

# Pedestrian stacker truck 1.2- 2.0 ton

## BT staxio

*P-series*

SPE120

SPE140

SPE160

SPE200



# Pedestrian stacker

Specifications				SPE120	SPE140	SPE160	SPE200	
Identification	1.1	Manufacturer		Toyota	Toyota	Toyota	Toyota	
	1.2	Model		SPE120	SPE140	SPE160	SPE200	
	1.3	Drive		Electric	Electric	Electric	Electric	
	1.4	Operator type		Stand on/pedestrian	Stand on/pedestrian	Stand on/pedestrian	Stand on/pedestrian	
	1.5	Load capacity/rated load	Q	kg	1200	1400	1600	2000
	1.6	Load center	c	mm	600	600	600	600
	1.8	Load distance, centre of support arm wheel to face of forks	x	mm	683	649	649	638
	1.9	Wheelbase	y	mm	1355	1355	1355	1355
	Weight	2.1	Service weight incl. battery		kg	1349	1489	1489
2.2		Axle load, with load, drive/castor/fork wheel		kg	480/510/1559	820/214/1855	870/172/2047	600/559/2532
2.3		Axle load, without load, drive/castor/fork wheel		kg	340/577/432	510/474/505	510/474/505	350/752/589
Wheels	3.1	Drive/castor/fork wheel		Polyurethane				
	3.2	Wheel size, front		mm	Ø 230	Ø 230	Ø 230	Ø 230
	3.3	Wheel size, rear		mm	Ø 85	Ø 85	Ø 85	Ø 85
	3.4	Additional wheel size		mm	Ø 125	Ø 125	Ø 125	Ø 125
	3.5	Wheels, number front/rear (x = driven wheels)			1x+2/4	1x+2/4	1x+2/4	1x+2/4
	3.6	Track width, front	b <sub>10</sub>	mm	585	585	585	585
	3.7	Track width, rear	b <sub>11</sub>	mm	390	390	390	390
Dimensions	4.2	Height, mast lowered	h <sub>1</sub>	mm	2020 *)	1955 *)	1955 *)	1955 *)
	4.3	Free lift	h <sub>2</sub>	mm	1556 *)	1478 *)	1478 *)	1378 *)
	4.4	Lift	h <sub>3</sub>	mm	4060 *)	4060 *)	4060 *)	3960 *)
		Lift height	h <sub>23</sub>	mm	4150 *)	4150 *)	4150 *)	4050 *)
	4.5	Height, mast extended	h <sub>4</sub>	mm	4657 *)	4668 *)	4668 *)	4668 *)
	4.8	Stand height	h <sub>7</sub>	mm	190	190	190	190
	4.9	Height of tiller in drive position, min./max.						
		highest setting	h <sub>14</sub>	mm	1201/1413	1201/1413	1201/1413	1201/1413
		lowest setting	h <sub>14</sub>	mm	1101/1313	1101/1313	1101/1313	1101/1313
	4.15	Height, fork lowered	h <sub>13</sub>	mm	90	90	90	90
	4.19	Overall length						
		platform up	l <sub>1</sub>	mm	2037	2101	2101	2113
		platform down	l <sub>1</sub>	mm	2489	2563	2563	2574
	4.20	Length to face of forks						
		platform up	l <sub>2</sub>	mm	887	951	951	963
		platform down	l <sub>2</sub>	mm	1339	1413	1413	1424
	4.21	Overall width	b <sub>1</sub> /b <sub>2</sub>	mm	790/—	790/—	790/—	850/—
	4.22	Fork dimensions	s/e/l	mm	70/180/1150	70/180/1150	70/180/1150	70/185/1150
	4.25	Width over forks	b <sub>5</sub>	mm	570	570	570	575
4.32	Ground clearance, center of wheelbase	m <sub>2</sub>	mm	27,5	27,5	27,5	27,5	
4.33	Aisle width for pallets 1000x1200 crossways							
	platform up	A <sub>st</sub>	mm	2541	2563	2563	2570	
	platform down	A <sub>st</sub>	mm	2990	3012	3012	3019	
4.34	Aisle width for pallets 800x1200 lengthways							
	platform up	A <sub>st</sub>	mm	2435	2462	2462	2471	
	platform down	A <sub>st</sub>	mm	2884	2911	2911	2920	
4.35	Turning radius							
	platform up	W <sub>a</sub>	mm	1581	1581	1581	1581	
	platform down	W <sub>a</sub>	mm	2030	2030	2030	2030	
Performance data	5.1	Travel speed, with/without load						
		6 km/h version	km/h	6,0/6,0	6,0/6,0	6,0/6,0	6,0/6,0	
		8 km/h version	km/h	7,0/8,0	7,0/8,0	7,0/8,0	—	
		10 km/h version	km/h	—	9,0/10,0	9,0/10,0	—	
	5.2	Lift speed, with/without load	m/s	0,20/0,36	0,17/0,33	0,15/0,31	0,13/0,24	
	5.3	Lowering speed, with/without load	m/s	0,45/0,45	0,45/0,45	0,45/0,45	0,45/0,45	
5.8	Max. gradeability, with/without load <sup>1)</sup>	%	8/12	8/12	8/12	8/12		
5.9	Acceleration time (over 10 m)	s	5,2	5,3	5,5	6,6		
5.10	Service brake			Electromagnetic	Electromagnetic	Electromagnetic	Electromagnetic	
Electric motor	6.1	Drive motor rating (S2 60min)						
		6 km/h version	kW	1,8	1,8	1,8	1,8	
		8 km/h version	kW	1,8	1,8	1,8	—	
		10 km/h version	kW	—	2,5	2,5	—	
	6.2	Lift motor rating (S3 15%)	kW	3	3	3	3	
	6.4	Battery voltage, nominal capacity K <sub>S</sub>	V/Ah	24/300	24/300	24/300	24/300	
6.5	Battery weight	kg	195-270	195-270	195-270	195-270		
6.6	Energy consumption according to VDI cycle	kWh/h	1,04	1,06	1,07	1,06		
	Energy consumption according to EN 16796	kWh/h	0,81	0,83	0,85	0,87		
Others	8.1	Type of drive control		Variable AC	Variable AC	Variable AC	Variable AC	
	8.4	Sound level at the driver's ear according to EN 12 053		dB (A)	66	66	67	

1) Measured according to company standard.

\*) Further alternatives are available and will produce other values.

Data is based on standard configurations: Small battery compartment, h<sub>23</sub> = 4150 mm (SPE120/140/160) and 4050 mm (SPE200) Triplex HiLo mast

All data are based on table configuration. Other configurations may give other values.

Truck performance and dimensions are nominal and subject to tolerances.

Products and specifications are subject to change without notice.

# Battery dependent dimensions

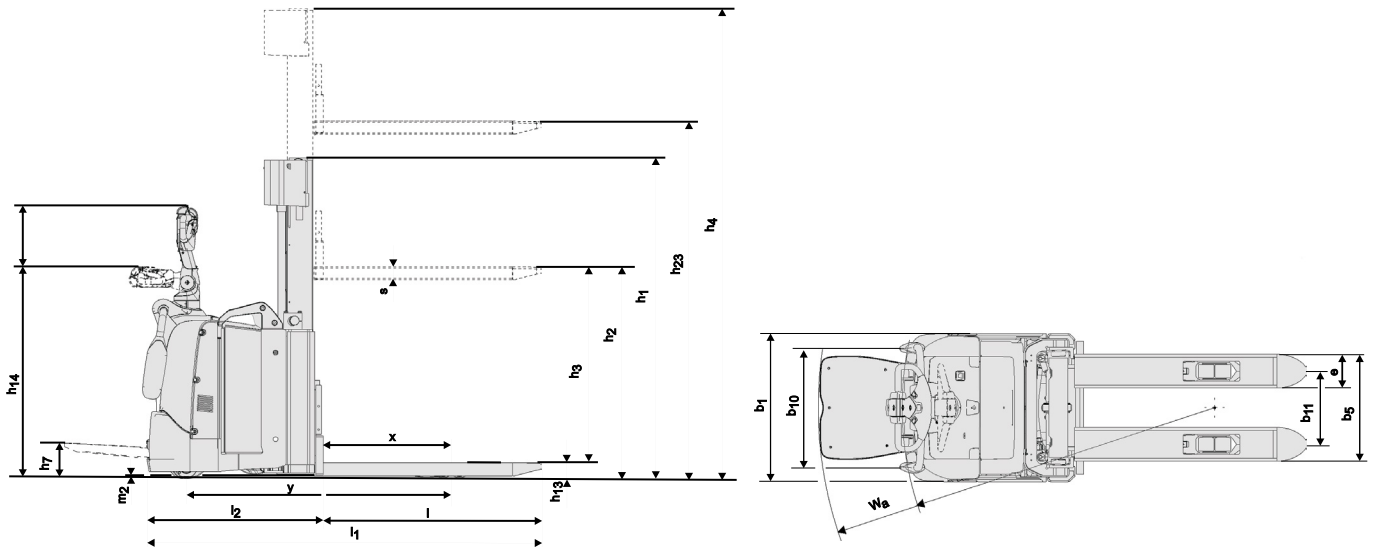
Dimensions		Battery		SPE120				SPE140				SPE160				SPE200			
				Lift out		Sideways		Lift out		Sideways		Lift out		Sideways		Lift out		Sideways	
				S	L*	S	L*	S	L*	S	L*	S	L*	S	L*	S	L*	S	L*
1.9	Wheelbase	y	mm	1355	1452	1355	1452	1355	1452	1355	1452	1355	1452	1355	1452	1355	1452	1355	1452
4.19	Overall length																		
	platform up	$l_1$	mm	2037	2136	2036	2136	2101	2198	2101	2198	2101	2198	2101	2198	2113	2210	2113	2210
	platform down	$l_1$	mm	2489	2586	2489	2586	2563	2660	2563	2660	2563	2660	2563	2660	2574	2671	2574	2671
4.20	Length to face of forks																		
	platform up	$l_2$	mm	887	986	886	986	951	1048	951	1048	951	1048	951	1048	963	1060	963	1060
	platform down	$l_2$	mm	1339	1436	1339	1436	1413	1510	1413	1510	1413	1510	1413	1510	1424	1521	1424	1521
4.33	Aisle width for pallets 1000x1200 crossways																		
	platform up	$A_{st}$	mm	2541	2637	2541	2637	2563	2659	2563	2659	2563	2659	2563	2659	2570	2666	2570	2666
	platform down	$A_{st}$	mm	2990	3086	2990	3086	3012	3108	3012	3108	3012	3108	3012	3108	3019	3115	3019	3115
4.34	Aisle width for pallets 800x1200 lengthways																		
	platform up	$A_{st}$	mm	2435	2531	2435	2531	2462	2558	2462	2558	2462	2558	2462	2558	2471	2567	2471	2567
	platform down	$A_{st}$	mm	2884	2980	2884	2980	2911	3007	2911	3007	2911	3007	2911	3007	2920	3016	2920	3016
4.35	Turning radius																		
	platform up	$W_a$	mm	1581	1677	1581	1677	1581	1677	1581	1677	1581	1677	1581	1677	1581	1677	1581	1677
	platform down	$W_a$	mm	2030	2126	2030	2126	2030	2126	2030	2126	2030	2126	2030	2126	2030	2126	2030	2126
6.4	Battery voltage, nominal capacity $K_5$		V/Ah	24/300	24/500	24/300	24/500	24/300	24/500	24/300	24/500	24/300	24/500	24/300	24/500	24/300	24/500	24/300	24/500
6.5	Battery weight, min.—max.		kg	195-310	345-405	195-300	345-405	195-310	345-405	195-310	345-405	195-310	345-405	195-310	345-405	195-310	345-405	195-310	345-405

\* DIN battery will give same truck dimensions as for the large battery

# Mast dimensions

Mast			Duplex Tele Panoramic View					Duplex HiLo					Triplex HiLo									
SPE120	$h_{23}$	Lift height ( $h_{13}+h_3$ )	mm	2350	2800	3300	3700	4150	2350	2500	2800	3300	3700	4150	3300	3700	3950	4150	4500	4800	—	—
	$h_3$	Lift	mm	2260	2710	3210	3610	4060	2260	2410	2710	3210	3610	4060	3210	3610	3860	4060	4410	4710	—	—
	$h_1$	Height, mast lowered	mm	1718	1943	2193	2393	2618	1718	1793	1943	2193	2393	2618	1737	1870	1953	2020	2137	2237	—	—
	$h_2$	Free lift, ground to top of forks	mm	172	172	172	172	172	1282	1356	1506	1756	1956	2182	1274	1406	1490	1556	1674	1774	—	—
	$h_4$	Height, mast extended	mm	2827	3277	3777	4177	4627	2868	3018	3318	3818	4218	4660	3808	4207	4456	4657	5008	5308	—	—
SPE140	$h_{23}$	Lift height ( $h_{13}+h_3$ )	mm	2350	2800	3300	3700	4150	2350	2500	2800	3300	3700	4150	3300	3700	3950	4150	4500	4800	5400	—
	$h_3$	Lift	mm	2260	2710	3210	3610	4060	2260	2410	2710	3210	3610	4060	3210	3610	3860	4060	4410	4710	5310	—
	$h_1$	Height, mast lowered	mm	1744	1969	2219	2419	2644	1743	1818	1968	2218	2418	2643	1671	1805	1888	1955	2071	2171	2371	—
	$h_2$	Free lift, ground to top of forks	mm	—	—	—	—	—	1256	1332	1482	1732	1932	2156	1194	1328	1410	1478	1594	1694	1894	—
	$h_4$	Height, mast extended	mm	2892	3342	3842	4242	4692	2891	3041	3341	3841	4241	4691	3816	4218	4467	4668	5016	5316	5916	—
SPE160	$h_{23}$	Lift height ( $h_{13}+h_3$ )	mm	2350	2800	3300	3700	4150	2350	2500	2800	3300	3700	4150	3300	3700	3950	4150	4500	4800	5400	6000
	$h_3$	Lift	mm	2260	2710	3210	3610	4060	2260	2410	2710	3210	3610	4060	3210	3610	3860	4060	4410	4710	5310	5910
	$h_1$	Height, mast lowered	mm	1744	1969	2219	2419	2644	1743	1818	1968	2218	2418	2643	1671	1805	1888	1955	2071	2171	2371	2571
	$h_2$	Free lift, ground to top of forks	mm	—	—	—	—	—	1256	1332	1482	1732	1932	2156	1194	1328	1410	1478	1594	1694	1894	2096
	$h_4$	Height, mast extended	mm	2892	3342	3842	4242	4692	2891	3041	3341	3841	4241	4691	3816	4218	4467	4668	5016	5316	5916	6520

Mast			Duplex Tele Panoramic View					Duplex HiLo					Triplex HiLo								
SPE200	$h_{23}$	Lift height ( $h_{13}+h_3$ )	mm	2150	2600	3100	3500	3950	2150	2300	2600	3100	3500	3950	3200	3600	3850	4050	4400	—	—
	$h_3$	Lift	mm	2060	2510	3010	3410	3860	2060	2210	2510	3010	3410	3860	3110	3510	3760	3960	4310	—	—
	$h_1$	Height, mast lowered	mm	1744	1969	2219	2419	2644	1744	1819	1969	2219	2419	2644	1671	1805	1888	1955	2071	—	—
	$h_2$	Free lift, ground to top of forks	mm	—	—	—	—	—	1156	1232	1382	1632	1832	2056	1094	1228	1310	1378	1494	—	—
	$h_4$	Height, mast extended	mm	2792	3242	3742	4142	4592	2792	2942	3242	3742	4142	4592	3816	4218	4467	4668	5016	—	—



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## Truck features:

- BT Powertrak traction system
- Optimized Truck Performance
- Fingertip controls
- Electronic braking system
- Electronic speed control
- Operator safety
- Storage compartments
- Automatic switch-off
- Programmable performance
- Easy access for maintenance
- Sensilift
- Toyota I\_site: truck fleet management system (option)
- Hydraulic oil for low temperatures (option)
- Li-ion battery (option)

