## CUTTING, POSITIONING \& WELDING EQUIPMENT

## KOIKE ARONSON RANSOME



The Most Complete Line

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## How to Size a Positioner

## HOW TO SELECT A GEAR DRIVEN POSITIONER TO BEST MEET YOUR NEEDS

The illustration below shows a typical capacity plate that we attach to each Aronson Gear Driven Positioner. This happens to be the capacity plate for a Model HD400 Aronson Gear Driven unit. An HD400 is designed to handle loads up to $40,000 \mathrm{lbs}$ $(18,140 \mathrm{~kg})$ with a CG at a distance from the surface of the table of $12^{\prime \prime}(300 \mathrm{~mm})$. All the information required for loading the positioner is either on the capacity plate, or it can be simply calculated from the data on the plate


## Tilt Torque Load:

To find your weldments' Tilt Torque Load, add the Inherent Overhang (Inches) to the distance (Inches) the weldments' CG is from the table top surface. This is measured perpendicular to the table top surface. Then multiply this total distance in Inches by the weight of the weldment. Do not exceed the maximum load torque shown in the "tilt" column on next page.

## Rotation Torque Load:

To find your weldments' Rotation Torque Load, multiply the weldment weight in Pounds by the distance in inches that Center-of-Gravity (CG) will be from the center of the table. This measurement is taken parallel to the table surface. Do not exceed the maximum load torque shown in the "rotation" column.


## How About Swing Clearance:

When selecting a positioner, don't forget to leave clearance to swing the work above the floor when the table is in the full tilt position. This is a common error in specifying positioners. For excessive work-pieces, Aronson positioners are available with manually adjustable bases, or powered Elevating bases which adjust the table height for larger work. Fixed-base machines also can be elevated by using a riser or subbase.


## Load Capacity Tables

| Model |  | Rotation <br> Torque in/lb. | Tilt Torque in/lb. | INH <br> O.H. <br> inches | $\begin{gathered} \text { CG@ } \\ \text { lb. } \end{gathered}$ | $\begin{gathered} \mathrm{CG} @ \\ 12 " \\ \mathrm{lb.} \end{gathered}$ | $\begin{gathered} \text { CG@ } \\ 18 " \\ \text { lb. } \end{gathered}$ | $\begin{gathered} \text { CG@ } \\ 24 " \\ \text { lb. } \end{gathered}$ | $\begin{gathered} \text { CG@ } \\ 30 " \\ \text { lb. } \end{gathered}$ | $\begin{gathered} \text { CG@ } \\ 36 " " \\ \text { lb. } \end{gathered}$ | $\begin{gathered} \mathrm{CG} @ \\ 42 " \\ \text { lb. } \end{gathered}$ | $\begin{gathered} \text { CG@ } \\ 48 " \\ \text { lb. } \end{gathered}$ | $\begin{aligned} & \text { CG@ } \\ & 54 " \end{aligned}$ <br> lb. | $\begin{gathered} \text { CG@ } \\ 60 " \\ \text { lb. } \end{gathered}$ | $\begin{gathered} \text { CG@ } \\ 66 " \\ \text { lb. } \end{gathered}$ | $\begin{aligned} & \text { CG@ } \\ & \text { 72"" } \end{aligned}$ <br> lb. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10P | - | 6,000 | 10,500 | 4.5 | 1,000 | 635 | 466 | 365 | - | - | - | - | - | - | - | - |
| HD20 | - | 12,000 | 21,000 | 4.5 | 2,000 | 930 | 730 | 600 | 520 | 450 | 400 | 360 | 325 | - | - | - |
| HD25 | - | 15,000 | 31,875 | 6.8 | 2,500 | 1,700 | 1,285 | 1,035 | 875 | 750 | 650 | 580 | 520 | 470 | 430 | 400 |
| HD30 | - | 36,000 | 56,250 | 6.8 | - | 3,000 | 2,270 | 1,830 | 1,530 | 1,300 | 1,100 | 1,000 | 900 | 830 | 760 | 700 |
| HD45 | - | 54,000 | 84,375 | 6.8 | - | 4,500 | 3,400 | 2,750 | 2,300 | 1,975 | 1,720 | 1,530 | 1,380 | 1,250 | 1,150 | 1,100 |
| HD60 | - | 72,000 | 123,000 | 8.5 | - | 6,000 | 4,650 | 3,790 | 3,200 | 2,750 | 2,400 | 2,200 | 1,900 | 1,700 | 1,600 | 1,500 |
| HD100 | - | 120,000 | 205,000 | 8.5 | - | 10,000 | 7,700 | 6,300 | 5,300 | 4,600 | 4,000 | 3,600 | 3,200 | 3,000 | 2,700 | 2,500 |
| HD160 | - | 192,000 | 336,000 | 9.0 | - | 16,000 | 12,400 | 10,000 | 8,600 | 7,400 | 6,600 | 5,900 | 5,300 | 4,800 | 4,400 | 4,000 |
| HD240 | - | 288,000 | 504,000 | 9.0 | - | 24,000 | 18,500 | 15,000 | 13,000 | 11,000 | 9,800 | 8,800 | 8,000 | 7,300 | 6,700 | 6,200 |
| HD400 | G400 | 480,000 | 840,000 | 9.0 | - | 40,000 | 31,000 | 25,000 | 21,500 | 18,500 | 16,400 | 14,600 | 13,200 | 12,000 | 11,000 | 10,200 |
| HD500 | G500 | 600,000 | 1,050,000 | 8.8 | - | 50,000 | 39,000 | 32,000 | 27,000 | 23,400 | 20,600 | 18,500 | 16,700 | 15,200 | 14,000 | 13,000 |
| HD600 | G600 | 720,000 | 1,260,000 | 9.0 | - | 60,000 | 46,500 | 38,000 | 32,000 | 28,000 | 24,500 | 22,000 | 20,000 | 18,000 | 16,500 | 15,500 |
| HD700 | G700 | 840,000 | 1,470,000 | 9.0 | - | 70,000 | 54,500 | 44,500 | 37,500 | 32,500 | 28,500 | 25,500 | 23,000 | 21,000 | 19,500 | 18,000 |
|  | G850 | 1,020,000 | 1,800,000 | 9.0 | - | 85,000 | 66,600 | 54,500 | 45,770 | 42,000 | 35,000 | 31,300 | 28,333 | 26,000 | 24,000 | 22,000 |
|  | G1200 | 1,440,000 | 2,880,000 | 12.0 | - | 120,000 | 96,000 | 80,000 | 68,600 | 60,000 | 53,400 | 48,000 | 43,600 | 40,000 | 37,000 | 34,200 |
|  | G2200 | 2,640,000 | 5,400,000 | 12.5 | - | 220,000 | 177,000 | 148,000 | 127,000 | 111,000 | 100,000 | 89,000 | 81,000 | 74,000 | 69,000 | 64,000 |
|  | G3500 | 4,200,000 | 9,300,000 | 14.5 | - | 350,000 | 286,000 | 240,000 | 208,430 | 184,000 | 164,160 | 148,400 | 135,000 | 125,000 | 115,000 | 107,000 |
|  | G7000 | 5,000,000 | 18,600,000 | 14.5 | - | 700,000 | 570,000 | 481,000 | 416,800 | 367,300 | 328,300 | 296,800 | 270,000 | 248,900 | 230,000 | 214,000 |
|  | G10000 | 12,000,000 | 30,000,000 | 18.0 | - | 1,000,000 | 833,000 | 714,000 | 625,000 | 555,500 | 500,000 | 454,500 | 416,500 | 384,500 | 357,000 | 333,000 |


| Model | Rotation Torque in/lb. | Tilt Torque in/lb. | INH <br> O.H. <br> inches | $\begin{gathered} \text { CG } @ \\ \text { lb. } \end{gathered}$ | $\begin{gathered} \mathrm{CG} @ \\ 12 " \\ \text { lb. } \end{gathered}$ | $\begin{gathered} \text { CG@ } \\ \text { 18" } \\ \text { lb. } \end{gathered}$ | $\begin{gathered} \text { CG@ } \\ 24 " \\ \text { lb. } \end{gathered}$ | $\begin{gathered} \text { CG@ } \\ 30 " \\ \text { lb. } \end{gathered}$ | $\begin{gathered} \mathrm{CG} @ \\ 36 " \\ \text { lb. } \end{gathered}$ | $\begin{gathered} \text { CG@ } \\ 42 " \\ \text { lb. } \end{gathered}$ | $\begin{gathered} \text { CG@ } \\ 48 " \\ \text { lb. } \end{gathered}$ | $\begin{aligned} & \text { CG@ } \\ & 54 " \end{aligned}$ <br> lb. | $\begin{gathered} \text { CG@ } \\ 60 " \\ \text { lb. } \end{gathered}$ | $\begin{gathered} \mathrm{CG} @ \\ 66 " \\ \mathrm{lb} . \end{gathered}$ | $\begin{aligned} & \text { CG@ } \\ & \text { 72" } \end{aligned}$ <br> lb. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GE25 | 15,000 | 27,500 | 5.0 | 2,500 | 1,600 | 1,200 | 950 | 780 | 670 | 580 | 520 | 460 | 420 | 380 | 350 |
| GE30 | 36,000 | 60,750 | 8.2 | - | 3,000 | 2,300 | 1,880 | 1,600 | 1,375 | 1,200 | 1,075 | 975 | 890 | 820 | 750 |
| GE45 | 54,000 | 91,125 | 8.2 | - | 4,500 | 3,500 | 2,800 | 2,400 | 2,050 | 1,800 | 1,600 | 1,450 | 1,300 | 1,200 | 1,100 |
| GE60 | 72,000 | 123,000 | 8.5 | - | 6,000 | 4,650 | 3,790 | 3,200 | 2,750 | 2,400 | 2,200 | 1,900 | 1,700 | 1,600 | 1,500 |
| GE90 | 108,000 | 184,500 | 8.5 | - | 9,000 | 7,000 | 5,700 | 4,800 | 4,150 | 3,650 | 3,250 | 2,950 | 2,700 | 2,480 | 2,300 |
| GE120 | 144,000 | 252,000 | 9.0 | - | 12,000 | 9,300 | 7,600 | 6,450 | 5,600 | 4,950 | 4,400 | 4,000 | 3,650 | 3,350 | 3,100 |
| GE 180 | 216,000 | 369,000 | 8.5 | - | 18,000 | 13,900 | 11,350 | 9,600 | 8,300 | 7,300 | 6,500 | 5,900 | 5,400 | 4,950 | 4,600 |
| GE250 | 300,000 | 512,500 | 8.5 | - | 25,000 | 19,400 | 15,800 | 13,300 | 11,500 | 10,200 | 9,000 | 8,200 | 7,500 | 6,900 | 6,400 |
| GE500 | 600,000 | 1,050,000 | 8.8 | - | 50,000 | 39,000 | 32,000 | 27,000 | 23,400 | 20,600 | 18,500 | 16,700 | 15,200 | 14,000 | 13,000 |
| GE850 | 1,020,000 | 1,800,000 | 9.0 | - | 85,000 | 66,111 | 54,091 | 45,770 | 39,667 | 35,000 | 31,316 | 28,333 | 25,870 | 23,800 | 22,000 |
| GE 1200 | 1,440,000 | 2,880,000 | 12.0 | - | 120,000 | 96,000 | 80,000 | 68,600 | 60,000 | 53,400 | 48,000 | 43,600 | 40,000 | 37,000 | 34,200 |
| GE3500 | 2,640,000 | 9,300,000 | 14.5 | - | 350,000 | 285,000 | 240,000 | 208,500 | 183,500 | 164,000 | 148,000 | 135,000 | 124,000 | 115,000 | 107,000 |

Models and specifications subject to change without notice.
For models greater than 350,000 Lbs. capacity, please consult Factory

## Other Factors to Consider

## Practical Center of Gravity as it Effects Gear Driven Positioners

- CG of a weldment is exactly in the center of asymmetrical weldment.
- " A " is a symmetrical weldment: There is no top or bottom, just sides, the CG of a weldment is usually near the center of the weldment.
- The ends and two sides of 1 " steel plate. Each end is $1 \times 12 \times 12$ and weighs $40.8 \#$. Each side is $1 \times 12 \times 34$, weighs $115.6 \#$. 115.6\# x 2 , plus $40.8 \# \times 2$ equals $312.8 \#$. (Steel weighs approximately .283 pounds/cubic inch.) If one end is secured to the table of a Gear Driven Positioner, the CG will be 18 " out from or above the table. If either side, or the open top or bottom is secured to the table, the CG will be 6 " above it.
- " B " is also a symmetrical weldment: A 2 " plate rib has been added in the middle, making the weldment a stiff column. The $2 \times 10 \times 34$ steel rib weighs $192.7 \#$ so the weldment now weighs 505.5\#. The rib being right in the middle added weight equally in opposite directions from center, so the CG is still in the dead center.
- "C" is an un-symmetrical weldment: We want a box instead of a column, so we add a 2 " thick bottom to weldment " $A$ ". $2 \times 12 \times 36$ steel weighs $244.6 \#$ so total weight is now 557.6 \#. But the CG will not be at 7 ", halfway from top or bottom, because we added nothing to the top to balance the weight of the bottom. We made no change at either end, and the bottom is as much left as right, so the CG remains 18 " in from either end.
- The CG always moves toward any part that is added to a symmetrical weldment. Locating the CG is a function of moments. "Moment" means force or tendency to produce motion. A Moment is weight multiplied by length (Arm). Like a lever. And like a lever, we must have a hinge point, a reference plane. The top surface of a Gear Driven Positioner's table is our reference plane. Load Capacity Tables give ratings for various distances the CG is above the table, so this is very handy. Whenever possible, weldments should be mounted with the heavy side next to the table, so let's figure it that way.
- Each separate symmetrical part will have a known weight and CG, and the CG will be a known distance from the table top surface. Multiplying weight by distance (arm) gives the poundinch (lb-in) moment of the part. Adding all the moments and dividing by total weight gives the location of the CG of the weldment.

We don't need to take each end and each side separately because the side and ends make symmetrical mass weighing 312.8 \#, with the CG in the center of that mass. With the 2 " plate between it and the table, the CG will be 8 " above the table. $312.8 \# \times 8$ " $=2502.41$ b-in.

The 244.8\# bottom's CG is 1 " above the table. $244.8 \#$ x I" $=244 \mathrm{lb}$-in.

Adding 244.8 lb -in and 2502.4 lb -in equals 2747.2 Ib-in Total Moment. Dividing 2747.2 lb -in Total Moment by557.6 Total Weight locates the CG 4.9" above table top surface.


Weldment ' $A$ '


Weldment ' B '


Weldment ' $C$ '

## Notes

## UBSeries

## Universal Balance Positioner



## Features

- Machined Tables
- Caster Bases Available
- Manual Height Adjustment
- Friction Lock Brakes
- Powered rotation available

Koike Aronson Ransome Universal Balance Positioners allow safe and quick manipulation of large, awkward work objects when it is critical to maintain an efficient down-hand welding position. A welder can position objects up to 4,000 Lbs. By simply applying fingertip pressure and does not need to raise a helmet or break an arc.

The Universal Balance principle is to intersect the rotational axis center of gravity with that of the tilt axis. Work pieces can then be rotated 360 degrees around both axis, and in most cases around the Positioner column. A universally balanced load allows effortless access to any desired location upon a mounted fixture.

## Versatile Performance, Infinite Applications

Capacities from 25 to 4,000 Lbs.

## UB ${ }_{\text {series }}$

## Set-Up

## 1. Find Center of Gravity for rotation.

Workpiece should be placed on positioner with the center of gravity coinciding with the rotational axis of the table. Movement of the object around table rotational axis is almost effortless. In order to prevent over-travel of mounted objects, Koike Aronson has applied friction bands to the rotation point of the worktable which generates slight resistance and allows the load to be stopped at any desired point.


## Koike Aronson

universal balance positioners allow welders to maintain the most productive $10^{\circ}$ downhand welding position.


## 2. Finally, balance workpiece by adjusting wormgear so tilt axis intersects center of gravity of rotational axis.



By a simple adjustment to the wormgear, the tilt axis can be aligned to intersect the rotational axis. At this point, both axes intersect the object's center of gravity and move freely in any direction.


## Specifications

## Universal Balance Positioner

| SPECIFICATIONS | C25 | C100 | C1000 | C2000 | C4000 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Maximum Load | 25 Lbs. | 100 Lbs. | 1,000 Lbs. | 2,000 Lbs. | 4,000 Lbs. |
| DIM A, Overhang, | 6-1/2" | 11" | 32 " | $35 "$ | 51-1/2" |
| DIM B, Max. CG Height | $3 "$ | 4-3/4" | 14-1/2" | 16" | 33-1/2" |
| DIM C, Max. Part Diameter | 14" | 20" | 66" | $75 "$ | 96" |
| DIM D, Max. Part Length | 16" | 24 " | $100 "$ | $100 "$ | $96 "$ |
| DIM E, Table Diameter | 1-1/2" | $5 "$ | $8 "$ | 8" | 12" |
| DIM F, Hole Size | 10-32 | 1/4" Slots | 17/32" | 17/32" | 1-1/32" |
| DIM G, Bolt Circle | 1-1/4" | 4 Slots | 5" | $5 "$ | 8" |
| DIM H, Table Thickness | 1/4" | 1/4" | 15/16" | $1 "$ | 1-1/2" |
| DIM I, Pilot Hole | 10-32 | 1/4-20 | 1/2-13 | 3/4-10 | $1 "-8 \times 1.25$ |
| DIM J, Height Range | 6-1/4" Fix | 5" Fix | 27"-37" | 30"-36" | 41-1/2" Fix |
| DIM K, Table to Tilt Axis | 7/8" | 2" | 3-5/8" | 3-1/8" | $6 "$ |
| DIM L, Rear Overhang | 1-1/2" | 2-1/8" | 4-3/4" | 8" | $1 "$ |
| DIM M, Base Overall Width | $6 "$ | 4-1/2" | 43" | $43 "$ | 58" |
| DIM N, Base Overall Length. | $9 "$ | 4-1/2" | 37-3/4" | $48^{\prime \prime}$ | $78^{\prime \prime}$ |
| DIM O, Anchor Hole Size | 9/32" (4) | 13/32" (4) | 9/16" (4) | 9/16"'(6) | 13/16" (8) |
| DIM P, Anchor Hole Width Centers | 5-1/4" | 3-3/4" | 40 " | 40" | $55 "$ |
| DIM Q, Anchor Hole Length Centers | 8-1/4" | 3-3/4" | 29-3/4" | 39" | - |
| DIM R, Wrench Size | 1/4" | 1/2" | $1 "$ | $1 "$ | 2-1/4" |
| Type of Base | Plate | Plate | "T" | "T" | "T" |
| Tilt Axis Brake | Yes | No | Yes | Yes | Yes |
| Tilt Axis Pinlock | No | No | Yes | Yes | Yes |
| Rotation Axis Brake | Yes | No | Yes | Yes | Yes |
| Rotation Axis Pinlock | No | Yes | Yes | Yes | Yes |
| Bearing type | Ball | Tapered | Tapered | Tapered | Tapered |
| Ground Current Conduction | N/R | 300 Amps | 800 Amps | 1200 Amps | 2000 Amps |
| Power Axis Available | No | No | Yes | Yes | Yes |
| Shipping Weight | 15 Lbs. | 30 Lbs . | 340 Lbs. | 500 Lbs . | 1,300 Lbs. |

${ }^{* * *}$ All dimensions are for reference only and subject to change without notice.

## UB ${ }_{\text {series }}$



# BENCH ${ }_{\text {Series }}$ 

## BENCH MODEL POSITIONERS

## Models-B1 and B3



Koike Aronson/Ransome Bench Model Positioners are Engineered to provide versatility and safety over a range of 100 to 300 pounds. $135^{\circ}$ Forward tilt is achieved by manual hand-wheel operation. Variable speed Drives and Motors are provided to maintain precise speed and control during the welding process. Start/Stop foot switch is standard.

Capacities from 100 to 300 pounds

## Features

- Variable speed SCR solid state electronic drives
- Machined Tables
- Standard foot switch control
- Unitized rotation motor and drive
- $135^{\circ}$ forward tilt
- Welding chucks available



## Specifications

## Bench Positioners

| SPECIFICATIONS | B1 | B3 |
| :--- | :--- | :--- |
| MAXIMUM LOAD | 100 Lbs. @ 1" Off Table \& Concentric on <br> table | 300 Lbs. @ 3" Off Table \& 3" Eccentric |
| ROTATION | 0.1 TO 4 RPM Variable Speed @ 100 <br> IN.LB. Torque | 0.06 TO 2.5 RPM Variable Speed @ 900 <br> IN.LB. Torque |
| TILT | $125^{\circ}$ Forward Tilt-Powered by a Handwheel | $125^{\circ}$ Forward Tilt-Powered by a Handwheel |
| ELECTRICALS | SCR DC Drive with Ready Light Toggle <br> Disconnect Switch 1-Turn Speed <br> Pententiometer CW-CCW Selector Switch <br> Remote ON/OFF Foot Switch, Primary <br> Cable and Plug | SCR DC Drive with Ready Light Toggle <br> Disconnect Switch 1-Turn Speed <br> Pententiometer CW-CCW Selector Switch <br> Remote ON/OFF Foot Switch, Primary <br> Cable and Plug |
| WELD GROUND CURRENT | 190 Amps | 500 Amps |
| VOLTAGE | $115 \mathrm{~V} / 1$ PH/50-60HZ, Remote ON/OFF Foot <br> Switch | $115 \mathrm{~V} / 1 \mathrm{PH} / 50-60 H Z, ~ R e m o t e ~ O N / O F F ~ F o o t ~$ <br> Switch |
| SHIPPING WEIGHT | 90 Lbs. | 202 Lbs. |

***All dimensions are for reference only and subject to change without notice.
(4X)




## 10P GEAR DRIVEN POSITIONER



The Koike Aronson/Ransome 10P Positioner is engineered to provide versatility and safety. Variable speed drives and motors are provided to maintain precise rotation speed and control during the welding process. $135^{\circ}$ Forward tilt is powered by a constant speed motor. Hand pendant control includes Start/Stop/Forward/Reverse, 10 turn speed potentiometer and Rapid Traverse. Adjustable base provides 5 separate height settings for various size work pieces. Table slots are provided for easy fixturing and mounting of weldments. Tilt protractor enables operator to repeat welding positions quickly and precisely.

## Features

- Variable speed SCR solid state electronic drives
- Machined table
- Unitized tilt motor and drive
- $135^{\circ}$ forward tilt
- Welding chucks available



## Manually Adjustable From 32-1/2" to 50-1/2"

## Specifications 10P GEAR DRIVEN POSTIONER

| SPECIFICATIONS | 10P |
| :---: | :---: |
| CAPACITY | 1,000 LBS. Load Capacity, Center of Gravity 6" Overhang, 6" Off-center |
| ROTATION | .04-2 RPM @ 6,000 Lb-In Torque, 1/2 HP AC Motor, Variable Frequency Drive |
| TILT | $135^{\circ}$ Forward Tilt, 10,500 Lb-In Torque, . 4 RPM ( $90^{\circ}$ in 38 Seconds) 1/2 HP Brake Motor; 4.5" Inherent Overhang |
| TABLE | 30" Diameter Machined Table Top, with (4) Radial 'T' slots for $1 / 2$ " Diameter Bolts, $2.500 \times 1 / 2{ }^{\prime \prime}$ deep Pilot, $1-3 / 4{ }^{\prime \prime}$ Thru |
| FLAT TABLE HEIGHT | Minimum 32-1/2" from Floor, Maximum 50-1/2", Manually Adjustable in 6" Increments |
| WELD GROUND CURRENT | 1000 Amps |
| VOLTAGE | 460/3/60 |
| SHIPPING WEIGHT | 1,180 Lbs. |

${ }^{* * *}$ All dimensions are for reference only and subject to change without notice.


## $H D_{\text {Series }}$

## HD20 GEAR DRIVEN POSITIONER



The HD20 Gear Driven Positioner is designed to be a cost effective solution for positioning $2,000 \mathrm{Lbs}$. or less. 12,000 In-Lbs. rotation gearing provides safety and stability. Variable speed and standard 115 V wall voltage make this a very versatile machine. A standard T-slot table design allows almost any fixture or part to be easily adapted to the Positioner. 20 ' power cord included with machine.

115/1/60-2,000 Lbs. Machine

## Cost-Effective Solution for Precision Positioning

## Features

- Boxed section design that is stronger and will not distort support gearing when loaded
- Motors are mounted for easy access and sealed from dust contamination
- Limit switches and precision adjustable tiltstop triggers for accurate tilt setup and over-travel prevention
- Ground blocks for positive clamping of cable terminals to assure continuous, nonvarying weld current
- Heavy duty precision final drive gearing for smooth table rotation with a minimum of lost motion
- High load capacity tapered roller bearings are preloaded on spindles for guaranteed weld ground conduction
- Tables have full length slots with nut access in bottom side or edge


## Specifications HD20 GEAR DRVEN POSITIONER



## HD25 Thru HD100



The HD25-HD100 series Positioners provide a mid-range lineup that can run around the clock. These machines are engineered to provide rugged performance, yet they can easily be transported through your facility.

Models larger than the HD25 utilize double tilt gears which stabilize loads and prevent chassis warpage. The entire series features up-right motors safely mounted within the chassis and straddle supported tilt pinions to prevent misalignment of the rotational drive gearing. This group of gear driven Positioners are designed by Koike Aronson Inc. Ransome to offer the most in both performance and safety.

## Features

- $135^{\circ}$ powered forward tilt
- NEMA 12 Electricals
- Pin-through post manual height adjustment
- 90,000 psi aluminum-bronze low efficiency wormgear drive reduces back driving
- All steel welded gearboxes
- Low voltage hand control pendants
- 50:1 Variable speed drives
- AC brake motors

Standard hand pendant provided with all models


## Specifications HD25VF-HD100VF

| SPECIFICATIONS | HD25VF | HD30VF | HD45VF | HD60VF | HD100VF |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Tilt: Load Torque in-lb (N.m) <br> Rating Lbs.(kg) @ 6" (152mm) CG Height Rating Lbs.(kg) @ 12" ( 305 mm ) CG Height Rating Lbs.(kg) @ 18" (457mm) CG Height Rating Lbs.(kg) @ 24" (609mm) CG Height Rating Lbs.(kg) @ 30" (762mm) CG Height Rating Lbs.(kg) @ 36" (914mm) CG Height Rating Lbs.(kg) @ 42" (1067mm) CG Height Rating Lbs.(kg) @ 48" (1219mm) CG Height Rating Lbs.(kg) @ 54 " ( 1371 mm ) CG Height Rating Lbs.(kg) @ 60" (1524mm) CG Height Rating Lbs.(kg) @ 66" (1676mm) CG Height Rating Lbs.(kg) @ 72" (1829mm) CG Height | $\begin{aligned} & 31,875(3602) \\ & 2,500(1134) \\ & 1,700(771) \\ & 1,285(583) \\ & 1,035(469) \\ & 875(397) \\ & 750(340) \\ & 650(295) \\ & 580(263) \\ & 520(236) \\ & 470(213) \\ & 430(195) \\ & 400(181) \end{aligned}$ | $\begin{aligned} & 56,250(6356) \\ & 3,000(1361) \\ & 3,000(1361) \\ & 2,270(1030) \\ & 1,830(830) \\ & 1,530(694) \\ & 1,300(590) \\ & 1,100(499) \\ & 1,000(453) \\ & 900(408) \\ & 830(376) \\ & 760(345) \\ & 700(317) \end{aligned}$ | $\begin{aligned} & 84,375(9534) \\ & 4,500(2041) \\ & 4,500(2041) \\ & 3,400(1542) \\ & 2,750(1247) \\ & 2,300(1043) \\ & 1,975(896) \\ & 1,720(780) \\ & 1,530(694) \\ & 1,380(626) \\ & 1,250(567) \\ & 1,150(522) \\ & 1,100(499) \end{aligned}$ | $\begin{gathered} 123,000(13899) \\ - \\ 6,000(2721) \\ 4,650(2109) \\ 3,790(1719) \\ 3,200(1451) \\ 2,750(1247) \\ 2,400(1089) \\ 2,200(998) \\ 1,900(862) \\ 1,700(771) \\ 1,600(726) \\ 1,500(680) \end{gathered}$ | $\begin{gathered} 205,000(23165) \\ - \\ 10,000(4536) \\ 7,700(3493) \\ 6,300(2858) \\ 5,300(2404) \\ 4,600(2086) \\ 4,000(1814) \\ 3,600(1633) \\ 3,200(1451) \\ 3,000(1361) \\ 2,700(1225) \\ 2,500(1134) \end{gathered}$ |
| Rotation: Load Torque in-lb (N.m) Rating Lbs.(kg) @ 6" (152mm) Eccentric Rating Lbs.(kg) @ 12" (305mm) Eccentric | $\begin{aligned} & 15,000(1695) \\ & 2,500(1134) \\ & 1,250(567) \end{aligned}$ | $\begin{aligned} & 36,000(4068) \\ & 3,000(1361) \\ & 3,000(1350) \end{aligned}$ | $\begin{aligned} & 54,000(6102) \\ & 4,500(2041) \\ & 4,500(2041) \end{aligned}$ | $\begin{gathered} 72,000(8136) \\ - \\ 6,000(2721) \end{gathered}$ | $\begin{gathered} 120,000(13560) \\ - \\ 10,000(4536) \end{gathered}$ |
| Tilt: $135^{\circ}$ in how many seconds Tilt Motor Horse Power | $\begin{gathered} 23 \mathrm{Sec} . \\ 1 \mathrm{HP} \end{gathered}$ | $\begin{array}{r} 20 \mathrm{Sec} . \\ 2 \mathrm{HP} \end{array}$ | $\begin{gathered} 20 \mathrm{Sec} . \\ 3 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 24 \mathrm{Sec} . \\ 3 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 49 \mathrm{Sec} . \\ 3 \mathrm{HP} \end{gathered}$ |
| Rotation: Speed Range 50:1 AC Drive Rotation Motor Horse Power | $\begin{gathered} 2.0-.040 \mathrm{rpm} \\ 3 / 4 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 1.2-.024 \mathrm{rpm} \\ 1 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 1.2-.024 \mathrm{rpm} \\ 1-1 / 2 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 1.5-.030 \mathrm{rpm} \\ 3 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 1.0-.020 \\ 5 \mathrm{HP} \end{gathered}$ |
| Pendant cable length: | 20 ft . | 20 ft . | 20 ft . | 20 ft . | 20 ft . |
| A: Table Size <br> B: Maximum Clamping Diameter <br> C: Number of slots and width Number of Table nuts and Thread <br> D: Pilot hole and depth <br> E: Table Thickness <br> F: Inherent Overhang |  |  | $36 " \times 36 "(914 \times 914 \mathrm{~mm})$ $47 "(1194 \mathrm{~mm})$ <br> (4) $13 / 16^{\prime \prime}(20.6 \mathrm{~mm})$ <br> (4) $3 / 4-10$ " <br> 3.130 " $x^{1 / 2 "}$ " $(79.5 \times 13 \mathrm{~mm})$ <br> $1-3 / 4$ " ( 44.4 mm ) <br> 6-3/4" (171.4mm) | $\begin{gathered} 48^{\prime \prime} \times 48^{\prime \prime}(1219 \times 1219 \mathrm{~mm}) \\ 65^{\prime \prime}(1651 \mathrm{~mm}) \end{gathered}$ <br> (4) $13 / 16$ " $(20.6 \mathrm{~mm})$ <br> (4) $3 / 4^{\prime \prime}-10$ $\begin{gathered} 3.130 " \times 1 / 2 "(79.5 \times 12.7 \mathrm{~mm}) \\ 2 "(50.8 \mathrm{~mm}) \\ 81 / 2 "(215.9 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 48^{\prime \prime} \times 48^{\prime \prime}(1219 \times 1219 \mathrm{~mm}) \\ 65^{\prime \prime}(1651 \mathrm{~mm}) \end{gathered}$ <br> 4) $13 / 16^{\prime \prime}(20.6 \mathrm{~mm})$ <br> (4) $3 / 4 "-10$ $\begin{gathered} 3.130^{\prime \prime} \times 1 / 2 "(79.5 \times 12.7 \mathrm{~mm}) \\ 2 "(50.8 \mathrm{~mm}) \\ 81 / 2^{\prime \prime}(215.9 \mathrm{~mm}) \end{gathered}$ |
| Spindle OD Bearing Bore Hollow Spindle Dia | $\begin{aligned} & \text { 2-1/2" }(63.5 \mathrm{~mm}) \\ & \text { None } \end{aligned}$ | $\begin{aligned} & \text { 2-1/2" }(63.5 \mathrm{~mm}) \\ & \text { None } \end{aligned}$ | $\begin{aligned} & 3 "(76.2 \mathrm{~mm}) \\ & \text { None } \end{aligned}$ | $\begin{aligned} & 3 "(76.2 \mathrm{~mm}) \\ & \text { None } \end{aligned}$ | $\begin{gathered} 4 "(101.6 \mathrm{~mm}) \\ \text { None } \end{gathered}$ |
| Weld Current Conduction | 1,500 Amps | 1,500 Amps | 2,000 Amps | 2,000 Amps | 2,000 Amps |
| G: Table flat, Minimum Height Table flat, Maximum Height Adjustment Increments | $34-1 / 2 "(870 \mathrm{~mm})$ <br> $56-1 / 2 "(1435 \mathrm{~mm})$ <br> $5-1 / 2 "(139.7 \mathrm{~mm})$ | $\begin{gathered} 34-1 / 2 "(870 \mathrm{~mm}) \\ 54-1 / 20(1384.3 \mathrm{~mm}) \\ 5 "(127 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 34-1 / 2 "(870 \mathrm{~mm}) \\ 54-1 / 20(1384.3 \mathrm{~mm}) \\ 5 "(127 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 44-1 / 1 / 2(1130.3 \mathrm{~mm}) \\ 68-1 / 2 "(1740 \mathrm{~mm}) \\ 6 "(152.4 \mathrm{~mm}) \end{gathered}$ | $44^{-1 / 2 "}(1130.3 \mathrm{~mm})$ <br> 74-1/2" (1892.3mm) <br> 6" $(152.4 \mathrm{~mm})$ |
| H: Rotation axis, Minimum Height Rotation axis, Maximum Height Matching TS | $\begin{gathered} 27-3 / 4 "(704.8 \mathrm{~mm}) \\ 49-3 / 40(1263.6 \mathrm{~mm}) \\ \text { TS2 } \end{gathered}$ | $\begin{gathered} 27-3 / 3 "(704.8 \mathrm{~mm}) \\ 47-3 / 4 \times(1212.8 \mathrm{~mm}) \\ \text { TS2 } \end{gathered}$ | $\begin{gathered} 27-3 / 3 "(704.8 \mathrm{~mm}) \\ 47-3 / 4 \times(1212.8 \mathrm{~mm}) \\ \text { TS4 } \end{gathered}$ | $\begin{gathered} 36 "(914.4 \mathrm{~mm}) \\ 60 "(1524 \mathrm{~mm}) \\ \text { TS6 } \end{gathered}$ | $\begin{gathered} 36^{\prime \prime}(914.4 \mathrm{~mm}) \\ 66^{\prime \prime}(167 \mathrm{~mm}) \\ \text { TS10 } \end{gathered}$ |
| I: Tie down hole size <br> J: Front Mounting hole location <br> K: Center mounting hole location <br> L: Rear mounting hole location <br> M: Bolt hole pattern pitch <br> N: Overall base length <br> O: Overall Machine width <br> P: Overall machine length |  | $\begin{gathered} \text { (6) } 13 / 16 "(20.6 \mathrm{~mm}) \\ 1-1 / 2 "(38.1 \mathrm{~mm}) \\ 23 "(584.2 \mathrm{~mm}) \\ 20 "(508 \mathrm{~mm}) \\ 35-3 / 4 \times(908 \mathrm{~mm}) \\ 48^{\prime \prime}(1219.2 \mathrm{~mm}) \\ 48-3 / 4 \times(1225 \mathrm{~mm}) \\ 60 "(1524 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { (6) } 13 / 16^{\prime \prime}(20.6 \mathrm{~mm}) \\ 1-1 / 2 "(38.1 \mathrm{~mm}) \\ 23^{\prime \prime}(584.2 \mathrm{~mm}) \\ 20 "(508 \mathrm{~mm}) \\ 355-3 / 4(908 \mathrm{~mm}) \\ 48^{\prime \prime}(1219.2 \mathrm{~mm}) \\ 48-3 / 8 "(1229 \mathrm{~mm}) \\ 60 "(1524 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { (6) } 13 / 16^{\prime \prime}(20.6 \mathrm{~mm}) \\ 2 "(50.8 \mathrm{~mm}) \\ 30^{\prime \prime}(762 \mathrm{~mm}) \\ 24^{\prime \prime}(609.6 \mathrm{~mm}) \\ 47-1 / 2^{\prime \prime}(1206.5 \mathrm{~mm}) \\ 60 \text { " }(1524 \mathrm{~mm}) \\ 63-3 / 8^{\prime \prime}(1610 \mathrm{~mm}) \\ 76^{\prime \prime}(1930.4 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { (6) } 13 / 16 "(20.6 \mathrm{~mm}) \\ 2 "(50.8 \mathrm{~mm}) \\ 30^{\prime \prime}(762 \mathrm{~mm}) \\ 24 "(609.6 \mathrm{~mm}) \\ 47-5 / 8^{\prime \prime}(1209.7 \mathrm{~mm}) \\ 60^{\prime \prime}(1524 \mathrm{~mm}) \\ 61-13116{ }^{\prime \prime}(1570 \mathrm{~mm}) \\ 76^{\prime \prime}(1930.4 \mathrm{~mm}) \end{gathered}$ |
| Standard Primary Voltage | 460/3/60 | 460/3/60 | 460/3/60 | 460/3/60 | 460/3/60 |
| Shipping Weight | 1500 lbs . (680kg) | 1892 lbs. (858kg) | 2080 lbs. (943kg) | 3700 lbs. (1678kg) | 4105 lbs. (1862kg) |


**All dimensions are for reference only

+ and subject to change without notice.


## HD160 thru HD700



The HD160-HD700 series positioners are built to perform with larger capacities with their strong boxed chassis and high precision gearing.

Positioners larger than the HD240 are equipped with massive box beam trunnions, spur gear final drive for table rotation, and aluminumbronze wormgear drive of the spur tilt pinions.

The only thing that contradicts the large capacity of this series is their portability. They can be easily moved anywhere to tackle the largest of jobs.

Capacities from 16,000 to $\mathbf{7 0 , 0 0 0}$ pounds

## Features

- $135^{\circ}$ powered forward tilt
- NEMA 12 Electricals
- Pin-through post manual height adjustment
- 90,000 psi aluminum-bronze low efficiency wormgear drive reduces back driving
- All steel welded gearboxes
- Low voltage hand control pendants
- 50:1 Variable speed drives
- AC brake motors


## Standard hand pendant provided with all models



[^0]
## Specifications HD160VF - HD700VF

| SPECIFICATIONS | HD160VF | HD240VF | HD400VF | HD500VF | HD600VF | HD700VF |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tilt: Load Torque in-lb (N.m) <br> Rating Lbs.(kg) @ 6" (152mm) CG Height Rating Lbs.(kg) @ 12" (305mm) CG Height Rating Lbs.(kg) @ 18" ( 457 mm ) CG Height Rating Lbs.(kg) @ 24" (609mm) CG Height Rating Lbs.(kg) @ 30" (762mm) CG Height Rating Lbs.(kg) @ 36" (914mm) CG Height Rating Lbs.(kg) @ 42" (1067mm) CG Height Rating Lbs.(kg)@48" (1219mm) CG Height Rating Lbs.(kg) @ 54" (1371mm) CG Height Rating Lbs.(kg) @ 60" (1524mm) CG Height Rating Lbs.(kg) @ 66" (1676mm) CG Height Rating Lbs.(kg)@72" (1829mm) CG Height | $\begin{gathered} 336,000(37968) \\ - \\ 16,000(7257) \\ 12,400(5624) \\ 10,000(4536) \\ 8,600(3901) \\ 7,400(3356) \\ 6,600(2994) \\ 5,900(2676) \\ 5,300(2404) \\ 4,800(2177) \\ 4,400(1996) \\ 4,000(1814) \end{gathered}$ | $\begin{gathered} 504,000(56952) \\ - \\ 24,000(10886) \\ 18,500(8391) \\ 15,000(6804) \\ 13,000(5897) \\ 11,000(4989) \\ 9,800(4445) \\ 8,800(3992) \\ 8,000(3629) \\ 7,300(3311) \\ 6,700(3039) \\ 6200(2812) \end{gathered}$ | $\begin{gathered} 830,000(93790) \\ - \\ 40,000(18144) \\ 31,000(14061) \\ 25,000(11340) \\ 21,500(9752) \\ 18,500(8391) \\ 16,400(7439) \\ 14,600(6622) \\ 13,200(5987) \\ 12,000(5443) \\ 11,000(4989) \\ 10,200(4627) \end{gathered}$ | $\begin{gathered} 1,037,500(117238) \\ - \\ 50,000(22680) \\ 39,000(17690) \\ 32,000(14515) \\ 27,500(12473) \\ 23,450(10636) \\ 20,600(9344) \\ 18,500(8391) \\ 16,700(7575) \\ 15,200(6895) \\ 14,000(6350) \\ 13,000(5897) \end{gathered}$ | $\begin{gathered} 1,260,000(142380) \\ - \\ 60,000(27215) \\ 46,500(21092) \\ 38,000(17236) \\ 32,000(14515) \\ 28,000(12700) \\ 24,500(11113) \\ 22,000(9979) \\ 20,000(9072) \\ 18,000(8165) \\ 16,500(7484) \\ 15,500(6975) \end{gathered}$ | $\begin{gathered} 1,470,000(166110) \\ - \\ 70,000(31751) \\ 54,500(24721) \\ 44,500(20185) \\ 37,500(17010) \\ 32,500(14742) \\ 28,500(12927) \\ 25,500(11567) \\ 23,000(10433) \\ 21,000(9525) \\ 19,500(8845) \\ 18,000(8165) \end{gathered}$ |
| Rotation: Load Torque in-lb (N.m) Rating Lbs.(kg) @ 6" (152mm) Eccentric Rating Lbs.(kg) @ 12" (305mm) Eccentric | $\begin{gathered} 192,000(21696) \\ - \\ 16,000(7257) \end{gathered}$ | $\begin{gathered} 288,000(32544) \\ - \\ 24,000(10886) \end{gathered}$ | $\begin{gathered} 480,000(54240) \\ - \\ 40,000(18144) \end{gathered}$ | $\begin{gathered} 600,000(67800) \\ - \\ 50,000(22680) \end{gathered}$ | $\begin{gathered} 720,000(81360) \\ - \\ 60,000(27215) \end{gathered}$ | $\begin{gathered} 840,000(94920) \\ - \\ 70,000(31751) \end{gathered}$ |
| Tilt: $135^{\circ}$ in how many seconds Tilt Motor Horse Power | $\begin{gathered} 46 \mathrm{Sec} . \\ 5 \mathrm{HP} \end{gathered}$ | $\begin{aligned} & 46 \mathrm{Sec} . \\ & 7-1 / 2 \mathrm{HP} \end{aligned}$ | $\begin{aligned} & 135 \mathrm{Sec} \\ & 7-1 / 2 \mathrm{HP} \end{aligned}$ | $\begin{aligned} & 110 \mathrm{Sec} . \\ & 10 \mathrm{HP} \end{aligned}$ | $\begin{aligned} & 125 \mathrm{Sec} . \\ & 10 \mathrm{HP} \end{aligned}$ | $\begin{aligned} & 140 \mathrm{Sec} . \\ & 10 \mathrm{HP} \end{aligned}$ |
| Rotation: Speed Range 50:1 AC Drive Rotation Motor Horse Power | $\begin{gathered} .60-.012 \mathrm{rpm} \\ 3 \mathrm{HP} \end{gathered}$ | $\begin{gathered} .60-.012 \\ 7-1 / 2 \mathrm{HP} \end{gathered}$ | $\begin{gathered} .50-.010 \\ 10 \mathrm{HP} \end{gathered}$ | $\begin{gathered} .50-.010 \\ 15 \mathrm{HP} \end{gathered}$ | $\begin{gathered} .48-.010 \\ 15 \mathrm{HP} \end{gathered}$ | $\begin{gathered} .50-.010 \\ 20 \mathrm{HP} \end{gathered}$ |
| Pendant cable length: | 20 ft . | 20 ft . | 20 ft . | 20 ft . | 20 ft . | 20 ft . |
| A: Table Size <br> B: Maximum Clamping Diameter <br> C: Number of slots and width <br> Number of Table nuts and Thread <br> D: Pilot hole and depth <br> E: Table Thickness <br> F: Inherent Overhang | $\begin{gathered} 54^{\prime \prime} \times 54^{\prime \prime}(1372 \times 1372 \mathrm{~mm}) \\ 70^{\prime \prime}(1778 \mathrm{~mm}) \end{gathered}$ <br> (4) $1-1 / 16^{\prime \prime}(27 \mathrm{~mm})$ <br> (4) $1 "-8$ $\begin{gathered} 5.01 " \times 1 / 2 "(127 \times 13 \mathrm{~mm}) \\ 2-1 / 2 "(63.5 \mathrm{~mm}) \\ 9^{*}(228.6 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 54^{\prime \prime} \times 54^{\prime \prime}(1372 \times 1372 \mathrm{~mm}) \\ 70^{\prime \prime}(1778 \mathrm{~mm}) \end{gathered}$ <br> (4) $1-1 / 16^{\prime \prime}(27 \mathrm{~mm})$ <br> (4) $1 "-8$ $\begin{gathered} 5.01^{\prime \prime} \times 1 / 2 "(127 \times 13 \mathrm{~mm}) \\ 2-1 / 2 "(63.5 \mathrm{~mm}) \\ 9 "(228.6 \mathrm{~mm}) \end{gathered}$ | 84 " x 84 " ( $2134 \times 2134 \mathrm{~mm}$ ) <br> $112-1 / 2^{\prime \prime}(2857 \mathrm{~mm})$ <br> (4) $1-5 / 16^{\prime \prime}(33.3 \mathrm{~mm})$ <br> (4) $1-1 / 4 \mathrm{M}-7$ $\begin{gathered} 12.3 " \times 1-1 / 4 "(312 \times 32 \mathrm{~mm}) \\ 2-1 / 4(69.8 \mathrm{~mm}) \\ 8-3 / 4 "(222.2 \mathrm{~mm}) \end{gathered}$ | $84 " \times 84$ " ( $2134 \times 2134 \mathrm{~mm}$ ) $112-1 / 2^{\prime \prime}(2857 \mathrm{~mm})$ <br> (4) $1-5 / 16^{\prime \prime}(33.3 \mathrm{~mm})$ <br> (4) $1-1 / 43-7$ $\begin{gathered} 12.3 " \times 1-1 / 4 "(312 \times 32 \mathrm{~mm}) \\ 2-1 / 4 "(69.8 \mathrm{~mm}) \\ 8-3 / 4 "(222.2 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 96^{\prime \prime} \times 96^{\prime \prime}(2438 \times 2438 \mathrm{~mm}) \\ 126-1 / 2 "(3213 \mathrm{~mm}) \end{gathered}$ <br> (8) $1-5 / 8^{\prime \prime}(41.3 \mathrm{~mm})$ <br> (8) $1-1 / 2 "-12$ $\begin{gathered} 12.3 " \times 1-1 / 4 "(312 \times 32 \mathrm{~mm}) \\ 3 "(76.2 \mathrm{~mm}) \\ 9 "(228.6 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 96^{\prime \prime} \times 96^{\prime \prime}(2438 \times 2438 \mathrm{~mm}) \\ 127^{\prime \prime}(3225.8 \mathrm{~mm}) \end{gathered}$ <br> (8) $1-5 / 8^{\prime \prime}(41.3 \mathrm{~mm})$ <br> (8) $1-1 / 2 "-12$ $\begin{gathered} 12.3 " \times 1-1 / 4 "(312 \times 32 \mathrm{~mm}) \\ 3 "(76.2 \mathrm{~mm}) \\ 9 "(228.6 \mathrm{~mm}) \end{gathered}$ |
| Spindle OD Bearing Bore Hollow Spindle Dia | $\begin{gathered} 5 "(127 \mathrm{~mm}) \\ \quad \text { None } \end{gathered}$ | $\begin{gathered} 5 "(127 \mathrm{~mm}) \\ \text { None } \end{gathered}$ | $\begin{gathered} 14^{\prime \prime}(355.6 \mathrm{~mm}) \\ 11-7 / 8^{\prime \prime}(301.6 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 14 "(355.6 \mathrm{~mm}) \\ 11-7 / 8^{\prime \prime}(301.6 \mathrm{~mm}) \end{gathered}$ | $\begin{aligned} & 14 "(355.6 \mathrm{~mm}) \\ & 11-7 / 8^{\prime \prime}(301 \mathrm{~mm}) \end{aligned}$ | $\begin{aligned} & 14 "(355.6 \mathrm{~mm}) \\ & 11-7 / 8^{\prime \prime}(301 \mathrm{~mm}) \end{aligned}$ |
| Weld Current Conduction | 2,000 Amps | 2,000 Amps | 3,000 Amps | 3,000 Amps | 3,000 Amps | 3,000 Amps |
| G: Table flat, Minimum Height Table flat, Maximum Height Adjustment Increments | $\begin{gathered} 59-1 / 4 "(1505 \mathrm{~mm}) \\ 95-1 / 4 "(2419 \mathrm{~mm}) \\ 6^{\prime \prime}(152.4 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 59-1 / 4 "(1505 \mathrm{~mm}) \\ 95-1 / 4 "(2419 \mathrm{~mm}) \\ 6 "(152.4 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 70-3 / 4 "(1797 \mathrm{~mm}) \\ 118-3 / 4 "(3016 \mathrm{~mm}) \\ 12^{" \prime}(304.8 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 70-3 / 4 "(1797 \mathrm{~mm}) \\ 118-3 / 4 "(3016 \mathrm{~mm}) \\ 12^{\prime \prime}(304.8 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 74^{\prime \prime}(1879.6 \mathrm{~mm}) \\ 122^{\prime \prime}(3098.8 \mathrm{~mm}) \\ 12^{\prime \prime}(304.8 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 74-1 / 2 "(1892 \mathrm{~mm}) \\ 122-1 / 2 "(3112 \mathrm{~mm}) \\ 12^{\prime \prime}(304.8 \mathrm{~mm}) \end{gathered}$ |
| H: Rotation axis, Minimum Height Rotation axis, Maximum Height Matching TS | $\begin{gathered} 50-1 / 4 "(1276 \mathrm{~mm}) \\ 86-1 / 4 "(2191 \mathrm{~mm}) \\ \text { TS16 } \end{gathered}$ | $\begin{gathered} 50-1 / 4 "(1276 \mathrm{~mm}) \\ 86-1 / 4 "(2191 \mathrm{~mm}) \\ \text { TS25 } \end{gathered}$ | $\begin{aligned} & 62^{\prime \prime}(1574.8 \mathrm{~mm}) \\ & 110^{\prime \prime}(2794 \mathrm{~mm}) \end{aligned}$ | $\begin{aligned} & 62 "(1574.8 \mathrm{~mm}) \\ & 110 "(2794 \mathrm{~mm}) \end{aligned}$ | $\begin{gathered} 65 "(1651 \mathrm{~mm}) \\ 113 "(2870.2 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 65 "(1651 \mathrm{~mm}) \\ 113 "(2870.2 \mathrm{~mm}) \end{gathered}$ |
| I: Tie down hole size <br> J: Front Mounting hole location <br> K: Center mounting hole location <br> L: Rear mounting hole location <br> M Rear bolt hole pattern pitch <br> N: Overall base length <br> O: Overall Machine width <br> P: Overall Machine length | $\begin{gathered} \text { (6) } 1-1 / 16^{\prime \prime}(27 \mathrm{~mm}) \\ 2 "(50.8 \mathrm{~mm}) \\ 43^{\prime \prime}(1092 \mathrm{~mm}) \\ 21-1 / 2 "(546 \mathrm{~mm}) \\ 57-1 / 2^{" \prime}(1460.5 \mathrm{~mm}) \\ 71-1 / 4 "(1809.7 \mathrm{~mm}) \\ 73^{\prime \prime}(1854 \mathrm{~mm}) \\ 90-1 / 4 "(2292.3 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { (6) } 1-1 / 16^{\prime \prime}(27 \mathrm{~mm}) \\ 2 "(50.8 \mathrm{~mm}) \\ 40-1 / 2^{\prime \prime}(1028.7 \mathrm{~mm}) \\ 24 "(610 \mathrm{~mm}) \\ 57-9 / 16^{\prime \prime}(1462 \mathrm{~mm}) \\ 71-1 / 4 "(1809.7 \mathrm{~mm}) \\ 75^{\prime \prime}(1905 \mathrm{~mm}) \\ 90-1 / 4^{\prime \prime}(2292.3 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { (4) } 1-5 / 8^{\prime \prime}(41.3 \mathrm{~mm}) \\ 4 "(101.6 \mathrm{~mm}) \\ 82 "(2083 \mathrm{~mm}) \\ 91-3 / 4 "(2330.4 \mathrm{~mm}) \\ 90 "(2286 \mathrm{~mm}) \\ 120-1 / 2 "(3061 \mathrm{~mm}) \\ 124 "(3150 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { (4) } 1-5 / 8 "(41.3 \mathrm{~mm}) \\ 4 "(101.6 \mathrm{~mm}) \\ - \\ 82 "(2083 \mathrm{~mm}) \\ 91-3 / 4 "(2330.4 \mathrm{~mm}) \\ 90 "(2286 \mathrm{~mm}) \\ 120-1 / 2 "(3061 \mathrm{~mm}) \\ 124 "(3150 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { (2) } 1-5 / 8^{\prime \prime}(41.3 \mathrm{~mm}) \\ - \\ 82 "(2083 \mathrm{~mm}) \\ 94-3 / 4 "(2330.4 \mathrm{~mm}) \\ 90^{\prime \prime}(2286 \mathrm{~mm}) \\ 103-3 / 4 "(2635.3 \mathrm{~mm}) \\ 130 "(3302.6 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { (4) } 1-5 / 8 "(41.3 \mathrm{~mm}) \\ 4 "(101.6 \mathrm{~mm}) \\ - \\ 82 "(2083 \mathrm{~mm}) \\ 94-3 / 4 "(2330.4 \mathrm{~mm}) \\ 90 "(2286 \mathrm{~mm}) \\ 119 "(3023 \mathrm{~mm}) \\ 130 "(3302.6 \mathrm{~mm}) \end{gathered}$ |
| Standard Primary Voltage | 460/3/60 | 460/3/60 | 460/3/60 | 460/3/60 | 460/3/60 | 460/3/60 |
| Shipping Weight | $7675 \mathrm{lbs} .(3481 \mathrm{~kg}$ ) | 7490 lbs. (3397kg) | 16,270 lbs. (7380kg) | 16,325 lbs. ( 7405 kg ) | 18,800 lbs. (8527kg) | 26,020 lbs. (11802kg) |



## G400 Thru G2200



The G400-G2200 Positioners are a versatile series with capacities ranging from 40,000 to 220,000 pounds. Design characteristics of these Positioners include powered tilt from $90^{\circ}$ forward to $45^{\circ}$ backward, fixed height bases and hollow spindles. Larger models designed as "bolt together construction" reducing shipping costs and allowing for easier relocation of machine.

## Features

- $45 / 90$ powered tilt
- NEMA 12 Electricals
- Fixed Bases
- 90,000 psi aluminum-bronze low efficiency wormgear drive reduces back driving
- All steel welded gearboxes
- Low voltage hand control pendants
- 50:1 Variable speed drives
- AC brake motors


Standard hand pendant provided with all models

# Specifications G400-G2200 

| SPECIFICATIONS | G400 | G500 | G600 | G700 | G850 | G1200 | G2200 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tilt: Load Torque in-lb (N.m) <br> Rating Lbs.(kg) @ 12" ( 305 mm ) CG Height Rating Lbs.(kg) @ 18" ( 457 mm ) CG Height Rating Lbs.(kg)@24" ( 609 mm ) CG Height Rating Lbs.(kg) @ 30" ( 762 mm ) CG Height Rating Lbs.(kg) @ 36 " ( 914 mm ) CG Height Rating Lbs.(kg) @ 42" (1067mm) CG Height Rating Lbs.(kg) @ 48" (1219mm) CG Height Rating Lbs.(kg) @ 54 " ( 1371 mm ) CG Height Rating Lbs. (kg) @ 60" (1524mm) CG Height Rating Lbs.(kg) @ 66" (1676mm) CG Height Rating Lbs.(kg) @ 72" ( 1829 mm ) CG Height | $830,000(94920)$ $40,000(18144)$ $31,00(14061)$ $25,000(11340)$ $21,500(9752)$ $18,500(8391)$ $16,400(7439)$ $14,600(6622)$ $13,200(5987)$ $12,000(5443)$ $11,000(4989)$ $10,200(4627)$ | $1,037,000(118650)$ $50,000(22680)$ $39,000(17690)$ $32,000(14515)$ $27,000(12247)$ $23,400(10614)$ $20,600(9344)$ $18,500(8391)$ 16,700 $15,200(6895)$ $14,000(6350)$ $13,000(5897)$ | $1,260,000(142380)$ $60,000(27215)$ $46,500(21092)$ $38,000(17236)$ $32,000(14515)$ $28,000(12700)$ $24,500(11113)$ $22,000(9979)$ $20,000(9079)$ $18,000(8165)$ $16,500(7484)$ $15,500(7031)$ | $1,470,000(166110)$ $70,00(31751)$ $54,500(24721)$ $44,500(20185)$ $37,500(17010)$ $32,500(14742)$ $28,000(12927)$ $25,500(11567)$ $22,000(10433)$ $21,000(9525)$ $19,500(8845)$ $18,000(8165)$ | $1,800,000(203400)$ $85,000(38555)$ $66,111(30014)$ $54,100(24557)$ $45,770(20779)$ $39,67(18009)$ $35,000(15890)$ $31,316(14217)$ $28,33(12863)$ $25,870(11745)$ $23,800(10805)$ $22,037(10005)$ | $\begin{gathered} \hline 2,880,000(325440) \\ 120,000(54431) \\ 96,000(43545) \\ 80,000(36287) \\ 68,600(31116) \\ 60,000(27215) \\ 53,400(24222) \\ 48,000(21772) \\ 43,600(1977) \\ 40,000(18144) \\ 37,000(16783) \\ 34,200(15513) \end{gathered}$ | $\begin{gathered} \hline 5,400,000(610200) \\ 220,00(99790) \\ 177,000(09286) \\ 148,000(67132) \\ 127,000(57606) \\ 111,000(50349) \\ 100,000(45359) \\ 89,000(40370) \\ 81,000(3674) \\ 74,000(33566) \\ 69,000(31298) \\ 64,000(29030) \end{gathered}$ |
| Rotation: Load Torque in-lb (N.m) <br> Rating Lbs.(kg) @ 12" (305mm) Eccentric | $\begin{gathered} 480,000(54240) \\ 40,000(18000) \end{gathered}$ | $\begin{gathered} 600,000(67800) \\ 50,000(22680) \end{gathered}$ | $\begin{gathered} \hline 720,000(81360) \\ 60,000(27215) \end{gathered}$ | $\begin{gathered} 840,000(94920) \\ 70,000(31751) \end{gathered}$ | $\begin{gathered} 1,020,000(115260) \\ 85,000(38555) \end{gathered}$ | $\begin{gathered} 1,440,000(162720) \\ 120,000(54431) \end{gathered}$ | $\begin{gathered} \hline 2,640,000(298320) \\ 220,000(99790) \end{gathered}$ |
| Tilt: $135^{\circ}$ in how many seconds Tilt Motor Horse Power | $\begin{aligned} & 96 \mathrm{Sec} . \\ & 7-1 / 2 \mathrm{HP} \end{aligned}$ | $\begin{gathered} 135 \mathrm{Sec} . \\ 10 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 133 \mathrm{Sec} . \\ 10 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 135 \mathrm{Sec} . \\ 10 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 155 \mathrm{Sec} . \\ 15 \mathrm{HP} \\ \hline \end{gathered}$ | $\begin{aligned} & 156 \mathrm{Sec} . \\ & 20 \mathrm{HP} \\ & \hline \end{aligned}$ | $\begin{gathered} 150 \mathrm{Sec} . \\ 25 \mathrm{HP} \end{gathered}$ |
| Rotation: Speed Range 50:1 AC Drive | $\begin{gathered} .50-.01 \mathrm{rpm} \\ 10 \mathrm{HP} \end{gathered}$ | $\begin{gathered} .50-.01 \mathrm{rpm} \\ 10 \mathrm{HP} \end{gathered}$ | $\begin{gathered} .48-.010 \mathrm{rpm} \\ 15 \mathrm{HP} \\ \hline \end{gathered}$ | $\begin{gathered} .48-.010 \mathrm{rpm} \\ 20 \mathrm{HP} \\ \hline \end{gathered}$ | $\begin{gathered} .50-.001 \mathrm{rpm} \\ 20 \mathrm{HP} \\ \hline \end{gathered}$ | $\begin{gathered} .40-.008 \mathrm{rpm} \\ 25 \mathrm{HP} \end{gathered}$ | $\begin{gathered} .35-.007 \mathrm{rpm} \\ 30 \mathrm{HP} \\ \hline \end{gathered}$ |
| Pendant cable length: | 20 ft . | 20 ft . | 20 ft . | 20 ft . | 20 ft . | 20 ft . | 20 ft . |
| C: Table Size <br> CW: Maximum Clamping Diameter <br> CX: Number of slots and width <br> Number of Table nuts and Thread <br> D: Table Thickness <br> E: Pilot hole and depth <br> DE: Inherent Overhang |  |  |  | $96^{\prime \prime} \times 96^{\prime \prime}$ $(2438 \times 2438 \mathrm{~mm})$ $126^{\prime \prime}(3200 \mathrm{~mm})$ (8) $1-5 / 8^{\prime \prime}(41.3 \mathrm{~mm})$ $3 "(76.2 \mathrm{~mm})$ $12.30 " \times 1-1 / \mathrm{mm})$ (312.4x31.7mm $)$ $9^{\prime \prime}(228.6 \mathrm{~mm})$ | $96^{\prime \prime} \times 96^{\prime \prime}$ $(2438 \times 2438 \mathrm{~mm})$ $126^{\prime \prime}(3200 \mathrm{~mm})$ (8) $1-5 / 8^{\prime \prime}(41.3 \mathrm{~mm})$ $3 "(76.2 \mathrm{~mm})$ $12.255^{\prime \prime} \times 1$ " $(311.3 \times 25.4 \mathrm{~mm})$ $9 \times(228.6 \mathrm{~mm})$ | $20 "^{\prime \prime} \times 120^{\prime \prime}$ $(3048 \times 304 \mathrm{~mm})$ $10^{\circ} \times(4064 \mathrm{~mm})$ (8) $1-78^{\prime \prime}(47.6 \mathrm{~mm})$ $5^{\prime \prime}(127 \mathrm{~mm})$ $18.200^{\prime} \times 3^{\prime \prime}$ $(462.3 \times 76.2 \mathrm{~mm})$ $12^{24}(304.8 \mathrm{~mm})$ | $120^{\prime \prime} \times 120^{\prime \prime}$ $(3048 \times 3048 \mathrm{~mm})$ $157^{\prime \prime}(3988 \mathrm{~mm})$ $(8) 2-1 / 8^{\prime \prime}(56 \mathrm{~mm})$ $5^{\prime \prime}(127 \mathrm{~mm})$ $18.250{ }^{\prime \prime} \times 3^{\prime \prime}$ $(460.4 \times 76.2 \mathrm{~mm})$ $12-1 / 2^{* "}(317.5 \mathrm{~mm})$ |
| Spindle OD Bearing Bore Hollow Spindle Dia | $\begin{gathered} 14^{\prime \prime}(355.6 \mathrm{~mm}) \\ 11-7 / 8^{\prime \prime}(301 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 14^{\prime \prime}(355.6 \mathrm{~mm}) \\ 11-7 / 8^{\prime \prime}(301 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 14^{\prime \prime}(355.6 \mathrm{~mm}) \\ 11-7 / 8^{\prime \prime}(301 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 14^{\prime \prime}(355.6 \mathrm{~mm}) \\ 11-7 / 8^{\prime \prime}(301 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 14^{\prime \prime}(355.6 \mathrm{~mm}) \\ 11-7 / 8^{\prime \prime}(301 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 14^{\prime \prime}(355.6 \mathrm{~mm}) \\ 11-7 / 8^{\prime \prime}(301 \mathrm{~mm}) \end{gathered}$ | 18" ( 457.2 mm ) |
| Weld Current Conduction | 3,000 Amps | 3,000 Amps | 3,000 Amps | 3,000 Amps | 3,000 Amps | 3,000 Amps |  |
| F: Table flat, Height | 80-3/4" (2051mm) | ${ }^{80-3 / 4 "}$ (2051mm) | $81 "$ (2057mm) | $81 "$ (2057mm) | 94 " (2387.6mm) | 100 " (2540mm) | $102-1 / 2{ }^{\prime \prime}(2552.7 \mathrm{~mm})$ |
| G: Rotation axis, Height | 72 " ( 1828.8 mm ) | 72 " (1828.8mm) | 72" (1828.8mm) | 72" ( 1828.8 mm ) | $85 "$ ( 2159 mm ) | $88^{\prime \prime}(2235.2 \mathrm{~mm})$ | 88 " (2235.2mm) |
| H: Tie down hole size <br> H1: Mounting Plate Thickness <br> H2: Mountitg Plate Front <br> H3: Mounting Plate Rear <br> H4: Mounting Hole Dimension <br> H5: Mounting Hole Dimension <br> H6: Mounting Hole Dimension <br> H7: Mounting Hole Dimension <br> H8: Mounting Hole Dimension <br> I: BASE, Width Overall <br> J: BASE, Length Overall <br> K: Table Face Overhang <br> L: Length Overall |  |  | $\begin{gathered} \text { (8) } 2-1 / 8^{\prime \prime}(54 \mathrm{~mm}) \\ 1 "(25.4 \mathrm{~mm}) \\ 12 "(304.8 \mathrm{~mm}) \\ 12 "(304.8 \mathrm{~mm}) \\ 3 "(76.2 \mathrm{~mm}) \\ 6 "(152.4 \mathrm{~mm}) \\ 3 "(76.2 \mathrm{~mm}) \\ 6 "(152.4 \mathrm{~mm}) \\ 111-3 / 4 "(2838.4 \mathrm{~mm}) \\ 117-3 / 4>(2990.8 \mathrm{~mm}) \\ 72^{\prime \prime}(1828.8 \mathrm{~mm}) \\ 4 "(101.6 \mathrm{~mm}) \\ 76^{\prime \prime}(1930.4 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { (8) } 2-1 / 8^{" \prime}(54 \mathrm{~mm}) \\ 1 "(25.4 \mathrm{~mm}) \\ 12 "(304.8 \mathrm{~mm}) \\ 12 "(304.8 \mathrm{~mm}) \\ 3 "(76.2 \mathrm{~mm}) \\ 6 "(152.4 \mathrm{~mm}) \\ 3 "(76.2 \mathrm{~mm}) \\ 6 "(152.4 \mathrm{~mm}) \\ 111-3 / 4 "> \\ 117-3838.4(2990.4 \mathrm{~mm}) \\ 72 "(2928.8 \mathrm{~mm}) \\ 4 "(101.6 \mathrm{~mm}) \\ 76^{\prime \prime}(1930.4 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { (8) } 2-1 / 8^{\prime \prime}(54 \mathrm{~mm}) \\ 1 "(25.4 \mathrm{~mm}) \\ 12 "(304.8 \mathrm{~mm}) \\ 12 "(304.8 \mathrm{~mm}) \\ 3 "(76.2 \mathrm{~mm}) \\ 6 "(152.4 \mathrm{~mm}) \\ 3 "(76.2 \mathrm{~mm}) \\ 6 "(152.4 \mathrm{~mm}) \\ 140-1 / 2 "(3568.7 \mathrm{~mm}) \\ 146-1 / 2 "(3721.1 \mathrm{~mm}) \\ 92^{\prime \prime}(2336.8 \mathrm{~mm}) \\ 4 "(101.6 \mathrm{~mm}) \\ 96^{\prime \prime}(2438.4 \mathrm{~mm}) \end{gathered}$ |  | 8) $2-1 / 8 "(54 \mathrm{~mm})$ $1-1 / 2 "(38.1 \mathrm{~mm})$ $12 "(304.8 \mathrm{~mm})$ $12 "(304.8 \mathrm{~mm})$ $3 "(76.2 \mathrm{~mm})$ $6^{\prime \prime}(152.4 \mathrm{~mm})$ $3 "(76.2 \mathrm{~mm})$ $6 "(152.4 \mathrm{~mm})$ $166-1 / 2 "(4229.1 \mathrm{~mm})$ $172-1 / 2 "(4381.5 \mathrm{~mm})$ $96^{\prime \prime}(2438.4 \mathrm{~mm})$ $6 "(152.4 \mathrm{~mm})$ $102 "(2590.8 \mathrm{~mm})$ |
| Standard Primary Voltage | 460/3/60 | 460/3/60 | 460/3/60 | 460/3/60 | 460/3/60 | 460/3/60 | 460/3/60 |
| Shipping Weight | 15,500 lbs. (7031kg) | 15,700 lbs. (7121kg) | 17,000 lbs. (7711kg) | 17,200 lbs. (7711kg) | 24,000 lbs. (10886kg) | 43,500 lbs. (19731kg) |  |



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## G3500 Thru G10,000

## Features

- $45 / 90$ powered tilt
- NEMA 12 Electricals
- Fixed Bases
- 90,000 psi aluminum-bronze low efficiency wormgear drive reduces back driving
- All steel welded gearboxes
- Low voltage hand control pendants
- 50:1 Variable speed drives
- AC brake motors

The G3500-G10,000 Positioner line are some of the largest standard gear driven Positioners in the world. These heavy-weight Positioners make it both economical and practical to machine, weld and assemble massive structures safely. Their capacities range up to $1,000,000$ pounds; however these Positioners are very compact and can be transported within the workplace. This series is capable of withstanding the stress of the heaviest payloads and industrial applications, while providing many years of dependable service.

## Capacities from 350,000 to 1,000,000 pounds

## Specifications G3500-G10,000


${ }^{* * *}$ All dimensions are for reference only and subject to change without notice.

## GE ${ }_{\text {Series }}$

## GE25 thru GE45



The Koike Aronson GE25 to GE45 series of Geared Elevation Positioners are designed for lighter weight applications and portability.

These Geared Elevation Positioners allow work to be performed at the lowest possible level which makes welding both faster and safer. Along with precision elevation control, these Positioners allow simultaneous table tilt and rotation. Operators may easily access any section of a weldment eliminating the need for ladders and platforms.

All Koike Aronson Geared Elevating Positioners are engineered for safety, precision, performance and unsurpassed durability.

## Capacities from 2,500 to 4,500 pounds

## Features

- $135^{\circ}$ powered forward tilt
- NEMA 12 Electricals
- Powered Geared Elevation for varying work height
- 90,000 psi aluminum-bronze low efficiency wormgear drive reduces back driving
- All steel welded gearboxes
- Low voltage hand control pendants
- 50:1 Variable speed drives
- AC brake motors


Standard hand pendant provided with all models


[^1]
## Specifications GE25-GE45

| SPECIFICATIONS | GE25VF | GE30VF | GE45VF |
| :---: | :---: | :---: | :---: |
| Tilt: Load Torque in-lb (N.m) Rating Lbs.(kg) @ 6" (152mm) CG Height Rating Lbs.(kg) @ 12" (305mm) CG Height Rating Lbs.(kg) @ 18" (457mm) CG Height Rating Lbs.(kg) @ 24" (609mm) CG Height Rating Lbs.(kg) @ 30" (762mm) CG Height Rating Lbs.(kg) @ 36" (914mm) CG Height Rating Lbs.(kg) @ 42" (1067mm) CG Height Rating Lbs.(kg) @ 48" (1219mm) CG Height Rating Lbs.(kg) @ 54" (1371mm) CG Height Rating Lbs.(kg) @ 60" (1524mm) CG Height Rating Lbs.(kg) @ 66" (1676mm) CG Height Rating Lbs.(kg) @ 72" (1829mm) CG Height | $\begin{aligned} & 27,500(3108) \\ & 2,500(1134) \\ & 1,600(726) \\ & 1,200(544) \\ & 950(431) \\ & 780(354) \\ & 670(304) \\ & 580(263) \\ & 520(236) \\ & 460(209) \\ & 420(190) \\ & 380(172) \\ & 350(159) \end{aligned}$ | $\begin{gathered} 60,750(6864) \\ - \\ 3,000(1361) \\ 2,500(1043) \\ 1,880(853) \\ 1,600(726) \\ 1,375(624) \\ 1,200(544) \\ 1,075(488) \\ 975(442) \\ 890(404) \\ 820(372) \\ 750(340) \end{gathered}$ | $\begin{gathered} 91,125(10297) \\ - \\ 4,500(2041) \\ 3,500(1587) \\ 2,800(1270) \\ 2,400(1089) \\ 2,050(930) \\ 1,800(816) \\ 1,600(726) \\ 1,450(658) \\ 1,300(590) \\ 1,200(544) \\ 1,100(499) \end{gathered}$ |
| Rotation: Load Torque in-lb (N.m) Rating Lbs.(kg) @ 6" (152mm) Eccentric Rating Lbs.(kg) @ 12" (305mm) Eccentric | $\begin{gathered} 15,000(1695) \\ 2,500(1134) \\ 1,250(567) \end{gathered}$ | $\begin{gathered} 36,000(4068) \\ - \\ 3,000(1361) \end{gathered}$ | $\begin{gathered} 54,000(6102) \\ - \\ 4,500(2041) \end{gathered}$ |
| Tilt: $135^{\circ}$ in how many seconds Tilt Motor Horse Power | $\begin{aligned} & 19 \mathrm{Sec} . \\ & 1-1 / 2 \mathrm{HP} \end{aligned}$ | $\begin{gathered} 25 \mathrm{Sec} . \\ 2 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 25 \mathrm{Sec} . \\ 3 \mathrm{HP} \end{gathered}$ |
| Rotation: Speed Range 50:1 AC Drive Rotation Motor Horse Power | $\begin{gathered} 2.0-.040 \mathrm{rpm} \\ 1 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 1.2-.024 \mathrm{rpm} \\ 1-1 / 2 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 1.2-.024 \mathrm{rpm} \\ 2 \mathrm{HP} \end{gathered}$ |
| Elevation: Constant Speed, IPM ( $\mathrm{mm} / \mathrm{min}$ ) Elevation Motor Horse Power | $\begin{gathered} 34(863) \\ 1-1 / 2 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 30(762) \\ 2 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 30(762) \\ 3 \mathrm{HP} \end{gathered}$ |
| Pendant cable length: | 20 ft . | 20 ft . | 20 ft . |
| C: Table Size <br> CW: Maximum Clamping Diameter <br> CX: Number of slots and width Number of Table nuts and Thread <br> D: Table Thickness <br> E: Pilot hole and depth <br> DE: Inherent Overhang | $36^{\prime \prime}$ Dia. $(914 \mathrm{~mm})$ $33-3 / 4 "(857)$ (4) $25 / 32 "(20 \mathrm{~mm})$ None $1(25)$ $1.500 \times 1 "(38.1 \times 25 \mathrm{~mm})$ $5(127)$ | $\begin{gathered} 36 " \times 36 "(914 \times 914) \\ 47 "(1194) \\ \text { (4) } 13 / 16 "(21 \mathrm{~mm}) \\ (4) 3 / 4 "-10 \\ 1-3 / 4(44) \\ 9.126 \times 1 "(232 \times 25) \\ 8-1 / 4(209) \end{gathered}$ | $\begin{gathered} 42 " \times 42 "(1067 \times 1067) \\ 55-1 / 2 "(1410) \\ (4) 13 / 16 "(21 \mathrm{~mm}) \\ (4) 3 / 4 "-10 \\ 1-3 / 4(44) \\ 9.126 \times 1 "(232 \times 25) \\ 8-1 / 4(209) \end{gathered}$ |
| Spindle OD Bearing Bore Hollow Spindle Dia | $\begin{aligned} & 2-3 / 8(60) \\ & 1-1 / 2(38) \end{aligned}$ | $\begin{gathered} 10(254) \\ 8-1 / 2 "(216) \end{gathered}$ | $\begin{gathered} 10(254) \\ 8-1 / 2 "(216) \end{gathered}$ |
| Weld Current Conduction | 1500 Amps | 2000 Amps | 2000 Amps |
| F: Table flat, Minimum Height Table flat, Maximum Height Lift Stroke | $\begin{gathered} 35(889) \\ 59(1499) \\ 24 "(610) \end{gathered}$ | $\begin{gathered} 52-3 / 4(1340) \\ 85-3 / 4(2178) \\ 33 "(838) \end{gathered}$ | $\begin{gathered} 52-3 / 4(1340) \\ 85-3 / 4(2178) \\ 33 "(838) \end{gathered}$ |
| G: Rotation axis, Minimum Height Rotation axis, Maximum Height | $\begin{gathered} 30 "(762) \\ 54 "(1372) \end{gathered}$ | $\begin{aligned} & 44-1 / 2 "(1130) \\ & 77-1 / 2 "(1968) \end{aligned}$ | $\begin{aligned} & 44-1 / 2 "(1130) \\ & 77-1 / 2 "(1968) \end{aligned}$ |
| I: Tie down hole size <br> J: Front Mounting hole location <br> K: Rear mounting hole location <br> L: Rear bolt hole pattern pitch <br> M: Overall base length <br> N : Overall Base width <br> O : Overall machine length | $\begin{gathered} \text { (4) } 13 / 16 "(20.6 \mathrm{~mm}) \\ 1 "(25) \\ 53 "(1346) \\ 41-1 / 2(1054) \\ 55(1397) \\ 43(1092) \\ 68-1 / 2(1740) \end{gathered}$ | $\text { (4) 13/16" (20.6mm) } \begin{gathered} 3(76) \\ 73 "(1854) \\ 46 "(1168) \\ 79(2007) \\ 50(1270) \\ 89-1 / 2(2273) \end{gathered}$ | $\begin{gathered} \text { (4) } 13 / 16 "(20.6 \mathrm{~mm}) \\ 3(76) \\ 73 "(1854) \\ 46 "(1168) \\ 79(2007) \\ 50(1270) \\ 92-1 / 2(2349) \end{gathered}$ |
| Standard Primary Voltage | 460/3/60 | 460/3/60 | 460/3/60 |
| Shipping Weight | 2700 lbs . $(1225 \mathrm{~kg}$ ) | $5400 \mathrm{lbs}(2449 \mathrm{~kg}$ ) | 5622 lbs (2550) |



## GEseries

## GE60 Thru GE250



The GE60 to GE250 Models are Koike Aronson's midrange lineup and are the most popular series with their large capacities and yet compact size.

Geared Elevation Positioners allow work to be performed at the lowest possible level which makes welding both faster and safer. Along with precision elevation control, these Positioners enable simultaneous tilt and rotation. Operators may easily access any section of a weldment, eliminating the need for ladders and platforms.

All Koike Aronson / Ransome Geared Elevating Positioners are engineered for safety, precision, performance and unsurpassed durability.

## Capacities from 6,000 to $\mathbf{2 5 , 0 0 0}$ pounds

## Features

- $135^{\circ}$ powered forward tilt
- NEMA 12 Electricals
- Powered Geared Elevation for varying work height
- 90,000 psi aluminum-bronze low efficiency wormgear drive reduces back driving
- All steel welded gearboxes
- Low voltage hand control pendants
- 50:1 Variable speed drives
- AC brake motors


Standard hand pendant provided with all models

## Specifications GE60-GE250

| SPECIFICATIONS | GE60VF | GE90VF | GE120VF | GE180VF | GE250VF |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Tilt: Load Torque in-lb (N.m) Rating Lbs.(kg) @ 6" (152mm) CG Height Rating Lbs.(kg) @ 12" (305mm) CG Height Rating Lbs.(kg) @ 18 " ( 457 mm ) CG Height Rating Lbs.(kg) @ 24" (609mm) CG Height Rating Lbs.(kg) @ 30 " ( 762 mm ) CG Height Rating Lbs.(kg) @ 36" (914mm) CG Height Rating Lbs.(kg) @ 42" (1067mm) CG Height Rating Lbs.(kg) @ 48" (1219mm) CG Height Rating Lbs.(kg) @ 54" (1371mm) CG Height Rating Lbs.(kg) @ 60" (1524mm) CG Height Rating Lbs.(kg) @ 66" (1676mm) CG Height Rating Lbs.(kg) @ 72" ( 1829 mm ) CG Height | $\begin{gathered} 123,000(13899) \\ - \\ 6,000(2721) \\ 4,650(2109) \\ 3,790(1719) \\ 3,200(1451) \\ 2,750(1247) \\ 2,400(1089) \\ 2,200(998) \\ 1,900(862) \\ 1,700(771) \\ 1,600(726) \\ 1,500(680) \end{gathered}$ | 184,500 (20848) <br> 9,000 (4082) <br> 7,000 (3175) <br> 5,700 (2585) <br> 4,800 (2177) <br> 4,150 (1882) <br> 3,650 (1656) <br> 3,250 (1474) <br> 2,950 (1338) <br> 2,700 (1225) <br> 2,480 (1125) <br> 2,300 (1043) | $\begin{gathered} 252,000(28476) \\ - \\ 12,000(5443) \\ 9,300(4218) \\ 7,600(3447) \\ 6,450(2926) \\ 5,600(2540) \\ 4,950(2245) \\ 4,400(1996) \\ 4,000(1814) \\ 3,650(1656) \\ 3,350(1519) \\ 3,100(1406) \end{gathered}$ | $\begin{gathered} 369,500(41753) \\ - \\ 18,000(8165) \\ 13,900(6304) \\ 11,350(5148) \\ 9,600(4354) \\ 8,300(3765) \\ 7,300(3311) \\ 6,500(2948) \\ 5,900(2676) \\ 5,400(2449) \\ 4,950(2245) \\ 4,600(2086) \end{gathered}$ | $\begin{gathered} 512,500(57912) \\ - \\ 25,000(11340) \\ 19,400(8800) \\ 15,800(7167) \\ 13,300(6033) \\ 11,500(5216) \\ 10,200(4627) \\ 9,000(4082) \\ 8,200(3719) \\ 7,500(3402) \\ 6,900(3130) \\ 6,400(2903) \end{gathered}$ |
| Rotation: Load Torque in-lb (N.m) Rating Lbs.(kg) @ 6" (152mm) Eccentric Rating Lbs.(kg)@12" (305mm) Eccentric | $\begin{gathered} 72,000(8136) \\ - \\ 6,000(2721) \end{gathered}$ | $\begin{gathered} 108,000(12204) \\ - \\ 9,000(4082) \end{gathered}$ | $\begin{gathered} 144,000(16272) \\ - \\ 12,000(5443) \end{gathered}$ | $\begin{gathered} 216,000(24408) \\ - \\ 18,000(8165) \end{gathered}$ | $\begin{gathered} 300,000(33900) \\ - \\ 25,000(11340) \end{gathered}$ |
| Tilt: $135^{\circ}$ in how many seconds Tilt Motor Horse Power | $\begin{gathered} 35 \mathrm{Sec} . \\ 3 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 47 \mathrm{Sec} . \\ 3 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 63 \mathrm{Sec} . \\ 3 \mathrm{HP} \end{gathered}$ | $\begin{aligned} & 47 \mathrm{Sec} . \\ & 7-1 / 2 \mathrm{HP} \end{aligned}$ | $\begin{aligned} & 47 \mathrm{Sec} . \\ & 10 \mathrm{HP} \end{aligned}$ |
| Rotation: Speed Range 50:1 AC Drive Rotation Motor Horse Power | $\begin{gathered} 1.5-.030 \mathrm{rpm} \\ 5 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 1.0-.020 \mathrm{rpm} \\ 3 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 0.8-.016 \mathrm{rpm} \\ 5 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 0.6-.012 \mathrm{rpm} \\ 5 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 0.6-.012 \mathrm{rpm} \\ 10 \mathrm{HP} \end{gathered}$ |
| Elevation: Constant Speed, IPM ( $\mathrm{mm} / \mathrm{min}$ ) Elevation Motor Horse Power | $\begin{gathered} 24(610) \\ 3 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 21(533) \\ 3 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 18(457) \\ 5 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 24(610) \\ 7-1 / 2 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 20(508) \\ 10 \mathrm{HP} \end{gathered}$ |
| Pendant cable length: | 20 ft . | 20 ft . | 20 ft . | 20 ft . | 20 ft . |
| C: Table Size <br> CW: Maximum Clamping Diameter <br> CX: Number of slots and width <br> Number of Table nuts and Thread <br> D: Table Thickness <br> E: Pilot hole and depth <br> DE: Inherent Overhang | $\begin{gathered} 48^{\prime \prime} \times 48 "(1219 \times 1219) \\ 64(1626) \\ (4) 13 / 16 "(21 \mathrm{~mm}) \\ (4) 3 / 4-10 \\ 2(51) \\ 9.126^{\prime \prime} \times 1 "(232 \times 25) \\ 8-1 / 2 "(216) \end{gathered}$ | $\begin{gathered} 48^{\prime \prime} \times 48^{\prime \prime}(1219 \times 1219) \\ 64(1626) \\ (4) 13 / 16^{\prime \prime}(21 \mathrm{~mm}) \\ (4)^{3 / 4-10} \\ 2(51) \\ 9.126^{\prime \prime} \times 1(232 \times 25) \\ 8-1 / 2 "(216) \end{gathered}$ | $\begin{gathered} 54 " \times 54 "(1372 \times 1372) \\ 70(1778) \\ \text { (4) } 1-1 / 16 "(27 \mathrm{~mm}) \\ (4) 1 "-8 \\ 2-1 / 2 "(63) \\ 9.127 " \times 1-1 / 2 "(232 \times 38) \\ 8-1 / 2 "(216) \end{gathered}$ | $\begin{gathered} 54 " \times 54 "(1372 \times 1372) \\ 70(1778) \\ (4) 1-1 / 16 "(27 \mathrm{~mm}) \\ (4) 1 "-8 \\ 2-1 / 2 "(63) \\ 9.127 " \times 1-1 / 2 "(232 \times 38) \\ 8-1 / 2 "(216) \end{gathered}$ | $\begin{gathered} 60 " \times 60 "(1524 \times 1524) \\ 79(2007) \\ (4) 1-1 / 16 "(27 \mathrm{~mm}) \\ (4) 1 "-8 \\ 2-1 / 2 "(63) \\ 8.625 " \times 1-1 / 2 "(219 \times 38) \\ 8-1 / 2(216) \end{gathered}$ |
| Spindle OD Bearing Bore Hollow Spindle Dia | $\begin{gathered} 10(254) \\ 8-1 / 2 "(216) \end{gathered}$ | $\begin{aligned} & 10(254) \\ & 9(229) \end{aligned}$ | $\begin{aligned} & 10(254) \\ & 9(229) \end{aligned}$ | $\begin{aligned} & 10(254) \\ & 9(229) \end{aligned}$ | $\begin{gathered} 10(254) \\ 8-1 / 2(216) \end{gathered}$ |
| Weld Current Conduction | 2,000 Amps | 2,000 Amps | 2,000 Amps | 2,000 Amps | 2,000 Amps |
| F: Table flat, Minimum Height Lift Stroke <br> Table flat, Maximum Height | $\begin{gathered} 55 "(1397 \mathrm{~mm}) \\ 32-1 / 2 "(826 \mathrm{~mm}) \\ 87-1 / 2 "(2222 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 54-1 / 4 "(1384 \mathrm{~mm}) \\ 33^{\prime \prime}(838 \mathrm{~mm}) \\ 87-1 / 2 "(2222 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 55-1 / 2 "(1410 \mathrm{~mm}) \\ 32-1 / 2 "(826 \mathrm{~mm}) \\ 88^{\prime \prime}(2235 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 55-1 / 2 "(1410 \mathrm{~mm}) \\ 32-1 / 2 \prime \prime(826 \mathrm{~mm}) \\ 88^{\prime \prime}(2235 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 57-1 / 2 "(1460 \mathrm{~mm}) \\ 33 "(838 \mathrm{~mm}) \\ 90-1 / 2 "(2299 \mathrm{~mm}) \end{gathered}$ |
| G: Rotation axis, Minimum Height Rotation axis, Maximum Height | $\begin{gathered} 46-1 / 2 "(1181 \mathrm{~mm}) \\ 79^{\prime \prime}(2007 \mathrm{~mm}) \end{gathered}$ | $\begin{aligned} & 46^{\prime \prime}(1168 \mathrm{~mm}) \\ & 79^{\prime \prime}(2007 \mathrm{~mm}) \end{aligned}$ | $\begin{gathered} 47^{\prime \prime}(826 \mathrm{~mm}) \\ 79-1 / 2 "(2019 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 47 "(826 \mathrm{~mm}) \\ 79-1 / 2 "(2019 \mathrm{~mm}) \end{gathered}$ | $\begin{aligned} & 49^{\prime \prime}(1245 \mathrm{~mm}) \\ & 82^{\prime \prime}(2083 \mathrm{~mm}) \end{aligned}$ |
| I: Tie down hole size <br> J: Front Mounting hole location <br> K: Rear mounting hole location <br> L: Rear bolt hole pattern pitch <br> M: Overall base length <br> $\mathrm{N}:$ Overall Base with <br> $\mathrm{O}:$ Overall machine length | $\begin{gathered} \text { (4) } 13 / 16 "(21 \mathrm{~mm}) \\ 3 "(76 \mathrm{~mm}) \\ 74 "(1880 \mathrm{~mm}) \\ 41 "(1041 \mathrm{~mm}) \\ 80 "(2032 \mathrm{~mm}) \\ 44 "(1118 \mathrm{~mm}) \\ 96-5 / 8 "(2454 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { (4) } 13 / 16 "(21 \mathrm{~mm}) \\ \text { 3" }(76 \mathrm{~mm}) \\ 74 "(1880 \mathrm{~mm}) \\ 41 "(1041 \mathrm{~mm}) \\ 80 "(2032 \mathrm{~mm}) \\ 44 "(1118 \mathrm{~mm}) \\ 96-5 / 8 "(2454 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { (4) } 1-1 / 8 "(28 \mathrm{~mm}) \\ 3 "(76 \mathrm{~mm}) \\ 74 "(1880 \mathrm{~mm}) \\ 47^{\prime \prime}(1194 \mathrm{~mm}) \\ 80 "(2032 \mathrm{~mm}) \\ 54 "(1372 \mathrm{~mm}) \\ 101-1 / 2 "(2578 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { (4) } 11 / 8 "(28 \mathrm{~mm}) \\ 3 "(76 \mathrm{~mm}) \\ 74 "(1880 \mathrm{~mm}) \\ 47 "(1194 \mathrm{~mm}) \\ 80 "(2032 \mathrm{~mm}) \\ 54 "(1372 \mathrm{~mm}) \\ 100^{\prime \prime}(2540 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} (4) 11 / 16 "(27 \mathrm{~mm}) \\ 3-3 / 8 "(86 \mathrm{~mm}) \\ 891 / 2 "(2273 \mathrm{~mm}) \\ 80 "(2032 \mathrm{~mm}) \\ 94-1 / 2 "(2400 \mathrm{~mm}) \\ 88-1 / 2 "(2248 \mathrm{~mm}) \\ 133^{\prime \prime}(3378 \mathrm{~mm}) \end{gathered}$ |
| Standard Primary Voltage | 460/3/60 | 460/3/60 | 460/3/60 | 460/3/60 | 460/3/60 |
| Shipping Weight | $7670 \mathrm{lbs} .(3479 \mathrm{~kg}$ ) | $7700 \mathrm{lbs} .(3492 \mathrm{~kg}$ ) | $9500 \mathrm{lbs} .(4309 \mathrm{~kg}$ ) | 9,960 lbs. (4518kg) | 17,520 lbs. (7946kg) |



## GEseries

## GE500 Thru GE3500



The GE500 to GE3500 Models offer the largest capacities and range of elevations in the line of Koike Aronson Positioners.

Geared Elevation Positioners allow work to be performed at the lowest possible level which makes welding both faster and safer. Along with precision elevation control, these Positioners enable simultaneous tilt and rotation. Operators may easily access any section of a weldment, eliminating the need for ladders and platforms.

All Koike Aronson / Ransome Geared Elevating Positioners are engineered for safety, precision, performance and unsurpassed durability.

## Capacities from 50,000 to $\mathbf{3 5 0 , 0 0 0}$ pounds

## Features

- $135^{\circ}$ powered forward tilt
- NEMA 12 Electricals
- Powered Geared Elevation for varying work height
- 90,000 psi aluminum-bronze low efficiency wormgear drive reduces back driving
- All steel welded gearboxes
- Low voltage hand control pendants
- 50:1 Variable speed drives
- AC brake motors


Standard hand pendant provided with all models

## Specifications GE500-GE3500

| SPECIFICATIONS | GE500VF | GE850VF | GE1200VF | GE3500VF |
| :---: | :---: | :---: | :---: | :---: |
| Tilt: Load Torque in-lb (N.m) Rating Lbs.(kg) @ 12" (305mm) CG Height Rating Lbs.(kg) @ 18" (457mm) CG Height Rating Lbs.(kg) @ 24" (609mm) CG Height Rating Lbs.(kg) @ 30" (762mm) CG Height Rating Lbs.(kg) @ 36" (914mm) CG Height Rating Lbs.(kg) @ 42" (1067mm) CG Height Rating Lbs.(kg) @ 48" (1219mm) CG Height Rating Lbs.(kg) @ 54" (1371mm) CG Height Rating Lbs.(kg) @ 60" (1524mm) CG Height Rating Lbs.(kg) @ 66" (1676mm) CG Height Rating Lbs.(kg) @ 72" (1829mm) CG Height | $\begin{aligned} & 1,050,000(118650) \\ & 50,000(22680) \\ & 39,000(17690) \\ & 32,000(14515) \\ & 27,000(12247) \\ & 23,400(10614) \\ & 20,600(9344) \\ & 18,500(8391) \\ & 16,700(7575) \\ & 15,200(6895) \\ & 14,000(6350) \\ & 13,000(5896) \end{aligned}$ | $\begin{aligned} & 1,800,000(203400) \\ & 85,000(38950) \\ & 66,100(30014) \\ & 54,091(24557) \\ & 45,769(20779) \\ & 39,667(18009) \\ & 35,000(15890) \\ & 31,316(14217) \\ & 28,333(12863) \\ & 25,870(11745) \\ & 23,800(10805) \\ & 22,000(9979) \end{aligned}$ | $\begin{gathered} 2,880,000(325440) \\ 120,000(54431) \\ 96,000(43545) \\ 80,000(36287) \\ 68,600(31116) \\ 60,000(27215) \\ 53,400(24222) \\ 48,000(21772) \\ 43,600(19777) \\ 40,000(18144) \\ 37,000(16783) \\ 34,200(15513) \end{gathered}$ | $\begin{aligned} & 9,300,000(1050900) \\ & 350,000(158757) \\ & 286,000(129727) \\ & 240,000(108862) \\ & 210,000(95254) \\ & 184,000(83461) \\ & 160,000(72575) \\ & 145,000(65771) \\ & 135,000(61235) \\ & 125,000(56699) \\ & 115,000(52163) \\ & 107,000(48534) \end{aligned}$ |
| Rotation: Load Torque in-lb (N.m) Rating Lbs.(kg) @ 12" (305mm) Eccentric | $\begin{aligned} & 600,000(67800) \\ & 50,000(22680) \end{aligned}$ | $\begin{gathered} 1,020,000(115260) \\ 85,000(38555) \end{gathered}$ | $\begin{gathered} 1,440,000(162780) \\ 120,000(54431) \end{gathered}$ | $\begin{gathered} 2,640,000(298320) \\ 220,000(99790) \end{gathered}$ |
| Tilt: $135^{\circ}$ in how many seconds Tilt Motor Horse Power | $\begin{aligned} & 67 \mathrm{Sec} . \\ & 15 \mathrm{HP} \end{aligned}$ | $\begin{aligned} & 140 \mathrm{Sec} . \\ & 15 \mathrm{HP} \end{aligned}$ | $\begin{aligned} & 156 \mathrm{Sec} . \\ & 25 \mathrm{HP} \end{aligned}$ | $\begin{aligned} & 300 \mathrm{Sec} . \\ & 25 \mathrm{HP} \end{aligned}$ |
| Rotation: Speed Range 50:1 AC Drive Rotation Motor Horse Power | $\begin{gathered} 0.50-.010 \mathrm{rpm} \\ 15 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 0.40-.008 \mathrm{rpm} \\ 20 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 0.40-.008 \mathrm{rpm} \\ 25 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 0.35-.007 \mathrm{rpm} \\ 40 \mathrm{HP} \end{gathered}$ |
| Elevation: Constant Speed, IPM (mm/min) Elevation Motor Horse Power | $\begin{gathered} 20(508) \\ 20 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 17(432) \\ 25 \mathrm{HP} \end{gathered}$ | $\begin{gathered} 15(381) \\ 40 \mathrm{HP} \end{gathered}$ | $\begin{aligned} & 10(254) \\ & 150 \mathrm{HP} \end{aligned}$ |
| Pendant cable length: | 20 ft . | 20 ft . | 20 ft . | 20 ft . |
| C: Table Size <br> CW: Maximum Clamping Diameter <br> CX: Number of slots and width <br> Number of Table nuts and Thread <br> D: Table Thickness <br> E: Pilot hole and depth <br> DE: Inherent Overhang | $\begin{gathered} 84 " \times 84 "(2134 \times 2134 \mathrm{~mm}) \\ 112 "(2845 \mathrm{~mm}) \\ (4) 15 / 16 "(33 \mathrm{~mm}) \\ (4) 11 / 4-7 \\ 2-3 / 4 "(70 \mathrm{~mm}) \\ 12.253 " \times 1-3 / 4 "(311 " \times 45 \mathrm{~mm}) \\ 8-3 / 4 " 4(222 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 96 " \times 96 "(3048 \times 3048 \mathrm{~mm}) \\ 128 "(3251 \mathrm{~mm}) \\ (8) 15 / 8 "(41 \mathrm{~mm}) \\ (8) 11 / 2 "-12 \\ 3 "(76 \mathrm{~mm}) \\ 12.255 " \times 13 / 8 " \\ 9 \text { " }(229 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 120 " \times 120 "(3048 \times 3048 \mathrm{~mm}) \\ 159 "(4039 \mathrm{~mm}) \\ (8) 17 / 8 "(48 \mathrm{~mm}) \\ (8) 13 / 4 "-12 \\ 5 "(127 \mathrm{~mm}) \\ 12.255 " \times 1 " \\ 12 "(305 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 168 " \times 168 "(4267 \times 4267 \mathrm{~mm}) \\ 224 "(5690 \mathrm{~mm}) \\ (8) 21 / 8^{\prime \prime}(54 \mathrm{~mm}) \\ \text { (8) } 2 "-8 \\ 5-1 / 2 "(140 \mathrm{~mm}) \\ 20.000 " \times 3 " \\ 14-1 / 2 "(368 \mathrm{~mm}) \end{gathered}$ |
| Spindle OD Bearing Bore Hollow Spindle Dia | $\begin{aligned} & 14 "(356 \mathrm{~mm}) \\ & 11-7 / 8 "(301) \end{aligned}$ | $\begin{aligned} & 14 "(356 \mathrm{~mm}) \\ & 11-7 / 8 "(301) \end{aligned}$ | $\begin{gathered} 14 \& 20 "(356 \& 508 \mathrm{~mm}) \\ 11 / 7 / 8 "(301) \end{gathered}$ | $\begin{gathered} 100 "(2540 \mathrm{~mm}) \text { O.D. } \\ \text { Slew Ring } \end{gathered}$ |
| Weld Current Conduction | 3,000 Amps | 3,000 Amps | 3,000 Amps | 3,000 Amps |
| F: Table flat, Minimum Height Lift Stroke Table flat, Maximum Height | $\begin{gathered} 58-1 / 2 "(1486 \mathrm{~mm}) \\ 33 "(838 \mathrm{~mm}) \\ 94-1 / 2 "(2400 \mathrm{~mm}) \end{gathered}$ | $\begin{aligned} & 82^{\prime \prime}(2083 \mathrm{~mm}) \\ & 54 "(1372 \mathrm{~mm}) \\ & 136^{\prime \prime}(3454 \mathrm{~mm}) \end{aligned}$ | $\begin{aligned} & 98^{\prime \prime}(2489 \mathrm{~mm}) \\ & 54 "(1372 \mathrm{~mm}) \\ & 152^{\prime \prime}(3861 \mathrm{~mm}) \end{aligned}$ | $\begin{gathered} 144 "(3658 \mathrm{~mm}) \\ 92 "(2337 \mathrm{~mm}) \\ 236 "(5994 \mathrm{~mm}) \end{gathered}$ |
| G: Rotation axis, Minimum Height Rotation axis, Maximum Height | $\begin{aligned} & 52-3 / 4 "(1340 \mathrm{~mm}) \\ & 85-3 / 4 "(2178 \mathrm{~mm}) \end{aligned}$ | $\begin{gathered} 73 "(1854 \mathrm{~mm}) \\ 127 "(3226 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 86 "(2184 \mathrm{~mm}) \\ 140 "(3556 \mathrm{~mm}) \end{gathered}$ | $\begin{aligned} & 129-1 / 2 "(3289 \mathrm{~mm}) \\ & 221-1 / 2 "(5626 \mathrm{~mm}) \end{aligned}$ |
| I: Tie down hole size <br> J: Front Mounting hole location <br> K: Rear mounting hole location <br> L: Rear bolt hole pattern pitch <br> M: Overall base length <br> N: Overall Machine width <br> O: Overall machine length | $\begin{gathered} \text { (2) } 1-1 / 16^{\prime \prime}(27) \\ \text { None } \\ 96 "(2438 \mathrm{~mm}) \\ 98-1 / 2 "(2501 \mathrm{~mm}) \\ 98-1 / 4 \prime(2495 \mathrm{~mm}) \\ 127-1 / 2 \prime(3238 \mathrm{~mm}) \\ 134-3 / 4 / 4(3423 \mathrm{~mm}) \end{gathered}$ | None None None None $1483 / 4>"(3778 \mathrm{~mm})$ $1371 / 2 "(3492 \mathrm{~mm})$ $196-3 / 4 "(4997 \mathrm{~mm})$ | None None None None $1483 / 4 "(3778 \mathrm{~mm})$ $1411 / 2 "(3594 \mathrm{~mm})$ $209 "(5309 \mathrm{~mm})$ | None None None None $297 "(7544 \mathrm{~mm})$ $184 "(4674 \mathrm{~mm})$ $363 "(9220 \mathrm{~mm})$ |
| Standard Primary Voltage | 460/3/60 | 460/3/60 | 460/3/60 | 460/3/60 |
| Shipping Weight | 30,819 lbs. (13979kg) | $41,000 \mathrm{lbs} .(18597 \mathrm{~kg})$ | $53,000 \mathrm{lbs} .(24040 \mathrm{~kg})$ | $234,000 \mathrm{lbs} .(106141 \mathrm{~kg})$ |

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


## PE $E_{\text {series }}$

## 25P/E thru 250P/E



The 25/PE - 250/PE series Positioners provide all of the same benefits of the GE models but at a more affordable cost.

The Powered Elevation design makes maximum use of proven commercially available components, both in the elevation and guidance systems.

Elevation is made possible by means of commercial ball screw jacks for high duty cycle operation, driven by a worm/wormgear arrangement. Elevation uses two of these screw jacks for redundancy, coupled together and driven by a common motor. Belts, chains, and transfer gears are no longer utilized in the design.

Guidance is by means of wide, large diameter cam followers bearing on flat guide-ways. Cam follower contact with the guide-ways is adjustable for wear. Guidance is provided in the front, back, and at the sides of two columns that rigidly support the cantilevered load.

Capacities from 2,500 to 25,000 pounds

## Features

- $135^{\circ}$ powered forward tilt
- NEMA 12 Electricals
- Powered Screw Jack Elevation
- High capacity mechanical grounding shoes
- Spur gear final drive on tilt and rotation axis
- Low voltage hand control pendants
- 50:1 Variable speed drives
- AC brake motors


Standard hand pendant provided with all models


[^2]
# Specifications 25PIE-250PIE 

| SPECIFICATIONS | $25 \mathrm{P} / \mathrm{E}(6 \times 6)$ | $40 \mathrm{P} / \mathrm{E}(6 \times 6)$ | $60 \mathrm{P} / \mathrm{E}$ | $100 \mathrm{P} / \mathrm{E}$ | 200 P/E | $250 \mathrm{P} / \mathrm{E}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tilt: Load Torque in-lb (N.m) Rating Lbs.(kg) @ 6" (152mm) CG Height Rating Lbs.(kg) @ 12" (305mm) CG Height Rating Lbs.(kg) @ 18 " ( 457 mm ) CG Height Rating Lbs.(kg) @ 24" ( 609 mm ) CG Height Rating Lbs.(kg) @ 30" (762mm) CG Height Rating Lbs.(kg) @ 36" (914mm) CG Height Rating Lbs.(kg) @ 42" (1067mm) CG Height Rating Lbs.(kg) @ $48^{\prime \prime}(1219 \mathrm{~mm})$ CG Height Rating Lbs.(kg) @ 54 " ( 1371 mm ) CG Height Rating Lbs.(kg) @ 60" (1524mm) CG Height Rating Lbs.(kg) @ 66" (1676mm) CG Height Rating Lbs.(kg)@72" (1829mm) CG Height | $\begin{gathered} 30,000(3390) \\ 2,500(1134) \\ 1,700(771) \\ 1,285(583) \\ 1,035(469) \\ 875(397) \\ 750(340) \\ 650(295) \\ 580(263) \\ 520(236) \\ 470(213) \\ 430(195) \\ 400(181) \end{gathered}$ | $\begin{aligned} & 52,000(5876) \\ & 4,000(1814) \\ & 2,737(1242) \\ & 2,080(944) \\ & 1,677(761) \\ & 1,405(637) \\ & 1,210(549) \\ & 1,061(481) \\ & 945(428) \\ & 852(386) \\ & 776(352) \\ & 712(323) \\ & 658(298) \end{aligned}$ | $\begin{gathered} 126,000(13899) \\ - \\ 6,000(2721) \\ 4,650(2109) \\ 3,790(1719) \\ 3,200(1451) \\ 2,750(1247) \\ 2,400(1089) \\ 2,200(998) \\ 1,900(862) \\ 1,700(771) \\ 1,600(726) \\ 1,500(680) \end{gathered}$ | $\begin{gathered} 215,000(23166) \\ - \\ 9,500(4309) \\ 7,500(3402) \\ 6,200(2812) \\ 5,250(2381) \\ 4,600(2086) \\ 4,050(1837) \\ 3,650(1656) \\ 3,300(1497) \\ 3,000(1361) \\ 2,700(1225) \\ 2,500(1134) \end{gathered}$ | $\begin{gathered} 420,000(47460) \\ - \\ 20,000(9071) \\ 15,555(7055) \\ 12,727(5772) \\ 10,769(4884) \\ 9,333(4233) \\ 8,235(3735) \\ 7,368(3342) \\ 6,666(3023) \\ 6,087(2761) \\ 5,600(2450) \\ 5,185(2351) \end{gathered}$ | $\begin{gathered} 525,000(59325) \\ - \\ 25,000(11340) \\ 19,445(8820) \\ 15,910(7216) \\ 13,460(6105) \\ 11,600(5261) \\ 10,300(4672) \\ 9,210(4177) \\ 8,300(3764) \\ 7,600(3447) \\ 7,000(3175) \\ 3,110(1410) \end{gathered}$ |
| Rotation: Load Torque in-lb (N.m) Rating Lbs.(kg) @ 6" (152mm) Eccentric Rating Lbs.(kg)@12"(305mm) Eccentric | $\begin{aligned} & 15,000(1695) \\ & 2,500(1134) \\ & 1,250(567) \end{aligned}$ | $\begin{aligned} & 24,000(2712) \\ & 4,000(1814) \\ & 2,000(907) \end{aligned}$ | $\begin{gathered} 72,000(8136) \\ - \\ 6,000(2721) \end{gathered}$ | $\begin{aligned} & 120,000(13560) \\ & 10,000(4535) \\ & 9,500(4309) \end{aligned}$ | $\begin{gathered} 240,000(27120) \\ - \\ 20,000(9071) \end{gathered}$ | $\begin{gathered} 300,000(33900) \\ - \\ 25,000(11340) \end{gathered}$ |
| Tilt: Forward Tilt Degrees | 135 Degrees | 135 Degrees | 135 Degrees | 135 Degrees | 135 Degrees | 135 Degrees |
| Rotation: Speed Range 50:1 AC Drive | 1.5-. 030 rpm | $1.24-.025 \mathrm{rpm}$ | 1.0-. 020 rpm | $0.8-.016 \mathrm{rpm}$ | 0.49-. 010 rpm | 0.49-. 010 rpm |
| Pendant cable length: | 20 ft . | 20 ft . | 20 ft . | 20 ft . | 20 ft . | 20 ft . |
| C: Table Size <br> CX: Number of slots and width <br> Number of Table nuts and Thread <br> D: Table Thickness <br> E: Pilot hole and depth <br> DE: Inherent Overhang | 32" Dia. ( 812 mm ) <br> (4) $11 / 16^{\prime \prime}(17.5 \mathrm{~mm})$ <br> (4) $5 / 8 "-11$ <br> $3 / 4$ "" ( 19 mm ) $\begin{gathered} 4.250 " x \text { 1/4" }(108 " \times 6 \mathrm{~mm}) \\ 6 \text { " }(152.4 \mathrm{~mm}) \end{gathered}$ | 42" Dia. (1067mm) <br> (4) $11 / 16^{\prime \prime}(17.5 \mathrm{~mm})$ <br> (4) $5 / 8 "-11$ <br> $7 / 8^{\text {"" ( }}$ ( 22 mm ) <br> 4.625 "x $5 / 16^{\prime \prime}$ <br> 7" (178mm) | 60 " Dia. ( 1524 mm ) <br> (4) $1-1 / 8^{\prime \prime}(28.5 \mathrm{~mm})$ <br> (4) $1 "-12$ <br> 3/4"" ( 19 mm ) <br> 6.250 "x $1 / 2$ " <br> $10-1 / 4^{\prime \prime}(260 \mathrm{~mm})$ | 60" Dia. (1524mm) <br> (4) $1-1 / 8^{\prime \prime}(28.5 \mathrm{~mm})$ <br> (4) $1 "-12$ <br> 3/4"" (19mm) <br> $9.125 " x 3 / 8$ " <br> $10-5 / 8^{\prime \prime}(270 \mathrm{~mm})$ | $60 "$ Dia. (1524mm) <br> (4) $1-1 / 8^{\prime \prime}(28.5 \mathrm{~mm})$ $\begin{aligned} & \text { (4) } 1 "-12 \\ & 3 / 4 \times(19 \mathrm{~mm}) \\ & 10.250 " \times 1 / 2 " \\ & 9 "(228.6 \mathrm{~mm}) \end{aligned}$ | 60 " Dia. ( 1524 mm ) <br> (4) $1-1 / 8^{\prime \prime}(28.5 \mathrm{~mm})$ <br> (4) $1 "-12$ <br> 1" ( 25 mm ) <br> 10.250 "x 1/8" <br> $9 "(228.6 \mathrm{~mm})$ |
| Hollow Spindle Dia | $2 "$ ( 50.8 mm ) | $2 "(50.8 \mathrm{~mm})$ | $6 "(152.4 \mathrm{~mm})$ | 6" (152.4mm) | $7-1 / 2 "(190.5 \mathrm{~mm})$ | $7-1 / 20$ (190.5mm) |
| Weld Current Conduction | 1,500 Amps | 1,500 Amps | 2,000 Amps | 2,000 Amps | 2,000 Amps | 2,000 Amps |
| F: Table flat, Minimum Height Lift Stroke Table flat, Maximum Height | $\begin{aligned} & 38 "(965 \mathrm{~mm}) \\ & 24 "(609 \mathrm{~mm}) \\ & 62 "(1575 \mathrm{~mm}) \end{aligned}$ | $\begin{gathered} 42-1 / 2 "(1080 \mathrm{~mm}) \\ 24 "(609 \mathrm{~mm}) \\ 66-1 / 2 "(1689 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 49-3 / 4 "(1263 \mathrm{~mm}) \\ 24 "(609 \mathrm{~mm}) \\ 73-3 / 4 "(1873 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 69-1 / 4 "(1759 \mathrm{~mm}) \\ 26^{\prime \prime}(660 \mathrm{~mm}) \\ 95-1 / 4 "(2419 \mathrm{~mm}) \end{gathered}$ | $59 "(1499 \mathrm{~mm})$ <br> 24" ( 610 mm ) <br> $83 "(2108 \mathrm{~mm})$ | $\begin{aligned} & 62.5 "(1588 \mathrm{~mm}) \\ & 24^{\prime \prime}(610 \mathrm{~mm}) \\ & 86.5^{\prime \prime}(2197 \mathrm{~mm}) \\ & \hline \end{aligned}$ |
| G: Rotation axis, Minimum Height Rotation axis, Maximum Height | $\begin{gathered} 32 "(813 \mathrm{~mm}) \\ 56 "(1422 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} 35-1 / 2 "(902 \mathrm{~mm}) \\ 59-1 / 2 "(1511 \mathrm{~mm}) \end{gathered}$ | $\begin{aligned} & 39-1 / 2 "(1003 \mathrm{~mm}) \\ & 63-1 / 2 "(1613 \mathrm{~mm}) \end{aligned}$ | $58-5 / 8^{\prime \prime}(1489 \mathrm{~mm})$ <br> $84-5 / 8 "(2150 \mathrm{~mm})$ | $\begin{aligned} & 50 "(1270 \mathrm{~mm}) \\ & 74^{\prime \prime}(1880 \mathrm{~mm}) \end{aligned}$ | $\begin{aligned} & 50 "(1270 \mathrm{~mm}) \\ & 74^{\prime \prime}(1880 \mathrm{~mm}) \end{aligned}$ |
| I: Tie down hole size <br> J: $\quad$ Front Mounting hole location <br> $\mathrm{K}: \quad$ Rear mounting hole location <br> L: Rear bolt hole pattern pitch <br> M: Overall base length <br> N : Overall Base with | $\begin{gathered} \text { (6) } 1-1 / 8^{\prime \prime}(28.5 \mathrm{~mm}) \\ 3-1 / 2 "(89 \mathrm{~mm}) \\ 44 "(1117 \mathrm{~mm}) \\ 9-3 / 4 "-19-1 / 2 " \\ 50-7 / 8^{\prime \prime}(1292 \mathrm{~mm}) \\ 51-3 / 4 "(1315 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { (4) } 13 / 16 "(20.6 \mathrm{~mm}) \\ 1-1 / 2 ",(38.1 \mathrm{~mm}) \\ 65-1 / 2 "(1663 \mathrm{~mm}) \\ 60-1 / 4 \prime(1530 \mathrm{~mm}) \\ 68-1 / 2 "(1740 \mathrm{~mm}) \\ 63-3 / 4=(1620 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { (4) } 7 / 8^{\prime \prime}(22.2 \mathrm{~mm}) \\ 3-1 / 2 "(89 \mathrm{~mm}) \\ 83-3 / 4 \prime(2127 \mathrm{~mm}) \\ 55^{\prime \prime}(1397 \mathrm{~mm}) \\ 88-1 / 4 \prime(2242 \mathrm{~mm}) \\ 59 "(1499 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { (4) } 7 / 8^{\prime \prime}(22.2 \mathrm{~mm}) \\ 3-1 / 2 "(89 \mathrm{~mm}) \\ 83-3 / 4 "(2127 \mathrm{~mm}) \\ 55^{\prime \prime}(1397 \mathrm{~mm}) \\ 88-1 / 4 "(2242 \mathrm{~mm}) \\ 59 "(1499 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { (4) } 1-1 / 8^{\prime \prime}(28.5 \mathrm{~mm}) \\ 1-1 / 2 "(38 \mathrm{~mm}) \\ 80-1 / 2 "(2045 \mathrm{~mm}) \\ 66-1 / 2 "(1689 \mathrm{~mm}) \\ 83-1 / 2 "(2121 \mathrm{~mm}) \\ 76-1 / 2 "(1943 \mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { (4) } 1-1 / 8^{\prime \prime}(28.5 \mathrm{~mm}) \\ 1-1 / 2 "(38 \mathrm{~mm}) \\ 80-1 / 2 "(2045 \mathrm{~mm}) \\ 66-1 / 2 "(1689 \mathrm{~mm}) \\ 83-1 / 2 "(2121 \mathrm{~mm}) \\ 76-1 / 2 "(1943 \mathrm{~mm}) \end{gathered}$ |
| Standard Primary Voltage | 460/3/60 | 460/3/60 | 460/3/60 | 460/3/60 | 460/3/60 | 460/3/60 |
| Shipping Weight | 2700 lbs . (1225kg) | $4000 \mathrm{lbs} .(1814 \mathrm{~kg})$ | $6500 \mathrm{lbs} .(2948 \mathrm{~kg})$ | $10761 \mathrm{lbs} .(4881 \mathrm{~kg})$ | 16,700 lbs. ( 7575 kg ) | $17,000 \mathrm{lbs} .(7711 \mathrm{~kg})$ |



## FLOOR TURNTABLES



There are two basic types of Floor Turntables provided by Koike Aronson Inc. / Ransome. A free standing "A" frame and free standing column design are used depending on size and capacity.

Machine capacities of $2,500 \mathrm{Lbs}$. and less utilize the " A " frame design. The " $A$ " frame type turntable has a hollow spindle and uses pre-loaded tapered roller bearings. The bearing housing and main support "A" frame house the motor and gear reducer below the table, with no protrusions to prevent interference or damage to parts or equipment.

Machine capacities of $6,000 \mathrm{Lbs}$. and more utilize the free standing column design. The column design floor turntable uses a large diameter slew ring bearing and center column for supporting the load. Table deflection is reduced, while direct drive to the gear teeth on the bearing reduces maintenance.

All Koike Aronson Inc. / Ransome floor turntables are variable speed rotation using variable frequency inverter drives for smooth acceleration and deceleration control. Koike Aronson, Inc. / Ransome rotation axis are repeatable within $\pm 0.005$ Inches per Inch of radius, with a consistent load, speed and direction.

Capacities from 250 to 40,000 pounds

## Features

- $360^{\circ}$ powered rotation
- NEMA 12 Electricals
- Spur gear final drive on rotation axis
- Low voltage hand control pendants
- 50:1 Variable speed drives
- AC brake motors


Standard hand pendant provided with all models


Optional foot switch controls available

## Specifications Floor Tumtables

| Model | FT250 | FT500 | FT1000 | FT2500 | FT6000 | FT10000 | FT20000 | FT40000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Load Capacity | 250 Lbs. | 500 Lbs. | 1,000 Lbs | 2,500 Lbs. | 6,000 Lbs | 10,000 Lbs | 20,000 Lbs | 40,000 Lbs |
| Allowable load eccentricity | $3 "$ | $6 "$ | $6 "$ | $6 "$ | 12" | 12 " | 12" | 12" |
| Rotation speed (RPM) | . $07-3.7$ | . $04-2.0$ | . $04-2.0$ | . $02-1.0$ | . $02-1.0$ | . $02-1.0$ | . 02 -1.0 | 0.1-0.5 |
| Motor (HP) | 1/4HP | 1/4HP | 1/2HP | 3/4HP | 3/4HP | $3 / 4 \mathrm{HP}$ | 1HP | 1HP |
| Height from floor | $14 "$ | $24 "$ | $24 "$ | $24 "$ | $24 "$ | $24 "$ | $24 "$ | $28 "$ |
| Rotation bearing type | Timken w/spindle | Timken w/spindle | Timken w/spindle | Timken w/spindle | Slew Ring | Slew Ring | Slew Ring | Slew Ring |
| Ground current (Amps) | 1,500 | 1,500 | 1,500 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 |
| Table Size | 16" Dia. <br> Machined | 30" Dia. <br> Machined | 30" Dia. <br> Machined | 42" Dia. <br> Machined | 60 " Dia. | 60" Dia | 60 " Dia | 72" Dia |
| Table Thickness | 3/8" | 5/8" | 5/8" | 5/8" | 3/4" | 3/4" | 1" | 1" |

${ }^{* * *}$ All dimensions are for reference only and subject to change without notice.


# OPTIONS 

## 3 JAW SELF CENTERING SCROLL CHUCKS

## Features

- Self Centering
- Heavy duty 3-Jaw Construction
- Single handed operation
- Removable and reversible jaws
- Low maintenance
- Long jaw bites for stability and safety
- Serrated jaws available


## 3 JAW SELF CENTERING GRIPPER 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.

## OPTIONS

## SCROLL TYPE



| Size | Inside Clamp <br> Range | Outside Clamp Range | D | F | E | d | C | H | h | Thread M | Weight Lbs. | Mount Plate/Lbs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3JC6 | 1.65-5.75 | .12-6.30 | 6-1/4" | 5.511" | $4.921 "$ | 1.653" | .1575" | 2.539" | 1.693" | M10 (3) | 22 | $\begin{aligned} & .75 \times 8 \mathrm{Dia} \\ & 11 \mathrm{Lbs} . \end{aligned}$ |
| 3 JC 12 | 2.56-10.43 | .39-12.40 | 12-1/2" | 11.26" | 10.24" | 4.055" | .1969" | $3.701 "$ | 2.244" | M16 (6) | 121 | $\begin{gathered} \hline \text { 1"X14.38 } \\ \text { Dia / } 28 \\ \text { Lbs. } \end{gathered}$ |
| 3JC25 | 5.51-23.23 | 1.18-24.80 | 25" | 13.00" | 16.03" | 9.92" | 1.18" | 5.905" | 3.42" | 3/4-10 (6) | 630 | $\begin{gathered} 1 " \mathrm{X} 28 \\ \text { Dia / } 175 \\ \text { Lbs. } \end{gathered}$ |

GRIPPER TYPE
${ }^{* * *}$ All dimensions are for reference only and subject to change without notice.


| Model | $\begin{array}{l}\text { Clamp } \\ \text { Range } \\ \text { inches }\end{array}$ | $\begin{array}{c}\text { Inside } \\ \text { Clamp } \\ \text { Range } \\ \text { inches }\end{array}$ | $\begin{array}{c}\text { Outside } \\ \text { Clamp } \\ \text { Range } \\ \text { inches }\end{array}$ | $\begin{array}{c}\text { Load } \\ \text { Capacity } \\ \text { Lbs. }\end{array}$ | $\begin{array}{c}\text { Weight } \\ \text { Lbs. }\end{array}$ | Dimensions |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |$]$

${ }^{* * *} A l l$ dimensions are for reference only and subject to change without notice.

## OPTIONS

## WP-3 JAW SELF CENTERING CHUCKS



Open center 3 Jaw self centering chuck, allows fast set-up of cylindrical shapes. Heavy-duty construction and a completely enclosed faceplate prevents flux and weld splatter from impairing operation.


| Model | WP-200 | WP-300 | WP-400 |
| :---: | :---: | :---: | :---: |
| Inside Clamp Range | $3.1-8.7^{\prime \prime}$ | $4.7^{\prime \prime}-11.8^{\prime \prime}$ | $6.5^{\prime \prime}-15^{\prime \prime}$ |
| Outside Clamp <br> Range | $.8-5.1^{\prime \prime}$ | $2^{\prime \prime}-79^{\prime \prime}$ | $3.5^{\prime \prime}-12.2^{\prime \prime}$ |
| D1 | $7.8^{\prime \prime}$ | $11.8^{\prime \prime}$ | $15.7^{\prime \prime}$ |
| D2 | $4.7^{\prime \prime}$ | $5.9^{\prime \prime}$ | $9.8^{\prime \prime}$ |
| D3 | $3.1^{\prime \prime}$ | $3.9^{\prime \prime}$ | $6.7^{\prime \prime}$ |
| A | $1.5^{\prime \prime}$ | $1.5^{\prime \prime}$ | $1.8^{\prime \prime}$ |
| B | $3 / 4^{\prime \prime}$ | $3 / 4^{\prime \prime}$ | $.98^{\prime \prime}$ |
| G | $2.7^{\prime \prime}$ | $2.7^{\prime \prime}$ | $3.8^{\prime \prime}$ |
| L | $3.0^{\prime \prime}$ | $3.1^{\prime \prime}$ | $3.9^{\prime \prime}$ |
| H | $1.8^{\prime \prime}$ | $1.8^{\prime \prime}$ | $2.6^{\prime \prime}$ |
| F | $1.3^{\prime \prime}$ | $1.4^{\prime \prime}$ | $1.4^{\prime \prime}$ |
| P | $3.9^{\prime \prime}$ | $4.7^{\prime \prime}$ | $8.7^{\prime \prime}$ |
| Weight (Lbs.) | 13 | 26 | 48 |

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

## Features

- Self Centering
- Heavy duty 3-Jaw Construction
- Quick lock handles
- Low maintenance
- Light weight for small capacity Positioners



## 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

The Koike Aronson/Ransome Handheld Radio Remote Controlled Pendant is user friendly and adaptable to any Positioner. The weatherproof and lightweight pendant includes a resettable E-Stop and speed potentiometer for complete, safe machine control. A magnetic holder allows operator to keep remote out of harms way when not in use.


## Programmable Positioner Control

The programmable controller is designed to receive and memorize optimum work piece positions and increase productivity. The standard programmable control provides up to 3 part programs with 20 positions. Programmable Positioner System is designed to increase productivity of manual welding applications as well as aid in the transition from manual to robotic welding applications. Built in I/O can accept and provide "In position" signals to any robotic control. There is no need to reprogram Positioner welding sequence, all existing programs can be utilized.


## Variable Diameter Tachometer

Reads directly in Inches Per Minute for varying diameters. 2 inputs required, one is speed (IPM) required and the other is the Diameter vessel being rotated. Read out can Display IPM or RPM. HMI unit can be located in main electrical enclosure or stand alone pendant box. Actual running speed sensed by precision generator.


## Safety Laser Scanner

The Koike Aronson/Ransome Safety Laser Scanner increases safety and is adaptable to any Positioner. Tied electronically to the Positioner, any intrusion into the programmed Scan area produces an E-Stop condition. Providing protection for operators and eliminating part collisions with the floor or other obstacles.


## 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.

FPC—Provides On/Off foot control of the rotational axis
FWD/REV-Provides forward and reverse foot control of the rotational axis. (pictured above)


## Special Tables

Many standard table options are available, From round to square, machined or scribed. Standard t-slot configurations to customer specified bolt hole patterns and pilot configurations

## CUTTING, POSITIONING \& WELDING EQUIPMENT



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[^0]:    Optional foot switch controls available

[^1]:    Optional foot switch controls available

[^2]:    Optional foot switch controls available

