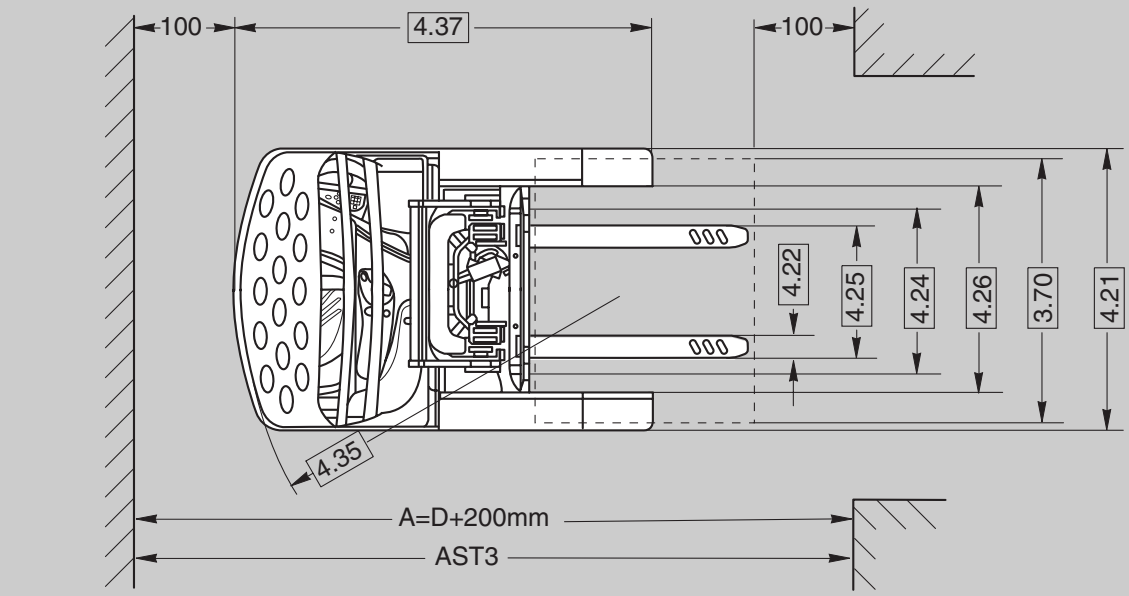
Specifications

ESR 5000 Series

Reach Truck

ESR 5000 Series


100
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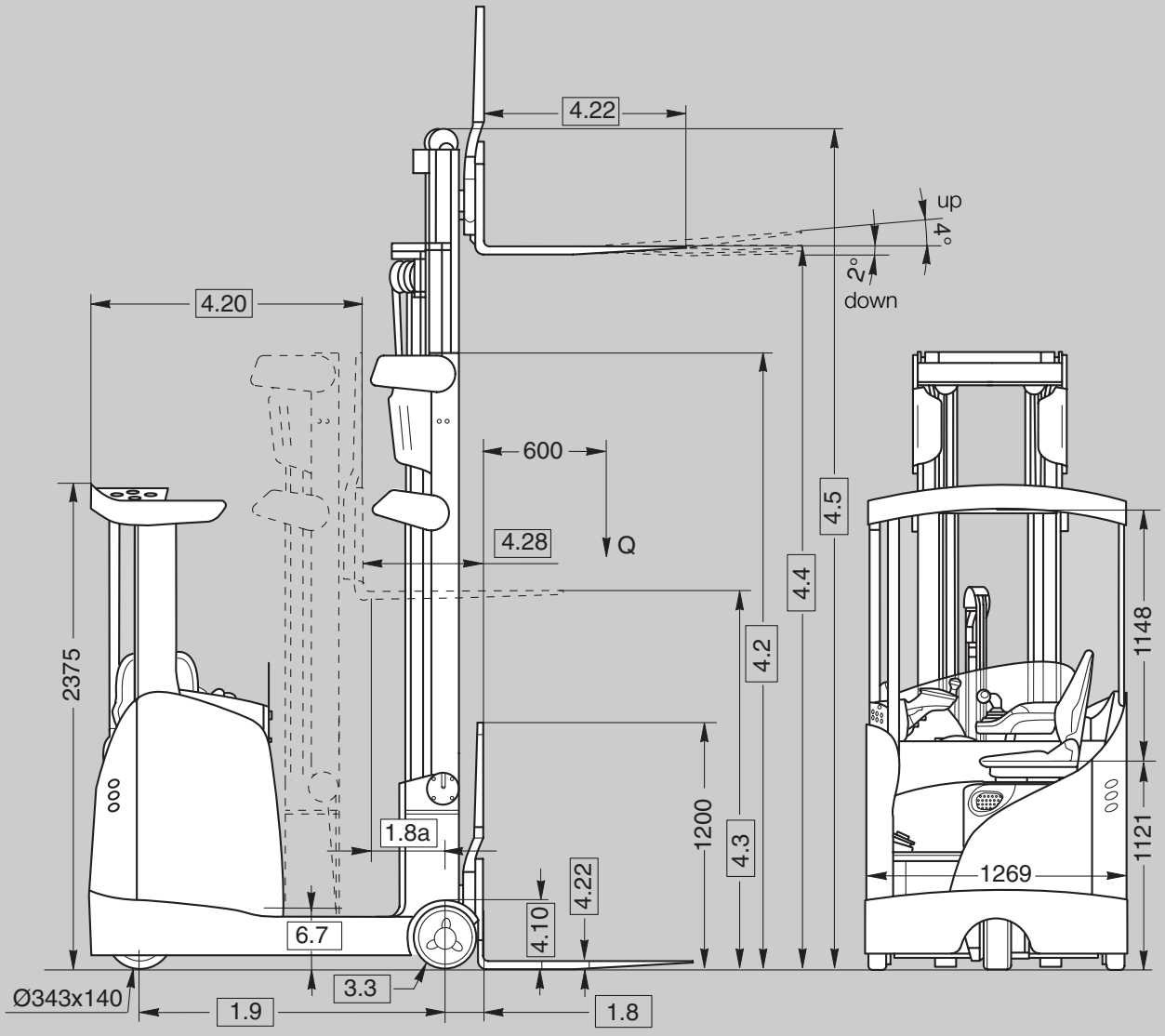
A=D+200mm
AST3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1.8a
4.22
4.10
6.7
3.3
Ø343x140
1.9
1.8

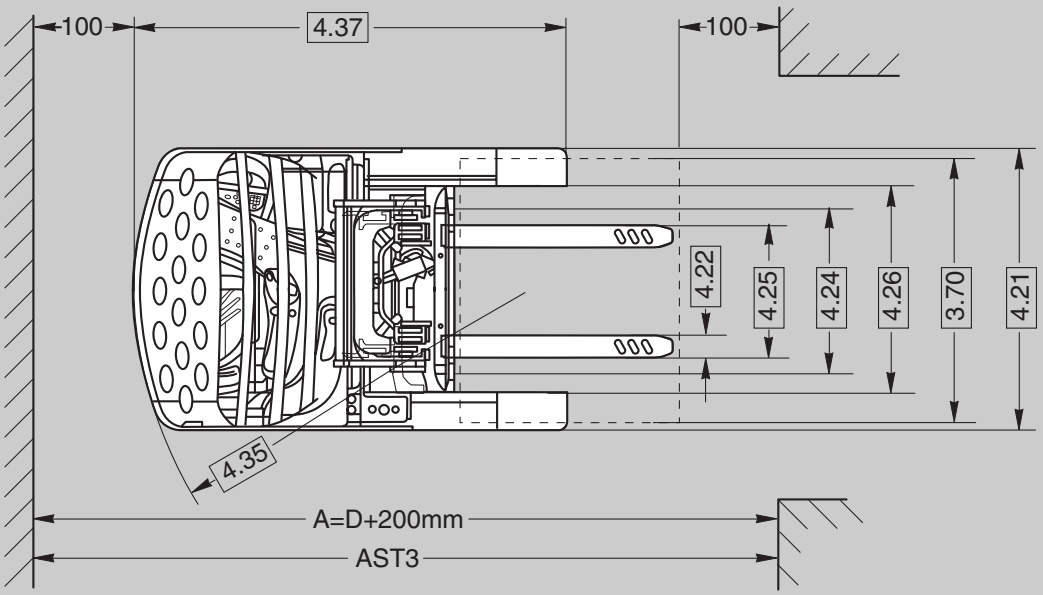
General Information	1.1	**Manufacturer**				Crown Equipment Corporation		
	1.2	**Model**				ESR 5000-1.4	ESR 5000-1.6	ESR 5000-2.0
	1.3	**Power**				electric		
	1.4	**Operator Type**				sit down		
	1.5	**Load Capacity**		Q	t	1.4	1.6	2.0
	1.6	**Load Centre**		c	mm	600		
	1.8	**Load Distance**	mast extended	x1	mm	see table of dimensions 2		
	1.8a		mast retracted	x	mm	187	217	217
	1.9	**Wheel Base**		y	mm	1380	1475	1475
Weights	2.1	**Weight**	less battery		kg	2534 ▲	2557 ▲	2661▲▲
	2.4	**Axle Load**	reach extended		kg	see table of dimensions 5		
	2.5		reach retracted		kg	see table of dimensions 5		
Tyres	3.1	**Tyre Type**	D/L			Vulkollan		
	3.2	**Tyres**	front		mm	343 x 140		
	3.3		rear		mm	285 x 100	330 x 100	330 x 100
	3.5	**Wheels**	no. (x=driven) front/rear			1x / 2		
	3.7	**Track Width**	rear	b11	mm	see table of dimensions 3		
Dimensions	4.1	**Fork Carriage Tilt**	forward / backward	angle	°	2 / 4		
	4.2	**Mast**	collapsed height	h1	mm	see table of dimensions 4		
	4.3	**Free Lift ***	w.o. load backrest	h2	mm	see table of dimensions 4		
	4.4	**Lift Height**		h3	mm	see table of dimensions 4		
	4.5	**Mast ****	extended height, w.o. lbr	h4	mm	see table of dimensions 4		
	4.7	**Overhead Guard Height**	standard / angled	h6	mm	2375 / 2554		
	4.8	**Seat Height**	compressed	h7	mm	1113		
	4.10	**Outrigger Height**			mm	301	346	346
	4.15	**Lowered Fork Height**		h13	mm	40	40	45
	4.16	**Head Room**	overhead guard std./angled		mm	1182 / 1275		
	4.20	**Headlength**		l2	mm	see table of dimensions 1		
	4.21	**Overall Width**	front / rear	b1/b2	mm	1269 / see table of dimensions 3		
	4.22	**Fork Dimension**		thxwxl	mm	38x100x1145	45x100x1145	45x100x1145
	4.23	**Fork Carriage**	ISO class		mm	2 A		
	4.24	**Fork Carriage Width**	w. lbr / w.o. lbr	b3	mm	770 / 750		
	4.25	**Width Across Forks**		b5	mm	see table of dimensions 3		
	4.26	**Inside Straddle**		b4	mm	see table of dimensions 3		
	4.28	**Reach**		l4	mm	see table of dimensions 1		
	4.32	**Ground Clearance**	centre wheelbase	m2	mm	76		
	4.33	**Working Aisle Width**	1000x1200 travers lowered	Ast	mm	see table of dimensions 1		
	4.34		800x1200 length lowered	Ast	mm	see table of dimensions 1		
	4.35	**Turning Radius**		Wa	mm	1645	1734	1734
	4.37	**Length Over Outriggers**		l7	mm	1785	1903	1903
Performance	5.1	**Travel Speed**	w./w.o. load		km/h	12.0 / 12.0		
	5.2	**Lift Speed**	w./w.o. load		m/s	0.41 / 0.69	0.39 / 0.69	0.32 / 0.54
	5.3	**Lower Speed**	w./w.o. load		m/s	0.57 / 0.57	0.57 / 0.57	0.57 / 0.50
	5.4	**Reach Speed**	w./w.o. load		m/s	0.19 / 0.19		
	5.7	**Max. Gradeability**	w./w.o. load		%	12 / 12		
	5.10	**Service Brake**				hydraulic / electric		
Motors	6.1	**Traction Motor**	60 min. rating		kW	6.8		
	6.2	**Lift Motor**	15% on time		kW	13.6		
	6.3	**Max. Battery Box Size**		lxhxw	mm	see table of dimensions 1		
	6.4	**Battery Voltage**	nominal capacity 5 h rating		V/Ah	48 / see table of dimensions 1		
	6.5	**Battery Weight**	nominal + 5 %		kg	see table of dimensions 1		
	6.7	**Battery Tray Height**	w./w.o. rollers		mm	303		
Misc.	8.1	**Type of Controller**	drive / lift / steer			AC-transistor		
	8.2	**Available Working Pressure for Attachments**			bar	210		
	8.4	**Noise Level**		dB(A)		65		

* with load backrest 1.4 / 1.6 t –650 mm; 2.0 t –535 mm

** with load backrest 1.4 / 1.6 t +650 mm; 2.0 t +535 mm

▲ ESR 5000 1.4 / 1.6 t with lift height 4890 + opt. 1 battery compartment tray

▲▲ ESR 5000 2.0 t with lift height 4595 + opt. 2 battery compartment tray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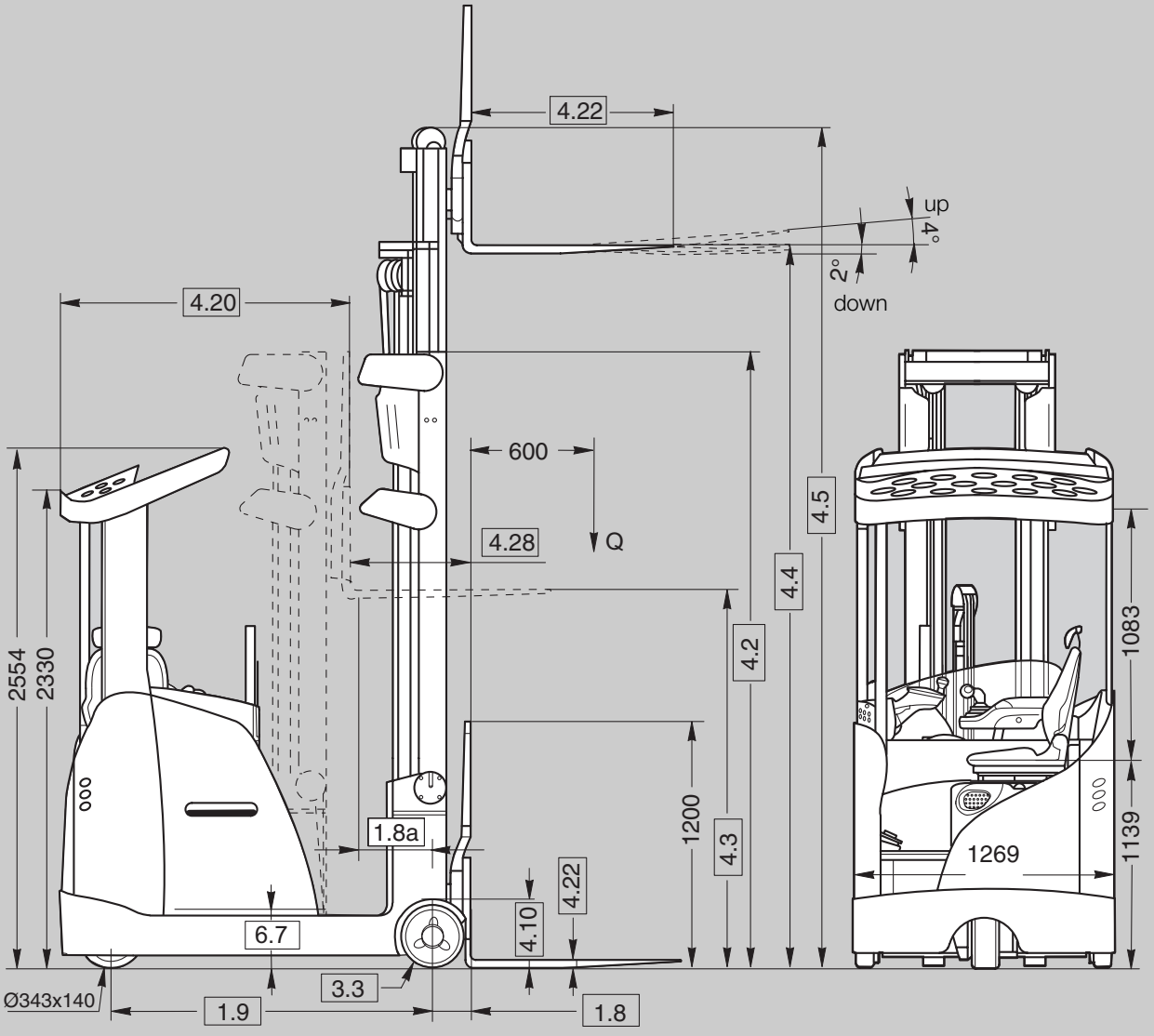
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General Information	1.1	**Manufacturer**				Crown Equipment Corporation	
	1.2	**Model**				ESR 5000S-1.6	ESR 5000S-2.0
	1.3	**Power**				electric	
	1.4	**Operator Type**				sit down	
	1.5	**Load Capacity**		Q	t	1.6	2.0
	1.6	**Load Centre**		c	mm	600	
	1.8	**Load Distance**	mast extended	x1	mm	217	
	1.8a		mast retracted	x	mm	see table of dimensions 2	
	1.9	**Wheel Base**		y	mm	1475	1550
Weights	2.1	**Weight**	less battery		kg	2619 ❑	2729 ❑❑
	2.4	**Axle Load**	reach extended		kg	see table of dimensions 5	
	2.5		reach retracted		kg	see table of dimensions 5	
Tyres	3.1	**Tyre Type**	D/L			Vulkollan	
	3.2	**Tyres**	front		mm	343 x 140	
	3.3		rear		mm	330 x 100	
	3.5	**Wheels**	no. (x=driven) front/rear			1x / 2	
	3.7	**Track Width**	rear	b11	mm	see table of dimensions 3	
Dimensions	4.1	**Fork Carriage Tilt**	forward / backward	angle	°	2 / 4	
	4.2	**Mast**	collapsed height	h1	mm	see table of dimensions 4	
	4.3	**Free Lift ***	w.o. load backrest	h2	mm	see table of dimensions 4	
	4.4	**Lift Height**		h3	mm	see table of dimensions 4	
	4.5	**Mast ****	extended height, w.o. lbr	h4	mm	see table of dimensions 4	
	4.7	**Overhead Guard Height**	standard / angled	h6	mm	2375 / 2554	
	4.8	**Seat Height**	compressed	h7	mm	1113	
	4.10	**Outrigger Height**			mm	346	
	4.15	**Lowered Fork Height**		h13	mm	40	45
	4.16	**Head Room**	overhead guard std./angled		mm	1164 / 1257	
	4.20	**Headlength**		l2	mm	see table of dimensions 2	
	4.21	**Overall Width**	front / rear	b1/b2	mm	1269 / see table of dimensions 3	
	4.22	**Fork Dimension**		thxwxl	mm	45x100x1145	
	4.23	**Fork Carriage**	ISO class		mm	2 A	
	4.24	**Fork Carriage Width**	w. lbr / w.o. lbr	b3	mm	770 / 750	
	4.25	**Width Across Forks**		b5	mm	see table of dimensions 3	
	4.26	**Inside Straddle**		b4	mm	see table of dimensions 3	
	4.28	**Reach**		l4	mm	see table of dimensions 2	
	4.32	**Ground Clearance**	centre wheelbase	m2	mm	76	
	4.33	**Working Aisle Width**	1000x1200 travers lowered	Ast	mm	see table of dimensions 2	
	4.34		800x1200 length lowered	Ast	mm	see table of dimensions 2	
	4.35	**Turning Radius**		Wa	mm	1734	1809
	4.37	**Length Over Outriggers**		l7	mm	1903	1978
Performance	5.1	**Travel Speed**	w./w.o. load		km/h	12.0 / 12.0	
	5.2	**Lift Speed**	w./w.o. load		m/s	0.39 / 0.69	0.32 / 0.54
	5.3	**Lower Speed**	w./w.o. load		m/s	0.57 / 0.57	0.57 / 0.50
	5.4	**Reach Speed**	w./w.o. load		m/s	0.19 / 0.19	
	5.7	**Max. Gradeability**	w./w.o. load		%	12 / 12	
	5.10	**Service Brake**				hydraulic / electric	
Motors	6.1	**Traction Motor**	60 min. rating		kW	6.8	
	6.2	**Lift Motor**	15% on time		kW	13.6	
	6.3	**Max. Battery Box Size**		lxhxw	mm	see table of dimensions 2	
	6.4	**Battery Voltage**	nominal capacity 5 h rating		V/Ah	48 / see table of dimensions 2	
	6.5	**Battery Weight**	nominal + 5 %		kg	see table of dimensions 2	
	6.7	**Battery Tray Height**	with rollers		mm	303	
Misc.	8.1	**Type of Controller**	drive / lift / steer			AC-transistor	
	8.2	**Available Working Pressure for Attachments**			bar	210	
	8.4	**Noise Level**		dB(A)		65	

* with load backrest 1.4 / 1.6 t –650 mm; 2.0 t –535 mm

** with load backrest 1.4 / 1.6 t +650 mm; 2.0 t +535 mm

❑ ESR 5000S 1.6 t with lift height 4890 + opt. 2 battery compartment tray

❑❑ ESR 5000S 2.0 t with lift height 4595 + opt. 3 battery compartment tray

Table 1 **ESR 5000** Working Aisle Width

		6.4 **Battery**	4.20 **Headlength**	1.8a **Load Dist.**	4.28 **Reach**	4.33 & 4.34 **Load Size**		**Working Aisle Width**	6.3 **Battery Size**	6.5 **Battery Weight** + 5 %
kg	Wa mm	Ah	l2 mm	x1 mm	l4 mm	length mm	width mm	VDI mm	lxh x w mm	kg
1400	1645	420	1281	357	544	800	1200	2591	opt. 1 1223x784 x 283	750
						1200	800	2778		
						1000	1200	2724		
						1200	1000	2825		
		560	1338	300	487	800	1200	2626	opt. 2 1223x784 x 355	939
						1200	800	2830		
						1000	1200	2767		
						1200	1000	2875		
		700	1410	228	415	800	1200	2674	opt. 3 1223x784 x 427	1119
						1200	800	2896		
						1000	1200	2823		
						1200	1000	2938		
1600	1734	420	1288	445	662	800	1200	2631	opt. 1 1223x784 x 283	750
						1200	800	2788		
						1000	1200	2751		
						1200	1000	2840		
		560	1345	388	605	800	1200	2662	opt. 2 1223x784 x 355	939
						1200	800	2839		
						1000	1200	2791		
						1200	1000	2888		
		700	1417	316	533	800	1200	2705	opt. 3 1223x784 x 427	1119
						1200	800	2904		
						1000	1200	2844		
						1200	1000	2950		
		840	1489	244	461	800	1200	2752	opt. 4 1223x784 x 499	1306
						1200	800	2970		
						1000	1200	2899		
						1200	1000	3013		
2000	1734	560	1345	388	605	800	1200	2662	opt. 2 1223x784 x 355	939
						1200	800	2839		
						1000	1200	2791		
						1200	1000	2888		
		700	1417	316	533	800	1200	2705	opt. 3 1223x784 x 427	1119
						1200	800	2904		
						1000	1200	2844		
						1200	1000	2950		
		840	1489	244	461	800	1200	2752	opt. 4 1223x784 x 499	1306
						1200	800	2970		
						1000	1200	2899		
						1200	1000	3013		

Table 2 **ESR 5000S** Working Aisle Width

		6.4 **Battery**	4.20 **Headlength** TS / DIN *	1.8a **Load Distance** TS / DIN *	4.28 **Reach** TS / DIN *	4.33 & 4.34 **Load Size**		**Working Aisle Width** TS *	DIN *	6.3 **Battery Size** DIN	6.5 **Battery Weight** +5%
kg	Wa mm	Ah	l2 mm	x1 mm	l4 mm	length mm	width mm	VDI mm	VDI mm	lxh x w mm	kg
1600	1734	560	1433 / 1516	299 / 216	516 / 433	800	1200	2716	2771	opt. 2 1223x784 x 355	939
						1200	800	2920	2996		
						1000	1200	2857	2921		
						1200	1000	2964	3038		
		700	1487 / 1588	245 / 144	462 / 361	800	1200	2751	2823	opt. 3 1223x784 x 427	1119
						1200	800	2969	3063		
						1000	1200	2898	2979		
						1200	1000	3012	3102		
2000	1809	560	1433 / 1514	374 / 293	591 / 510	800	1200	2745	2795	opt. 2 1223x784 x 355	939
						1200	800	2927	3000		
						1000	1200	2876	2936		
						1200	1000	2975	3045		
		700	1487 / 1586	320 / 221	537 / 438	800	1200	2777	2843	opt. 3 1223x784 x 427	1119
						1200	800	2976	3067		
						1000	1200	2916	2992		
						1200	1000	3021	3108		
		840	1559 / 1658	248 / 149	465 / 366	800	1200	2824	2894	opt. 4 1223x784 x 499	1306
						1200	800	3042	3134		
						1000	1200	2971	3050		
						1200	1000	3084	3173		

* TS / DIN = T-Shape or DIN battery compartment, contact Crown for T-Shape battery details.

Table 3 Chassis Frame

				ESR 5000 ESR 5000S	ESR 5000 ESR 5000S	ESR 5000
3.7	Track width rear	b_{11}	mm	1177	1317	1476
4.21	Overall width rear	b_2	mm	1285	1425	1575
4.25	Width across forks, max.	b_5	mm	750	750	980
4.26	Width inside straddle	b_4	mm	965	1105	1255
	Sideshift movement	left / right	mm	70	70	100

Table 4 Mast Chart

Mast		4.4 **LIFT** mm	4.2 **CLSD** mm	4.3 **FREE** mm	4.5 **EXTD** mm	ESR5000 1.4	ESR 5000 ESR 5000S 1.6	ESR 5000 ESR 5000S 2.0
4-Roller Fork Carriage		4440	2020	1345	4955	●	●	-
		4890	2170	1495	5405	●	●	-
		5340	2320	1645	5855	●	●	-
		5790	2470	1795	6305	●	●	-
		6090	2570	1895	6605	●	●	-
		6690	2770	2095	7205	●	●	-
		7140	2920	2245	7655	●	●	-
		7500	3040	2365	8015	●	●	-
		7950	3190	2515	8465	●	●	-
		8415	3350	2670	8930	❍	❍	-
		8850	3490	2815	9365	❍	❍	-
		9450	3690	3015	9965	❍	❍	-
		9900	3840	3330	10415	-	❍	-
		10230	3950	3440	10745	-	❍	-
6-Roller Fork Carriage		4145	2020	1400	4770	-	-	●
		4595	2170	1550	5220	-	-	●
		5495	2470	1850	6120	-	-	●
		6395	2770	2150	7020	-	-	●
		6845	2920	2300	7470	-	-	●
		7205	3040	2420	7830	-	-	●
		8120	3350	2725	8745	-	-	●
		9155	3690	3070	9780	-	-	●
		9605	3840	3220	10230	-	-	●
		9935	3950	3330	10560	-	-	●
		10835	4250	3630	11460	-	-	●
		11435	4450	3830	12060	-	-	●
	Super Duty*	9935	4420	3750	10560	-	-	●
		10835	4720	4050	11460	-	-	●
		11435	4920	4250	12060	-	-	●
		12000	5110	4435	12620	-	-	●

● = available ❍ = opt. 1 battery compt. not available * Super Duty masts have higher collapsed dimensions (4.2)

Table 5 Axle load

			without load			with load		
	Reach	front	rear	total	front	rear	total
ESR 5000-1.4 6090 TT with battery opt. 1	2.4	extended	1607	1796	3403	807	3996	4803
	2.5	retracted	2164	1239		1941	2862	
ESR 5000-1.6 7950 TT with battery opt. 3	2.4	extended	1890	2103	3993	1037	4556	5593
	2.5	retracted	2437	1556		2174	3419	
ESR 5000S-1.6 10230 TT with battery opt. 3	2.4	extended	1782	2483	4265	1020	4860	5880
	2.5	retracted	2440	1825		2240	3640	
ESR 5000-2.0 9155 TT with battery opt. 3	2.4	extended	2150	2373	4523	1042	5481	6523
	2.5	retracted	2660	1863		2043	4480	
ESR 5000S-2.0 12000 TT with battery opt. 3	2.4	extended	2000	3260	5260	1130	6155	7285
	2.5	retracted	2900	2360		2495	4790	

front = drive wheel rear = load wheels

Capacity
At a 600 mm load centre:

Model ESR 5000-1.4: 1400 kg

Model ESR 5000-1.6 &
Model ESR 5000S-1.6: 1600 kg

Model ESR 5000-2.0 &
Model ESR 5000S-2.0: 2000 kg

Batteries / Electrical System
The 48 V battery is pulled out of the chassis with the reach carriage, no tools required.

Standard Equipment
1. Crown Integrated Control System with Access 1 2 3™ for traction, hydraulics and steering
   - Virtually maintenance free 3-phase (AC) motors
   - CAN-Bus technology
2. Steering system
   - 360 Select™ steering system allows the operator to choose between 180° and 360° steer tyre rotation
   - Infinitely adjustable tilting steer column
3. Information display
   - Access 1 2 3™ onboard diagnostics with real time troubleshooting capabilities
   - 2 line LCD display with 16 characters per line
   - Travel direction indicator
   - Steer wheel position indicator
   - 360° select indicator
   - 3 selectable performance profiles
   - Input for operator PIN
   - Battery discharge indicator with lift lockout
   - Hour meters for monitoring various truck operating components
   - Real-time clock and date
4. Vulkollan load wheels and drive tyre
5. All-wheel braking systems
   - Regenerative coast and direction reversal braking
   - Parking brake with electric switch activation
   - Mechanical service brake
   - Truck-Hold automatic braking for slopes or pushback racking
6. Automotive type accelerator and brake pedal with variable applicable brake power
7. Operator compartment:
   - Low, wide step
   - Tubular grab handle
   - Comfortable padding within the driver's compartment
   - Large desktop
   - Five easy-access storage compartments
   - Electric power disconnect switch
   - Full-length corner Work Assist™ pole
8. Comfortable suspension seat
   - Multiple adjustment possibilities
   - Quick adjust lumbar support
   - Long lasting seat fabric
   - Integrated armrest with controls
9. Patented offset, wide visibility mast
   - Incorporating soft-lift/ soft-stop for smooth load movement
   - Integrated hose reeving
   - Lift slowdown prior to reaching full mast extension
10. Panoramic view fork carriage
    - Integrated sideshift and tilt
    - Sideshift center position indicator
    - ISO class 2A forks
    - Fork tip indicators
    - Clear view 1160 mm high load backrest
11. Reach carriage with optimised lateral guidance
    - Slow down prior to reaching full extend or retract position
    - Main bearings plus 4 side rollers and 2 backing rollers
    - Hardened mast carriage wear strips
12. Reach-out battery system
13. Battery plug DIN 160 Amp

Model Specific Standard Equipment

ESR 5000
Nominal capacities of 420 to 840 Ah.
The battery can be removed vertically or optional rollers can be provided allowing horizontal removal of the battery from either side.
1. Fingertip control levers
2. Thumb-operated travel direction switch with auto creep speed mode
3. Clear view flat overhead guard with dual protection zone
4. Overhead guard extensions
5. Standard clipboard

ESR 5000S
Nominal capacities of 560 to 840 Ah.
Two battery types are available, the T-Shape or DIN battery.
Battery rollers allow removal of the battery to the right side.
1. S-Class operator compartment
   - 170 mm wider legroom
2. MoveSeat™
   - Swivels 10° in forward direction
   - Swivels 20° in fork direction
   - Swivel lockout
   - Integrated headrest
   - FlexBack™ reclines for improved upward visibility
3. Multi task control joystick with auto creep speed mode
   - Joystick moves with the seat
4. Patented angled overhead guard with dual protection zone
5. Work assist post
6. Tilting S-Class clipboard

Optional Equipment
1. Integrated lift height and load weight indicator
   - Real time height/weight shown on display
   - Programmable truck performance linked to fork height
2. Smart Rack Height Select
   - Load recognition system with fork positioning starting 500 mm above secondary mast staging
   - Safe clearance auto stop enhances load put away and retrieval
   - Rack levels programmable by operators
3. Capacity Data Monitor (CDM)
   - Recognises the load weight and recommends maximum put away height
   - Overload warning depending on residual capacity
4. Free lift indicator, warning of fork heights above free lift
   - Programmable to reduce top travel speed
5. Tilt Position Assist (TPA)
   - Fork tilt stops in horizontal position
6. High Level Performance Systems (HLPS) includes items 1 to 5
7. Camera systems
   - Mast or fork mounted
   - Colour or B&W monitor
8. Choice of proportional hydraulic controls
   - Fingertip control levers
   - Dual-Axis control levers
   - Multi-task control joystick
9. Mast options
   - Stiffened and Heavy-Duty masts
   - Lower cutout with/without override at a fork position just above the outriggers
   - Load backrest heights
10. Keyless start-up with PIN code
11. Light & safety packages:
    - Driving, work and reading lights
    - Flashing beacon
    - Audible travel alarm
    - Rearview mirror
12. Various overhead guards
    - Flat or Angled
    - OHG guard covers
13. Power supply 12/24 or 48 V
14. Work Assist accessories
    - Clipboard
    - Scan gun cradle
    - Adjustable arm
    - Trash bin
    - Drink holder
    - Storage pocket
15. 5th hydraulic function for add-on attachments
16. Cold storage conditioning
    - Heated vinyl seat
    - -30° C minimum operating temperature

Model Specific Optional Equipment

ESR 5000
1. Angled overhead guard
2. Battery rollers for horizontal battery extraction
3. Dual-Axis hydraulic control levers
4. Multi task control joystick
5. Headrest
6. Tilting S-Class clipboard
7. OHG for drive-in racking
8. Aisle guide rollers
9. Cold store cab
10. FlexBack™ reclines for improved upward visibility

ESR 5000S
1. Flat overhead guard
2. Fingertip control levers
3. Dual-Axis hydraulic control levers
4. Standard clipboard

Driver's Compartment and Controls
A comfortable low, wide step speeds entry. Well-positioned long tubular overhead guard post works as a grab handle. Non-slip floor mat ensure safe and comfortable footing during entry and exit.

Once seated, the operator has the ability to tailor the compartment to “fit”. A high quality comfortable seat can be adjusted for the operator’s weight. In addition, the seat can be adjusted laterally, as well as for the angle of the backrest.

These adjustments, coupled with a tilting steer column, ensure a comfortable position for any operator. The left foot rests on the operator “presence” pedal. The right foot operates an automotive style accelerator and brake pedal arrangement.

The travel direction switch is actuated with the right thumb leaving the fingers of the right hand free to operate all the hydraulic controls.
Hydraulic controls allow for easy blending of functions.
There are four easily accessible storage compartments. The padded armrest is designed particularly with wrist support in mind.

The display contains information on the truck's operating status, a battery discharge indicator, a travel direction indicator, steer wheel position indicator, hour meters for various truck operations, performance profile selection, and service information for planned maintenance scheduling, fault finding and testing. Coupled with a traditional keyswitch, the information display also serves as the PIN input for those choosing to employ the onboard user code system thereby preventing unauthorised use. The two line LCD display with 16 characters per line is well illuminated for excellent visibility. These standard features are complimented by information such as fork height and load weight indicators should these options be chosen.

Integrated Control System with Access 1 2 3™
Crown's Integrated Control System provides unmatched truck control for all primary truck systems:

- Traction motor control
- Hydraulic valve and motor control
- Steer motor control
- Braking
- Information/diagnostic display

Dedicated motor controllers are employed to simplify troubleshooting and minimise replacement cost. All systems are linked through CAN-Bus, which greatly simplifies wiring while improving diagnostic communication.

On ramps, or when interfacing with push back racking, the selectable Truck-Hold feature electronically brakes the truck when the accelerator is released. The operator does not have to apply the brake, improving comfort and control in these applications.

Selected travel speed remains constant regardless of surfaces, load weight or grades. The travel speed, acceleration, and electric braking ratio can be programmed via the display, facilitating the best possible productivity and energy consumption for each application. Regenerative motor braking helps save energy.

The control system for the hydraulic pump motor and all proportional hydraulics facilitates precise and sensitive execution of all hydraulic functions. All hydraulic parameters such as lift, lower, tilt, sideshift, and reach speeds are fully adjustable and can therefore be adapted to different applications.

Crown's Access 1 2 3 Diagnostics is the most comprehensive fault detection system in the industry. A properly trained technician can actively view inputs and outputs during truck operation thereby significantly reducing search and downtime.

All operator information such as travel and hydraulic parameters, truck monitors, etc. can be obtained and adjusted via the display. No handset or laptop is required – all functions are onboard and easy to use.

Performance Profiling
Three pre-set performance profiles can be selected on the display. These pre-sets can be changed to a multitude of other traction and hydraulic parameters, allowing adaptation to each customer's requirements.

Hydraulic System
Proportional control ensures all hydraulic functions can be individually and precisely actuated regardless of load. Four hydraulic functions (lift/lower, tilt, sideshift, reach) are standard. A fifth function can also be provided.
All hydraulic hoses are internally reeved through the mast.
The internal gear pump reduces the noise level and ensures high efficiency in all applications. The hydraulic oil is filtered twice. The return and suction filters can be exchanged without draining the hydraulic tank.

Mast and reach carriage
Crown's unique offset, wide view mast delivers excellent visibility at height as well as for low-level operations. Mast cross-bracing and overhead guard bracing have been angled, and hose and chain rollers have been canted to further enhance visibility. A load backrest designed for maximum visibility is also standard. The standard three-stage full free lift mast incorporates integrated sideshift with tilting carriage, hence reducing head length. Mast channels are reinforced to minimise static and dynamic deflection.

Spring dampers are located on the fork carriage to reduce noise while staging, and the lifting speed is slowed before reaching the lift limit. Elastomer dampers between the mast stages and hydraulic dampening in the free lift cylinder reduce noise while lowering.

The anti-friction mast rollers are canted to reduce energy consumption and ensure longer life. The heavy-duty reach carriage moves on four main roller bearings. Two adjustable backing rollers minimise dynamic mast rocking while four adjustable side rollers ensure very smooth movement and precise positioning.

Drive unit
A highly efficient drive unit with helical gears, integrated pinion and vertically mounted 3-phase (AC) traction motor provides quiet, powerful traction performance.
A large Vulkollan drive wheel (343 x 140 mm) offers high load capacity, long life, and excellent travel comfort.

Steering
Advanced AC steering system featuring 360 Select™ control system that allows the operator to choose between 180° and 360° steer tyre rotation to match driving conditions, experience level or personal preference. The system can be locked in either mode with password-protected access.
A fail-safe control circuit applies motor braking and parking brake if a fault is detected.

Brakes
The foot pedal applies the service brake. The brake pressure is distributed to the load wheels and the drive wheel by a master cylinder in combination with regenerative motor braking.
This ensures the truck brakes smoothly and efficiently.

The parking brake is activated by a switch in the operator compartment. The spring-applied / electromagnetically released brake is applied on the drive wheel. The parking brake is automatically applied when the operator exits the truck.

The truck can also be brought to a stop by reversing the travel direction using the electric regenerative plugging function. Furthermore, the truck is equipped with an electric auto brake function, which stops the truck as the accelerator pedal is released (controlled coasting). Both electric braking functions can be set via the display.

Motors
All motors are highly efficient 3-phase (AC) which provide high available torque and seamless reversal. Traction and hydraulic motors are oversized for superior thermal capability and are especially suitable for high loads and high ambient temperature applications.

Safety Regulations
Conforms to European safety standards.
Dimensions and performance data given may vary due to manufacturing tolerances. Performance is based upon 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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