

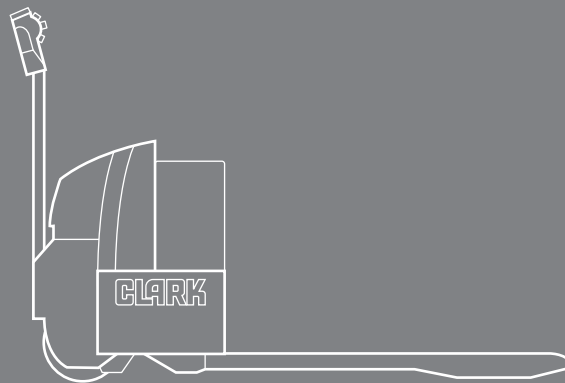
# POWERWORKERS

Low Lift Pallet Trucks  
Electric 24 Volt

WP45

4,500 lbs 2045 kg

# WP45



CLARK THE FORKLIFT

North America

Germany

Korea

w w w . c l a r k m h c . c o m

### Battery Compartment Dimensions

	For Battery Tray (Tray Size)		For Industrial Battery	
	in	mm	in	mm
Width	10.4	265	28.5	724
Length	7.2	185	9.0	230
Height	12.5	317	24.0	610

### Pallet Specifications

	in	mm
Type:	Double Faced Wood	
Size:	Length	48 1220
	Width (min-max)	32-48 815-1220
Bottom Board Nominal	0.75	20

### Available Fork Lengths

Nominal Length	Actual Length	
	in	mm
36	914.4	35.63 905.0
42	1066.8	41.63 1057.4
48	1219.2	47.63 1209.8

### Notes

Performances are of trucks with 410 lb (185 kg) industrial battery and 200 lb (91 kg) battery pack. Performance may vary +5% or -10% due to motor, tire, drive unit and hydraulic efficiency tolerances and battery weight.

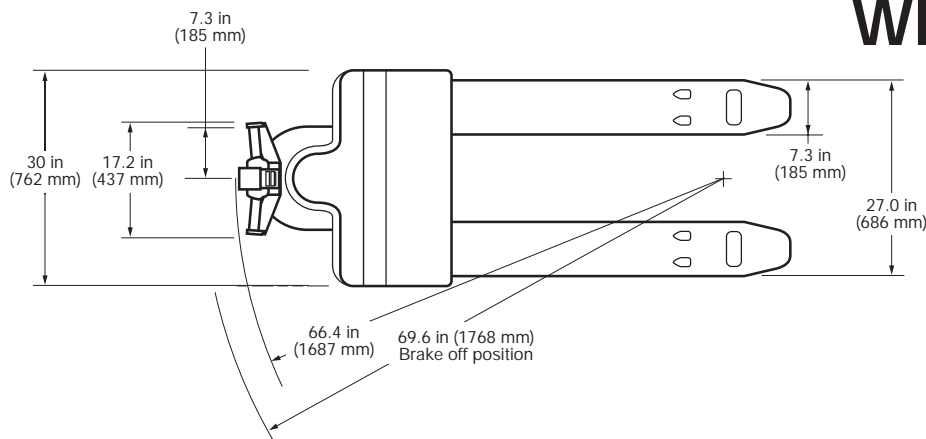
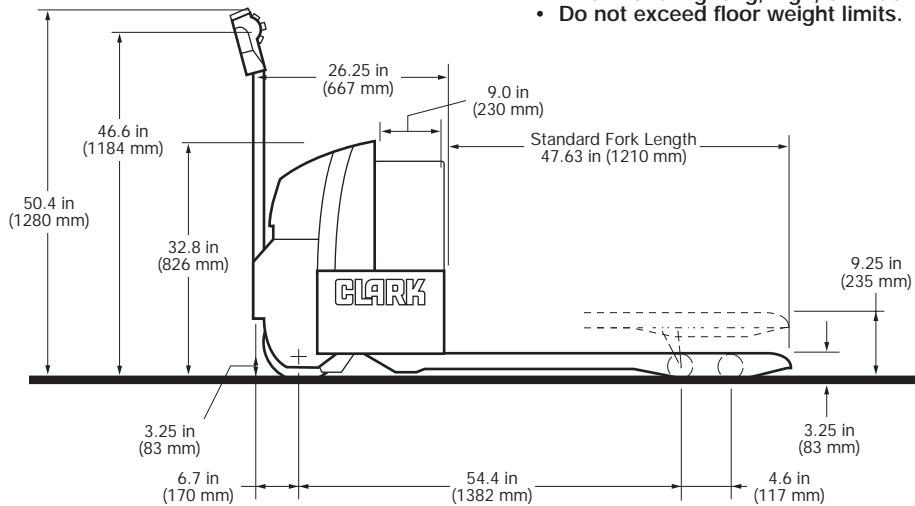
Clark products and specifications are subject to change without notice.  
© Clark Material Handling Company 2002.

### ANSI/ASME and Insurance Classification

Standard truck meets all applicable mandatory requirements of ASME-B56.1 Safety Standard for Powered Industrial Trucks. Underwriters Laboratories "E" or "EE" classifications are available as options. For further information contact a Clark representative.

### For Your Safety

- Do not operate motorized hand trucks unless you are trained and authorized. Read and understand the operator's manual before operating.
- Do not operate a damaged or faulty truck. Do not attempt repairs unless you are trained and authorized.
- Keep hands on designated grips and feet away from truck. Do not operate truck with wet or greasy hands or shoes.
- Enter confined areas with load end first. Be very careful when operating in confined areas to avoid being pinned.
- Avoid uneven or slippery surfaces and loose materials.
- Travel slowly and with caution on slopes and do not turn. Always travel with load end down grade.
- Do not load truck over capacity on nameplate. Do not handle unstable loads. Be very careful when handling long, high, or wide loads.
- Do not exceed floor weight limits.



**WP45**

General Information	1	Manufacturer		Clark			
	2	Model	Manufacturer's Designation	WP45			
	3	Load Capacity		lbs(kg)	4500 (2045)		
	5	Drive Unit	Electric		24 volt		
	6	Operator Type			Walkie pallet		
	7	Tire Type	Front/Rear		Rubber/polyurethane		
	8	Wheels (x=driven)	Front/Rear		1x / 2		
	Basic Dimensions	9	Pallet Forks	Maximum fork height	in(mm)	9.25 (235)	
		Lowered height		in(mm)	3.25 (83)		
14		Fork	Width	in(mm)	7.3 (185)		
			Thickness	in(mm)	1.75 (44)		
			Usable length <sup>2</sup>	in(mm)	47.63 (1210)		
			Spread <sup>2</sup>	in(mm)	27.0 (686)		
15		Overall Dimensions	Length to fork face	in(mm)	26.25 (667)		
16			Chassis height, fork lowered	in(mm)	32.8 (833)		
19	Turning Radius		in(mm)	66.3 (1684)			
22	Right Angle Stack Aisle <sup>3</sup>	Add clearance (6-8")	in(mm)	73 (1854)			
Performance	24	Travel Speed	Max w/ load	mph(kph)	3.3 (5.3)		
	25		Max w/o load	mph(kph)	3.7 (6.0)		
	26	Lift Speed	With load	sec	4.2		
	27		Without load	sec	3.3		
	29	Lower Speed	With load	sec	2.7		
			Without load	sec	3.1		
Wt	34	Service Weight		lbs(kg)	1130 (513)		
Chassis	39	Tires	Number, front/rear		1 / 2		
	40		Size, front	in	10.5 x 5 x 6.5		
			Size, rear	in	3.25 x 5.0		
	41	Wheelbase	Lowered/raised	in(mm)	59 (1499) / 54.4 (1382)		
	44	Ground Clearance	Minimum/at center of wheelbase	in(mm)	1.5 (38)		
	46	Service Brake	Type		Drum and Shoe		
	47	Parking Brake	Type		Spring applied		
	Steering	Type		Pivot arm			
Drive Line	48	Battery	Type		Lead acid		
			Capacity (6 hr. rate) max	kWh	11.8		
			Weight, min/max	lbs(kg)	200 (91)		
	49	Motors, Controls	Drive motor, diameter	in(mm)	6.6 (168)		
			Hydraulic motor, diameter	in(mm)	4.5 (114)		
			Drive motor control			Curtis SepEx transistor	
			Forward/reverse contactors			No	
			Speed control			Infinitely variable	
		Hydraulic motor control		On/Off			
	57	Hydraulic Pressure		psi	2500		

- Notes:**
- 1 Specifications are shown for WP 45 with battery pack.
  - 2 Optional lengths and widths available.
  - 3 Dimension shown is for 48L x 40W load, raised position.

Clark WP 45 electric low-lift pallet trucks are ideal for moderate duty cycles. Their quiet operation, and clean self-contained hydraulic systems make them ideal for most indoor work areas. Their low initial cost, ease of maintenance and 24-volt electrical system make them an economical alternative to hand pallet jacks.

### Operator Comfort/Convenience

- Formed steel handle with closed loop design
- All controls at operator's fingertips
- International symbols identify functions
- Smooth, stepless speed control in forward and reverse
- Reversing switch in handle

The enclosed handle with designed-in hand guards is especially convenient in tight workspaces. It allows control from either side of the truck and provides excellent hand protection. The smooth contours help prevent snagging on clothes, posts, doorways, machinery or adjacent loads.

Direction, speed, lift/lower and horn controls are located on the handle, marked with international symbols.

Reversing switch at the end of the handle is spring-loaded and designed to override the directional control, automatically reversing the truck on contact.

The directional control is thumb actuated and designed for left or right hand operation.

### Motors

Drive motor is 6.6 in. diameter, fan cooled and has class "H" insulation for increased protection from heat damage. 24-volt drive motor is separately excited (shunt wound).

Hydraulic motor is 4.5 in. diameter with class "H" insulation and vertically mounted.

### Electrical Systems

- Infinitely variable, separately excited transistor drive control
- 24-volt operation
- Utilizes convenient battery pack with built in charger or industrial battery (neither included in truck price)
- 100 amp contactors
- Automatic resetting circuit breakers
- Easy access for inspection and testing

The separately excited control allows elimination of the forward and reverse contactors. This control has many features designed to improve productivity and serviceability including: programmable neutral braking, creep and top speeds, variable plugging and diagnostics to facilitate troubleshooting.

Wiring through the handle is contained in a heavy-duty harness designed to last without undue binding, chafing or twisting.

A battery pack is optional and eliminates the need for special charging equipment. It consists of a steel tray that holds four 6-volt, deep cycle, heavy-duty batteries and a built-in charger. The charger plugs into any grounded 110 volt AC outlet for quick, economical recharging of batteries. The steel tray features hinged, swing-out top batteries for easy bottom battery maintenance. Maintenance free batteries are also available. Units equipped with either battery pack cannot carry UL label.

- Battery pack provides 3.52 kwh with a 152 amp hour rating (maintenance free battery pack provides 4.6 kwh with 195 amp hour rating) and is equipped with a SB-175 red connector.
- Industrial battery - 12 cell 7 plate, 25.7 in. x 8.9 in. x 23.3 in. (653 mm x 226 mm x 592 mm) battery provides up to 11.8 kwh.

### Drive Line

- Double reduction helical and spur gears
- Totally enclosed
- Protected location

Power from the horizontally mounted drive motor is transmitted through 22 to 1 double reduction helical and spur gears to the drive wheel axle. The gears are mounted on ball and tapered roller bearings and operate totally enclosed in a bath of oil. Fluid volume is 0.8 quarts (.76 L). Drive wheel is mounted on a spline type axle and secured with a single, heavy duty lock nut for quick change in the field.

### Brakes

- Double acting
- Self adjusting

Brake is actuated by positioning the handle up or down. In either position, the motor shuts off as the brakes are applied. When the handle is released a heavy spring and chain return it to the vertical position which applies the brake for parking. Brake pads are self-adjusting and easily replaced.

### Hydraulic System

- Integral pump and motor
- Simple hosing
- Serviceable cylinder

Hydraulic pump, motor, fluid reservoir, relief valves and inlet filter are completely integrated, eliminating most of the connections associated with hydraulic fluid leaks. Plumbing consists of a single, non-flexing hose from the pump to the lift cylinder. The cylinder is a single acting, ram type with an easily removable wire ring retention for easy seal replacement. Hydraulic sump fluid volume is 1 quart (.95 L).

### Steering

- Handle rotates drive unit 180°
- Design assures positive control

Long steer handle with low pivot point provides increased leverage to reduce steering effort. Rectangular tubular design prevents handle flexing and improves control.

### Frame and Chassis

- Formed, unitized steel
- Uniquely tooled fork design

Major components of the truck frame are formed steel, resulting in superior strength at reduced weight. Forks are one piece steel sections designed for added rigidity to increase life. Frame provides single point mounting of hydraulic cylinder and drive unit, absorbs stress of lifting/lowering and travel. All exposed surfaces are covered with a highly durable powder coat, free of chromium and lead. This finish is smooth, easy to clean and resistant to chipping, rust and corrosion.

### Standard Equipment

Full 6" lift; 24-volt separately excited transistor control, rubber drive tire; poly load wheels; poly skid stabilizers; horn; key switch; BDI and 27 in. x 48 in. (686 x 1220 mm) forks. Finish is high-visibility Clark green with black.

### Options

Battery pack (standard or maintenance free batteries); poly drive tire; various fork lengths from 32" (813 mm) to 60" (1524 mm) and widths from 18" (457 mm) to 27" (686 mm), 48 in. (1220 mm) and 60 in. (1525 mm) load backrests; hour meter/BDI combination; cold storage/corrosion conditioning, UL "E" and "EE" construction ("E" requires industrial battery; "EE" requires "EE" rated industrial battery).

■ **North America** CMHC  
Sales & Marketing HQ  
2317 Alumni Park Plaza  
Suite 500  
Lexington, KY 40517  
1-877-66-CLARK  
www.clarkmhc.com

■ **Germany** CMHE  
DE Manufacturing  
Rheinstraße 19-23  
D-45478  
Mülheim an der Ruhr  
+49 208-588 (0)  
www.clarkmhe.com

■ **Korea** CMHA  
Changwon Headquarters  
& Manufacturing  
#40-1, Ungnam Dong  
Changwon-City  
Kyungnam, Korea 641-290  
82-55-260-9001, 9008  
www.clarkmhc.co.kr

Seoul Office  
Cheongnam Bldg.  
13, 16th Floor,  
1329-3 Socho-Dong, Socho-Gu  
Seoul, Korea 137-070  
82-2-2186-6500  
www.clarkmhc.co.kr

your authorized CLARK dealer is: