



Positioning Solutions since 1972

2-Axis Positioners



2-Axis Positioners

Efficient and precise welding depends on the right positioning.

PrestonEastin two-axis welding positioners are ideal for construction, OEM, oil & gas, and contract manufacturing applications where increased efficiency and safe operation is strongly desired. Our robust product line delivers precise, repeatable, and safe operation. Better positioning yields higher quality welds, improved productivity, and a lower risk of operator injury.



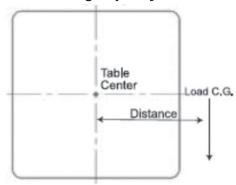


Positioner Models

Positioner Model	Load Capacity	Inherent Overhang	Rotational Torque	Tilt Torque	RPM	Table Size
PA-1 MT	100 lbs. @ 1"	N/A	102	N/A	0.3-9.0	12" Diameter
PA-2 MT	250 lbs. @ 2"	N/A	625	N/A	0.3-7.8	16" Diameter
PA-5 MT	500 lbs. @ 4"	N/A	2,000	N/A	0.2-3.7	22" Diameter
PA-5 PT	500 lbs. @ 4"	3.81"	2,000	3,905	.02-3.7	22" Diameter
PA-15 HD4	1500 lbs. @ 4"	4.25"	6,000	12,375	.12-3.6	24" Diameter
PE-30 HD6	3000 lbs. @ 6"	5"	18,000	33,000	0.2-2.8	30" X 30"
PE-45 HD12	4500 lbs. @ 12"	6"	54,000	81,000	.073-1.46	42" X 42"
PE-60 HD12	6000 lbs. @ 12"	7"	72,000	114,000	0.2-2.8	42" X 42"
PA-100 HD12	10,000 lbs. @ 12"	9"	120,000	210,000	.0386	54" X 54"
PA-160 HD12	16,000 lbs. @ 12"	9.25"	192,000	340,000	.0368	60" X 60"
PE-240 HD12	24,000 lbs. @ 12"	9.75"	288,000	522,000	.0353	60" X 60"

Sizing Your Positioner

Positioner Rotating Capacity



Rotational Torque Calculation

- 1. Determine total weight of work piece, including fixtures.
- 2. Calculate the load center of gravity distance (LOAD C.G.) in inches, from center of table.
- **3.** Multiply information from step 1 times the information in step 2 for required rotational torque.
- **4.** Compare the required rotational torque with the rated rotational torque from the table.
- **5.** Select a positioner with a rotational torque rating equal to or greater than the required rotational torque.

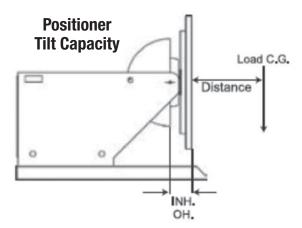
LOAD X DISTANCE = ROTATIONAL TORQUE REQUIREMENT (LBS.) X (INCHES) = (LBS. – INCHES)

Tilt Torque Calculation



- **2.** Calculate the load center of gravity distance (LOAD C.G.) in inches, from the table face, including the fixture.
- 3. Add inherent overhang distance (INH. OH.) in inches to step 2.
- **4.** Multiply information from step 1 times the sum of step 2 and step 3 to determine the required tilt torque.
- Compare the required tilt torque with the rated tilt torque from the table below.
- **6.** Select a positioner with a tilt torque rating equal to or greater than the required tilt torque.

LOAD X DISTANCE + INHERENT OVERHANG = TORQUE RATING (LBS.) X (INCHES) + (INH. OH.) = (LBS. – INCHES)





PA-1 MT, 2-Axis Welding Positioner

The PA-1 MT, 2-Axis Welding Positioner is ideal for construction, OEM, oil & gas, and contract manufacturing applications. It delivers precise, repeatable, and safe operation. Better positioning yields higher quality welds, improved productivity, and a lower risk of operator injury.

PRESTON-EASTIN MODEL PA-1 MT PRODUCT DATA

Capacity

- Horizontal Weight: 200 pounds
- Vertical Weight: 100 pounds
- Offset of C.G. from table: 1"
- Eccentricity of C.G. from axis: 1"

Rotation

- Motor: Variable speed DC 1/12HP
- Rotational Torque: 102 inch-pounds
- Speed range: 0.3 to 9.0 RPM

Tilt

- Range: 90° forward tilt
- Actuation: 4-1/2" hand wheel with self-lockin worm drive

Table

- Size: 12" diameter, ground, with four radial T-slots
- Mounting bolt size: 5/16"
- **Grounding:** 250 Amp mechanical ground

Controls

- Control Panel: Panel built-in to positioner frame
- **Speed Control:** One-turn potentiometer
- **Directional Control:** Two-position selector switch
- Power: 115V, 2Amp, Single-Phase, 60 Hz

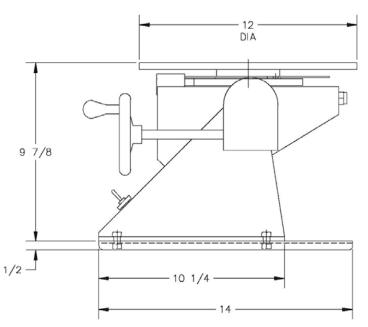
- Overload Protection: On/Off switch with fuse
- Foot Switch: Remote start/stop with 6 ft. cable

Options

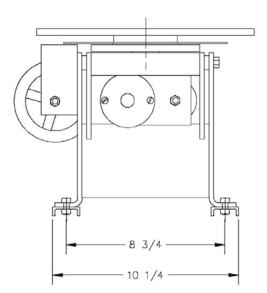
- Additional Table Speeds: 0.2 4.5 and 0.6 18 RPM
- Through Spindle Gas Purging
- Heavy-duty On-Off Foot Switch
- Foot Switch Guard
- Variable Speed Foot Switch
- Spin-loc Chucks
- 3-Jaw Scroll Chucks

Weight

• Shipping weight: 56 pounds









PA-2 MT, 2-Axis Welding Positioner

The PA-2 MT, 2-Axis Welding Positioner is ideal for construction, OEM, oil & gas, and contract manufacturing applications. It delivers precise, repeatable, and safe operation. Better positioning yields higher quality welds, improved productivity, and a lower risk of operator injury.

PRESTON-EASTIN MODEL PA-2 MT PRODUCT DATA

Capacity

• Weight: 250 pounds

• Offset of C.G. from table: 2.5"

• Eccentricity of C.G. from axis: 2"

Rotation

• Motor: Variable speed DC 1/8 HP

• Rotational Torque: 500 inch-pounds

• Speed Range: 0.3 to 7.9 RPM

• Speed Accuracy: 3% of base speed

• Safety: Drive reducer is self-locking

Weight

• Shipping weight: 125 pounds

Tilt

• Range: 135° forward tilt

• Tilt Torque: Manual

• Actuation: 6" hand wheel with self-locking worm drive

Table

• Size: 16" round with four radial T-slots

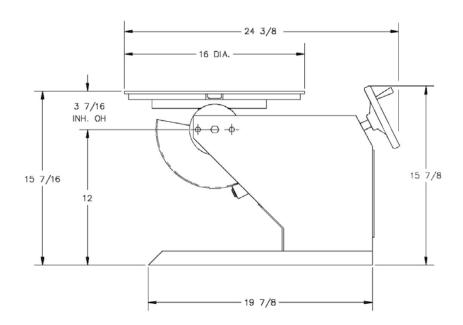
• Mounting bolt size: 3/8"

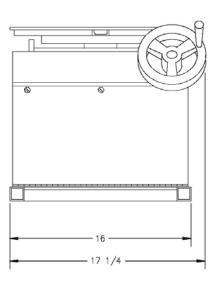
Bearings: Timken tapered roller bearings

Grounding: 600 Amp spring-loaded mechanical ground

Controls

- Control Panel: Panel built-in to positioner frame
- **Speed Control:** One-turn potentiometer
- Directional Control: Two-position selector switch
- Power: 115V, 2 Amp, Single-Phase, 60 Hz
- Overload Protection: Fuse
- Foot Switch: Remote start/stop with 6 ft. cable







PA-5 MT, 2-Axis Welding Positioner

The PA-5 MT, 2-Axis Welding Positioner is ideal for construction, OEM, oil & gas, and contract manufacturing applications. It delivers precise, repeatable, and safe operation. Better positioning yields higher quality welds, improved productivity, and a lower risk of operator injury.

PRESTON-EASTIN MODEL PA-5 MT PRODUCT DATA

Capacity

• Weight: 500 pounds

• Offset of C.G. from table: 4"

• Eccentricity of C.G. from axis: 4"

Rotation

• Motor: Variable speed DC 1/4 HP

• **Rotational Torque:** 2000 inch-pounds

• Speed Range: 0.2 to 3.7 RPM

• Speed Accuracy: 3% of base speed

• Safety: Drive reducer is self-locking

Weight

• Shipping weight: 365 pounds

Tilt

• Range: 135° forward tilt

• Tilt Torque: Manual

 Actuation: 8" hand wheel with self-locking worm drive

Table

• Size: 22" round with four radial T-slots

• Mounting bolt size: 3/8"

Bearings: Timken tapered roller bearings

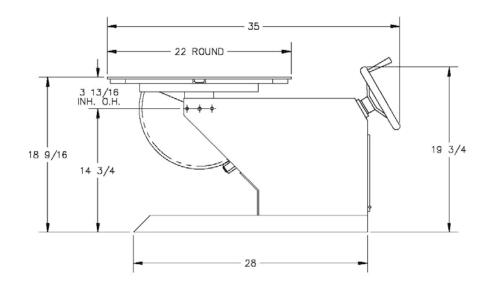
Grounding: 600 Amp spring-loaded mechanical ground

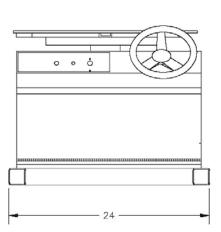
Controls

- Control Panel: Panel built-in to positioner frame
- Speed Control: One-turn potentiometer
- Directional Control: Two-position selector switch
- Power: 115V, 15 Amp, Single-Phase, 60 Hz
- Overload Protection: Circuit breaker
- Foot Switch: Remote start/stop with 6 ft. cable

Options

Power Tilt







PE-15 HD4, 2-Axis Welding Positioner

The PE-15 HD4 2-Axis Welding Positioner is ideal for construction, OEM, oil & gas, and contract manufacturing applications. It delivers precise, repeatable, and safe operation. Better positioning yields higher quality welds, improved productivity, and lower risk of operator injury.

PRESTON-EASTIN MODEL PE-15 HD4 PRODUCT DATA

Capacity

• Weight: 1500 lbs

• Offset of C.G. from Table: 4"

• Eccentricity of C.G. from axis: 4"

Rotation

• Motor: Variable speed AC 1/2

• Speed range: 0.36 to 3.6 RPM

Speed Accuracy: 2% of set speed

Tilt

• Motor: AC motor ¼ HP

• Speed: 0.55 RPM

• Range: 0° – 135° forward tilt

• Inherent Overhang: 4.38"

Table

• **Size:** 24" diameter with four radial T-slots

• Mounting bolt size: 1/2"

• **Bearings:** Tapered roller bearings

• **Ground:** 400 Amp spring loaded mechanical ground

Elevation

• Adjustment: None

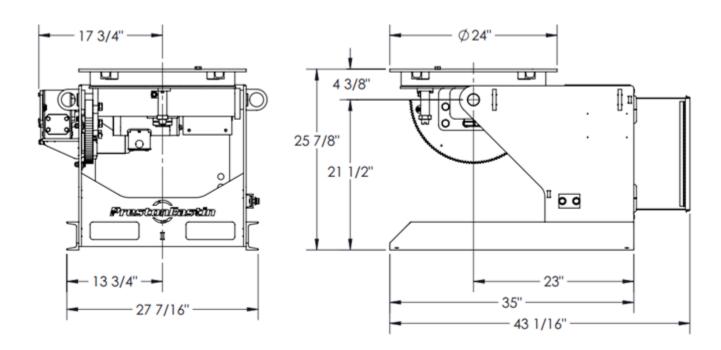
• **Height:** 25-7/8" (table top)

Weight

• Shipping weight: 650 lbs

Controls

- **Rotation Speed:** One-turn potentiometer
- Rotation Direction: Three-position toggle switch, FWD/OFF/REV
- Rotation Control: ON/OFF footswitch w/ 30 ft cable
- Tilt Control: Three-position toggle switch, UP/OFF/DOWN
- Power: 115V, 15 Amp, Single Phase, 60 Hz
- Overload Protection: Circuit breaker
- Additional Options: Variable Speed Footswitch, FWD/REV Footswitch, and Hand Pendant (toggle switches pre-installed for options)





PE-30 HD6, 2-Axis Welding Positioner

The PE-30 HD6 2-Axis Welding Positioner is ideal for construction, OEM, oil & gas, and contract manufacturing applications. It delivers precise, repeatable, and safe operation. Better positioning yields higher quality welds, improved productivity, and a lower risk of operator injury. The PE-30 HD6 is externely versatile as it operates on a 120V power source that is commonly provided by an ordinary wall outlet.

PRESTON-EASTIN MODEL PE-30 HD6 PRODUCT DATA

Capacity

- Weight: 3,000 pounds
- Offset of C.G. from table: 6"
- Eccentricity of C.G. from axis: 6"

Rotation

- Motor: Variable speed AC 1HP
- Speed range: 0.2 to 2.8 RPM
- Speed accuracy: 2% of set speed

Tilt

- Motor: AC brake motor 1 HP
- Range: 0° 135° forward tilt

Table

- Size: 30" square with four radial T-slots
- Mounting bolt size: 1/2" 13"
- Bearings: Tapered roller bearings

Elevation

- Adjustment: Manual
- Range: 32-3/4" to 44-3/4" in 4" increments (table top)

Controls

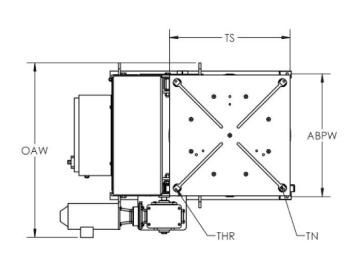
• **Pendant:** Remote pendant with 30 ft. cable

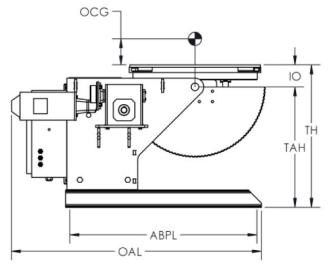
Electricals

- **Ground:** 600 Amp spring loaded mechanical ground
- Power: 120V Single Phase, 60 Hz, 230V/460V Optional
- **Table Drive:** Variable Frequency Drive (VFD)
- **Tilt Drive:** Variable Frequency Drive (VFD)
- Overload Protection: Circuit breaker
- Foot Switch: Optional

Weight

• Shipping weight: 1,800 pounds





Symbol	Description	Dimensions	Symbol	Description	Dimensions
0AL	Overall Length	57-1/2"	TS	Table Size	30"
OAW	Overall Width	43-1/2"	ABPL	Anchor Bolt Pattern Length	43"
TH	Table Height	32-3/4"	ABPW	Anchor Bolt Pattern Width	30"
TAH	Tilt Axis Height	27-3/4"	THR	T-Nut Thread	1/2"
10	Inherent Overhang	5"	TN	T-Nut Quantity	4"
OCG	Offset Center of Gravity	6"			



PE-45 HD12, 2-Axis Welding Positioner

The PE-45 HD12 2-Axis Welding Positioner is ideal for construction, 0EM, oil & gas, and contract manufacturing applications. It delivers precise, repeatable, and safe operation. Better positioning yields higher quality welds, improved productivity, and a lower risk of operator injury.

PRESTON-EASTIN MODEL PE-45 HD12 PRODUCT DATA

Capacity

• Weight: 4,500 pounds

• Offset of C.G. from table: 12"

• Eccentricity of C.G. from axis: 12"

Rotation

• Motor: Variable speed AC 2HP

• Speed range: 0.7 to 1.45 RPM

• Speed accuracy: 2% of set speed

Tilt

Motor: AC brake motor 2 HP

• Range: 0° - 135° forward tilt

Table

 Size: 42" square with four radial T-slots

• Mounting bolt size: 3/4"

• Bearings: Tapered roller bearings

Elevation

• Adjustment: Manual

• **Range:** 38-5/8" to 53-5/8" in 5" increments (table top)

Controls

• **Pendant:** Remote pendant with 30 ft. cable

Electricals

• **Ground:** (2) each, 600 Amp spring loaded mechanical ground

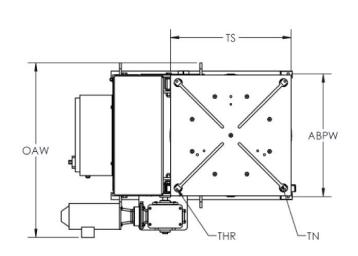
• Power: 480V Three Phase, 60 Hz

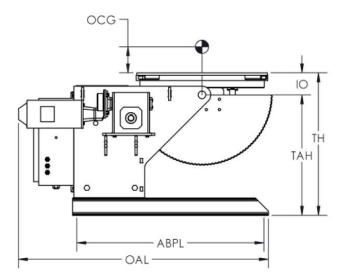
• Overload Protection: Fused disconnect

• Foot Switch: Optional

Weight

• Shipping weight: 2,700 pounds





Symbol	Description	Dimensions	Symbol	Description	Dimensions
0AL	Overall Length	68-7/16"	TS	Table Size	42"
0AW	Overall Width	51-9/16"	ABPL	Anchor Bolt Pattern Length	64"
TH	Table Height	38-5/8"	ABPW	Anchor Bolt Pattern Width	35-1/16"
TAH	Tilt Axis Height	32-1/2"	THR	T-Nut Thread	3/4"-10"
10	Inherent Overhang	6-1/8"	TN	T-Nut Quantity	4"
OCG	Offset Center of Gravity	12"			



PE-60 HD12, 2-Axis Welding Positioner

The PE-60 HD12 2-Axis Welding Positioner is ideal for construction, 0EM, oil & gas, and contract manufacturing applications. It delivers precise, repeatable, and safe operation. Better positioning yields higher quality welds, improved productivity, and a lower risk of operator injury.

PRESTON-EASTIN MODEL PE-60 HD12 PRODUCT DATA

Capacity

• Weight: 6,000 pounds

• Offset of C.G. from table: 12"

• Eccentricity of C.G. from axis: 12"

Rotation

• Motor: Variable speed AC 2HP

• Speed range: 0.4 to 1.18 RPM

• Speed accuracy: 2% of set speed

Tilt

• Motor: AC brake motor 2 HP

• Range: 0° - 135° forward tilt

Table

 Size: 42" square with four radial T-slots

• Mounting bolt size: 3/4"

• Bearings: Tapered roller bearings

Elevation

• Adjustment: Manual

• **Range:** 37-1/8" to 57-1/8" in 5" increments (table top)

Controls

• **Pendant:** Remote pendant with 30 ft. cable

Electricals

• **Ground:** (2) each, 600 Amp spring loaded mechanical ground

• Power: 480V Three Phase, 60 Hz

• **Table Drive:** Variable Frequency Drive (VFD)

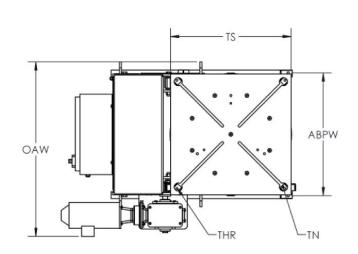
• **Tilt Drive:** Variable Frequency Drive (VFD)

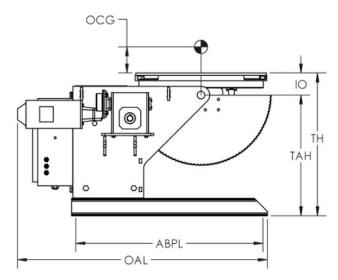
• Overload Protection: Circuit breaker

• Foot Switch: Optional

Weight

• Shipping weight: 3,400 pounds





Symbol	Description	Dimensions	Symbol	Description	Dimensions
OAL	Overall Length	86-1/8"	TS	Table Size	42"
OAW	Overall Width	48-3/4"	ABPL	Anchor Bolt Pattern Length	64"
TH	Table Height	37-1/8"	ABPW	Anchor Bolt Pattern Width	44-3/4"
TAH	Tilt Axis Height	30-1/8"	THR	T-Nut Thread	3/4"-10"
10	Inherent Overhang	7"	TN	T-Nut Quantity	4"
OCG	Offset Center of Gravity	12"			



PA-100 HD12, 2-Axis Welding Positioner

The PA-100 HD12 2-Axis Welding Positioner is ideal for construction, OEM, oil & gas, and contract manufacturing applications. It delivers precise, repeatable, and safe operation. Better positioning yields higher quality welds, improved productivity, and a lower risk of operator injury.

PRESTON-EASTIN MODEL PA-100 HD12 PRODUCT DATA

Capacity

• Weight: 10,000 pounds

• Offset of C.G. from table: 12"

• Eccentricity of C.G. from axis: 12"

Rotation

• Motor: Variable speed AC 3HP

• Speed range: 0.03 to 0.86 RPM

• Speed accuracy: 2% of set speed

Tilt

• Motor: AC brake motor 3 HP

• Range: 0° - 135° forward tilt

Table

 Size: 54" square with four radial T-slots

• Mounting bolt size: 3/4" - 10"

• Bearings: Tapered roller bearings

Elevation

• Adjustment: Manual

• Range: 49" to 73" in 6" increments (table top)

Controls

• **Pendant:** Remote pendant with 30 ft. cable

Electricals

• **Ground:** (2) each, 600 Amp spring loaded mechanical ground

• Power: 480V Three Phase, 60 Hz

• **Table Drive:** Variable Frequency Drive (VFD)

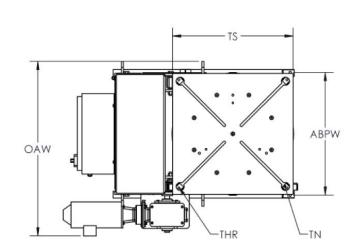
• Tilt Drive: Variable Frequency Drive (VFD)

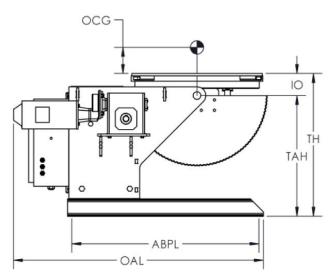
• Overload Protection: Circuit breaker

• Foot Switch: Optional

<u>Weight</u>

• Shipping weight: 6,250 pounds





Symbol	Description	Dimensions	Symbol	Description	Dimensions
0AL	Overall Length	106-5/16"	TS	Table Size	54"
0AW	Overall Width	60-3/4"	ABPL	Anchor Bolt Pattern Length	82"
TH	Table Height	49-1/8"	ABPW	Anchor Bolt Pattern Width	56-3/4"
TAH	Tilt Axis Height	40-1/8"	THR	T-Nut Thread	3/4"-10"
10	Inherent Overhang	9"	TN	T-Nut Quantity	4"
OCG	Offset Center of Gravity	12"			



PE-160 HD12, 2-Axis Welding Positioner

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The PE-160 HD12 2-Axis Welding Positioner is ideal for construction, OEM, oil & gas, and contract manufacturing applications. It delivers precise, repeatable, and safe operation. Better positioning yields higher quality welds, improved productivity, and a lower risk of operator injury.

PRESTON-EASTIN MODEL PE-160 HD12 PRODUCT DATA

Capacity

• Weight: 16,000 pounds

• Offset of C.G. from table: 12"

• Eccentricity of C.G. from axis: 12"

Rotation

• Motor: Variable speed AC 5HP

• Speed range: 0.3 to 0.68 RPM

• Speed accuracy: 2% of set speed

<u>Tilt</u>

• Motor: AC brake motor 5 HP

• Range: 0° - 135° forward tilt

Table

 Size: 60" square with four radial T-slots

• Mounting bolt size: 3/4" - 10"

• Bearings: Tapered roller bearings

Elevation

• Adjustment: Manual

• Range: 49" to 73" in 6" increments (table top)

Controls

• **Pendant:** Remote pendant with 30 ft. cable

Electricals

• **Ground:** (2) each, 600 Amp spring loaded mechanical ground

• Power: 480V Three Phase, 60 Hz

• **Table Drive:** Variable Frequency Drive (VFD)

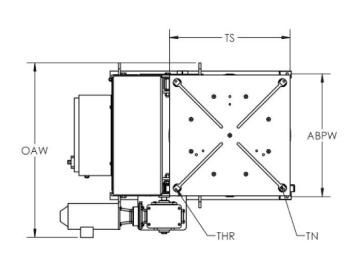
• Tilt Drive: Variable Frequency Drive (VFD)

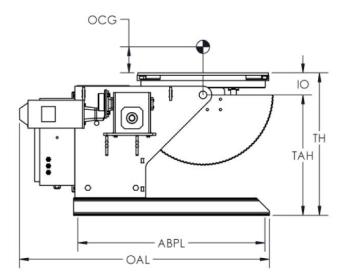
• Overload Protection: Circuit breaker

• Foot Switch: Optional

Weight

• Shipping weight: 12,400 pounds





Symbol	Description	Dimensions	Symbol	Description	Dimensions
0AL	Overall Length	109-5/16"	TS	Table Size	60"
OAW	Overall Width	66-3/4"	ABPL	Anchor Bolt Pattern Length	82"
TH	Table Height	49-7/8"	ABPW	Anchor Bolt Pattern Width	62-3/4"
TAH	Tilt Axis Height	40-1/8"	THR	T-Nut Thread	3/4"-10"
10	Inherent Overhang	9-3/4"	TN	T-Nut Quantity	4"
OCG	Offset Center of Gravity	12"			



PA-240 HD12, 2-Axis Welding Positioner

The PA-240 HD12 2-Axis Welding Positioner is ideal for construction, OEM, oil & gas, and contract manufacturing applications. It delivers precise, repeatable, and safe operation. Better positioning yields higher quality welds, improved productivity, and a lower risk of operator injury.

PRESTON-EASTIN MODEL PA-240 HD12 PRODUCT DATA

Capacity

• **Weight:** 24,000 pounds

• Offset of C.G. from table: 12"

Eccentricity of C.G. from axis: 12"

Rotation

• Motor: Variable speed DC 5HP

• Speed range: 0.02 to 0.59 RPM

• Speed accuracy: 2% of set speed

Tilt

• Motor: AC brake motor 7.5 HP

• Range: 0° - 135° forward tilt

Table

• Size: 66" square with four radial T-slots

• Mounting bolt size: 3/4" - 10"

• Bearings: Tapered roller bearings

Elevation

• Adjustment: Manual

• Range: 60-1/4" to 84-1/4" in 6" increments (table top)

Controls

• **Pendant:** Remote pendant with 30 ft. cable

Electricals

• **Ground:** (2) each, 600 Amp spring loaded mechanical ground

• Power: 480V Three Phase, 60 Hz

• **Table Drive:** Variable Frequency Drive (VFD)

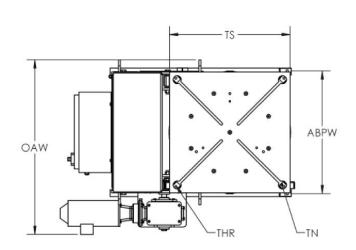
• Tilt Drive: Variable Frequency Drive (VFD)

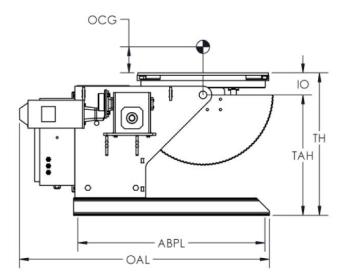
• Overload Protection: Circuit breaker

• Foot Switch: Optional

Weight

• Shipping weight: 12,500 pounds





Symbol	Description	Dimensions	Symbol	Description	Dimensions
0AL	Overall Length	109-5/16"	TS	Table Size	66"
OAW	Overall Width	73-3/4"	ABPL	Anchor Bolt Pattern Length	91"
TH	Table Height	60-1/4"	ABPW	Anchor Bolt Pattern Width	64-3/4"
TAH	Tilt Axis Height	51"	THR	T-Nut Thread	3/4"-10"
10	Inherent Overhang	9-1/4"	TN	T-Nut Quantity	4"
OCG	Offset Center of Gravity	12"			



Options

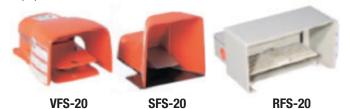
Foot Switches, Wireless Foot Switches, Wireless Pendants (1 or 2 Axis), Dial-A-Matic



Square and Round Tables Available on All Models

FOOT SWITCHES

Preston-Eastin offers several optional foot switches for equipment control.



VFS-20 Variable Speed Foot Switch

SFS-20 On/Off Foot Switch

RFS-20 Forward/Reverse Foot Switch

Electrical Panel



Electrical Controls

- Regulate Speed
- Smoother Performance
- · Feedback for Troubleshooting

Single Phase and 3 Phase Available on Select Models

CHUCKS

Spin-Lock

- PSL-7-2
- PSL-7-3
- PSL-12-3
- PC-15

Gripper

- PC-20A
- PC-30A

- PC-42B
- PC-48C
- PC-60C



Self-Centering

• PC-8

• PC-12

• PC-15

• PC-24



Non-Conductive Pendant Standard







Positioning Solutions since 1972

PrestonEastin designs and manufactures a complete line of manual, powered, and robotic positioning systems and equipment. Since its inception in 1972, **PrestonEastin** has provided innovative solutions to positioning requirements serving the welding, aerospace, aviation, automotive, transportation, ship building, material handling, thermal spray, and heavy equipment manufacturing industries.

At our new engineering and manufacturing facility in Tulsa, Oklahoma, we design and manufacture positioning solutions for precision operations, while continually upholding foundational principles of safety and reliability. We manufacture our products to afford our customers many years of safe and dependable operation.

We understand our customers' needs, and quickly respond with proven solutions to meet positioning requirements. Dedicated to continuous improvement of our products and services to ensure long term continued customer satisfaction worldwide.

Quality Policy

PrestonEastin is committed to meet the expectations and requirements of our customers, suppliers, co-workers, and all interested parties as well as continuously improve.



Certificate No. 8000

