



WELDING &  
POSITIONING

# MD SERIES

TILT / TURN / ROTATE WELDING POSITIONER



SIMPLY BETTER BUILT.



# MD Series

## MD 15 through MD50



The MD series Positioners provide a mid-range lineup with the same quality and workmanship as our HD line without the cost. Completely manufactured and engineered in the U.S.A. utilizing all readily available components.

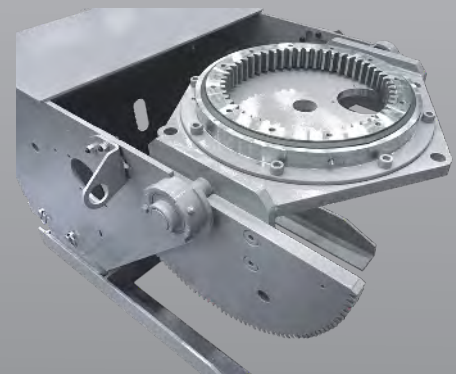
The entire series features slew ring bearings on the rotation axis, thru-holes for purge access and manual height adjusting bases. This group of gear driven Positioners is designed by Koike Aronson Inc. Ransome to offer the most in both performance and safety.

**Capacities of 1,500 - 3,000 or 5,000 pounds**



## Features

- 135° powered forward tilt
- NEMA 12 Electricals
- Pin-through post manual height adjustment
- Thru-hole Tables
- Internal geared Slew Ring
- Low voltage hand control pendants
- Variable speed drives
- AC brake motors
- 2 Year machine warranty
- 5 Year Variable Frequency Drive warranty



**Internally geared slew rings**



**Standard hand pendant provided with all models**

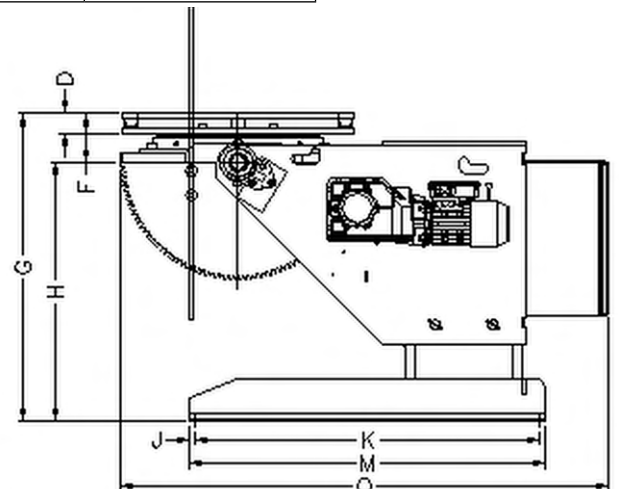
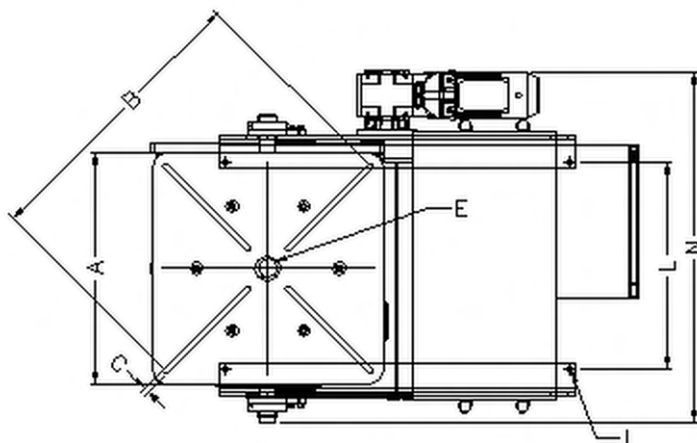
# SPECIFICATIONS

## MD15 - MD30 - MD50

	MD15	MD30	MD50
Tilt: Load Torque in - lb (N.m)	13,500 (1,525)	34,500 (3,897)	67,500 (7,626)
Rating lb (kg) @ 4 in (101mm) CG Height	1,500 (680)	3,000 (1,361)	5,000 (2,268)
Rating lb (kg) @ 6 in (152mm) CG Height	1,227 (557)	3,000 (1,361)	5,000 (2,268)
Rating lb (kg) @ 12 in (304mm) CG Height	794 (360)	1,971 (894)	3,860 (1,750)
Rating lb (kg) @ 24 in (609mm) CG Height	465 (211)	1,169 (530)	2,290 (1,039)
Rating lb (kg) @ 30 in (762mm) CG Height	385 (175)	971 (440)	1,900 (862)
Rating lb (kg) @ 36 in (914mm) CG Height	329 (149)	831 (377)	1,630 (739)
Rotation: Load Torque in - lb (N.m)	6,000 (677)	15,750 (1,780)	40,000 (4,519)
Rating lb (kg) @ 4 in (101.6mm) Eccentric	1,500 (680)	3,000 (1,361)	5,000 (2,268)
Rating lb (kg) @ 6 in (152mm) Eccentric	1,000 (454)	2,625 (1,193)	5,000 (2,268)
Rating lb (kg) @ 8 in (203mm) Eccentric	750 (340)	1,970 (895)	5,000 (2,268)
Tilt: 135° in how many seconds	22 Sec.	45 Sec.	45 Sec.
Tilt Motor Horse Power	0.5 HP	0.5 HP	1 HP
Rotation: Speed Range AC Drive	.21 - 2.1 rpm	2.0 - .20 rpm	2.0 - .07 rpm
Rotation Motor Horse Power	0.5 HP	1 HP	2 HP
Pendant cable length	20 ft	20 ft	20 ft
A: Table Size (mm)	24 in x 24 in (609 x 609)	30 in x 30 in (762x 762)	36 in x 36 in (914 x 914)
B: Maximum Clamping Diameter (mm)	30 in (762)	38 in (965)	47 in (1,194)
C: Number of slots and width (mm)	(4) 9/16 in (14)	(4) 9/16 in (14)	(4) 13/16 in (21)
Number of Table nuts and Thread	(4) ½-13	(4) ½-13	(4) ¾ in - 10
D: Table Thickness (mm)	2 in (51)	2 in (51)	2 in (51)
E: Pilot hole and depth (mm)	2-¾ in x 1/2 in (70 x 13)	2-¾ in x 1/2 in (70 x 13)	2-¾ in x 1/2 in (70 x 13)
F: Inherent Overhang (mm)	5 in (127)	5-½ in (140)	5-½ in (140)
Slew Ring Diameter (mm)	13-¼ in (337)	13-¼ in (337)	18 in (457)
Through-hole Diameter (mm)	2 in (51)	2 in (51)	2 in (51)
Weld current conduction with single ground shoe	550 Amps	550 Amps	550 Amps
G: Table flat, Minimum Height (mm)	32 in (813)	32-½ in (826)	32-½ in (826)
Lift stroke in 4 in increments (mm)	12 in (305)	12 in (305)	12 in (305)
Table flat, Maximum Height (mm)	44 in (1118)	44-½ in (1130)	44-½ in (1130)
H: Rotation axis, Minimum Height (mm)	27 in (686)	27 in (686)	27 in (686)
Rotation axis, Maximum Height (mm)	39 in (991)	39 in (991)	39 in (991)
I: Tie down hole size (mm)	(4) 9/16 in (14)	(4) 13/16 in (21)	(4) 13/16 in (21)
J: Front Mounting hole location (mm)	3/4 in (19)	3/4 in (19)	1 in (25)
K: Rear mounting hole location (mm)	34-1/2 in (876)	39-½ in (1003)	45-¾ in (1,162)
L: Mounting hole width (mm)	21-3/4 in (552)	23-¾ in (603)	28-¾ in (730)
M: Overall base length (mm)	36 in (940)	41 in (1041)	47 ¾ in (1,213)
N: Overall machine width (mm)	36-½ in (927)	43 in (1092)	52 in (1,321)
O: Overall machine length (mm)	50-½ in (1283)	57-1/4 in (1454)	68 in (1,727)
Standard Primary Voltage	115/1/60	115/1/60	460/3/60
Shipping Weight (kg)	1,000 lb (454)	1,700 lb (771)	3,000 lb (1,360)



All dimensions are for reference only and subject to change without notice.



# OPTIONS

By the nature of design and function, the majority of optional equipment for Koike Aronson / Ransome Positioners should be installed at the time of manufacture. When ordering Positioners, it is therefore important to consider all optional features and equipment.



## Radio Remote Controlled Pendant

Includes high resolution display to keep the operator informed of system status and diagnostics at all times, including battery life and signal strength. Pushbuttons feature gold-plated contacts and are rated for more than one million press cycles.

The defined pushbuttons provide positive tactile feedback even while wearing gloves. Rugged, super tough nylon housing is made to withstand shock, water, heat, and harsh environments. Designed to minimize power consumption, providing one of the longest battery lives in the industry today. Ergonomically designed contoured case makes it comfortable for the user. Compact and lightweight to prevent operator fatigue, one-handed operation frees the operator to assist in other tasks. Controls include directional pushbuttons momentary or latched, proportional speed pushbuttons, rapid traverse and E-stop.



## Variable Diameter Tachometer

The independent hand held touch screen Human Machine Interface (HMI) communicates with VFD drive on the positioner, and provides real-time display of Revolutions Per Minute (RPM) and linear surface speed for the rotational axis.

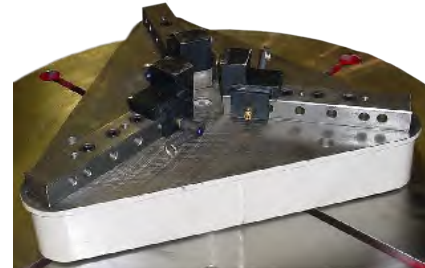
Additionally, the HMI can command the rotational speed target.

The user can set the target speed as either 'work-piece' surface speed or RPM.

On the fly Speed adjustment is included.

Pressing the arrow button once will increment or decrement the current speed target by a fixed step size. Pressing and holding one of these buttons continuously will ramp the speed target up or down.

The up / down buttons will modify the speed target immediately, either when the axis is running or stopped. The speed increment step size can be adjusted to provide faster or slower speed target changes when using the up / down arrows.



## Welding Chucks

The Gripper is a cam operated assembly designed specifically for the welding industry. The gripper incorporates many features that make it especially suitable for the welding environment. These features include single point cam operation of the jaws and adjustable quick-change reversible jaws that can be positioned for small and large diameter work pieces. Heavy-duty construction and a completely enclosed faceplate prevents flux and weld splatter from impairing the operation of the gripper.



FWD/ REV Switch



FSC

## Foot Switch Control

With three styles of foot switches available Koike Aronson can adapt your positioner to be used in the most efficient way.

- FSC-Foot Speed control, provides variable speed control through the use of a foot switch.
- FWD/REV-Provides forward/reverse and On/off foot control of the rotational axis (pictured above).



## Wireless Foot Switch

Wireless foot switch includes both variable speed and directional control with one foot. Variable speed is controlled with the main foot pedal, while a micro-switch on the side wall controls direction. Foot pedal has approximately a 60 ft range and up to 5 systems can work in the same work area without fear of interference. Battery life is estimated at 4,000 hr based on a 50% duty cycle.