

## **Multi-Level Power Changer**



DOUBLE, TRIPLE AND QUAD STACKING MODELS AVAILABLE



Model PCHE 480 Volt



# PCE MULTI-STACKING POWER CHANGER SPECIFICATIONS\* END VIEW SIDE VIEW L2 L1 В 73.00″ AISLE REQUIREMENT VACUUM CUP REACH 55.50″ 1410mm 849mm TOP VIEW **Available Options:**

- Magnet Extraction
- Stainless Steel Watering Tank and Pump Kit (Battery Filling System)
- Hydraulic Extension Arm
- Hydraulic Carriage Roller Extensions (Note: Restricts Lowered Height to 14"/356mm)

<sup>\*</sup> PLEASE REFERENCE THE DIMENSIONAL DATA CHART ON PAGE 3
TO MATCH THE LETTERS TO THE CORRESPONDING SPECIFICATIONS.

### **SPECIFICATIONS**



#### General Specifications<sup>1</sup>

	MODEL NO.	*PCHE-1-40		PCHE-2-24		PCHE-2-32		PCHE-2-40	
1	Drive System H.P./KW	7.5 HP	5.6KW	7.5 HP	5.6KW	7.5 HP	5.6KW	7.5 HP	5.6KW
2	Drive System / Travel Speed	0-225 FPM	0-68.8MPM	0-225 FPM	0-68.8MPM	0-225 FPM	0-68.8MPM	0-225 FPM	0-68.8 MPM
3	Hydraulic System H.P./KW	15 HP	11.2KW	15 HP	11.2KW	15 HP	11.2KW	15 HP	11.2KW
4	Raise/Lower Speed	0-24 FPM	0-7.3MPM	0-24 FPM	0-7.3MPM	0-24 FPM	0-7.3 MPM	0-24 FPM	0-7.3 MPM
5	Machine Duty Cycle (Per Year)	5000 Hrs.		5000 Hrs.		5000 Hrs.		5000 Hrs.	
6	Input Voltage	480 VAC / 60 Hz		480 VAC / 60 Hz		480 VAC / 60 Hz		480 VAC / 60 Hz	
7	Control Voltage	24 VDC		24 VDC		24 VDC		24 VDC	
8	System AC Amp Draw / Vacuum	33.7 @ 480 VAC		33.7 @ 480 VAC		33.7 @ 480 VAC		33.7 @ 480 VAC	
9	System AC Amp Draw / Magnet	32.1@ 480 VAC		32.1@ 480 VAC		32.1@ 480 VAC		32.1@ 480 VAC	
9.a	Draw Bar Pull (10" Round Vacuum Cup)	1,000 Lbs.	454 kgs.	1,000 Lbs.	454 kgs.	1,000 Lbs.	454 kgs.	1,000 Lbs.	454 kgs.
10	Draw Bar Pull (6.75"×13.25" Magnet)	1,400 Lbs. @ .25" plate		1,400 Lbs. @ .25" plate		1,400 Lbs. @ .25" plate		1,400 Lbs. @ .25" plate	
10	Draw Bar Puli (6.75 x 15.25 Magnet)	635 kgs. @6 mm plate		635 kgs. @ 6 mm plate		635 kgs. @ 6 mm plate		635 kgs. @ 6 mm plate	
11	Power Unit Type	Electric/Hydraulic		Electric/Hydraulic		Electric/Hydraulic		Electric/Hydraulic	
12	Wheel Type / Size (Height × Width)	Poly 10"×6"	254 × 152 mm	Poly 10"×6"	254 × 152 mm	Poly 10"×6"	254 × 152 mm	Poly 10"×6"	254×152 mm
13	Capacity (Fully Loaded)	10,000 Lbs.	4536 kgs.	10,000 Lbs.	4536 kgs.	10,000 Lbs.	4536 kgs.	10,000 Lbs.	4536 kgs.

#### **Dimensional Data**

	MODEL NO.	*PCH	E-1-40	PCHE	-2-24	PCHE	-2-32	PCHE	-2-40
А	Overall Length	147 5/8″	3750 mm	154 5/8″	3927 mm	172 5/8″	4385 mm	188 5/8″	4791 mm
В	Overall Width	67 1/4″	1708 mm	67 1/4″	1708 mm	67 1/4"	1708 mm	67 1/4″	1708 mm
С	Vacuum Arm Travel	48 3/8″	1229 mm	48 3/8″	1229 mm	48 3/8"	1229 mm	48 3/8″	1229 mm
D	Max. Vacuum Arm Reach	LS - 9 3/8"	238 mm						
	(Standard Arm)	RS - 8 3/4"	222 mm						
D.1	Max. Vacuum Arm Reach with (Extension	LS - 20 3/4"	527 mm						
D.1	Arm)	RS - 18"	457 mm						
Е	Max. Magnet Arm Reach	LS - 11 3/4"	299 mm						
=	(Standard Arm)	RS - 10 1/2"	267 mm						
E.1	Max. Magnet Arm Reach	LS - 20 5/8"	524 mm						
E. I	(Extension Arm)	RS - 20"	508 mm						
F	Wheel Base	140″	3556 mm	117″	2972 mm	133 1/4"	3365 mm	151″	3835 mm
G	Centerline of Drive Wheels	50 1/2"	1283 mm						
Н	Ground Clearance	1″	25 mm						
1	Grade Percent	1%		1%		1%		1%	
J	Battery Compartment Size (Each)	41 1/8″	1045 mm	24 1/8″	613 mm	32 1/8″	816 mm	41 1/8″	1045 mm
14	Max. Battery Length	44"	1118mm	44″	1118mm	44"	1118mm	44"	1118mm
15	Max. Battery Width	40″	1016mm	23″	584 mm	31″	787 mm	40″	1016mm
16	Max. Battery Height	32″	813mm	32″	813mm	32″	813 mm	32″	813 mm
17	Min. Battery Length	12″	305 mm						
18	Min. Battery Width	6.5″	165 mm						
19	Min. Battery Height <sup>2</sup>	19″	483 mm						
20	Carriage Free Lift	17″	432 mm						
21	Upper Guide Required? (Yes/No)	No		No		No		Yes	
22	Floor Variance (+ or - in 10 ft.)	1/4″	6mm	1/8″	3mm	1/8″	3mm	1/8″	3mm
23	Minimum Point Load	450 PSI	31.6 kgf/cm <sup>2</sup>						

	Height Dimensions	Double	Triple	Quad	
K	Carriage Height (Lowered/ Raised)	6″ / 55 3/8″	6" / 96 3/8"	6″ / 137 3/8″	
	Carnage Height (Lowered/ Haised)	152/1406mm	152/2448mm	152/3489 mm	
L	Overall Height L1 & L2	127 1/2" / 134 1/2"	160 3/8" / 167 3/8"	191 3/4" / 198 3/4"	
	Overall Height LT & LZ	3238/3416mm	4073/4251 mm	4870/5048 mm	
М	Operator Platform Height (AFF)	18" / 50 1/4"	18" / 91 1/4"	18" / 132 1/4"	
	Operator Flationin Height (AFF)	457/1276mm	457/2318mm	457/3359 mm	

Service Weight	*PCHE-1-40		PCHE-2-24		PCHE-2-32		PCHE-2-40	
Double Level	8400 lbs.	3810 kgs.	8600 lbs.	3901 kgs.	8900 lbs.	4037 kgs.	9200 lbs.	4173 kgs.
Triple Level	8700 lbs.	3946 kgs.	8900 lbs.	4037 kgs.	9200 lbs.	4173 kgs.	9500 lbs.	4309 kgs.
Quad Level	9000 lbs.	4082 kgs.	9200 lbs.	4173 kgs.	9500. lbs.	4309 kgs.	9800 lbs.	4445 kgs.

#### $^{\star}\,\mbox{All}$ Specifications Subject to Change Without Notice.

#### Notes:

- 1. Performance may vary +/- 5% due to system efficiency tolerance. The performance shown represents nominal values obtained under typical operating conditions.
- $2. \ \ Special\ 220\ rotary\ actuator\ available\ for\ batteries\ less\ than\ 19^{\prime\prime}/483mm\ tall.\ Consult\ factory$



#### **PCHE SERIES POWER CHANGER**

The PCHE Series Multi-Level Power Changer™ is designed for high-capacity applications requiring 20-250 battery changes per day. The simultaneous travel and lift functions allow for fast, efficient battery changes that average less than two minutes. A 7.5-HP/5.6KW electric drive motor generates a travel speed of up to 225 fpm/69 mpm on this machine. The electric drive system replaces the hydraulic drive altogether with a new Movitrac AC brake motor controller and a sealed gearbox. This super-smooth, reliable SEW Eurodrive system is the same type utilized on the PCE systems.

By separating the drive system from the lift system a lifting speed of 24 fpm/7 mpm can also be attained. This is one reason why the PCHE multi-level model is among the most efficient machines on the market today.

The  $8'' \times 12 \frac{1}{2}'' / 203$ mm  $\times 318$ mm tubular uprights, unyielding frame, double-80 leveling chains, and sturdy roller carriage make the PCHE stand out above any other multi-level battery changer on the market. In high usage and high abuse applications, there is no comparison to the PCH other than MTC's own model PCE.

Safety is designed into all aspects of the multi-level Power Changer™. The standard PLC controlled battery safety lock system prevents the operator from discharging a battery off the carriage unintentionally. This unique lock out system utilizes four polarized retro-reflective photo eyes and a small PLC controller to monitor the position of the battery in the carriage. This type of system forces the operator to decide when it is safe to discharge a battery from the carriage.

Another safety feature of the multi-level Power Changer<sup>TM</sup> is the dead-man operator platform. This platform allows full access to the control panel and allows the operator complete freedom of movement during each battery change. The floor of the platform is cushioned with anti-slip padding, and handholds are provided for the operator to use during battery changes.

#### **Multi-Stacking Power Changer Features and Benefits**

FEATURES	BENEFITS
<ol> <li>Double, Triple or Quad Levels</li> <li>Variable Speed Electric Drive</li> <li>Simultaneous Travel and Lift</li> <li>Powered vacuum or Magnetic Extraction</li> <li>PLC Controlled Battery Safety Locks</li> </ol>	<ul> <li>Saves valuable facility floor space</li> <li>Allows operator to adjust speed to meet various operating conditions</li> <li>Greatly reduces the time required to complete a battery change</li> <li>Provides reliable, powerful, and consistent battery attachment</li> <li>Prevents the unintentional discharge of a battery from the carriage</li> </ul>



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