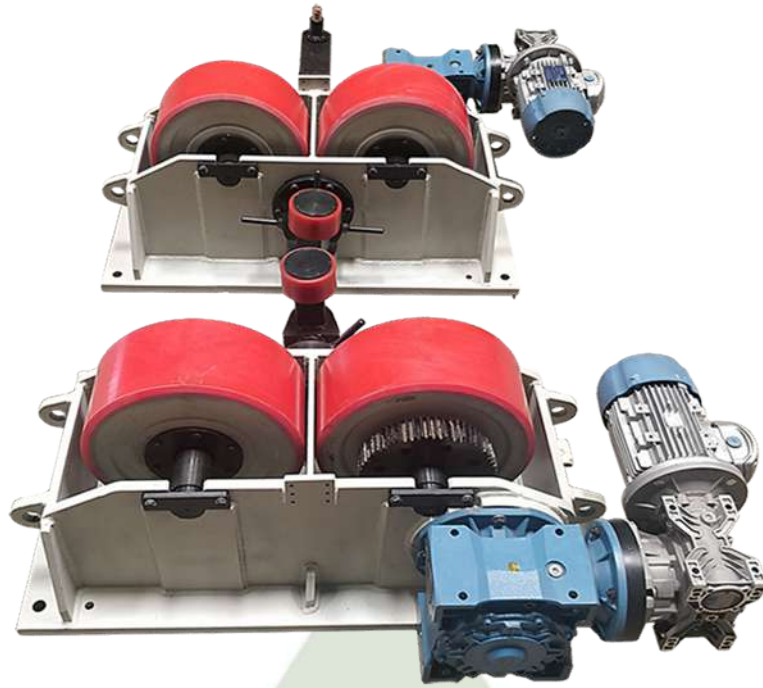
### Applications

- ▲ Welding of straight pipes with uniform diameters.
- ▲ Rotational assembly of cylindrical components with consistent dimensions.
- ▲ General welding tasks where workpiece alignment is straightforward.



# CUSTOMIZED ROTATOR

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**CUSTOMIZED ROTATOR**  
**Capacity : 1 Ton - 300 Ton**

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