

**CROWN**

**WF 3200**  
**ST 3200**  
**SX 3200**  
SERIES

**Specifications**

Pedestrian Powered Stacker







**WF 3200 Series**

**Specifications**

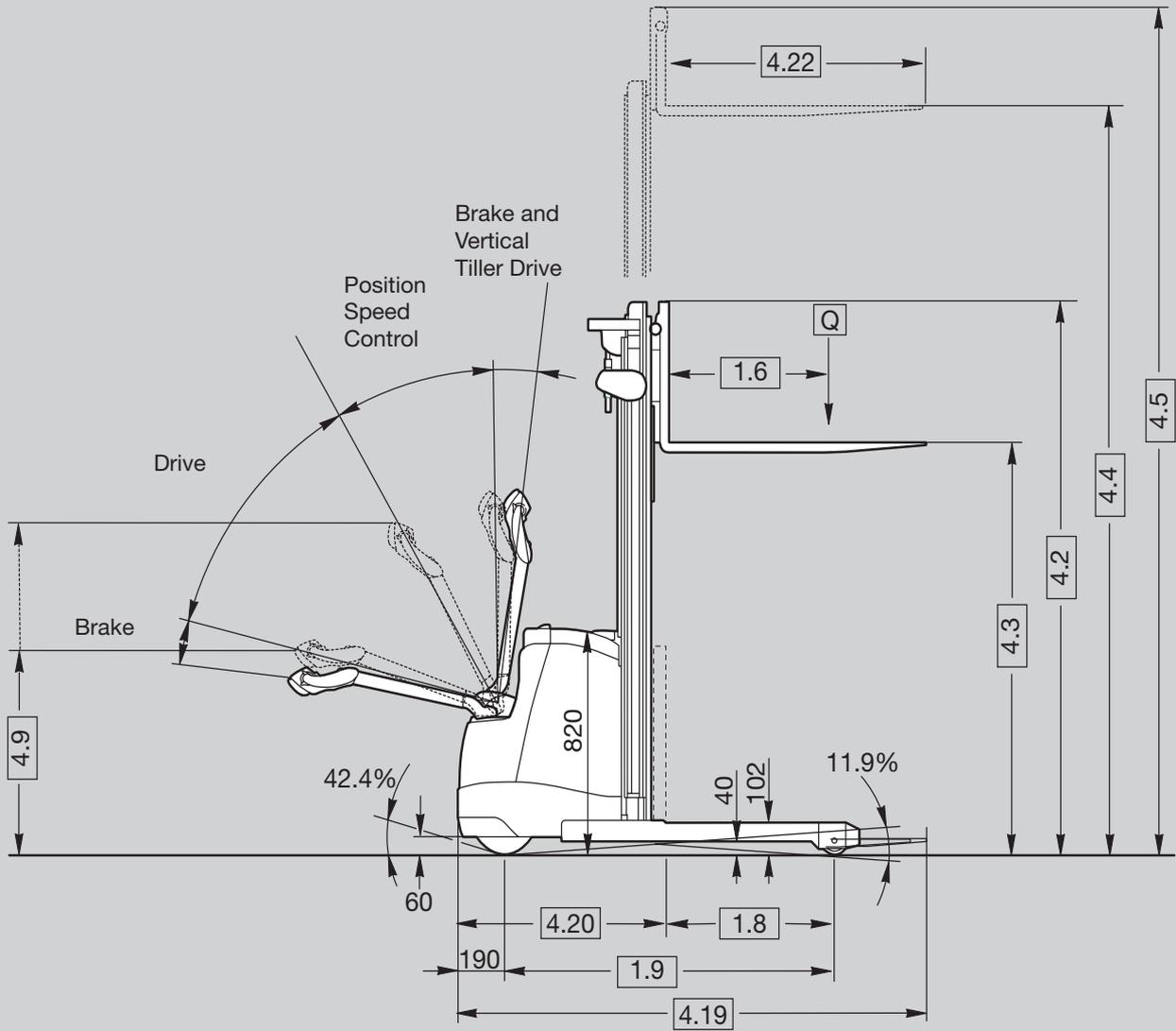
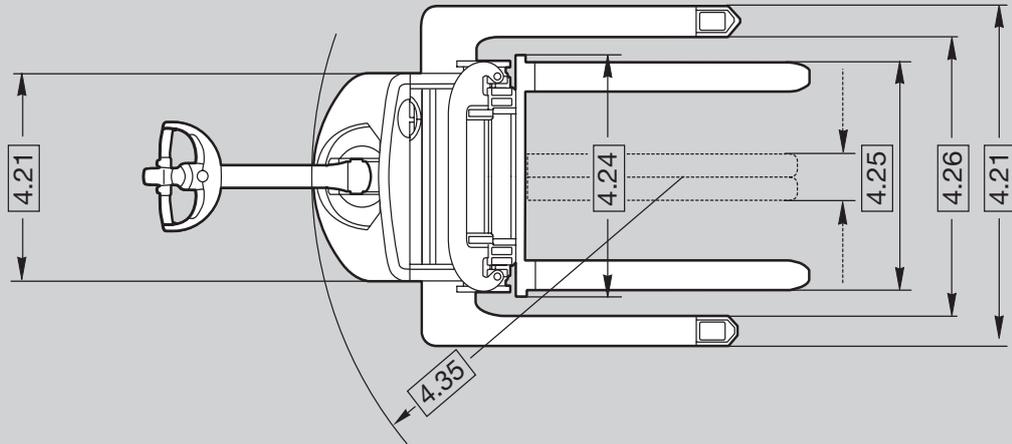
Distinguishing Mark	1.1	<b>Manufacturer</b>	Crown Equipment Corporation																				
	1.2	<b>Model</b>				WF3200-1.0 NT	WF3200-1.0 TL	WF3200-1.0 TF	WF3200-1.2 TL	WF3200-1.2 TF													
	1.3	<b>Power Source</b>	electric																				
	1.4	<b>Operator Type</b>	pedestrian																				
	1.5	<b>Rated Capacity</b>		Q	t	1.0						1.2											
	1.6	<b>Load Centre</b>		c	mm	600																	
	1.8	<b>Load Distance</b>		x	mm	689																	
	1.9	<b>Wheelbase</b>		y	mm	1182																	
	Weight	2.1	<b>Service Weight</b>	less battery		kg	see table 1																
2.2		<b>Axle Load</b>	with Load front / rear	80 Ah MF	kg	564/1121	650/1198	659/1195	-	-													
				160 Ah Ind.	kg	-	712/1212	721/1209	-	-													
				180 Ah Ind.	kg	-	732/1216	741/1214	741/1407	751/1404													
2.3			without Load front / rear	80 Ah MF	kg	494/191	602/246	610/244	-	-													
			160 Ah Ind.	kg	-	664/260	672/258	-	-														
			180 Ah Ind.	kg	-	683/265	693/262	683/265	693/262														
Tyres/Wheels/Chassis	3.1	<b>Tyres</b>				Rubber						Vulkollan											
	3.2	<b>Tyre Size</b>	front		mm	Ø 254 x 70						Ø 254 x 85											
			rear		mm	Ø 82 x 104																	
	3.4	<b>Additional Wheels</b>	castor wheels		mm	Ø 140 x 54																	
	3.5	<b>Wheels</b>	number (x=driven wheels) front/ rear			1x + 1/2																	
	3.6	<b>Tread</b>	front	b <sub>10</sub>	mm	510																	
			rear	b <sub>11</sub>	mm	382																	
Dimensions	4.2	<b>Mast</b>	collapsed height	h <sub>1</sub>	mm	see table 1																	
	4.3	<b>Free-lift</b>		h <sub>2</sub>	mm	see table 1																	
	4.4	<b>Lift Height</b>		h <sub>3</sub>	mm	see table 1																	
	4.5	<b>Mast</b>	extended height	h <sub>4</sub>	mm	see table 1																	
	4.9	<b>Height Control Handle</b>	in driving position min./max.	h <sub>14</sub>	mm	799 / 1181																	
	4.15	<b>Fork Height</b>	lowered	h <sub>13</sub>	mm	86																	
	4.19	<b>Overall Length</b>		l <sub>1</sub>	mm	1843																	
	4.20	<b>Head Length</b>		l <sub>2</sub>	mm	692																	
	4.21	<b>Overall Width</b>	front	b <sub>1</sub>	mm	805																	
	4.22	<b>Fork Dimension</b>	DIN ISO 2331	thxwxl	mm	170x60x1150						186x60x1150											
	4.25	<b>Fork Spread</b>		b <sub>5</sub>	mm	560																	
	4.32	<b>Ground Clearance</b>	Centre Wheelbase	m <sub>2</sub>	mm	29																	
	4.34.1	<b>Aisle Width</b>	for Pallets 1000x1200 crossways	A <sub>st</sub>	mm	2310																	
4.34.2	<b>Aisle Width</b>	for Pallets 800x1200 lengthways	A <sub>st</sub>	mm	2243																		
4.35	<b>Turning Radius</b>		W <sub>a</sub>	mm	1401																		
Performance Data	5.1	<b>Travel Speed</b>	with / without Load		km/h	5.9 / 5.9						5.9 / 5.9											
	5.2	<b>Lift Speed</b>	with / without Load		m/s	0.12 / 0.22						0.11 / 0.22											
	5.3	<b>Lowering Speed</b>	with / without Load		m/s	0.42 / 0.23						0.40 / 0.23											
	5.7	<b>Gradeability</b>	w. / w.o. 30 min. rating		%	4.9 / 9.1						4.4 / 8.7											
	5.8	<b>Max. Gradeability</b>	w. / w.o. 5 min. rating		%	8.4 / 15.7						9.5 / 19.4											
	5.10	<b>Service Brake</b>				electric																	
Electric Motor	6.1	<b>Traction Motor</b>	rating at S2 60 min.		kW	1.5						1.5											
	6.2	<b>Pump Motor</b>	rating at S3 10%		kW	2.2																	
	6.3	<b>Max. Battery Box Size</b>	DIN 43535 L-shape	lxwxh	mm	111 / 210 x 784 x 537																	
	6.4	<b>Battery Voltage</b>	Nominal Capacity 5h rating		V/Ah	2x12 / 80						24 / 180											
	6.5	<b>Battery Weight</b>	Nominal + 5%		kg	72						172											
8.1	<b>Drive Unit</b>				transistor																		

Table 1 Lift Height		WF3200-1.0												WF3200-1.2									
		NT		TL				TF						TL					TF				
4.2	<b>Mast</b>	1970	2400	1750	1970	2170	2400	2650	1750	1970	2170	2400	2650	1750	1970	2170	2400	2650	1750	1970	2170	2400	2650
4.3	<b>Free-lift</b>	1480	1970	180	180	180	180	180	1250	1470	1670	1910	2160	180	180	180	180	180	1250	1470	1670	1910	2160
4.4	<b>Lift Height</b>	1550	2000	2500	2930	3330	3800	4300	2600	3030	3430	3900	4400	2500	2930	3330	3800	4300	2600	3030	3430	3900	4400
4.5	<b>Mast extended</b>	1970	2400	2896	3326	3726	4196	4696	2996	3426	3826	4296	4796	2896	3326	3726	4196	4696	2996	3426	3826	4296	4796
2.1	<b>Weight less batt.</b>	598	619	696	717	736	759	785	702	723	742	765	790	697	718	737	760	784	703	724	743	766	789

\* with optional load backrest: NT/TF mast - 804 mm

\*\*with optional load backrest: NT/TL/TF mast + 804 mm

ST / SX 3200





Distinguishing Mark	1.1	Manufacturer	Crown Equipment Corporation							
	1.2	Model			ST3200N 1.0	ST3200 1.0	SX3200 1.35	SX3200 1.35		
	1.3	Power Source	electric							
	1.4	Operator Type	pedestrian							
	1.5	Rated Capacity	Q	kg	1000			1350		
	1.6	Load Centre	c	mm	600					
	1.8	Load Distance	x	mm	621/603			686/666		
	1.9	Wheelbase	y	mm	1255			1362		
	Tyres/Wheels/ Chassis	2.1	Service Weight	less battery		kg	see table 1			
3.1		Tyres			mm	Rubber+Poly/Vulkollan		Vulkollan		
3.2		Tyre Size	front		mm	Ø 254 x 100		Ø 254 x 85		
3.3			rear		mm	Ø 4" x 102				
3.4		Additional Wheels	castor wheels		mm	Ø 90 x 50				
3.5	Wheels	number (x=driven wheels) front/ rear				1x +2 / 2				
Dimensions	4.2	Mast	collapsed height	$h_1$	mm	see table 1				
	4.3	Free-lift		$h_2$	mm	see table 1				
	4.4	Lift Height		$h_3$	mm	see table 1				
	4.5	Mast	extended height	$h_4$	mm	see table 1				
	4.9	Height Control Handle	in driving position min./max.	$h_{14}$	mm	790 / 1206				
	4.15	Fork Height	lowered	$h_{13}$	mm	51		50		
	4.19	Overall Length		$l_1$	mm	see table 2				
	4.20	Head Length		$l_2$	mm	see table 2				
	4.21	Overall Width	front	$b_1$	mm	712				
	4.22		rear	$b_2$	mm	inside straddle width + 152	inside straddle width + 204			
	4.22	Fork Dimension	DIN ISO 2331	thxwxl	mm	38 x 76 x 1145		38 x 102 x 1150		
	4.25	Fork Spread	adjustable min./max.	$b_5$	mm	232 - 765		252 - 785		
	4.26	Inside Straddle Dimension	infinite adjustment	$b_4$	mm	865-1165	965-1270	865-1165	965-1270	
4.32	Ground Clearance	Centre Wheelbase	$m_2$	mm	40					
4.34.1	Aisle Width	for Pallets 1000x1200 crossways	$A_{st}$	mm	see table 2					
4.34.2	Aisle Width	for Pallets 800x1200 lengthways	$A_{st}$	mm	see table 2					
4.35	Turning Radius		$W_a$	mm	1446		1553			
Performance Data	5.1	Travel Speed	with / without Load		km/h	5.9 / 5.9		5.9 / 5.7		
	5.2	Lift Speed	with / without Load		m/s	0.12 / 0.20		0.14 / 0.24		
	5.3	Lowering Speed	with / without Load		m/s	0.22 / 0.22		0.30 / 0.26		
	5.7	Gradeability	w. / w.o. 30 min. rating		%	4.9 / 9.1		4.4 / 8.7		
	5.8	Max. Gradeability	w. / w.o. 5 min. rating		%	8.4 / 15.7		9.5 / 19.4		
	5.10	Service Brake				electric				
Electric Motor	6.1	Traction Motor	60 min. rating		kW	1.5				
	6.2	Pump Motor			kW	2.2		3.0		
	6.3	Max. Battery Box Size	DIN 43535 / A	lxwxh	mm	185 x 649 x 613		230 x 670 x 600		
	6.4	Battery Voltage	Nominal Capacity 5h rating		V/Ah	2x12 / 80		4x6 / 200		
	6.5	Battery Weight	Nominal + 5%		kg	60		121		
8.1	Drive Unit				transistor					

Table 1 Lift Height				ST 3200 / SX 3200						
				TL				TT		
4.2	Mast	collapsed height	mm	1700	1910	2110	2350	2600	1858	1858
4.3	Free-lift		mm	150					1422	1422
4.4	Lift Height		mm	2400	2820	3220	3700	4200	3900	4250
4.5	Mast	extended height	mm	2910	3330	3730	4210	4710	4410	4760
2.1	Weight	ST less battery	kg	792	810	828	849	871	847	847
2.1	Weight	SX less battery	kg	955	973	991	1012	1034	1071	1071

Table 2 Aisle width with dimension (VDI 2198)				ST 3200		SX 3200	
				TL	TT	TL	TT
4.19	Overall Length		mm	1975	1993	2017	2037
4.20	Headlength		mm	825	843	867	887
4.34.1	Aisle Width	traverse 800x1200	mm	2360	2360	2489	2489
		1000x1200	mm	2356	2364	2489	2489
4.34.2	Aisle Width	traverse 1200x800	mm	2350	2364	2404	2420
		1200x1000	mm	2411	2425	2470	2485

### Electric System / Batteries

24-volt electrical system with nominal battery capacities up to 222 Ah.

### Standard Equipment

1. Maintenance free 3-phase (AC) traction
2. e-GEN® Braking System offers regenerative and frictionless electric braking. Mechanical braking applies only as parking brake
3. The X10® Control Handle places all truck functions at the operator's fingertips
4. Batteries
  - WF 1.0 and ST: 80 Ah maintenance free
  - WF 1.2 and SX: 180 Ah wet industrial
  - SX: 200 Ah maintenance free
5. DIN 80A Rema battery connector
6. Onboard 30A solid state charger
7. Drive tyre
  - WF 1.0 and ST: Rubber
  - WF 1.2 and SX: Vulkollan
8. Vulkollan Load Wheels
9. Castor Wheels
10. Ramp hold
11. Adjustable outriggers (ST and SX)
12. Polycarbonate mast guard
13. Storage tray above battery
14. Battery discharge indicator with lift lockout and integrated hour meter and fault code readout
15. Fork tip indicators
16. Key Switch
17. Rabbit/turtle switch incorporates two levels of programmable travel performance
18. Proportional lifting/lowering
19. Position Speed Control
20. Vertical Tiller Drive

### Optional Equipment

1. Drive tyre
  - WF 1.0 and ST: Vulkollan and Supertrac
  - WF 1.2 and SX: Rubber and Supertrac
2. Tandem load wheels
3. Load backrest
  - WF: 750 x 1200 mm
  - ST / SX: 832 x 1200 mm
4. Battery options: Maintenance free, wet industrial or lithium-ion
5. Battery connector SBE 160 red
6. Freezer conditioning
7. Side shifter (SX)
8. Flashing light
9. Travel alarm
10. Work Assist options
11. Fork length and fork spread options
12. Special paint
13. InfoLink® Ready
14. Keypad
15. Lithium-Ion Battery Ready

### Electrical System

24-volt fused electrical system with built in 30-amp charger. This premium fan-cooled, solid-state charger is durable and efficient. It has an advanced memory feature to allow for opportunity charging and can be set for either maintenance free or industrial batteries. A retractable power cord is standard.

### Operator Area and Controls

The X10® Control Handle, designed for simultaneous operation of all functions with one hand, improves side-stance operation for maximum visibility in both driving directions. An ergonomic forward/reverse thumb wheel allows for precise manoeuvring. The hand grips are urethane covered for insulation from cold and vibration with integrated horn buttons for easy activation.

A rabbit/turtle switch incorporates two levels of programmable travel performance so operators

can select the setting that matches their experience level or application requirements. Proportional lift and lowering allows easy and precise positioning of loads. The fast responsiveness and speeds of the lifting and lowering functions are designed to ensure high efficiency in all applications and all this together at a low noise level.

### Position Speed Control

When operating in tight spaces such as retail stores with narrow aisles or inside lorries and elevators, the operator can move the tiller from the Travel zone to the Position Speed Control zone. The travel speed in fork direction will then be automatically reduced to 1.5 km/h without the need to come to a halt and a further command from the operator. This ensures a smooth and productive workflow while avoiding unintentional interruptions.

### Vertical Tiller Drive

The Vertical Tiller Drive function goes one step beyond. When activated, the truck can be moved at up to 1.5 km/h even in the upper braking zone by simply keeping the travel switch pressed in the desired direction. Reducing the turning radius of the truck, the system enables operators to easily move pallets while reducing goods damage cost.

### e-GEN® Braking System

The power of the high-torque AC traction motor is used to stop the truck and keep it static until a travel input is requested, even when operating on a gradient.

This system eliminates adjustments and wear points for a lifetime of maintenance free use. An automatic parking brake activates if the truck is stopped and the operator leaves the platform or power is disconnected.

### Chassis

All models feature a heavy gauge one-piece welded steel frame backed by a lifetime warranty. Removable steel covers protect all critical system components. The low-profile power unit has been optimised to provide the best fork tip visibility available.

### 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.