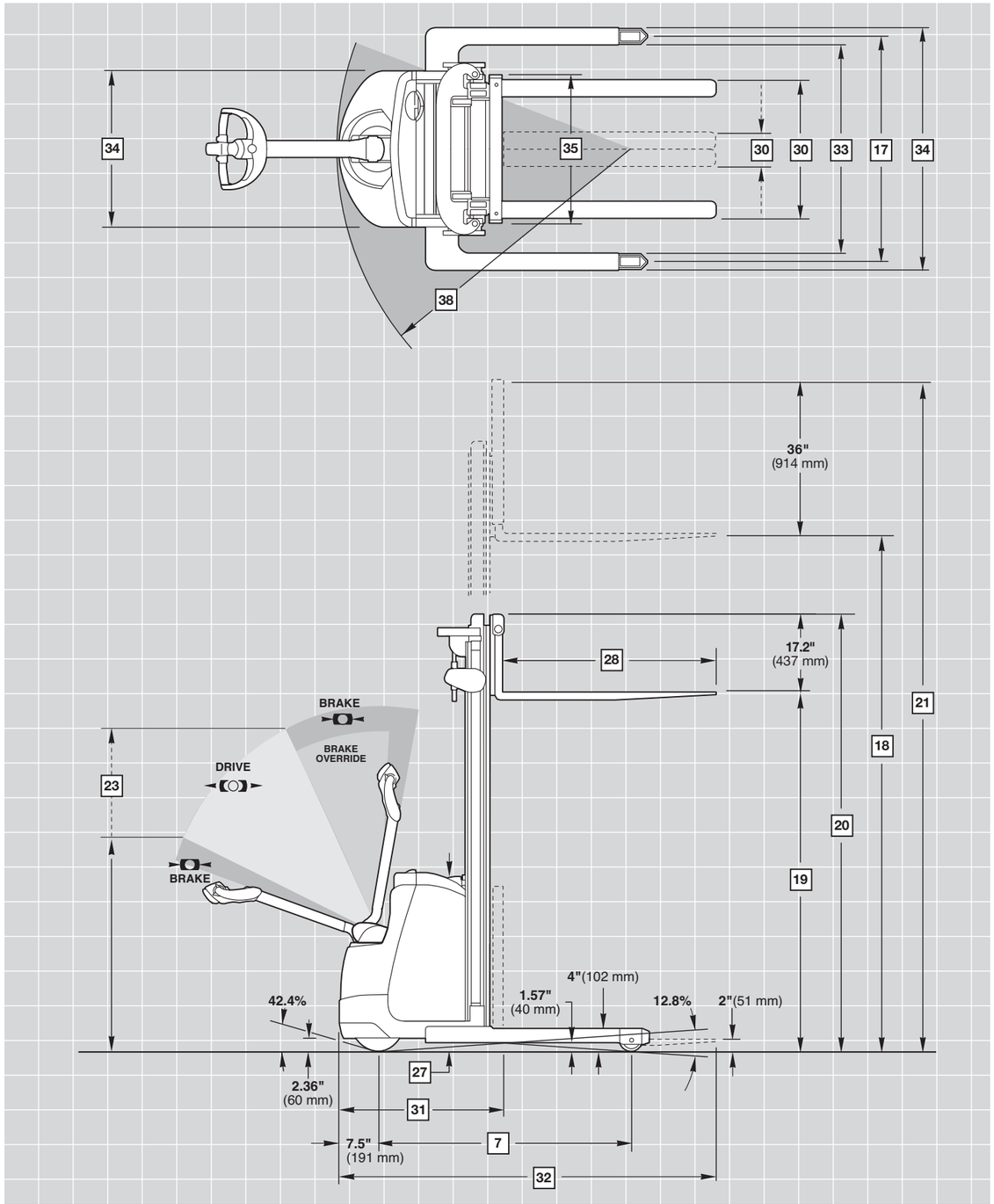
ST 3000 SERIES

Specifications
Stackers



					imperial	*metric*
General Information	1	**Manufacturer**			**Crown Equipment Corporation**	
	2	**Model**			**ST 3000-25**	
		Mast Type		in mm	TL-128	TL-3236
	3	**Power**			Electric	
	4	**Operator Type**			Walkie	
	5	**Load Capacity**	Max	lb kg	2500	1134
	6	**Load Center**		in mm	24	600
	7	**Wheelbase**		in mm	49	1255
	8	**Weight Less Battery**		lb kg	1856	842
Tires	13	**Wheel Size Front (d × w)**	Vulkollan	in mm	10 × 3.35	254 x 85
			Rubber	in mm	10 × 4	254 x 100
	14	**Wheel Size Rear (d × w)**	Vulkollan	in mm	4 × 2	102 x 50
			Steel	in mm	4 × 2	102 x 50
	15	**Additional Wheels Caster Wheel (d × w)**	Poly	in mm	3.54 × 2	90 x 50
	16	**Wheels Number (x=driven)**	Front/Rear		1x /2	
	17	**Track Width**	Rear	in mm	Inside Straddle + 3	Inside Straddle + 76
Dimensions	18	**Lift Height**		in mm	127.4	3236
	18a	**Capacity at Lift Height**	24" (600 mm) Load Center	lb kg	2500	1134
			26" (660 mm) Load Center	lb kg	2300	1043
			28" (711 mm) Load Center	lb kg	2130	966
			30" (762 mm) Load Center	lb kg	1980	898
	19	**Free Lift**	w/o Load Backrest	in mm	6	152
	20	**Collapsed Height**		in mm	83	2108
	21	**Extended Height**	w/o Load Backrest	in mm	Lift Height + 17.2	Lift Height + 436
			w/Load Backrest	in mm	Lift Height + 36	Lift Height + 914
	22	**Load Backrest Width**	Load Backrest Height 36" (914) High	in mm	36/42/48	914/1067/1219
	23	**Tiller Arm Ht in Drive Position**	Min/Max	in mm	31.1/47.5	790/1206
	24	**Outrigger Height**		in mm	4	100
	25	**Lowered Fork Height**		in mm	2	51
	27	**Power Unit Height**		in mm	32.28	820
	28	**Fork Lengths**		in mm	36/42/48	914/1067/1219
	29	**Fork Dimensions**	Thickness × Width	in mm	1.5 × 3	38 x 76
	30	**Width Across Forks**	Adjustable Min/Max	in mm	6.57 - 24.8	167-630
	31	**Headlength**		in mm	32.24	819
	32	**Overall Length**			Headlength + Fork Length	
	33	**Inside Straddle**		in mm	38-50	965-1270
	34	**Overall Width**	Front	in mm	28.03	712
			Rear	in mm	Inside Straddle + 6.4	Inside Straddle + 162
	35	**Fork Carriage Width**		in mm	26.57	675
	36	**Ground Clearance**	w/Load below Mast	in mm)	1.57	40
	37		Center Wheelbase	in mm	1.57	40
	38	**Turning Radius**		in mm	56.73	1446
Performance	39	**Length w/Outriggers**		in mm	60.28	1536
	40	**Travel Speed**	w/wo Load	mph km/h	3.11/3.42	5.0/5.5
	41	**Lift Speed**	w/wo Load	fpm m/s	21.65/35.43	.12/.18
	42	**Lowering Speed 1**	w/wo Load	fpm m/s	51.18/49.21	.26/.25
		Lowering Speed 2	w/wo Load	fpm m/s	19.69/11.81	.10/.06
	43	**Gradeability**	w/wo Load, 60 min Rating	%	2.4	4.5
			w/wo Load, 30 min Rating	%	4.9	9.1
	44	**Max Gradeability**	w/wo Load, 5 min Rating	%	8.4	15.7
	45	**Service Brake**			Electric	
Battery	46	**Maximum Battery Box**	L×W×H	in mm	7.28 × 25.55 × 24.13 (w/No Clearance)	185 x 649 x 613 (w/No Clearance)
	47	**Battery Voltage (Nominal Capacity 6 Hour Rating)**	4x Automotive Starter	V/Ah	24	87
			2x 12v MF	V/Ah	24	95
			4x Semi-industrial	V/Ah	24	156
			4x 6v MF	V/Ah	24	195
	48	**Type of Controller**	Drive		Transistor	
	49	**Battery Weight**	4x Automotive Starter	lb kg	128	58
			2x 12v MF	lb kg	132	60
			4x Semi-industrial	lb kg	220	100
			4x 6v MF	lb kg	267	121

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

					imperial	*metric*
General Information	1	**Manufacturer**			**Crown Equipment Corporation**	
	2	**Model**			**ST 3000-25**	
		Mast Type		in mm	TT-154	TT-3912
	3	**Power**			Electric	
	4	**Operator Type**			Walkie	
	5	**Load Capacity**	Max	lb kg	2500	1134
	6	**Load Center**		in mm	24	600
	7	**Wheelbase**		in mm	49	1255
	8	**Weight Less Battery**		lb kg	2048	929
Tires	13	**Wheel Size Front (d × w)**	Vulkollan	in mm	10 x 3.35	254 x 85
			Rubber	in mm	10 x 4	254 x 100
	14	**Wheel Size Rear (d × w)**	Vulkollan	in mm	4 x 2	102 x 50
			Steel	in mm	4 x 2	102 x 50
	15	**Additional Wheels Caster Wheel (d × w)**	Poly	in mm	3.54 x 2	90 x 50
	16	**Wheels Number (x=driven)**	Front/Rear		1x/2	
	17	**Track Width**	Rear	in mm	Inside Straddle + 3	Inside Straddle + 76
Dimensions	18	**Lift Height**		in mm	154	3912
	18a	**Capacity at Lift Height**	24" (600 mm) Load Center	lb kg	2500	1134
			26" (660 mm) Load Center	lb kg	2300	1043
			28" (711 mm) Load Center	lb kg	2130	966
			30" (762 mm) Load Center	lb kg	1980	898
	19	**Free Lift**	w/o Load Backrest	in mm	56	1422
	20	**Collapsed Height**		in mm	73	1858
	21	**Extended Height**	w/o Load Backrest	in mm	Lift Height + 17.2	Lift Height + 436
			w/Load Backrest	in mm	Lift Height + 36	Lift Height + 914
	22	**Load Backrest Width**	Load Backrest Height 36" (914) High	in mm	36/42/48	914/1067/1219
	23	**Tiller Arm Ht in Drive Position**	Min/Max	in mm	31.1/47.5	790/1206
	24	**Outrigger Height**		in mm	4	100
	25	**Lowered Fork Height**		in mm	2	51
	27	**Power Unit Height**		in mm	32.28	820
	28	**Fork Lengths**		in mm	36/42/48	914/1067/1219
	29	**Fork Dimensions**	Thickness × Width	in mm	1.5 × 3	38 x 76
	30	**Width Across Forks**	Adjustable Min/Max	in mm	6.57 - 24.8	167-630
	31	**Headlength**		in mm	32.95	837
	32	**Overall Length**			Headlength + Fork Length	
	33	**Inside Straddle**		in mm	38-50	965-1270
	34	**Overall Width**	Front	in mm	28.03	712
			Rear	in mm	Inside Straddle + 6.4	Inside Straddle + 162
	35	**Fork Carriage Width**		in mm	26.57	675
	36	**Ground Clearance**	w/Load below Mast	in mm)	1.57	40
	37		Center Wheelbase	in mm	1.57	40
	38	**Turning Radius**		in mm	56.73	1446
Performance	39	**Length w/Outriggers**		in mm	60.28	1536
	40	**Travel Speed**	w/wo Load	mph km/h	3.11/3.42	5.0/5.5
	41	**Lift Speed**	w/wo Load	fpm m/s	21.65/35.43	.12/.18
	42	**Lowering Speed 1**	w/wo Load	fpm m/s	51.18/49.21	.26/.25
		Lowering Speed 2	w/wo Load	fpm m/s	19.69/11.81	.10/.06
	43	**Gradeability**	w/wo Load, 60 min Rating	%	2.4	4.5
			w/wo Load, 30 min Rating	%	4.9	9.1
	44	**Max Gradeability**	w/wo Load, 5 min Rating	%	8.4	15.7
	45	**Service Brake**			Electric	
Battery	46	**Maximum Battery Box**	L×W×H	in mm	7.28 × 25.55 × 24.13 (w/No Clearance)	185 x 649 x 613 (w/No Clearance)
	47	**Battery Voltage (Nominal Capacity 6 Hour Rating)**	4x Automotive Starter	V/Ah	24	87
			2x 12v MF	V/Ah	24	95
			4x Semi-industrial	V/Ah	24	156
			4x 6v MF	V/Ah	24	195
	48	**Type of Controller**	Drive		Transistor	
	49	**Battery Weight**	4x Automotive Starter	lb kg	128	58
			2x 12v MF	lb kg	132	60
			4x Semi-industrial	lb kg	220	100
			4x 6v MF	lb kg	267	121

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ST 3000 Series Specifications

					imperial	*metric*
General Information	1	**Manufacturer**			**Crown Equipment Corporation**	
	2	**Model**			**ST 3000-25**	
		Mast Type		in mm	TT-168	TT-4267
	3	**Power**			Electric	
	4	**Operator Type**			Walkie	
	5	**Load Capacity**	Max	lb kg	2500	1134
	6	**Load Center**		in mm	24	600
	7	**Wheelbase**		in mm	49	1255
	8	**Weight Less Battery**		lb kg	2048	929
Tires	13	**Wheel Size Front (d × w)**	Vulkollan	in mm	10 x 3.35	254 x 85
			Rubber	in mm	10 x 4	254 x 100
	14	**Wheel Size Rear (d × w)**	Vulkollan	in mm	4 x 2	102 x 50
			Steel	in mm	4 x 2	102 x 50
	15	**Additional Wheels Caster Wheel (d × w)**	Poly	in mm	3.54 x 2	90x50
	16	**Wheels Number (x=driven)**	Front/Rear		1 x /2	
	17	**Track Width**	Rear	in mm	Inside Straddle + 3	Inside Straddle + 76
Dimensions	18	**Lift Height**		in mm	168	4267
	18a	**Capacity at Lift Height**	24" (600 mm) Load Center	lb kg	2500	1134
			26" (660 mm) Load Center	lb kg	2300	1043
			28" (711 mm) Load Center	lb kg	2130	966
			30" (762 mm) Load Center	lb kg	1980	898
	19	**Free Lift**	w/o Load Backrest	in mm	56	1422
	20	**Collapsed Height**		in mm	73	1858
	21	**Extended Height**	w/o Load Backrest	in mm	Lift Height + 17.2	Lift Height + 436
			w/Load Backrest	in mm	Lift Height + 36	Lift Height + 914
	22	**Load Backrest Width**	Load Backrest Height 36" (914) High	in mm	36/42/48	914/1067/1219
	23	**Tiller Arm Ht in Drive Position**	Min/Max	in mm	31.1/47.5	790/1206
	24	**Outrigger Height**		in mm	4	100
	25	**Lowered Fork Height**		in mm	2	51
	27	**Power Unit Height**		in mm	32.28	820
	28	**Fork Lengths**		in mm	36/42/48	914/1067/1219
	29	**Fork Dimensions**	Thickness × Width	in mm	1.5 × 3	38 x 76
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	31	**Headlength**		in mm	32.95	837
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	34	**Overall Width**	Front	in mm	28.03	712
			Rear	in mm	Inside Straddle + 6.4	Inside Straddle + 162
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	36	**Ground Clearance**	w/Load below Mast	in mm)	1.57	40
	37		Center Wheelbase	in mm	1.57	40
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	43	**Gradeability**	w/wo Load, 60 min Rating	%	2.4	4.5
			w/wo Load, 30 min Rating	%	4.9	9.1
	44	**Max Gradeability**	w/wo Load, 5 min Rating	%	8.4	15.7
	45	**Service Brake**			Electric	
Battery	46	**Maximum Battery Box**	L×W×H	in mm	7.28 × 25.55 × 24.13 (w/No Clearance)	185 x 649 x 613 (w/No Clearance)
	47	**Battery Voltage (Nominal Capacity 6 Hour Rating)**	4x Automotive Starter	V/Ah	24	87
			2x 12v MF	V/Ah	24	95
			4x Semi-industrial	V/Ah	24	156
			4x 6v MF	V/Ah	24	195
	48	**Type of Controller**	Drive		Transistor	
	49	**Battery Weight**	4x Automotive Starter	lb kg	128	58
			2x 12v MF	lb kg	132	60
			4x Semi-industrial	lb kg	220	100
			4x 6v MF	lb kg	267	121

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Standard Equipment
1. 24-volt fused electrical system
2. MOSFET transistorized traction control system
3. Separately excited drive motor (SEM)
4. X10® Handle
5. Wet-cell starter battery pack, four 6-volt batteries at 87 amp hour
6. 30 amp fully automatic charger
7. Electric brake
8. Brake override
9. Anti-roll down
10. Regenerative motor braking
11. Heavy-duty drive unit
12. Drive unit enclosed in high ductile strength steel frame
13. Stamped steel power unit cover
14. Safety reversing button
15. 175-amp connector with disconnect handle
16. Color-coded wiring
17. High speed cut-out at lift height
18. Two pre-programmed performance levels
19. 10" x 3.35" wide (254 x 85 mm) Vulkollan drive tire
20. Vulkollan load wheels 4" x 2" wide (102 x 51 mm)
21. Adjustable outriggers
22. Battery compartment storage tray
23. Plexiglass mast guard
24. Horn
25. Key switch
26. Discharge indicator with hour meter and lift lockout

Optional Equipment
1. Rubber drive tire
2. Non-marking rubber drive tire
3. Diamond siped rubber drive tire
4. Spring loaded poly casters
5. Handset analyzer for calibration or fault analyzing
6. 36" (915 mm) high load backrest
7. Maintenance-free, semi-industrial or starter battery package
8. Keyless on/off toggle switch in lieu of key switch
9. Steel load wheels
10. Wire mesh mast guard
11. Soft start hydraulic control
12. Work Assist® Accessories:
    - Clip pad and hook
    - Operator fan
    - Storage pocket
    - Remote raise/lower control
13. Work Assist® Options:
    - Work platform (37.5" W x 26" L) (953 x 660 mm)

      Platform options:
      - Work lights
      - Operator fan
      - Clip pad and hook
      - Adjustable load tray
      - Remote raise/lower control
      - Casters
    - Snap-on platform

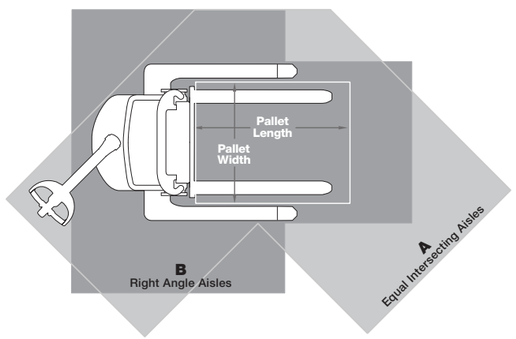
Battery and Charger

Battery package options are as follows:

- Maintenance-free battery pack, two 12-volt batteries at 95 amp hour
  four 6-volt batteries at 195 amp hour
- Semi-industrial deep cycle battery pack, four 6-volt batteries at 156 amp hour
- Wet-cell starter battery pack, four 6-volt batteries at 87 amp hour

  Flooded battery packs have a slide-out feature to check water level of bottom batteries.

A built-in 30-amp charger is standard with all battery packs. This premium fan-cooled, solid-state charger is durable and efficient. It has an advanced memory feature to allow for opportunity charging. The charger can be set for either maintenance free, wet cell or industrial batteries. An extension cord is included with any truck equipped with the built-in battery charger.



ST 3000 Series Aisle Planning Guide

ST 3000 – Right Angle and Intersecting Aisle

Pallet Width		Pallet Length in (mm)									
		30 (762)		**36** (915)		**40** (1016)		**42** (1067)		**48** (1220)	
		A	B	A	B	A	B	A	B	A	B
36 915	in	57.6	62.9	57.6	62.9	57.6	62.9	57.6	62.9	57.6	68.4
	mm	1463	1599	1463	1599	1463	1599	1463	1599	1463	1738
40 1016	in	60.9	64.0	60.9	64.0	60.9	64.0	60.9	64.0	60.9	68.6
	mm	1546	1625	1546	1625	1546	1625	1546	1625	1546	1625
42 1067	in	62.5	64.5	62.5	64.5	62.5	64.5	62.5	64.5	62.5	68.7
	mm	1588	1638	1588	1638	1588	1638	1588	1638	1588	1746
48 1220	in	67.5	69.0	67.5	69.0	67.5	69.0	67.5	69.0	67.5	72.0
	mm	1715	1752	1715	1752	1715	1752	1715	1752	1715	1829

Add 6" (152 mm) to all aisle dimensions for maximum maneuverability.

ST 3000 Series Technical Information

Operator Controls
Crown's robust X10® Handle places all controls in the optimum position for ease of operation with either hand and to minimize hand and wrist movements. An ergonomic forward/reverse thumb wheel allows for precise maneuvering.

The control hand grips are urethane covered for insulation from cold and vibration. Horn buttons are integrated into the control handle for easy activation. The handle contains a safety button which reverses the direction of the truck should the button touch the operator.

The physical efforts to hold the handle at a comfortable height was minimized to reduce fatigue, a distinct advantage. The operator is positioned to maximize the steer effort and maintain excellent visibility.

The rabbit/turtle switch incorporates two levels of programmable travel performance to match operator experience and application environment.

Exclusive brake override allows slow speed travel with the handle near vertical. This feature improves maneuverability in tight areas.

Performance
The ST 3000 Series benefits from Crown's design and engineering excellence.

The transistor control module works in conjunction with a new separately excited (SEM) drive motor to provide excellent acceleration and top travel speed loaded or empty. Transistor control is programmable for specific tasks or operator skill levels.

Smooth travel and lift combine with excellent controls to reduce product damage and increase productivity.

Electrical System
A heavy-duty 24-volt fused electrical system provides good travel and lift speeds.

Separately excited motor control eliminates directional contractors reducing maintenance and downtime.

The transistor control is sealed from dirt, dust and moisture for trouble-free operation. Transistor control features include over-temperature protection, polarity protection, self-test and visible diagnostics.

Regenerative motor braking is activated under a downhill condition, during plugging or when the directional control is returned to neutral. "Regen" reduces heat build-up and extends motor brush life.

An anti-roll down feature will apply the brakes if the truck rolls without a travel command.

175-amp battery connector with standard disconnect handle.

Hydraulic System
Heavy-duty hydraulic motor (3.0 kw) with integral pump and reservoir for maximum efficiency and durability.

Single-speed lift and two-speed lowering is available to the operator.

Cylinder rods are hard-plated chrome with polyurethane seals.

Relief valve tuned to capacity protects all components in the hydraulic system.

Drive Unit and Brakes
Heavy-duty gearbox with spur gears for low noise emission.

Drive unit is equipped with an electromagnetic disc brake that is spring applied and electrically released. Brake is activated by the control handle position. Brake rotor and disc are easily accessed for inspection and replacement. Regenerative motor braking assists brake effort and improves component life.

Drive unit mounts in truck frame with a permanently lubricated, twin-conical roller bearing that disperses load forces evenly, reducing maintenance and downtime.

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 the mast and clear view onto fork tips during load handling. Mast cushioning between stages ensures smooth operation. Heavy-duty mast and chain rollers are sealed and lubricated for life. Mast design allows for easy access to carriage rollers.

Fork Carriage
ST 3000 Series feature 25" (635 mm) wide pin-type fork carriage. Forks are adjustable from 6.5" to 24.8" (165 to 630 mm). Standard fork lengths are 36", 42" and 48" (914, 1067 and 1219 mm).

Serviceability
One-piece steel power unit cover is removed easily for access to all major components.

Brake rotor and disc inspection and replacement are easy.

Drive motor brush access is excellent.

Color-coded wiring speeds troubleshooting and the transistor control module uses visible LED flashes for fault communication. Optional plug-in hand set analyzer for servicing and programming capability.

Control handle switch cap is easily removed to expose components.

Wheels and Tires
- Drive tire – Vulkollan 10" dia x 3.35" wide (254 x 85 mm)
- Load wheels – Vulkollan 4" dia x 2" wide (ST) (102 x 51 mm)
- Optional poly casters are 3.5" dia x 2" wide (89 x 51 mm)

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.

Other Options Available
Contact your local Crown dealer.

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.

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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 and view our safety section to learn more.

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