



## Specifications

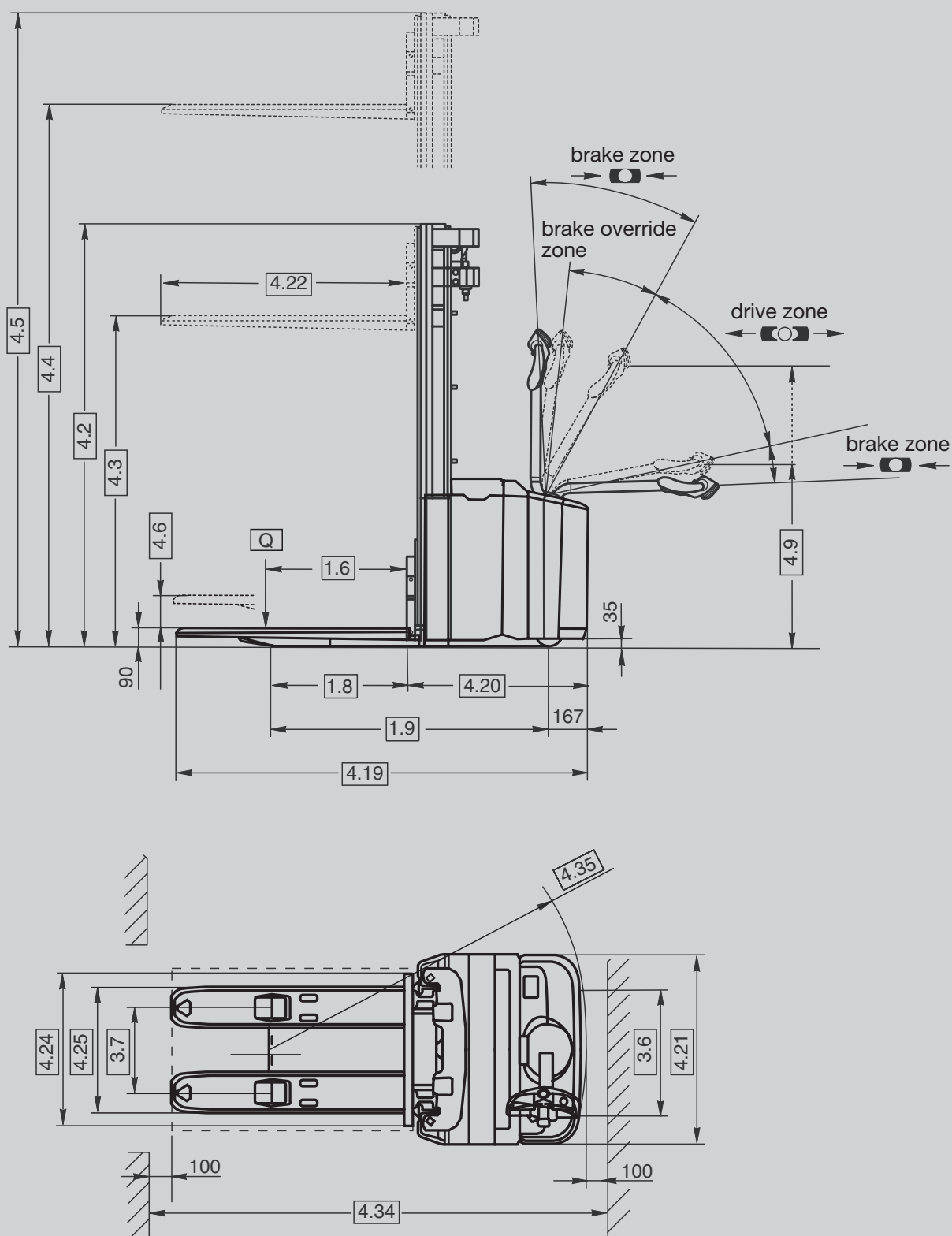
### WI 2300 Series

Pedestrian Powered  
Stacker with Initial Lift

# WI 2300

# Series





General Information	1.1	<b>Manufacturer</b>	Crown Equipment Corporation			
	1.2	<b>Model</b>				WI 2300-1.6
	1.3	<b>Power</b>				electric
	1.4	<b>Operator Type</b>				pedestrian
	1.5	<b>Load Capacity *</b>		Q	t	1.6 / 2.0
	1.6	<b>Load Centre</b>		c	mm	600
	1.8	<b>Load Distance **</b>	initial lift raised	x	mm	858
	1.9	<b>Wheel Base **</b>	initial lift raised	y	mm	1562
Weights	2.1	<b>Weight</b>	less battery		kg	see table 1
	2.2	<b>Axle Load</b>	w. load, front / rear		kg	see table 1
	2.3	<b>Axle Load</b>	w.o. load, front / rear		kg	see table 1
Tyres	3.1	<b>Tyre Type</b>				Vulkollan
	3.2	<b>Wheel Size</b>	front		mm	Ø 254 x 85
	3.3	<b>Wheel Size</b>	rear		mm	Ø 82 x 64
	3.4	<b>Additional Wheels</b>	castor wheel		mm	Ø 125 x 50
	3.5	<b>Wheels</b>	number (x=driven) front/rear			1x + 1/4
	3.6	<b>Track Width</b>	front	b10	mm	587
	3.7	<b>Track Width</b>	rear	b11	mm	382
Dimensions	4.2	<b>Mast</b>	collapsed height	h1	mm	see table 1
	4.3	<b>Free Lift</b>		h2	mm	see table 1
	4.4	<b>Lift Height</b>		h3	mm	see table 1
	4.5	<b>Mast</b>	extended height	h4	mm	see table 1
	4.6	<b>Initial Lift ***</b>		h5	mm	120
	4.9	<b>Tiller Arm Height</b>	in drive position min./max.	h14	mm	780 / 1220
	4.15	<b>Fork Height</b>	lowered	h13	mm	90
	4.19	<b>Overall Length ****</b>		l1	mm	2021
	4.20	<b>Headlength ****</b>		l2	mm	871
	4.21	<b>Overall Width</b>		b1/b2	mm	850
	4.22	<b>Fork Dimension</b>		thxwxl	mm	50 x 190 x 1150
	4.24	<b>Fork Carriage Width</b>		b3	mm	680
	4.25	<b>Width Across Forks</b>		b5	mm	570
	4.32	<b>Ground Clearance</b>	centre wheelbase	m2	mm	22
	4.34	<b>Working Aisle Width</b>	800 x 1200 mm length, initial lift raised	Ast	mm	2473
	4.35	<b>Turning Radius **</b>	initial lift raised	Wa	mm	1747
Performance	5.1	<b>Travel Speed</b>	w. / w.o. load		km/h	5.3 / 6.0
	5.2	<b>Lift Speed</b>	w. / w.o. load		m/s	0.14 / 0.22
	5.3	<b>Lowering Speed</b>	w. / w.o. load		m/s	0.36 / 0.20
	5.8	<b>Max. Gradeability</b>	w. / w.o. load, 5 min. rating		%	8 / 17
	5.10	<b>Service Brake</b>				electro-magnetic
Motors	6.1	<b>Traction Motor</b>	60 min. rating		kW	1.5
	6.2	<b>Lift Motor</b>	15% on time		kW	3.0
	6.3	<b>Max. Battery Box Size</b>	DIN 43535 / A	lxwxh	mm	216 x 827 x 627
	6.4	<b>Battery Voltage</b>	nominal capacity 5h rating		V / Ah	24 / 345-375
	6.5	<b>Battery Weight</b>			kg	307
	8.1	<b>Type Controller</b>	drive			transistor

\* Capacity as Stacker or Double Stacker / Pallet Truck

\*\*\* Initial lift automatically lowers when forks lifted 1.7 m

\*\* Initial lift lowered +75 mm

\*\*\*\* TT-mast -26 mm

Table 1

				WI 2300-1.6														
				TL					TF					TT				
2.1	Weight	less battery	kg	1120	1140	1165	1185	1215	1120	1140	1165	1185	1215	1205	1235	1260	1295	1315
2.2	Axle Load	w. load, front	kg	1359	1369	1382	1392	1402	1359	1369	1382	1392	1402	1401	1416	1429	1447	1452
		w. load, rear	kg	1669	1679	1692	1702	1711	1669	1679	1692	1702	1711	1712	1727	1740	1757	1761
2.3	Axle Load	w.o. load, front	kg	1026	1044	1067	1085	1112	1026	1044	1067	1085	1112	1102	1129	1152	1184	1202
		w.o. load, rear	kg	402	404	406	408	411	402	404	406	408	411	411	414	416	419	421
4.2	Mast	collapsed height	h1 mm	1980	2130	2280	2430	2630	1980	2130	2280	2430	2630	1725	1860	1980	2130	2235
4.3	Free Lift		h2 mm	150					1570	1720	1870	2020	2220	1315	1450	1570	1720	1825
4.4	Lift Height		h3 mm	3000	3300	3600	3900	4300	3000	3300	3600	3900	4300	3700	4100	4465	4915	5230
4.5	Mast	extended height	h4 mm	3430	3730	4030	4330	4730	3430	3730	4030	4330	4730	4130	4530	4895	5345	5660

**Standard Equipment**

1. X10® control handle.
2. 24-Volt electrical system.
3. Stable four point suspension.
4. MOSFET transistorised traction control.
5. Electric brake.
6. Brake override.
7. Key switch.
8. Horn button in each handgrip.
9. Emergency power disconnect switch.
10. SBE 160 red battery connector.
11. Auto reverse safety switch.
12. Battery discharge indicator with hour meter and lift lockout.
13. Vulkollan drive tyre, tandem load wheels and castor wheels.
14. High visibility mast design.
15. Plexiglas mast guard.
16. DIN battery compartment.
17. Maintenance free self adjusting steering chain tensioner.
18. Tandem load wheels and castor wheels with built in debris guard.
19. Two speed lower with soft start and stop.
20. Two pre-programmed performance levels.
21. Ramp hold.

**Optional Equipment**

1. Load backrest.
2. Travel alarm.
3. Metal mast grill.
4. Industrial battery 375 Ah with watering system.
5. Hand held diagnostic set for
  - performance adjustment
  - truck diagnostic.
6. DIN 160A battery connector.

**Electrical System 24 volt electrical system**

1. MOSFET controller, microprocessor controlled with on-board service diagnostics. This state of the art transistor controller provides many benefits such as maximum energy efficiency, reduced maintenance and infinite speed control capability.

**Performance and Diagnostic:**

Various detected faults can be recognized through a status flash code signalled by an LED. The status code will be stored in the controller memory. The integrated storage register for fault history can be interrogated by service personnel. With the hand held unit in test mode functional test of components is also possible. All changeable parameters can be programmed by the hand held unit.

2. Robust drive and lift motors provide high reliability and efficiency.
3. Electric panel with swing-out feature, allows easy access and maintenance.
4. Emergency disconnect is easily accessible from all operating positions.
5. Proven componentry ensures high component reliability.
6. Control and power circuits are short circuit protected.
7. All wiring is colour coded.

**Hydraulic System**

Heavy-duty hydraulic motor with integral pump and reservoir for maximum efficiency and durability, selected for optimum lift performance and low operating noise.

The hydraulic control module (HCM) provides quick, smooth initiation and stopping of lift function. Single-speed lift and two speed lowering is standard. Cylinder rods are hard-chrome plated with polyurethane seals. 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. Fixed, vertically mounted drive motor (does not rotate) ensures minimum wear on electrical cables as well as minimum contamination and optimum cooling. Drive unit is equipped

with an electro-magnetic brake, spring applied, electrically released. The brake is directly mounted on the drive motor shaft and the braking effort is transmitted through the gear reduction. The brake is activated by the control handle position.

**Frame**

Easy serviceability of all components in power unit and simple adjustment to compensate for tyre wear is possible. Single swing-out door design allows easy access to all components. Contoured panels around power unit and mast give maximum protection to the operator and internal components.

**Mast**

High visibility two and three stage mast design features nested I-beams and angled 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 carriage and chain rollers are sealed and lubricated for life. The WI model features fixed formed steel forks welded to a high visibility backrest. This design accommodates Euro pallets or other containers without bottom boards.

**Control Handle**

The robust X10® control handle is designed to allow for optimum turning radius with low steering effort.

Nearly all control buttons can be operated with either hand and can be accessed with minimum hand and wrist movement. The operator's hands are protected within the handle yoke. The horn switches are integrated in the hand grips.

An ergonomic forward and reverse thumb wheel allows for precise manoeuvring.

The parking brake is activated at the lower and upper end of the tiller position.

**Brake Override Function**

For easy operation in tight areas a brake override function is incorporated which allows the WI 2300 to be driven safely and precisely at creep speed with the handle in a near vertical position. The control handle remains within the profile of the power unit at all times, even when performing 90° turn.

When the forward/reverse thumb wheel is in neutral position the parking brake is immediately activated thus preventing unexpected movement.

**Steering**

The centre mounted X10® handle allows for an optimum turning radius and enables the operator to drive and manoeuvre in very congested areas. Steering effort applied at the handle by the operator is transmitted to the drive unit via a double universal shaft and a maintenance free self-adjusting steering chain.

**Battery**

Hinged battery top cover allow easy access to the battery and lift out. The battery compartment offers space for batteries up to 375 Amp. hours.

**Safety Regulations**

Conforms to European safety standards. 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.