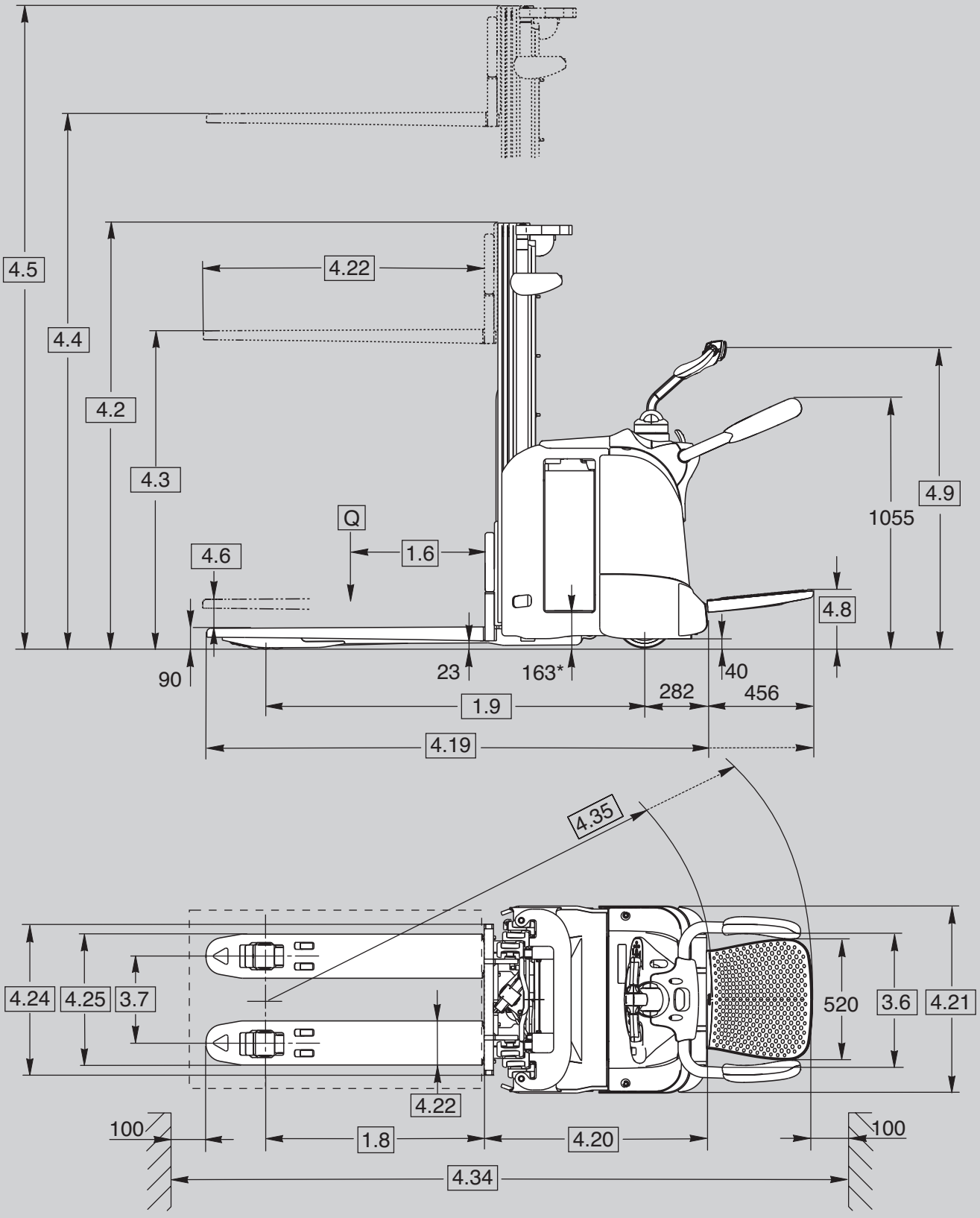
ET 4000 SERIES

Specifications

Rider Stacker with Initial Lift



* battery rollout height, initial lift lowered

Destinguishing Mark	1.1	**Manufacturer**				Crown Equipment Corporation		
	1.2	**Model**				ETi 4000 – 1.2	ETi 4000 – 1.4	ETi 4000 – 1.6
	1.3	**Power Source**				electric		
	1.4	**Operator Type**				stand-on		
	1.5	**Rated Capacity** [5]		Q	t	1.2	1.4	1.6
	1.6	**Load Centre**		c	mm	600		
	1.8	**Load Distance** [6]	TL-TF/TT, initial lift raised	x	mm	943 / 919	938 / 914	906 / 882
	1.9	**Wheelbase** [7]	initial lift raised	y	mm	1582		
Weight	2.1	**Service Weight**			kg	see table 1	see table 2	see table 3
	2.2	**Axle Load**	with load	front	kg	see table 1	see table 2	see table 3
				rear	kg	see table 1	see table 2	see table 3
	2.3	**Axle Load**	without load	front	kg	see table 1	see table 2	see table 3
				rear	kg	see table 1	see table 2	see table 3
Tyres/Wheels/Chassis	3.1	**Tyres**				Vulkollan		
	3.2	**Tyre Size** [2]	front		mm	Ø 230 x 70		
	3.3	**Tyre Size**	rear		mm	1x Ø 82 x 100		2x Ø 82 x 82
	3.4	**Additional Wheels**	castor wheel		mm	2x Ø 125 x 54		
	3.5	**Wheels**	number front/rear (x=driven wheels)			1x + 2/2		1x + 2/4
	3.6	**Tread** [3]	front	b_{10}	mm	542		
	3.7	**Tread**	rear	b_{11}	mm	374		
Dimensions	4.2	**Mast**	collapsed height	h_1	mm	see table 1	see table 2	see table 3
	4.3	**Free-lift**		h_2	mm	see table 1	see table 2	see table 3
	4.4	**Lift Height**		h_3	mm	see table 1	see table 2	see table 3
	4.5	**Mast**	extended height	h_4	mm	see table 1	see table 2	see table 3
	4.6	**Initial Lift**		h_5	mm	125		
	4.8	**Operator Stand Height**		h_7	mm	186		
	4.9	**Height Control Handle**	in driving position min./max.	h_{14}	mm	1070 / 1383		
	4.10	**Outrigger**		h_8	mm	84	82	
	4.15	**Fork Height**	lowered	h_{13}	mm	90		
	4.19	**Overall Length** [1]	platform up, TL-TF / TT, initial lift raised	l_1	mm	2127 / 2144	2131 / 2149	2157 / 2181
			platform down, TL-TF / TT, initial lift raised	l_1	mm	2582 / 2600	2587 / 2605	2613 / 2637
	4.20	**Head Length** [1]	platform up, TL-TF / TT, initial lift raised	l_2	mm	925 / 943	930 / 948	956 / 980
			platform down, TL-TF / TT, initial lift raised	l_2	mm	1381 / 1399	1386 / 1404	1412 / 1436
	4.21	**Overall Width**		b_1	mm	800		
	4.22	**Fork Dimensions**	DIN ISO 2331	s/e/l	mm	60 x 186 x 1200	60 x 190 x 1200	
	4.24	**Fork Carriage Width**		b_3	mm	650		
	4.25	**Fork Spread**		b_5	mm	560	565	
	4.32	**Ground Clearance**	centre wheelbase	m_2	mm	23		
	4.34.1	**Aisle Width**	for pallets 1000×1200 crossways, TL-TF/TT, platform up, initial lift raised	Ast	mm	2713 / 2723	2715 / 2725	2728 / 2739
			for pallets 1000×1200 crossways, TL-TF/TT, platform down, initial lift raised	Ast	mm	3172 / 3182	3174 /3184	3187 / 3198
	4.34.2	**Aisle Width**	for pallets 800×1200 lenghtways, TL-TF/TT, platform up, initial lift raised	Ast	mm	2535 / 2549	2538 / 2552	2556 / 2571
			for pallets 800×1200 lenghtways, TL-TF/TT, platform down, initial lift raised	Ast	mm	2994 / 3008	2997 / 3011	3015 / 3030
	4.35	**Turning Radius** [7]	platform up, initial lift raised	Wa	mm	1860		
			platform down, initial lift raised	Wa	mm	2319		
Performance Data	5.1	**Travel Speed**	with / without load		km/h	8 / 9	7.7 / 9	7.5 / 9
	5.1.1	**Travel Speed Backwards**	with / without load		km/h	8 / 9	7.7 / 9	7.5 / 9
	5.2	**Lift Speed**	with / without load		m/s	0.16 / 0.24	0.14 / 0.24	0.12 / 0.24
	5.3	**Lowering Speed**	with / without load		m/s	0.36 / 0.28		
	5.7	**Gradeability**	with / without load		%	10 / 16	9 / 16	8 / 16
	5.8	**Max. Gradeability**	with / without load, 5 min. rating		%	10 / 16	9 / 16	8 / 16
	5.10	**Service Brake**				electric		
Electric Motor	6.1	**Traction Motor**	rating at S2 60 min. / H-class		kW	3.0		
	6.2	**Pump Motor**	rating at S3 9%		kW	3.0		
	6.3	**Battery**	according to DIN 43531/35/36 A, B, C, no			B		
		Max. Battery Box Size [8]		lxwxh	mm	212 x 790 x 633		
	6.4	**Battery Voltage** [4]	nominal capacity 5h rating		V/Ah	24 / 230-270 (315-375)		
	6.5	**Battery Weight** [4]	min. / max.		kg	201-252 (270-325)		
	8.1	**Drive Unit**	drive			AC-transistor		
	10.7	**Sound Pressure Level**	at the operator's seat		dB(A)	≤ 70		

[1] subtract 22 mm for initial lift lowered
[2] Ø 250 x 75 mm with electric steering
[3] subtract 9 mm with electric steering
[4] with optional larger battery, use values in brackets
[5] capacity on load arms = 2.0 t for electric steering version
[6] add 64 mm for initial lift lowered
[7] optional available wheelbase:
long + 100 mm
short - 180 mm
[8] contact Crown for battery details

Table 1 Mast Chart

	1.2	**Model**				**ETi 4000 - 1.2**															
		Mast Type				**TL**					**TF**					**TT**					
Weight	2.1	**Service Weight ***	less battery		kg	1044	1066	1086	1110	1136	1054	1075	1095	1118	1143	1159	1192	1216	1229	1250
	2.2	**Axle Load 250 Ah**	with load	front	kg	1271	1286	1300	1317	1335	1278	1292	1306	1322	1340	1334	1357	1373	1382	1397
				rear	kg	1185	1192	1198	1205	1213	1188	1195	1201	1208	1215	1237	1247	1255	1259	1265
	2.3	**Axle Load 250 Ah**	without load	front	kg	984	999	1013	1030	1048	991	1005	1019	1036	1053	1060	1083	1100	1109	1123
				rear	kg	272	279	285	292	300	275	282	288	294	302	311	321	328	332	339
	2.2	**Axle Load 375 Ah**	with load	front	kg	1341	1356	1370	1387	1405	1348	1363	1377	1393	1410	1404	1427	1444	1452	1467
				rear	kg	1191	1198	1204	1211	1219	1194	1200	1206	1213	1221	1243	1253	1260	1265	1271
	2.3	**Axle Load 375 Ah**	without load	front	kg	1045	1061	1075	1091	1110	1052	1067	1081	1097	1114	1121	1144	1161	1170	1185
				rear	kg	287	293	299	307	314	290	296	302	309	317	326	336	343	347	353
Dimensions	4.2	**Mast**	collapsed height	h_1	mm	1770	1980	2180	2420	2670	1770	1980	2180	2420	2670	1845	1980	2140	2220	2370
	4.3	**Free-lift ****		h_2	mm	180					1290	1500	1690	1940	2190	1360	1500	1660	1735	1870
	4.4	**Lift Height**		h_3+h_{13}	mm	**2440**	**2860**	**3260**	**3740**	**4240**	**2540**	**2960**	**3360**	**3840**	**4340**	**4000**	**4440**	**4750**	**5000**	**5400**
	4.5	**Mast *****	extended height	h_4	mm	2920	3350	3750	4220	4720	3020	3450	3850	4320	4820	4480	4930	5240	5480	5880

Table 2 Mast Chart

	1.2	**Model**				**ETi 4000 - 1.4**															
		Mast Type				**TL**					**TF**					**TT**					
Weight	2.1	**Service Weight ***	less battery		kg	1063	1086	1108	1134	1162	1073	1096	1117	1142	1169	1173	1206	1230	1243	1264
	2.2	**Axle Load 250 Ah**	with load	front	kg	1323	1339	1355	1373	1393	1330	1346	1361	1379	1397	1380	1403	1420	1429	1443
				rear	kg	1352	1359	1365	1373	1381	1355	1362	1368	1375	1384	1405	1415	1422	1426	1433
	2.3	**Axle Load 250 Ah**	without load	front	kg	993	1009	1024	1043	1062	1000	1016	1031	1048	1067	1065	1088	1105	1114	1128
				rear	kg	282	289	296	303	312	285	292	298	306	314	320	330	337	341	348
	2.2	**Axle Load 375 Ah**	with load	front	kg	1395	1411	1426	1445	1464	1402	1418	1433	1450	1469	1452	1475	1491	1500	1515
				rear	kg	1356	1363	1370	1377	1386	1359	1366	1372	1380	1388	1409	1419	1427	1431	1437
	2.3	**Axle Load 375 Ah**	without load	front	kg	1054	1070	1086	1104	1123	1061	1077	1092	1109	1128	1127	1150	1166	1175	1190
				rear	kg	297	304	310	318	327	300	307	313	321	329	334	344	352	356	362
Dimensions	4.2	**Mast**	collapsed height	h_1	mm	1770	1980	2180	2420	2670	1770	1980	2180	2420	2670	1845	1980	2140	2220	2370
	4.3	**Free-lift ****		h_2	mm	180					1290	1500	1690	1940	2190	1360	1500	1660	1735	1870
	4.4	**Lift Height**		h_3+h_{13}	mm	**2440**	**2860**	**3260**	**3740**	**4240**	**2540**	**2960**	**3360**	**3840**	**4340**	**4000**	**4440**	**4750**	**5000**	**5400**
	4.5	**Mast *****	extended height	h_4	mm	2920	3350	3750	4220	4720	3020	3450	3850	4320	4820	4480	4930	5240	5480	5880

Table 3 Mast Chart

	1.2	**Model**				**ETi 4000 - 1.6**															
		Mast Type				**TL**					**TF**					**TT**					
Weight	2.1	**Service Weight ***	less battery		kg	1122	1152	1182	1212	1247	1138	1168	1195	1228	1263	1287	1317	1347	1364	1392
	2.2	**Axle Load 250 Ah**	with load	front	kg	1382	1403	1424	1445	1469	1393	1414	1433	1456	1480	1466	1486	1507	1518	1537
				rear	kg	1552	1561	1570	1579	1590	1557	1566	1574	1584	1595	1633	1643	1652	1658	1667
	2.3	**Axle Load 250 Ah**	without load	front	kg	1030	1051	1072	1093	1117	1041	1062	1081	1104	1128	1137	1158	1179	1190	1209
				rear	kg	304	313	322	331	342	309	318	326	336	347	362	371	380	386	395
	2.2	**Axle Load 375 Ah**	with load	front	kg	1456	1476	1497	1518	1542	1466	1487	1506	1529	1553	1539	1560	1580	1592	1611
				rear	kg	1554	1564	1573	1582	1593	1560	1569	1577	1587	1598	1636	1645	1655	1660	1669
	2.3	**Axle Load 375 Ah**	without load	front	kg	1092	1113	1133	1154	1179	1103	1123	1142	1165	1189	1199	1219	1240	1251	1270
				rear	kg	318	327	337	346	356	323	333	341	351	362	376	386	395	401	410
Dimensions	4.2	**Mast**	collapsed height	h_1	mm	1770	1980	2180	2420	2670	1770	1980	2180	2420	2670	1845	1980	2140	2220	2370
	4.3	**Free-lift ****		h_2	mm	180					1290	1500	1690	1940	2190	1360	1500	1660	1735	1870
	4.4	**Lift Height**		h_3+h_{13}	mm	**2440**	**2860**	**3260**	**3740**	**4240**	**2540**	**2960**	**3360**	**3840**	**4340**	**4000**	**4440**	**4750**	**5000**	**5400**
	4.5	**Mast *****	extended height	h_4	mm	2920	3350	3750	4220	4720	3020	3450	3850	4320	4820	4480	4930	5240	5480	5880

* add 6 kg for electronic steering

** for TF and TT reduces free-lift by
750 mm with 1200 mm high load backrest
550 mm with 1000 mm high load backrest
350 mm with 800 mm high load backrest

*** for TF and TT reduces free-lift by
750 mm with 1200 mm high load backrest
550 mm with 1000 mm high load backrest
350 mm with 800 mm high load backrest

axle load figures assume initial lift lowered and rated capacity on forks
all data apply to mechanical steering only

Standard Equipment

1. Load arms with initial lift
2. The X10® Control Handle places all truck functions at the operator's fingertips. Load arm lift/lower switches are located on left side
3. Proportional lifting/lowering provided by a low-noise hydraulic system
4. e-GEN® Braking System offers regenerative and frictionless electric braking. Mechanical braking applies only as parking brake
5. Crown Access 1 2 3® Comprehensive System Control
   - LCD screen
   - Hour meter
   - Keyless start up with PIN code
   - Start up and run time diagnostics
   - Battery discharge indicator and lift interrupt
   - 3 selectable traction performance profiles
   - On-board diagnostics with real time trouble-shooting capabilities
6. Crown maintenance-free 3-phase (AC) traction motor
7. CAN-Bus technology
8. Electric power disconnect push button
9. Ramp hold
10. Vulkollan drive tyre, castor wheel(s) and load wheels
11. Single load wheels (1.2 t and 1.4 t), tandem load wheels (1.6 t)
12. Dual heavy-duty caster wheels
13. Heavy-duty chassis with 8 mm thick steel skirt
14. Easily removable steel covers
15. Hinged steel top battery cover for easy battery access
16. Polycarbonate mast guard
17. Battery compartment for 230-270 Ah and 315-375 Ah
18. Battery rollout
19. Battery connector DIN 160A Schaltbau
20. Sealed electrical Deutsch connectors
21. FlexRide™ reduces vibrations and shocks to a minimum by combining
    - Soft floor mat with integrated presence sensor
    - Advanced platform suspension
    - Fully suspended drive unit
22. Heavy-duty side restraints with soft side pads and lifetime guarantee with soft side pads and easy exit feature

Optional Equipment

1. Intelligent Electric Steering System
   - Selectable performance profiles for speed reduction in turns
   - Tactile feedback feature analyses operational conditions and adjusts steering force for optimised control
   - 3-phase (AC) steering motor
2. Load arm lift/lower switches on left and right side of X10 Control Handle
3. Pallet entry/exit roller system
4. On-board charger (battery liftout only)
5. Battery connector options
6. Folding platform without side restrains (mechanical steering only)
7. Rubber, Rubber siped and Supertrac drive tyre
8. Tandem load wheels (1.2 t and 1.4 t)
9. Fork length, spread and wheelbase options
10. Fork weld marks for pallet positioning
11. Load backrest
12. Key switch or key pad
13. Freezer conditioning
14. InfoLink® Ready
15. Work Assist accessory tube
16. Work Assist Accessories
    - Storage pockets
    - Scan gun holder
    - Medium and large clip pads
    - Beverage holder
17. Metal mast grill
18. Flashing beacon
19. Travel alarm
20. 12 V clean power supply
21. 24 V power supply
22. Special paint
23. Lithium-Ion Battery Ready

Electric System / Battery

24 volt electrical system with nominal battery capacities from 230 Ah to 375 Ah is managed by Crown's Access 1 2 3 Comprehensive System Control. Virtually maintenance-free Crown AC traction motor provides strong acceleration and control at any speed. Sensors monitor functional parameters including steering, load weight, height, drive mode and speed and adjust operational settings automatically to suit conditions.

Power Unit

The rugged power unit features a reinforced 8 mm thick skirt to protect drive unit and castor components. Removable steel covers all around ensure internal components are protected against impacts yet easily accessible for service. On the inside, a Crown-built AC traction motor and a low-noise cast iron gearbox provide reliable power.

Initial Lift

Initial lift offers higher under clearance for better handling and performance on ramps, grades and uneven surfaces. Initial lift offers the possibility of double pallet transport. Optional electric steering allows transport of loads up to 2 tons on the load arms.

Operator Area and Controls

The ET 4000 Series incorporates numerous design features to improve operator comfort and productivity.

The folding FlexRide platform reduces shock transfer to the operator. The lifetime platform suspension never requires adjustment and features solid state induction switches to avoid reliability issues caused by contaminants.

Heavy-duty side restraints feature 50 mm heavy-wall steel tubing and rugged C-clamp mounting system. Soft polyurethane side pads are positioned for excellent support and comfort. The easy exit feature allows the restraints to swing up for faster access to the load. Trucks with mechanical steering have an automatic lift stop at 1.8 metres unless the side restraints are folded fully down.

Trucks equipped with power steering allow lift and travel when the side restraints are in the upper position. This simple, one-handed motion allows the operator to pass the 1.8 metre lift limit without stopping to fold down the restraints.

The centre mounted X10 Control Handle, designed for operation of all functions with one hand, improves side-stance operation for maximum visibility in both driving directions and positions the operator in a safe distance to the power unit even with the tiller turned 90° in pedestrian mode.

Available electric steering improves manoeuvrability and responsiveness, even with heavy loads. Electric steering combined with speed reduction in turns, safely delivers top driving performance.

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 at a low noise level.

Access 1 2 3® Comprehensive System Control

Crown's Access 1 2 3 technology provides optimum performance and control by offering a communications interface for the operator and service technician. The display includes a full featured on-board service tool allowing service technicians to actively view inputs and outputs during truck operation. No laptop or service terminal is required.
In addition, up to 25 PIN codes can be assigned to individual operators and matched to one of the pre-programmed performance profiles, if desired.

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.

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.

ET 4000 SPEC GB 11/21, 10
M03900-006-03
Printed in Germany

ISO 9001 Quality Management System certified for the design, development, manufacture, sale and product support of industrial trucks.

European Manufacturing:
Crown Gabelstapler GmbH & Co. KG
Roding, Germany
www.crown.com