

# HD Series

## HD20 GEAR DRIVEN POSITIONER



The HD20 Gear Driven Positioner is designed to be a cost effective solution for positioning 2,000 Lbs. or less. 12,000 In-Lbs. rotation gearing provides safety and stability. Variable speed and standard 115V 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

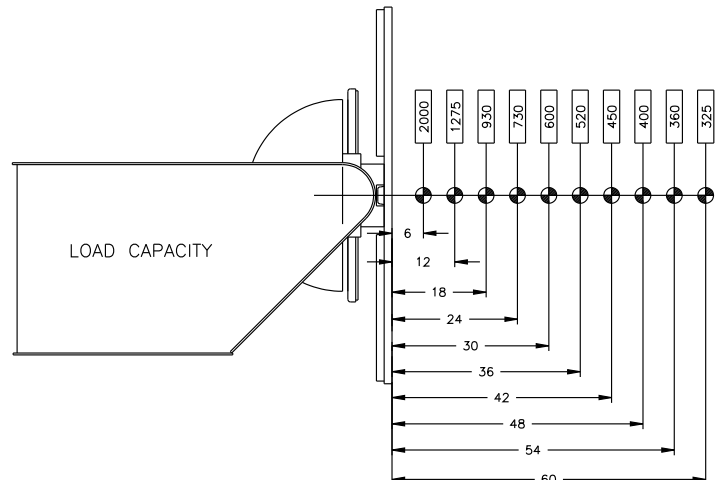
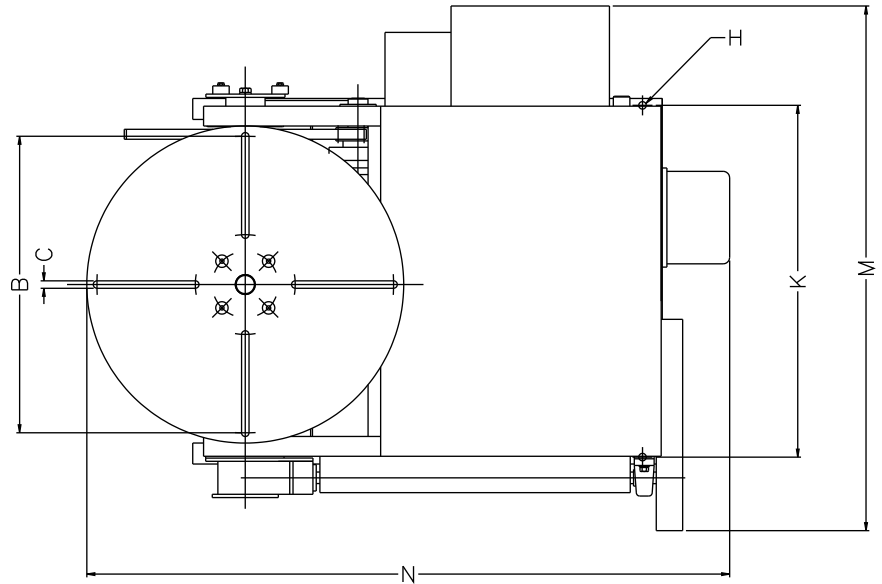
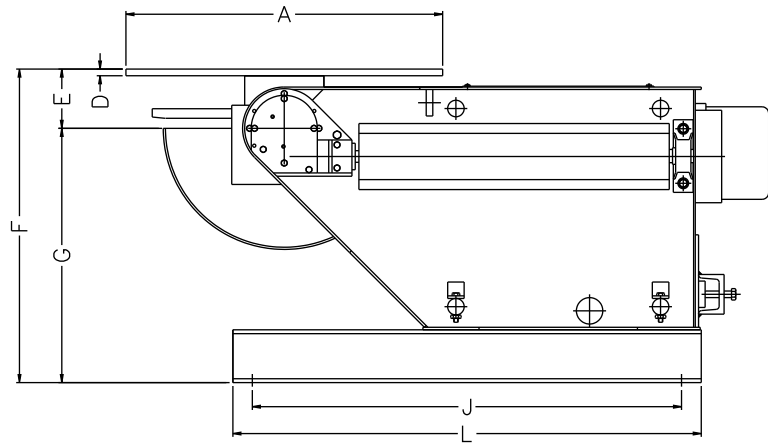
- Boxed section design that is stronger and will not distort support gearing when loaded
- Motors are mounted for easy access and sealed from dust contamination
- Limit switches and precision adjustable tilt-stop triggers for accurate tilt setup and over-travel prevention
- Ground blocks for positive clamping of cable terminals to assure continuous, non-varying 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 DRIVEN POSITIONER

	HD20
Tilt: Load Torque, In-Lbs.	21,000
Rating Lbs. @ 4" CG Height	2,000
Rating Lbs. @6" CG Height	2,000
Rating Lbs. @12" CG Height	1,275
Rating Lbs. @18" CG Height	930
Rating Lbs. @24" CG Height	730
Rating Lbs. @30" CG Height	600
Rating Lbs. @36" CG Height	520
Rating Lbs. @42" CG Height	450
Rating Lbs. @48" CG Height	400
Rating Lbs. @54" CG Height	360
Rating Lbs. @60" CG Height	325
Rotation: Load Torque, In/Lbs.	12,000
Rating Lbs. @ 4" Eccentricity	2,000
Rating Lbs. @ 6" Eccentricity	2,000
Rating Lbs. @12" Eccentricity	1,000
Tilt: 135° in Seconds	22 Sec.
Motor HP	1/2 Hp
Rotation: Speed Range	2.0—.04 RPM
Motor HP	1/2 Hp
Pendant Cable Length	20'
A: Table Diameter	24"
B: Max. Clamping Dia.	22-1/2"
C: No. of slots and width	(4) 9/16"
D: Table Thickness	1/2"
Pilot hole and Depth	1-1/2" x 1/2"
E: Inherent Overhang	4-1/2"
Weld Current Conduction:	1,000 Amps
Spindle OD:	2"
Hollow Spindle ID	1-3/8"
F: Table flat dim. from floor	23-3/4" - 31-3/4" - 38-3/4"
G: Rotation axis dim. from floor	19-1/4" - 27-1/4" - 34-1/4"
H: Base mounting holes	(4) 9/16"
I: Front mounting hole location	1-1/2"
J: front to rear mounting holes	32-1/2"
K: Traverse center distance	26-5/8"
L: Base length overall	35-1/2"
M: Model width overall	40"
N: Model length overall	48"
Primary Voltage:	115/1/60
Shipping Weight:	755 Lbs.



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

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# HD Series

## 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.

**Capacities from 2,500 to 10,000 pounds**

### Features

- 135° 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



Optional foot switch controls available

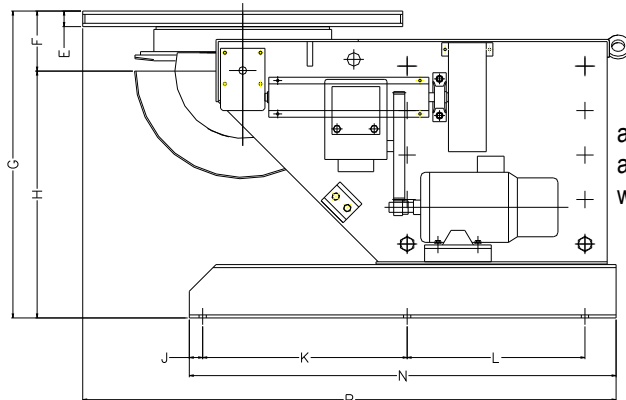
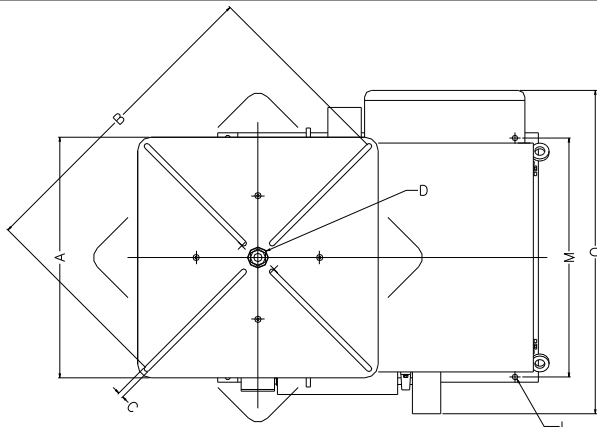


**KOIKE ARONSON, INC. / RANSOME**

# Specifications

## HD25VF - HD100VF

SPECIFICATIONS	HD25VF	HD30VF	HD45VF	HD60VF	HD100VF
Tilt: Load Torque in-lb (N.m)	31,875 (3602)	56,250 (6356)	84,375 (9534)	123,000 (13899)	205,000 (23165)
Rating Lbs.(kg) @ 6" (152mm) CG Height	2,500 (1134)	3,000 (1361)	4,500 (2041)	-	-
Rating Lbs.(kg) @ 12" (305mm) CG Height	1,700 (771)	3,000 (1361)	4,500 (2041)	6,000 (2721)	10,000 (4536)
Rating Lbs.(kg) @ 18" (457mm) CG Height	1,285 (583)	2,270 (1030)	3,400 (1542)	4,650 (2109)	7,700 (3493)
Rating Lbs.(kg) @ 24" (609mm) CG Height	1,035 (469)	1,830 (830)	2,750 (1247)	3,790 (1719)	6,300 (2858)
Rating Lbs.(kg) @ 30" (762mm) CG Height	875 (397)	1,530 (694)	2,300 (1043)	3,200 (1451)	5,300 (2404)
Rating Lbs.(kg) @ 36" (914mm) CG Height	750 (340)	1,300 (590)	1,975 (896)	2,750 (1247)	4,600 (2086)
Rating Lbs.(kg) @ 42" (1067mm) CG Height	650 (295)	1,100 (499)	1,720 (780)	2,400 (1089)	4,000 (1814)
Rating Lbs.(kg) @ 48" (1219mm) CG Height	580 (263)	1,000 (453)	1,530 (694)	2,200 (998)	3,600 (1633)
Rating Lbs.(kg) @ 54" (1371mm) CG Height	520 (236)	900 (408)	1,380 (626)	1,900 (862)	3,200 (1451)
Rating Lbs.(kg) @ 60" (1524mm) CG Height	470 (213)	830 (376)	1,250 (567)	1,700 (771)	3,000 (1361)
Rating Lbs.(kg) @ 66" (1676mm) CG Height	430 (195)	760 (345)	1,150 (522)	1,600 (726)	2,700 (1225)
Rating Lbs.(kg) @ 72" (1829mm) CG Height	400 (181)	700 (317)	1,100 (499)	1,500 (680)	2,500 (1134)
Rotation: Load Torque in-lb (N.m)	15,000 (1695)	36,000 (4068)	54,000 (6102)	72,000 (8136)	120,000 (13560)
Rating Lbs.(kg) @ 6" (152mm) Eccentric	2,500 (1134)	3,000 (1361)	4,500 (2041)	-	-
Rating Lbs.(kg) @ 12" (305mm) Eccentric	1,250 (567)	3,000 (1350)	4,500 (2041)	6,000 (2721)	10,000 (4536)
Tilt: 135° in how many seconds	23 Sec.	20 Sec.	20 Sec.	24 Sec.	49 Sec.
Tilt Motor Horse Power	1 HP	2 HP	3 HP	3 HP	3 HP
Rotation: Speed Range 50:1 AC Drive	2.0 - .040 rpm	1.2 - .024 rpm	1.2 - .024 rpm	1.5 - .030 rpm	1.0 - .020
Rotation Motor Horse Power	1/4 HP	1 HP	1 1/2 HP	3 HP	5 HP
Pendant cable length:	20 ft.	20 ft.	20 ft.	20 ft.	20 ft.
A: Table Size	30" x 30" (762x762mm)	36" x 36" (914x914mm)	36" x 36" (914x914mm)	48" x 48" (1219 x 1219mm)	48" x 48" (1219 x 1219mm)
B: Maximum Clamping Diameter	38-1/2" (978mm)	47" (1194mm)	47" (1194mm)	65" (1651mm)	65" (1651mm)
C: Number of slots and width	(4) 13/16" (20.6mm)	(4) 13/16" (20.6mm)	(4) 13/16" (20.6mm)	(4) 13/16" (20.6mm)	4) 13/16" (20.6mm)
Number of Table nuts and Thread	(4) 3/4"-10"	(4) 3/4"-10"	(4) 3/4"-10"	(4) 3/4"-10"	(4) 3/4"-10"
D: Pilot hole and depth	3.130"x1/2" (79.5 x13mm)	3.130"x1/2" (79.5 x13mm)	3.130"x1/2" (79.5 x13mm)	3.130" x 1/2" (79.5 x 12.7mm)	3.130" x 1/2" (79.5 x 12.7mm)
E: Table Thickness	1-3/4" (44.4mm)	1-3/4" (44.4mm)	1-3/4" (44.4mm)	2" (50.8mm)	2" (50.8mm)
F: Inherent Overhang	6-3/4" (171.4mm)	6-3/4" (171.4mm)	6-3/4" (171.4mm)	8 1/2" (215.9mm)	8 1/2" (215.9mm)
Spindle OD Bearing Bore	2-1/2" (63.5mm)	2-1/2" (63.5mm)	3" (76.2mm)	3" (76.2mm)	4" (101.6mm)
Hollow Spindle Dia	None	None	None	None	None
Weld Current Conduction	1,500 Amps	1,500 Amps	2,000 Amps	2,000 Amps	2,000 Amps
G: Table flat, Minimum Height	34-1/2" (870mm)	34-1/2" (870mm)	34-1/2" (870mm)	44-1/2" (1130.3mm)	44-1/2" (1130.3mm)
Table flat, Maximum Height	56-1/2" (1435mm)	54-1/2" (1384.3mm)	54-1/2" (1384.3mm)	68-1/2" (1740mm)	74-1/2" (1892.3mm)
Adjustment Increments	5-1/2" (139.7mm)	5" (127mm)	5" (127mm)	6" (152.4mm)	6" (152.4mm)
H: Rotation axis, Minimum Height	27-3/4" (704.8mm)	27-3/4" (704.8mm)	27-3/4" (704.8mm)	36" (914.4mm)	36" (914.4mm)
Rotation axis, Maximum Height	49-3/4" (1263.6mm)	47-3/4" (1212.8mm)	47-3/4" (1212.8mm)	60" (1524mm)	66" (1676mm)
Matching TS	TS2	TS2	TS4	TS6	TS10
I: Tie down hole size	(6) 9/16" (14.3mm)	(6) 13/16" (20.6mm)	(6) 13/16" (20.6mm)	(6) 13/16" (20.6mm)	(6) 13/16" (20.6mm)
J: Front Mounting hole location	1-1/2" (38.1mm)	1-1/2" (38.1mm)	1-1/2" (38.1mm)	2" (50.8mm)	2" (50.8mm)
K: Center mounting hole location	19" (482.6mm)	23" (584.2mm)	23" (584.2mm)	30" (762mm)	30" (762mm)
L: Rear mounting hole location	19" (482.6mm)	20" (508mm)	20" (508mm)	24" (609.6mm)	24" (609.6mm)
M: Bolt hole pattern pitch	34" (863.6mm)	35-3/4" (908mm)	35-3/4" (908mm)	47-1/2" (1206.5mm)	47-5/8" (1209.7mm)
N: Overall base length	42-3/4" (1073.1mm)	48" (1219.2mm)	48" (1219.2mm)	60" (1524mm)	60" (1524mm)
O: Overall Machine width	47" (1194mm)	48-3/4" (1225mm)	48-3/8" (1219mm)	63-3/8" (1610mm)	61-13/16" (1570mm)
P: Overall machine length	50-3/4" (1289mm)	60" (1524mm)	60" (1524mm)	76" (1930.4mm)	76" (1930.4mm)
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)



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# HD Series

## 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 aluminum-bronze 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 70,000 pounds**

### Features

- 135° 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



Optional foot switch controls available

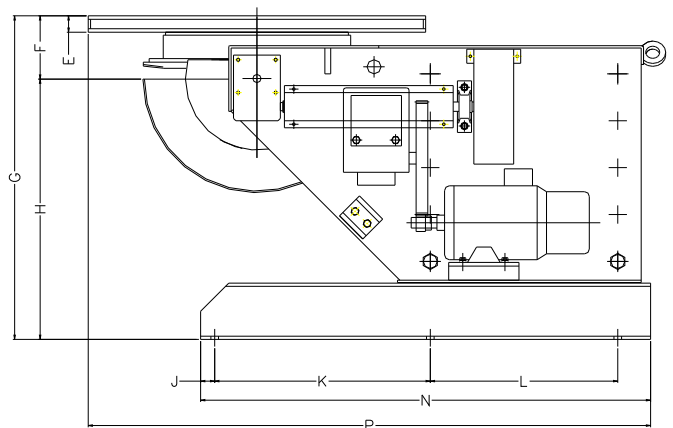
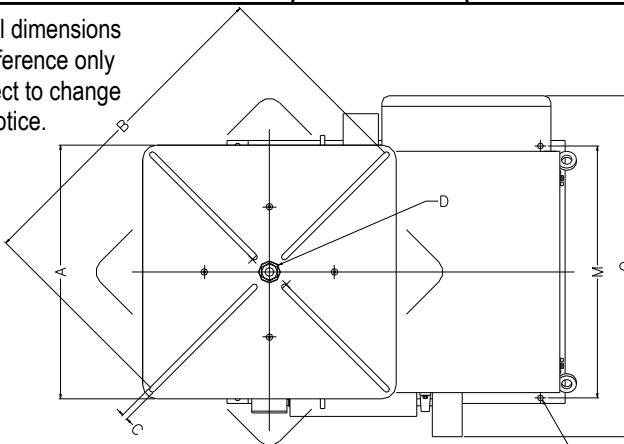


# Specifications

## HD160VF - HD700VF

SPECIFICATIONS	HD160VF	HD240VF	HD400VF	HD500VF	HD600VF	HD700VF
Tilt: Load Torque in-lb (N.m)	336,000 (37968)	504,000 (56952)	830,000 (93790)	1,037,500 (117238)	1,260,000 (142380)	1,470,000 (166110)
Rating Lbs.(kg) @ 6" (152mm) CG Height	-	-	-	-	-	-
Rating Lbs.(kg) @ 12" (305mm) CG Height	16,000(7257)	24,000 (10886)	40,000 (18144)	50,000 (22680)	60,000 (27215)	70,000 (31751)
Rating Lbs.(kg) @ 18" (457mm) CG Height	12,400 (5624)	18,500 (8391)	31,000 (14061)	39,000 (17690)	46,500 (21092)	54,500 (24721)
Rating Lbs.(kg) @ 24" (609mm) CG Height	10,000 (4536)	15,000 (6804)	25,000 (11340)	32,000 (14515)	38,000 (17236)	44,500 (20185)
Rating Lbs.(kg) @ 30" (762mm) CG Height	8,600 (3901)	13,000 (5897)	21,500 (9752)	27,500 (12473)	32,000 (14515)	37,500 (17010)
Rating Lbs.(kg) @ 36" (914mm) CG Height	7,400 (3356)	11,000 (4989)	18,500 (8391)	23,450 (10636)	28,000 (12700)	32,500 (14742)
Rating Lbs.(kg) @ 42" (1067mm) CG Height	6,600 (2994)	9,800 (4445)	16,400 (7439)	20,600 (9344)	24,500 (11113)	28,500 (12927)
Rating Lbs.(kg) @ 48" (1219mm) CG Height	5,900 (2676)	8,800 (3992)	14,600 (6622)	18,500 (8391)	22,000 (9979)	25,500 (11567)
Rating Lbs.(kg) @ 54" (1371mm) CG Height	5,300 (2404)	8,000 (3629)	13,200 (5987)	16,700 (7575)	20,000 (9072)	23,000 (10433)
Rating Lbs.(kg) @ 60" (1524mm) CG Height	4,800 (2177)	7,300 (3311)	12,000 (5443)	15,200 (6895)	18,000 (8165)	21,000 (9525)
Rating Lbs.(kg) @ 66" (1676mm) CG Height	4,400 (1996)	6,700 (3039)	11,000 (4989)	14,000 (6350)	16,500 (7484)	19,500 (8845)
Rating Lbs.(kg) @ 72" (1829mm) CG Height	4,000 (1814)	6,200 (2812)	10,200 (4627)	13,000 (5897)	15,500 (6975)	18,000 (8165)
Rotation: Load Torque in-lb (N.m)	192,000 (21696)	288,000 (32544)	480,000 (54240)	600,000 (67800)	720,000 (81360)	840,000 (94920)
Rating Lbs.(kg) @ 6" (152mm) Eccentric	-	-	-	-	-	-
Rating Lbs.(kg) @ 12" (305mm) Eccentric	16,000 (7257)	24,000 (10886)	40,000 (18144)	50,000 (22680)	60,000 (27215)	70,000 (31751)
Tilt: 135° in how many seconds	46 Sec.	46 Sec.	135 Sec.	110 Sec.	125 Sec.	140 Sec.
Tilt Motor Horse Power	5 HP	7-½ HP	7-½ HP	10 HP	10 HP	10 HP
Rotation: Speed Range 50:1 AC Drive	.60 - .012 rpm	.60 - .012	.50 - .010	.50 - .010	.48 - .010	.50 - .010
Rotation Motor Horse Power	3 HP	7-½ HP	10 HP	15 HP	15 HP	20 HP
Pendant cable length:	20 ft.	20 ft.	20 ft.	20 ft.	20 ft.	20 ft.
A: Table Size	54" x 54" (1372 x 1372mm)	54" x 54" (1372 x 1372mm)	84" x 84" (2134 x 2134mm)	84" x 84" (2134 x 2134mm)	96" x 96" (2438 x 2438mm)	96" x 96" (2438 x 2438mm)
B: Maximum Clamping Diameter	70" (1778mm)	70" (1778mm)	112-½" (2857mm)	112-½" (2857mm)	126-½" (3213mm)	127" (3225.8mm)
C: Number of slots and width	(4) 1-1/16" (27mm)	(4) 1-1/16" (27mm)	(4) 1-5/16" (33.3mm)	(4) 1-5/16" (33.3mm)	(8) 1-5/8" (41.3mm)	(8) 1-5/8" (41.3mm)
Number of Table nuts and Thread	(4) 1"-8	(4) 1"-8	(4) 1-½"-7	(4) 1-½"-7	(8) 1-½"-12	(8) 1-½"-12
D: Pilot hole and depth	5.01" x ½" (127x13mm)	5.01" x ½" (127x13mm)	12.3" x 1-¼" (312x 32mm)	12.3" x 1-¼" (312x 32mm)	12.3" x 1-¼" (312x 32mm)	12.3" x 1-¼" (312x 32mm)
E: Table Thickness	2-½" (63.5mm)	2-½" (63.5mm)	2-¾" (69.8mm)	2-¾" (69.8mm)	3" (76.2mm)	3" (76.2mm)
F: Inherent Overhang	9" (228.6mm)	9" (228.6mm)	8-¾" (222.2mm)	8-¾" (222.2mm)	9" (228.6mm)	9" (228.6mm)
Spindle OD Bearing Bore	5" (127mm)	5" (127mm)	14" (355.6mm)	14" (355.6mm)	14" (355.6mm)	14" (355.6mm)
Hollow Spindle Dia	None	None	11-7/8" (301.6mm)	11-7/8" (301.6mm)	11-7/8" (301mm)	11-7/8" (301mm)
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	59-¼" (1505mm)	59-¼" (1505mm)	70-¾" (1797mm)	70-¾" (1797mm)	74" (1879.6mm)	74-½" (1892mm)
Table flat, Maximum Height	95-¼" (2419mm)	95-¼" (2419mm)	118-¾" (3016mm)	118-¾" (3016mm)	122" (3098.8mm)	122-½" (3112mm)
Adjustment Increments	6" (152.4mm)	6" (152.4mm)	12" (304.8mm)	12" (304.8mm)	12" (304.8mm)	12" (304.8mm)
H: Rotation axis, Minimum Height	50-¼" (1276mm)	50-¼" (1276mm)	62" (1574.8mm)	62" (1574.8mm)	65" (1651mm)	65" (1651mm)
Rotation axis, Maximum Height	86-¼" (2191mm)	86-¼" (2191mm)	110" (2794mm)	110" (2794mm)	113" (2870.2mm)	113" (2870.2mm)
Matching TS	TS16	TS25	-	-	-	-
I: Tie down hole size	(6) 1-1/16" (27mm)	(6) 1-1/16" (27mm)	(4) 1-5/8" (41.3mm)	(4) 1-5/8" (41.3mm)	(2) 1-5/8" (41.3mm)	(4) 1-5/8" (41.3mm)
J: Front Mounting hole location	2" (50.8mm)	2" (50.8mm)	4" (101.6mm)	4" (101.6mm)	-	4" (101.6mm)
K: Center mounting hole location	43" (1092mm)	40-1/2" (1028.7mm)	-	-	-	-
L: Rear mounting hole location	21-½" (546mm)	24" (610mm)	82" (2083mm)	82" (2083mm)	82" (2083mm)	82" (2083mm)
M: Rear bolt hole pattern pitch	57-1/2" (1460.5mm)	57-9/16" (1462mm)	91-¾" (2330.4mm)	91-¾" (2330.4mm)	94-¾" (2330.4mm)	94-¾" (2330.4mm)
N: Overall base length	71-¼" (1809.7mm)	71-¼" (1809.7mm)	90" (2286mm)	90" (2286mm)	90" (2286mm)	90" (2286mm)
O: Overall Machine width	73" (1854mm)	75" (1905mm)	120-½" (3061mm)	120-½" (3061mm)	103-½" (2635.3mm)	119" (3023mm)
P: Overall Machine length	90-1/4" (2292.3mm)	90-1/4" (2292.3mm)	124" (3150mm)	124" (3150mm)	130" (3302.6mm)	130" (3302.6mm)
Standard Primary Voltage	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60
Shipping Weight	7675 lbs. (3481kg)	7490 lbs. (3397kg)	16,270 lbs. (7380kg)	16,325 lbs. (7405kg)	18,800 lbs. (8527kg)	26,020 lbs. (11802kg)

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