

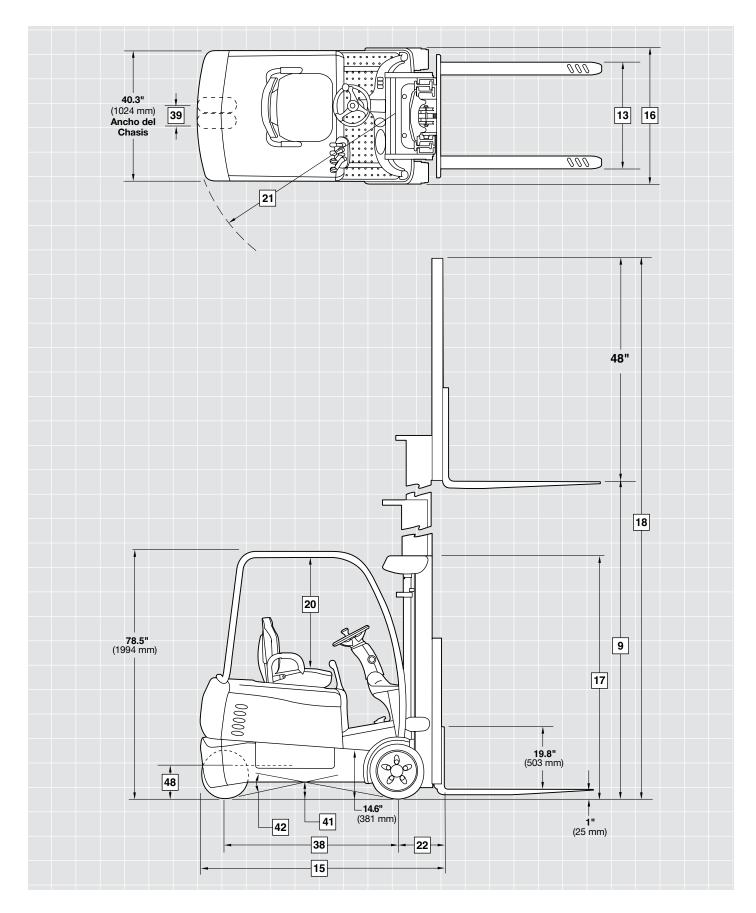
# **SC 5200** SERIES

# **Specifications**

Sit-Down Rider Lift Truck







			1		Imperial	Metric	Imperial	Metric	Imperial	Metric			
5	1	Manufacturer						ent Corporat					
General Information	2	Model		SC	-	X-30		X-30	522X-35				
Ē	3	Load Capacity*	Rated to 154" (3911)		3000	1361	3000	1361	3500	1588			
f	4	Load Center	Fork Face to Load C	CG in mm	24	600	24	600	24	600			
	5	Power	Electric					3 Volts					
er.	6	Operator Type			Sit-down Rider								
ě	7	Tire Type	Press-on Solid		Cushion								
<u> </u>	8	Wheels (x = driven)	Number Front/Rear	-	2x/2								
	9	Mast**	Lifting Height	in mm	190	4825	190	4825	190	4825			
	11		Free Lift Height†	in mm	35	885	35	885	35	885			
	12	Fork Carriage						lass II					
	13	Forks	Standard L x W x T	in mm	36x4x1.5	915x102x38	36x4x1.5	915x102x38	36x4x1.75	915x102x45			
Dimensions			Optional Lengths Fork Spread–Min/M	in mm lax in mm	30, 39, 42, 45, 48, 54, 60, 63, 72 9/33	760, 990, 1065, 1145, 1220, 1370, 1525, 1600, 1830 230/840	30, 39, 42, 45, 48, 54, 60, 63, 72 9/33	760, 990, 1065, 1145, 1220, 1370, 1525, 1600, 1830 230/840	30, 32, 39, 40, 42, 43.31, 45, 48, 54, 60, 72 9/33	760, 815, 990, 1015, 1065, 1100, 1145, 1220, 1370, 1525, 1830 230/840			
ů,	14	Tilt	B°/F°	degree	5/00	200/040		/5	5/00	200/040			
<u>ă</u>	14	Headlength***		in mm	68.5	1740	72.8	1849	73.0	1854			
	16	Width Overall	Standard Tread	in mm	42.0	1067	42.0	1049	42.0	1054			
	17		Mast Collapsed	in mm	83	2110	83	2110	83	2110			
	18	Height	Mast Extended†	in mm	238	6045	238	6045	238	6045			
	20	Seat to Bottom of OHG Clearance (Loaded)	Std / Suspension	in mm	39.06/38.69	992/982	39.06/38.69	992/982	39.06/38.69	992/982			
	21	Turning Radius		in mm	54.2	1377	58.5	1486	58.5	1486			
	22	Load Distance***	Wheel Cntr to Fork F		14.3	365	14.3	365	14.5	370			
	23	Aisle Width	Right Angle Stack	in mm		Turn Radius +							
	24a	Speed Travel <sup>††</sup> 36V	Empty/Loaded	mph mm/s	8.5/7.6	3800/3398	8.5/7.6	3800/3398	8.5/7.6	3800/3398			
a	24b	48V	Empty/Loaded	mph mm/s	9.5/8.9	4247/3979	9.5/8.9	4247/3979	9.5/8.9	4247/3979			
ů.	25a	Speed Lift <sup>††</sup> 36V DC	Empty/Loaded	fpm mm/s	90/63	457/320	90/63	457/320	90/60	457/305			
۳ ۳	25b	36V AC	Empty/Loaded	fpm mm/s	110/72	559/366	110/72	559/366	110/69	559/351			
for 1	25c	48V AC	Empty/Loaded	fpm mm/s	110/72	559/391	110/72	559/391	110/75	559/381			
Performance	26a	Speed Lower Manual	Empty/Loaded	fpm mm/s	90/90	457/457	90/90	457/457	90/90	457/457			
-	26b	EPV	Empty/Loaded	fpm mm/s	100/100	508/508	100/100	508/508	100/100	508/508			
<u>ч</u>	32	Weight, Less Battery	Empty/Loaded	lb kg	6149	2790	5974	2710	6216	2820			
le l	33		Unloaded Front	lb kg	4047	1835	4300	1950	4316	1960			
Weight	34	Axle Load with Max Battery	Unloaded Rear	lb kg	3852	1745	3924	1780	4150	1880			
-	35		Number Front/Rear		0002	1745		/2	4100	1000			
	36	Tires	Size Front	in mm	18x7x12.1	457x178x307		457x178x307	18 x 7 x 12 1	457x178x307			
	37		Size Rear	in mm		381x127x286		381x127x286		381x127x286			
	38	Wheelbase		in mm	46.2	1173	50.5	1283	50.5	1283			
is.	39	Tread Width	Front	in mm	35.0	889	35.0	889	35.0	889			
Chassis	50		Rear	in mm	6.7	170	6.7	170	6.7	170			
ธ	40	Ground Clearance,	Lowest Point	in mm	3.0	76	3.0	76	3.0	76			
	41	Loaded	Center of Wheelbas		4.8	122	5.0	127	5.0	127			
	42	Grade Clearance, Loaded		%	27.1 24.6 24.6								
	43	Brakes	Service					Electric Assist	t				
	44		Parking		Auto - Electric								
	45	Battery	Туре			Lead Acid							
	46	a start and a start a	Capacity AH		510 17.8			80	680 23.7				
2			Maight Min	kWh				3.7					
ter	47		Weight - Min Weight - Max	lb kg Ib kg	1475 1750	670 795	1850 2250	840 1025	1850 2250	840 1025			
Battery			Size - Max	Length	16.63	422	2250	530	2250	530			
-				Width	38.81	986	38.81	986	38.81	986			
		W W	<u> </u>	Height	22.63 †††	579 †††	22.63 †††	579 +++	22.63 +++	579 +++			
	48	Battery Floor Height	With Rollers/ w/o Rolle		10.4/9.8	264/249	10.4/9.8	264/249	10.4/9.8	264/249			
ε	49	Motors	Traction Motor, dia	in mm	7.5	191	7.5	191	7.5	191			
Motors	50	WOLUIS	Lift Motor, dia	in mm	6.7	170	6.7	170	6.7	170			
ž	51	Operating Pressure	For Attachments	psi bar	Up to 3100	Up to 214	Up to 3100	Up to 214	Up to 3100	Up to 214			
		-	or load dimonsions a					•					

Optional masts, attachments, longer load dimensions and higher lifting heights may result in derating of the capacity. Contact your local dealer.
Other mast heights available. See chart for other standard mast heights.
Add 4.25" (108 mm) for quad masts, add 2" (51 mm) for sideshift option.
Includes load backrest.
Performance specifications are based on a truck equipped with a 190" (4825 mm) triple telescopic mast.
Without Battery Comp't Rollers - Max battery height is 23.29" (529 mm) at the battery center lifting eye and 22.63" (575 mm) at the battery front corner. With Battery Comp't Rollers - Max battery height is 22.80" (579 mm) at the battery center lifting eye and 22.14" (562 mm) at the battery front corner.

				Imporial	Metric	Imperial	Metric				
	-	Manufacturer		Imperial		ent Corporation	IVIELIIC				
General Information	2	Manufacturer	C	С	524X-35	524X-40					
lati	2				1588	4000	1814				
Ĕ		Load Capacity*		<u> </u>		24					
f	4	Load Center	Fork Face to Load CG in m	m 24	600		600				
al	5	Power	Electric			3 Volts					
٦e	6	Operator Type			Sit-down Rider						
9e	7	Tire Type	Press-on Solid		Cushion						
-	8	Wheels (x = driven)	Number Front/Rear		2x/2						
	9	Mast**	Lifting Height in m		4825	190	4825				
	11		Free Lift Height† in m	m 35	885	35	885				
	12	Fork Carriage				Class II	0.15 100 15				
	13	Forks	Standard L x W x T in m	m 36x4x1.75		36x4x1.75	915x102x45				
			Optional Lengths in m	m 30, 32, 39, -	760, 815, 990, 40, 1015, 1065,	30, 32, 39, 40,	760, 815, 990, 1015, 1065,				
				42, 43.31, 4	45, 1100, 1145,	42, 43.31, 45,	1100, 1145,				
				48, 54, 60,		48, 54, 60, 72	1220, 1370,				
Suc					1525, 1830	0.5/00	1525, 1830				
isi	14	T:14	Fork Spread–Min/Max in m B°/F° degre		230/840	9.5/36	240/915				
Dimensions		Tilt Headlength***			<del></del> 1960	/5 77.2	1960				
ā	15 16	Width Overall	in m Standard Tread in m		1067	42.0	1067				
	10				2110	83	2110				
	17	Height	· · · · · · · · · · · · · · · · · · ·		6045	238					
	20	Seat to Bottom of OHG	Mast Extended† in m	230	0045	230	6045				
	20	Clearance (Loaded)	Std / Suspension in m	m 39.06/38.6	<u>992/982</u>	39.06/38.69	992/982				
	21	Turning Radius	in m	m 62.7	1595	62.7	1595				
	22	Load Distance***	Wheel Cntr to Fork Face in m	m 14.5	370	14.5	370				
	23	Aisle Width	Right Angle Stack in m	m Tur	n Radius + Load Distanc	e + Load Length + C	Clearance				
	24a	Speed Travel <sup>††</sup> 36V	Empty/Loaded mph mm	/s 8.5/7.6	3800/3398	8.5/7.6	3800/3398				
ø	24b	48V	Empty/Loaded mph mm	/s 9.5/8.9	4247/3979	9.5/8.9	4247/3979				
an	25a	Speed Lift <sup>††</sup> 36V DC	Empty/Loaded fpm mm	/s 90/60	457/305	90/58	457/295				
Performance	25b	36V AC	Empty/Loaded fpm mm	/s 110/69	559/351	110/67	559/340				
£	25c	48V AC	Empty/Loaded fpm mm	/s 110/75	559/381	110/73	559/371				
Бе	26a	Speed Lower Manual	Empty/Loaded fpm mm	/s 90/90	457/457	90/90	457/457				
	26b	EPV	Empty/Loaded fpm mm	/s 100/100	508/508	100/100	508/508				
Ħ	32	Weight, Less Battery	lb l	(g 6040	2740	6260	2840				
Weight	33	Axle Load with	Unloaded Front Ib I	(g 4518	2050	4506	2845				
ž	34	Max Battery	Unloaded Rear Ib I	g 4122	1870	4355	1975				
	35	Tires	Number Front/Rear		2	/2					
	36		Size Front in m	m 18x7x12.	1 457x178x307	18x7x12.1	457x178x307				
	37		Size Rear in m	m 15x5x11.2	25 381x127x286	15x5x11.25	381x127x286				
	38	Wheelbase	in m	m 54.7	1390	54.7	1390				
sis	39	Tread Width	Front in m	m 35.0	889	35.0	889				
Chassi			Rear in m		170	6.7	170				
б	40	Ground Clearance, Loaded	Lowest Point in m	m 3.0	76	3.0	76				
	41	·	Center of Wheelbase in m		127	5.0	127				
	42	Grade Clearance, Loaded		%	22.4		2.4				
	43	Brakes	Service			Electric Assist					
	44		Parking		Auto -	Electric					
	45	Battery	Туре			Acid					
	46	Da		H	850	850					
>			kV		29.6		9.6				
Battery	47		Weight - Min Ib I	<u> </u>	1025	2250	1025				
3at			Weight - Max Ib I	<u> </u>	1180	2600	1180				
ш			Size - Max Leng		638	25.13	638				
		LW	Wid Heig		986 † 579 †††	<u>38.81</u> 22.63 †††	986 579 †††				
	48	Battery Floor Height	With Rollers/ w/o Rollers in m			10.4/9.8	264/249				
S	49	Motors	Traction Motor, dia in m		191	7.5	191				
ğ	50		Lift Motor, dia in m		170	6.7	170				
Motors	51	Operating Pressure	For Attachments psi b			Up to 3100	Up to 214				
		anal maste attachmente longer lo			•	· · ·	•				

Optional masts, attachments, longer load dimensions and higher lifting heights may result in derating of the capacity. Contact your local dealer. Other mast heights available. See chart for other standard mast heights. Add 4.25" (108 mm) for quad masts, add 2" (51 mm) for sideshift option.

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† Includes load backrest.

Specifications

Ma	st Chart SC 5200 Series	TF				TT									
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
9	Lifting Height	114	2895	126	3200	172	4365	190	4825	208	5280	226	5740	241	6120
11	Free Lift Height*	29	735	35	889	29	735	35	885	41	1040	47	1190	52	1320
14	Tilt B/F (degree)	5/5**	5/5**	5/5**	5/5**	5/5	5/5	5/5	5/5	5/5	5/5	3/5	3/5	3/5	3/5
17	Mast Collapsed Height	77	1955	83	2110	77	1955	83	2105	89	2260	95	2410	100	2540
18	Mast Extended Height*	162.5	4130	174.5	4430	220.5	5605	238.5	6060	256.5	6515	274.5	6975	289.5	7355

Ma	st Chart SC 5200 Series	QUAD									
		in	mm								
9	Lifting Height	240	6095	246	6245	258	6550	264	6705	276	7010
11	Free Lift Height*	36	910	38	965	41	1040	44	1115	47	1190
14	Tilt B/F (degree)	5/5**	5/5**	3/5**	3/5**	3/5**	3/5**	3/5**	3/5**	3/5**	3/5**
17	Mast Collapsed Height	83	2105	86	2180	89	2260	92	2335	95	2410
18	Mast Extended Height*	288	7315	294	7470	306	7775	312	7925	324	8230

\* Includes load backrest.

\*\* Not available with drive-in rack or double-function hydraulics.

#### **Standard Equipment**

- 1. Crown's Access 1 2 3<sup>e</sup> Comprehensive System Control
- 2. e-GEN<sup>®</sup> Braking System with automatic parking brake
- 3. Intrinsic Stability System®
  - Travel speed reduction and appropriate brake control when forks are above free lift
  - Forward tilt interlock above free lift
  - Controlled tilt speeds
  - Counterweight exceeds
     required standards
  - Cornering speed control
  - Ramp hold
  - Ramp speed control
- 4. 36/48-volt system
- 5. Driveability standard features
  - 15" (381 mm) step height
  - Large, uncluttered floorboard
  - Rubber floor mat
  - Rubber accelerator and brake pedal
  - Large, entry/exit "window"Contoured battery cover for
  - easy entry/exit
    Crown FlexSeat<sup>™</sup> fabric with hip restraint and anti-
  - cinch seatbeltCompact steering wheel and steering column

- Infinitely adjustable tilt steering
- Operator forward design for enhanced visibility
- Low cowl for fork and floor visibility
- Nylon covered manual hydraulic control levers with integrated tactile feedback
- Natural position for forward/reverse selector
- Automatic parking brake
- Crown FlexSeat with a passive suspension and back flex
- 6. Crown display
  - Battery discharge indicator with lift interrupt and re-key feature
  - Hour meters / travel distance / stop watch
  - Pin code access capable
  - Event code display with five (5) key navigation
  - Access 1 2 3 diagnostics
  - P1, P2, P3 Performance tuning
- 7. 350 amp battery connector
- 8. InfoPoint<sup>®</sup> System with Quick Reference Guide
- 9. Color-coded wiring
- 10. Lift out or side removal battery access
- 11. Dual 15" (381 mm) steer tires
- 12. Large 18" (457 mm) cushion drive tires

- 13. Crown-manufactured drive and lift motors
- 14. Proportional rack and pinion steering

SC 5200 Series

- 15. Waterfall design overhead guard
- 16. 48" (1220 mm) high load backrest
- 17. No tool lift out floorboards for service access
- 18. High visibility mast with in-line hose routing
- 19. O-ring face seal hydraulic fittings
- 20. 5° Forward / 5° Back tilt
- 21. All AC System
- 22. On-Demand Steering
- 23. Drive Axle Debris Guard

#### **Optional Equipment**

- Battery rollers
   Quick Charge 1 or 2 connectors on seat deck
- 3. Freezer and corrosion conditioning
- 4. Sideshifter
- 5. Hydraulic valves for attachments
- 6. Quick disconnect hydraulic connectors
- 7. Steering spinner knob
- 8. Storage tray
- 9. Keyless on/off switch

# **Technical Information**

- 10. Keypad lock
- 11. Foot operated directional control
- 12. Fork lengths
- 13. Polished and tapered forks
- 14. Load backrest heights
- 15. Super elastic tires
- 16. Drive-in rack overhead guard
- 17. 83" overhead guard
- 18. Tilt options
- 19. Working lights
- 20. Flashing lights
- 21. Turn signals
- 22. Brake, tail and back-up light
- 23. Audible travel alarms
- 24. Tilt position assist
- 25. Arm rest
- 26. Grabbar
- 27. Work Assist® Accessories
  - Clip pad and hook
  - Clamp
  - Clamp and mounting plate
  - Operator fan
  - Fire extinguisher
  - Mirrors
  - Shrink Wrap Holder
  - Cup Holder
  - Pencil Holder
  - Storage pocket behind seat

- 28. Suspension Seat fabric or vinyl
- 29. Crown FlexSeat vinyl
- 30. Rear Post Handle with Horn Button
- 31. Hydraulic control options with directional travel and horn integrated into the adjustable armrest
  - Fingertip control levers
  - Dual-axis joystick control levers

#### Driveability

The SC 5200 Series benefits from Crown's design and engineering excellence. Numerous design features improve operator comfort and productivity.

A low 15" (381 mm) step height first greets the operator. A low battery cover that is streamlined helps the operator glide into the truck's Crown FlexSeat<sup>™</sup>. The overhead guard is shaped to open up the entry/exit window. The compact tilt steer column and steer wheel further facilitate entry/exit. Floorboards are large, uncluttered and rubber covered to insulate the operator from vibration. Brake and accelerator pedals are rubber covered to provide good grip and comfort.

Several designs contribute to better visibility everywhere you look. A low cowl for fork visibility, a unique waterfall overhead guard for load handling, a high visibility mast and a compact steer column all improve operator visibility around the truck.

Control handles are crafted into the compartment and "fanned" for easy selection. They are nylon covered with tactile feedback for comfort and easy selection. Control actuation forces are minimal and responsive.

#### **Crown Drive System**

Crown has applied the latest generation AC drive system, enhanced with Access 1 2 3 technology. The demand for high efficiency systems that closely match customer torque requirements is met with this generation control system. Crownmanufactured, independently controlled, AC drive motors are specifically designed to optimize system integration between the traction and braking controls.

Crown's Access 1 2 3 technology provides optimum performance and control by offering a communication interface for operators and technicians, intelligent coordination of lift truck system and simplified service with advanced diagnostics.

The Crown display is used for easy troubleshooting, access service history and set performance features. Three modes of performance can be selected to accommodate operator experience or application requirements.

#### e-GEN<sup>®</sup> Braking System

Variable regenerative motor braking is optimized and assisted with electric friction brakes, eliminating maintenance associated with typical wet, disk or drum and shoe style brakes. The appropriate amount of stopping force is applied to match operator brake input and the current operating conditions of the truck.

The closed loop Access 1 2 3 traction control will keep the truck static until a travel input is requested, even when operating on a grade.

Automatic electric parking brakes activate when the operator leaves the seat, a travel input has not been requested or battery power has been disconnected.

#### Proportional Rack and Pinion Steering System

Hydrostatic power steering uses a large, totally enclosed rack and pinion gear assembly. Load-sense hydrostatic steering is an ondemand system which reduces energy consumption. Smooth, quiet steering control with minimal operator effort required at the steer tiller. Crown's hydrostatic steering system is simplified with significantly fewer parts, thus reducing maintenance requirements.

The steering geometry is matched to the controller to deliver smooth steering at all angles. The advantage is less tire scrubbing which extends tire life.

Both motors receive power, even in the tightest turns. This helps the truck to accelerate, turn and maneuver even from a full turn start position.

Cornering speed control regulates the drive motor's output by the turning degree of the truck. The advantage is smooth, stable steering which may increase operator confidence and productivity. Large, (15" diameter, 381 mm) dual steer wheels provide good traction and stability.

#### **Hydraulics**

The hydraulic system provides continuous filtration. A heat stabilized polymer hydraulic tank is free from contamination and retains strength over a wide range of temperatures. Hydraulic attachments can be added easily in the field using modular valve bodies. Hydraulic valve handle actuation is precise and oil is controlled using metered spool valves and motor speeds.

Ram displacement type lift cylinders and two double acting tilt cylinders are Crownmanufactured. All rams and piston rods are hard chrome plated to reduce pitting and extend cylinder packing life. O-ring face seal fittings are used to eliminate leaks.

#### **Mast Assembly**

Crown-manufactured mast assembly utilizes a "flush-face" interlocked I-beam design to improve visibility and save truck length. Roller bearing studs are welded on both sides of the rails for maximum strength and roller bearings are canted to run in the thick cross section of the rail. Tie bars wrap around the rails for added strength and to resist off-center load forces.

"In-line" hose routing opens up visibility. Cylinders are placed to the sides to create a high visibility design.

The mast has four points of attachment to the truck for good load force distribution. Two mounting points are at the frame, where tilt cylinders attach. Tilt cylinders use spherical bushings to resist off center load



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. distortions. Two large diameter studs secure the mast to the drive units.

#### **Drive Units**

Two Crown-manufactured independent double reduction planetary gear drives offer 27 to 1 gear reduction. The first and second reduction use helical gears for low noise and efficiency. The drive unit gears are splash lubricated in an oil bath.

#### Carriage

An ITA Class II carriage is standard. An optional hook type ITA sideshifter or other attachments are easily added. Optional fork lengths are available.

#### **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.

#### **Crown Equipment Corporation**

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

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