

**CROWN**

**Specifications**

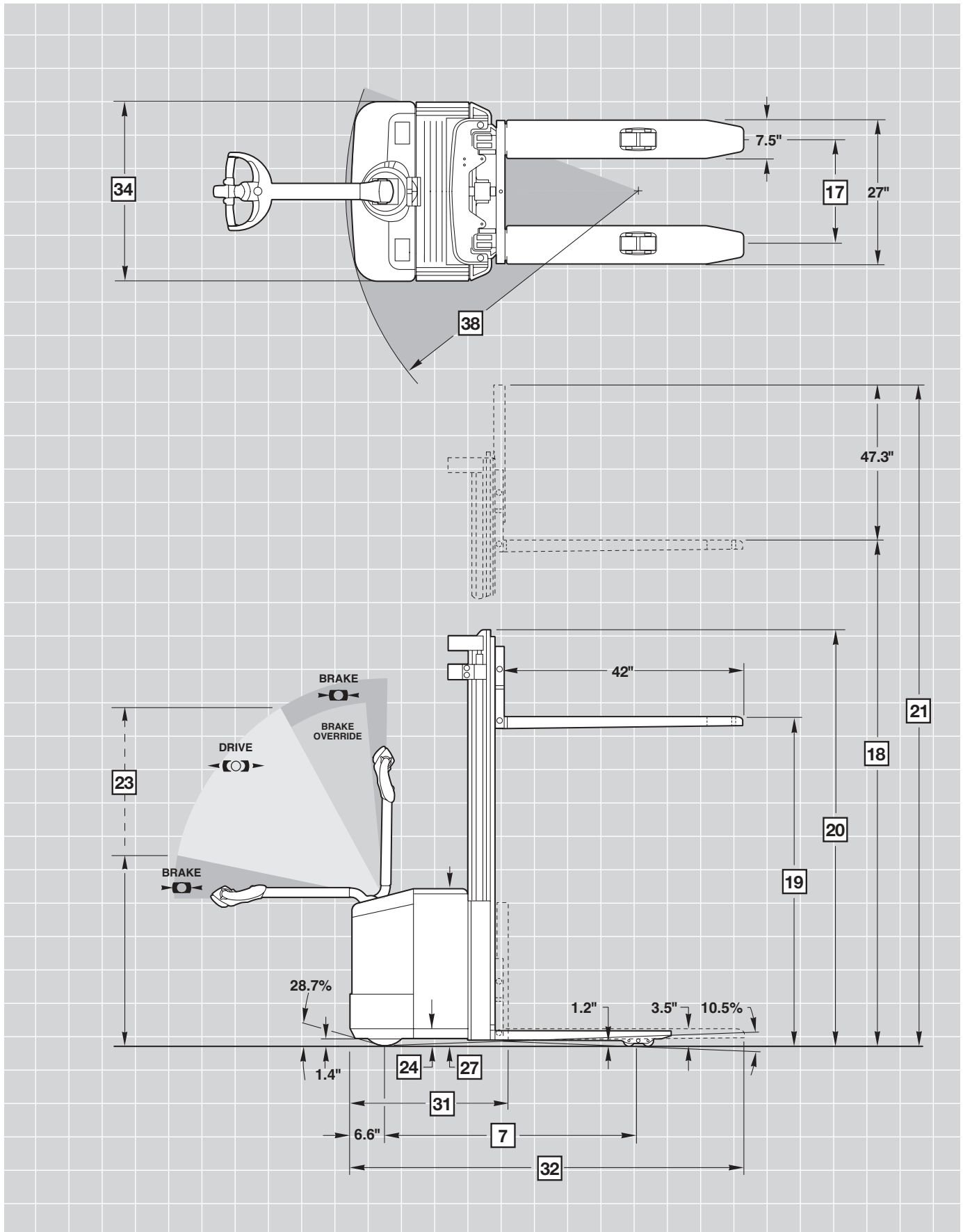
**WE 2300 Series  
WS 2300 Series**

Walkie Stackers

# WE/WS 2300

# Series





<b>General Information</b>	1	<b>Manufacturer</b>		<b>Crown Equipment Corporation</b>		
	2	<b>Model</b>		WE 2300-25	WE 2300-30	
		<b>Mast Type</b>		TL	TF	
	3	<b>Power</b>		Electric		
	4	<b>Operator Type</b>		Walkie		
	5	<b>Load Capacity</b>	Max	lb (kg)	2500 (1135)	3000** (1361**)
	6	<b>Load Center</b>		in (mm)	24 (600)	24 (600)
	7	<b>Wheelbase</b>		in (mm)	47 (1206)	50 (1280)
<b>Tires</b>	8	<b>Weight</b>	Less Battery	lb (kg)	1907 (865)	2072 (940)
	13	<b>Wheel Size Front (d x w)</b>	Vulkollan	in (mm)	9.8 x 3 (250 x 75)	
	14	<b>Wheel Size Rear (d x w)</b>	Vulkollan	in (mm)	3.2 x 4 (82 x 100)	3.2 x 2.3 (82 x 60)
	15	<b>Additional Wheels</b>	Caster Wheel (d x w)	in (mm)	5.9 x 2 (150 x 50)	
	16	<b>Wheels (x=driven)</b>	Front/Rear		1x, 1/2	1x, 1/4
<b>Dimensions</b>	17	<b>Track Width</b>	Front	in (mm)	23 (587)	
			Rear	in (mm)	15 (382)	
	18	<b>Lift Height</b>		in (mm)	130 (3300)	130 (3300)
	19	<b>Free Lift</b>	w/o Load Backrest	lb (kg)	6 (150)	68 (1720)
	20	<b>Collapsed Height</b>		in (mm)	84 (2130)	84 (2130)
	21	<b>Extended Height*</b>	w/o Load Backrest	in (mm)	147 (3730)	147 (3730)
	22	<b>Load Backrest Size</b>		in (mm)	47.3 (1202) H x 32.7 (832) W	
	23	<b>Tiller Arm Height in Drive Position</b>	Min/Max	in (mm)	31 (780) / 48 (1220)	
	24	<b>Battery Comp't Floor Ht</b>		in (mm)	3.4 (85)	
	25	<b>Lowered Fork Height</b>		in (mm)	3.5 (90)	
	27	<b>Power Unit Height</b>		in (mm)	29.75 (756)	
	28	<b>Fork Lengths</b>		in (mm)	42 (1067)	
	29	<b>Fork Dimensions</b>	Thickness	in (mm)	2 (50)	
			Width	in (mm)	7.5 (190)	
	30	<b>Width Across Forks</b>		in (mm)	27 (686)	
	31	<b>Headlength</b>		in (mm)	29 (730)	30 (753)
	32	<b>Overall Length</b>	at fork length 42"	in (mm)	71 (1803)	72 (1829)
	34	<b>Overall Width</b>		in (mm)	33.5 (850)	
35	<b>Fork Carriage Width</b>		in (mm)	27 (680)		
36	<b>Ground Clearance</b>	w/Load Below Mast	in (mm)	1.4 (35)		
		Center Wheelbase	in (mm)	1.2 (30)		
38	<b>Turning Radius</b>		in (mm)	55 (1400)	58 (1475)	
<b>Performance</b>	40	<b>Travel Speed</b>	w/wo Load	mph (km/h)	3.3 / 3.7 (5.3 / 6.0)	
	41	<b>Lift Speed</b>	w/wo Load	fpm (m/s)	31 / 51 (.16 / .26)	28 / 43 (.14 / .22)
	42	<b>Lowering Speed</b>	w/wo Load	fpm (m/s)	71 / 43 (.36 / .22)	71 / 43 (.36 / .22)
	43	<b>Gradeability</b>	w/wo Load, 30 min Rating	%	3 / 9	3 / 8
	44	<b>Maximum Gradeability</b>	w/wo Load, 5 min Rating	%	9 / 17	8 / 17
45	<b>Service Brake</b>			Electric		
<b>Battery</b>	46	<b>Maximum Battery Box</b>	L x W x H	in (mm)	8.5 x 32.5 x 24.7 (216 x 827 x 627)	
	47	<b>Battery Voltage (Nominal Capacity 6 Hour Rating)</b>		V/Ah	24 / 195	
	48	<b>Type of Controller</b>	Drive		Transistor	
	49	<b>Battery Weight</b>		lb (kg)	644-712 (293-323)	

\* Subtract 32" (810 mm) from free lift; add 32" (810 mm) to extended height if optional 47.3" (1202 mm) high load backrest is required.

\*\* Up to 110" (2800 mm), 2910 lb up to 130" (3300 mm)

English conversions are approximations. Metric conversions should be done to find true values.

**Standard Equipment**

1. Four-point suspension with centrally located handle
2. Traction speed control (MOSFET)
3. Variable traction speed forward and reverse
4. One-speed lift, two-speed lower
5. Electric brake
6. Brake override
7. Key switch
8. Horn
9. Compound drive and lift motor
10. Emergency power disconnect
11. Battery connector SB-175
12. Reversing button
13. Hour meter
14. Vulkollan tires
15. 27" x 42" fork configuration

**Optional Equipment**

1. Pivoting tandem load wheels 3.2" x 2.3" (WE 2300-25 only)
2. Battery compartment rollers
3. Battery discharge indicator with low battery lift interrupt and hour meter
4. Freezer corrosion conditioning, continuous -30° C / -22° F, intermittent -40° C / -40° F
5. Load backrest
6. Maintenance-free battery pack

**Electrical System**

24-volt electrical system incorporating:

1. Transistor "MOSFET" controller, microprocessor controlled with on-board service diagnostic capability. This transistor controller provides many benefits such as maximum energy efficiency, reduced maintenance and infinite speed control capability.

**Fault Monitoring System:**

- Through a fault flash code signaled by an LED, 17 detectable faults can be recognized. Using an optional hand set, faults can be displayed digitally. Controller settings are programmable. Functional tests of components are also possible. Incorporates storage register for fault history that can be interrogated by service personnel.
2. Heavy-duty drive and lift motors provide high reliability and efficiency.
  3. Electric panel with swing-out feature, allows good accessibility and serviceability to the distribution panel and all other electrical components.
  4. Emergency disconnect is easily accessible from all operating positions.
  5. Solid-state switching ensures high component reliability.
  6. Control and power circuits are fused. Distribution panel and controller are short-circuit protected.
  7. All wiring is color coded.

**Hydraulic System**

1. Heavy-duty compound motor and gear pump selected for optimum lift performance and low noise.
2. Control block houses proportional pressure compensated flow control valve, check valve, relief valve and direction control valve to select lower function. The proportional valve ensures smooth load handling. Single speed lift and two speed lowering is available to the operator.
3. Cylinder rods are hard-plated chrome with polyurethane seals.
4. Relief valve tuned to capacity protects all components in the hydraulic system.

**Drive Unit/Brake**

Heavy-duty gear box with helical spur input gear for low noise emission. Drive unit is equipped with an electro-magnetic brake, spring applied, electrically released. The brake is activated by the control handle position.

**Frame/Pivoting Carriage**

Frame and Articulated Truck Suspension system (ATS) are of a rugged design ensuring minimum deflections during operation. Modular pivoting carriage design ensures excellent traction, optimum truck stability and minimum steering effort in all load conditions. Easy serviceability of all components in power unit and simple adjustment to compensate for tire wear is possible. Single swing-out door design allows easy access to all components.

**Mast**

High visibility two- and three-stage mast design features nested I-beams and canted rollers. Lift cylinders are positioned in outer I-beam profile for best visibility through mast and clear view onto fork tips during load handling. Standard equipment includes full-free lift for two- and three-stage mast. Mast cushioning between stages ensures smooth operation. Heavy-duty mast and chain rollers are sealed and lubricated for life. Easy access to carriage rollers.

**Operator Controls**

The robust X10™ control handle is designed to allow for an optimum turning radius with low steer effort. All control buttons can be operated with either hand and can be accessed with minimum hand and wrist movement. The horn buttons are integrated in the hand grips. An ergonomic forward/reverse thumb wheel allows for precise maneuvering.

Depending on conditions and operator experience, maximum travel speed can be reduced via the rabbit/turtle switch. Exclusive brake override allows slow speed travel with the handle near vertical. This feature improves maneuverability in tight areas.

**Battery**

Removable side panels and top hinged cover allow easy access to battery, as well as battery change in three directions, either side or top lift out. Compartment rollers are fitted as an option.

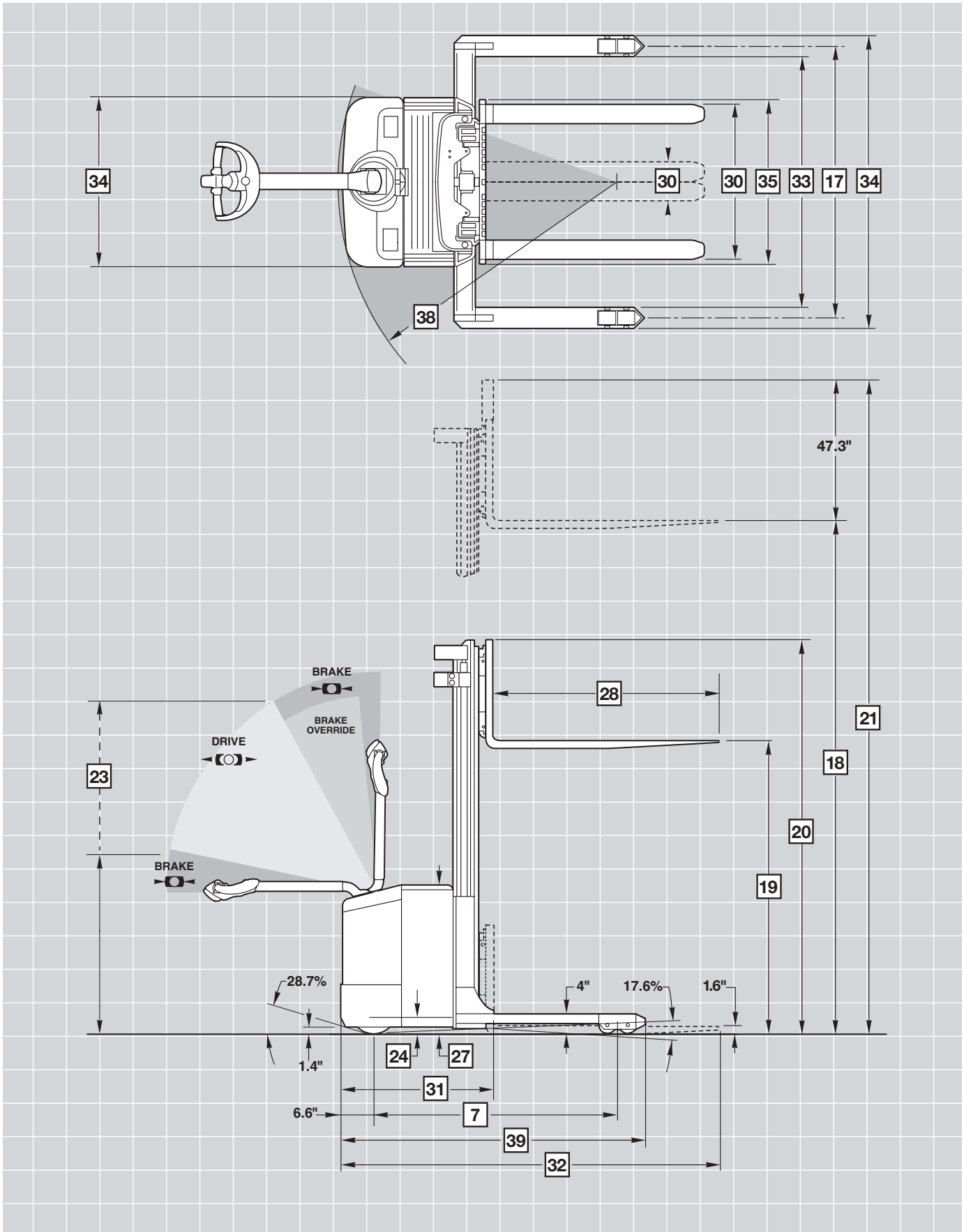
**Other Options**

1. Audible travel alarm
2. Flashing lights

Safety considerations and dangers associated with audible travel alarms and flashing lights include:

- Multiple alarms and/or lights can cause confusion.
- Workers ignore the alarms and/or lights after day-in and day-out exposure.
- Operator may transfer the responsibility for "looking out" to the pedestrians.
- Annoys operators and pedestrians.

*Dimensions and performance data given may vary due to manufacturing tolerances. Performance is based on an average size vehicle and is affected by weight, condition of truck, how it is equipped and the conditions of the operating area. Crown products and specifications are subject to change without notice.*



		<b>Crown Equipment Corporation</b>			
<b>General Information</b>	1	<b>Manufacturer</b>			
	2	<b>Model</b>	WS 2300-40		WS 2300-40
		<b>Mast Type</b>	TL/TF		TT
	3	<b>Power</b>	Electric		
	4	<b>Operator Type</b>	Walkie		
	5	<b>Load Capacity</b>	Max	lb (kg)	4000 (1815) 4000* (1815*)
	6	<b>Load Center</b>		in (mm)	24 (600) 24 (600)
	7	<b>Wheelbase</b>		in (mm)	51 (1300) 51 (1300)
8	<b>Weight</b>	Less Battery	lb (kg)	2072 (940) 2282 (1035)	
<b>Tires</b>	13	<b>Wheel Size Front (d x w)</b>	Vulkollan	in (mm)	9.8 x 3 (250 x 75)
	14	<b>Wheel Size Rear (d x w)</b>	Vulkollan	in (mm)	3.3 x 2.8 (85 x 70)
	15	<b>Additional Wheels</b>	Caster Wheel (d x w)	in (mm)	5.9 x 2 (150 x 50)
	16	<b>Wheels (x=driven)</b>	Front/Rear		1x, 1/4
	17	<b>Track Width</b>	Front	in (mm)	23 (587)
		Rear	in (mm)	46, 54 (1167, 1370)	
<b>Dimensions</b>	18	<b>Lift Height</b>		in (mm)	128 (3250) 160 (4050)
	19	<b>Free Lift ** w/o Load Backrest</b>	TL	lb (kg)	4 (100) na
			TF/TT**	lb (kg)	62 (1575) 51 (1305)
	20	<b>Collapsed Height</b>		in (mm)	84 (2130) 73 (1860)
	21	<b>Extended Height*</b>	w/o Load Backrest	in (mm)	151 (3825) 182 (4625)
		<b>Outrigger Height</b>		in (mm)	4 (100)
	22	<b>Lowered Fork Height</b>		in (mm)	1.6 (40)
	23	<b>Tiller Arm Height in Drive Position</b>	Min/Max	in (mm)	31 (780) / 48 (1220)
	24	<b>Battery Comp't Floor Ht</b>		in (mm)	3.4 (85)
	27	<b>Power Unit Height</b>		in (mm)	29.75 (756)
	28	<b>Fork Lengths</b>		in (mm)	30, 36, 42, 45, 48 (760, 912, 1067, 1167, 1219)
	29	<b>Fork Dimensions</b>	Thickness	in (mm)	1.6 (40)
			Width	in (mm)	4 (100)
	30	<b>Width Across Forks</b>	Adjustable Min/Max	in (mm)	10 (253) / 31.1 (790)
	31	<b>Headlength</b>		in (mm)	31 (783) 32 (808)
	32	<b>Overall Length</b>	at fork length 42"	in (mm)	73 (1850) 74 (1875)
	33	<b>Inside Straddle</b>		in (mm)	42, 50 (1067, 1270)
	34	<b>Overall Width</b>	Front	in (mm)	33 (850)
		Rear	in (mm)	50, 58 (1267, 1470)	
35	<b>Fork Carriage Width</b>		in (mm)	32.5 (825)	
36	<b>Ground Clearance</b>	w/Load Below Mast	in (mm)	1.4 (35)	
37		Center Wheelbase	in (mm)	1.6 (40)	
38	<b>Turning Radius</b>		in (mm)	59 (1490)	
<b>Performance</b>	39	<b>Length Over Outrigger</b>		in (mm)	60 (1535)
	40	<b>Travel Speed</b>	w/wo Load	mph (km/h)	3.3 / 3.7 (5.3 / 6.0)
	41	<b>Lift Speed</b>	w/wo Load	fpm (m/s)	26 / 43 (.13 / .22)
	42	<b>Lowering Speed</b>	w/wo Load	fpm (m/s)	71 / 39 (.36 / .20)
	43	<b>Gradeability</b>	w/wo Load, 30 min Rating	%	2 / 8
	44	<b>Maximum Gradeability</b>	w/wo Load, 5 min Rating	%	7 / 17
	45	<b>Service Brake</b>			
<b>Battery</b>	46	<b>Maximum Battery Box</b>	L x W x H	in (mm)	8.5 x 32.5 x 24.7 (216 x 827 x 627)
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	48	<b>Type of Controller</b>	Drive		Transistor
	49	<b>Battery Weight</b>		lb (kg)	644-712 (293-323)

\* Up to 144" (3658 mm), 3548 lb up to 160" (4050 mm)

\*\* Subtract 26" (665 mm) (WS 2300-40 TF/TT) from free lift;

Add 26" (665 mm) (WS 2300-40 TL/TF/TT) to extended height if option 47.3" (1202 mm) high load backrest is required.

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**Standard Equipment**

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- Traction speed control (MOSFET)
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- Brake override
- Key switch
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- Battery connector SB-175
- Reversing button
- Hour meter
- Vulkollan tires

**Optional Equipment**

- Battery compartment rollers
- Battery discharge indicator with low battery lift interrupt and hour meter
- Freezer corrosion conditioning, continuous -30° C / -22° F, intermittent -40° C / -40° F
- Load backrest
- Maintenance-free battery pack
- Sideshift

**Electrical System**

24-volt electrical system incorporating:

- Transistor "MOSFET" controller, microprocessor controlled with on-board service diagnostic capability. This transistor controller provides many benefits such as maximum energy efficiency, reduced maintenance and infinite speed control capability.

**Fault Monitoring System**

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**Mast**

High visibility two- and three-stage mast design features nested I-beams and canted rollers. Lift cylinders are positioned in outer I-beam profile for best visibility through mast and clear view onto fork tips during load handling. Standard equipment includes full-free lift for two- and three-stage mast. Mast cushioning between stages ensures smooth operation. Heavy-duty mast and chain rollers are sealed and lubricated for life. Easy access to carriage rollers.

**Fork Carriage**

WS 2300 Series features a standard 32" wide ITA Class II fork carriage. Forks are adjustable from 10" to 31". Standard fork lengths are 30", 36", 42" 45" and 48".

**Operator Controls**

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**Battery**

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**You can count on Crown to build lift trucks designed for safe operation, but that's only part of the safety equation. Crown encourages safe operating practices through ongoing operator training, safety-focused supervision, maintenance and a safe working environment. Go to [crown.com](http://crown.com) and view our safety section to learn more.**

Because Crown is continually improving its products, specifications are subject to change without notice.

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