

# Pedestrian stacker truck 1.2- 2.0 ton



## BT staxio

*P-series*

SPE120L

SPE140L

SPE160L

SPE200L



# Pedestrian stacker with elevating support arms

Specifications				SPE120L	SPE140L	SPE160L	SPE200L	
Identification	1.1	Manufacturer		BT	BT	BT	BT	
	1.2	Model		SPE120L	SPE140L	SPE160L	SPE200L	
	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
		Support arm capacity	Q	kg	2000	2000	2000	2000
	1.6	Load center	c	mm	600	600	600	600
	1.8	Load distance, centre of support arm wheel to face of forks raised support arms	x	mm	694	661	661	644
		lowered support arms	x	mm	725	692	692	675
1.9	Wheelbase raised support arms	y	mm	1408	1408	1408	1408	
	lowered support arms	y	mm	1439	1439	1439	1439	
Weight	2.1	Service weight incl. battery		kg	1349	1489	1489	1691
	2.2	Axle load, with load, drive/castor/fork wheel		kg	680/249/1620	820/143/1926	870/94/2125	680/384/2627
	2.3	Axle load, without load, drive/castor/fork wheel		kg	400/496/453	510/450/529	510/529/450	400/676/615
Wheels	3.1	Drive/castor/fork wheel			Friction/Vulkollan®/Vulkollan®			
	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 / 2 or 4	1x + 2 / 2 or 4	1x + 2 / 2 or 4	1x + 2 / 2 or 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	1995	1946	1946	1946
	4.3	Free lift	h <sub>2</sub>	mm	1556	1666	1666	1566
	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
	4.6	Initial Lift	h <sub>5</sub>	mm	120	120	120	120
	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	mm	2085	2106	2106	2129
		platform down	l	mm	2532	2565	2565	2577
	4.20	Length to face of forks						
		platform up	l <sub>2</sub>	mm	935	956	956	979
		platform down	l <sub>2</sub>	mm	1382	1415	1415	1427
	4.21	Overall width	b <sub>1</sub> /b <sub>2</sub>	mm	790/—	790/—	790/—	790/—
	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	19,5	19,5	19,5	19,5	
4.33	Aisle width for pallets 1000 × 1200 crossways							
	platform up	A <sub>st</sub>	mm	2619	2639	2639	2650	
	platform down	A <sub>st</sub>	mm	3068	3088	3088	3099	
4.34	Aisle width for pallets 800 × 1200 lengthways							
	platform up	A <sub>st</sub>	mm	2510	2536	2536	2550	
	platform down	A <sub>st</sub>	mm	2959	2985	2985	2999	
4.35	Turning radius							
	platform up	W <sub>a</sub>	mm	1665	1665	1665	1665	
	platform down	W <sub>a</sub>	mm	2114	2114	2114	2114	
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	0,38/0,45
5.8	Max. gradeability, with/without load		%	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 K5		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 acc to VDI cycle		kWh/h	1,04	1,06	1,07	1,06	
Others	8.1	Type of drive control			Variable AC	Variable AC	Variable AC	
	8.4	Sound level at the driver's ear according to EN 12 053		dB (A)	66	66	66	67

1) Measured according to company standard.

Data is based on standard truck and small battery.

All data are based on table configuration. Other configurations may give other values. Truck performance and dimensions are nominal and subject to tolerances. BT products and specifications are subject to change without notice.

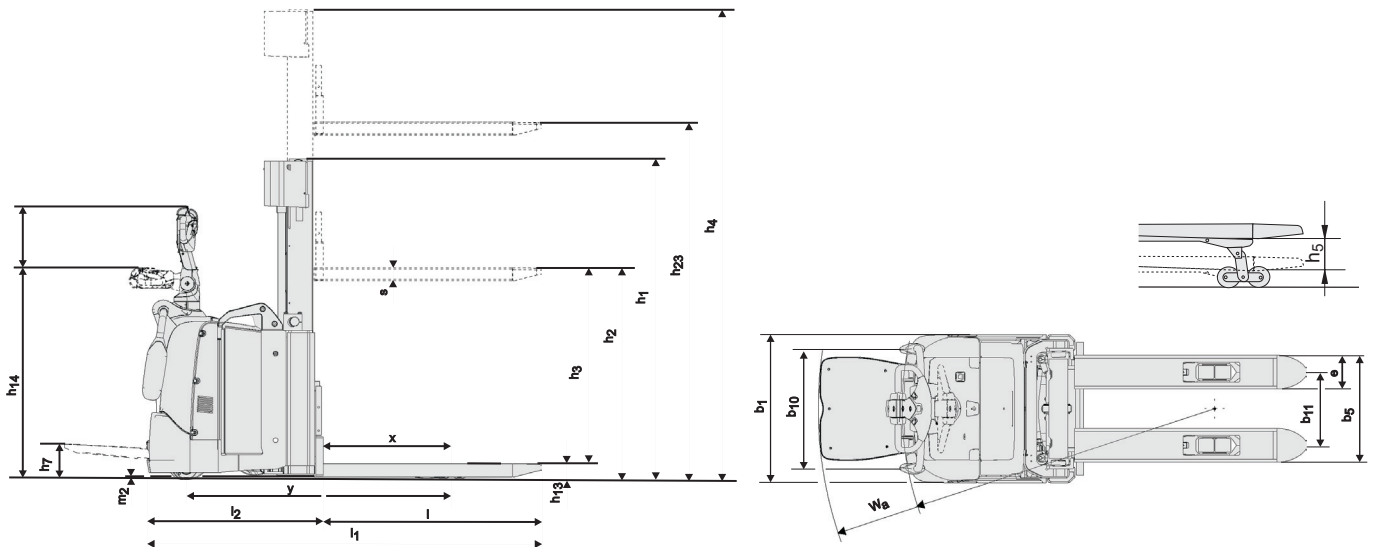
# Battery dependent dimensions

Dimensions		Battery		SPE120L				SPE140L				SPE160L				SPE200L			
				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																		
	raised support arms	y	mm	1408	1505	1408	1505	1408	1505	1408	1505	1408	1505	1408	1505	1408	1505	1505	
	lowered support arms	y	mm	1439	1536	1436	1536	1439	1536	1439	1536	1439	1536	1439	1536	1439	1536	1536	
4.19	Overall length																		
	platform up	$l_1$	mm	2085	2181	2085	2181	2106	2203	2106	2203	2106	2203	2106	2203	2129	2226	2129	2226
	platform down	$l_1$	mm	2532	2631	2532	2631	2565	2665	2565	2665	2565	2665	2565	2665	2577	2674	2577	2674
4.20	Length to face of forks																		
	platform up	$l_2$	mm	935	1031	935	1031	956	1053	956	1053	956	1053	956	1053	979	1076	979	1076
	platform down	$l_2$	mm	1382	1481	1382	1481	1415	1515	1415	1515	1415	1515	1415	1515	1427	1524	1427	1524
4.33	Aisle width for pallets 1000x1200 crossways																		
	platform up	$A_{st}$	mm	2619	2715	2619	2715	2639	2735	2639	2735	2639	2735	2639	2735	2650	2746	2650	2746
	platform down	$A_{st}$	mm	3068	3165	3068	3165	3088	3185	3088	3185	3088	3185	3088	3185	3099	3196	3099	3196
4.34	Aisle width for pallets 800x1200 lengthways																		
	platform up	$A_{st}$	mm	2510	2606	2510	2606	2536	2632	2536	2632	2536	2632	2536	2632	2550	2646	2550	2646
	platform down	$A_{st}$	mm	2959	3056	2959	3056	2985	3082	2985	3082	2985	3082	2985	3082	2999	3096	2999	3096
4.35	Turning radius																		
	platform up	$W_a$	mm	1665	1761	1665	1761	1665	1761	1665	1761	1665	1761	1665	1761	1665	1761	1665	1761
	platform down	$W_a$	mm	2114	2211	2114	2211	2114	2211	2114	2211	2114	2211	2114	2211	2114	2211	2114	2211
6.4	Battery voltage, nominal capacity $K_s$		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	195-270	345-403	195-270	345-403	195-270	345-403	195-270	345-403	195-270	345-403	195-270	345-403	195-270	345-403	195-270	345-403

# Mast dimensions

Mast			Duplex Tele Panoramic View					Duplex HiLo					Triplex HiLo										
SPE120L	$h_{23}$	Lift height ( $h_{13}+h_3$ )	mm	2350	2800	3300	3700	4150	1950	2350	2500	2800	3300	3700	4150	3300	3700	3950	4150	4500	4800	5400	6000
	$h_3$	Lift	mm	2260	2710	3210	3610	4060	1860	2260	2410	2710	3210	3610	4060	3210	3610	3860	4060	4410	4710	—	—
	$h_1$	Height, mast lowered	mm	1710	1935	2185	2385	2610	1510	1710	1785	1935	2185	2385	2610	1712	1845	1928	1995	2112	2212	—	—
	$h_2$	Free lift, ground to top of forks	mm	172	172	172	172	172	1082	1282	1356	1506	1756	1956	2182	1274	1406	1490	1556	1674	1774	—	—
	$h_4$	Height, mast extended	mm	2827	3277	3777	4177	4627	2468	2868	3018	3318	3818	4218	4660	3808	4207	4456	4657	5008	5308	—	—
SPE140L	$h_{23}$	Lift height ( $h_{13}+h_3$ )	mm	2350	2800	3300	3700	4150	1950	2350	2500	2800	3300	3700	4150	3300	3700	3950	4150	4500	4800	5400	6000
	$h_3$	Lift	mm	2260	2710	3210	3610	4060	1860	2260	2410	2710	3210	3610	4060	3210	3610	3860	4060	4410	4710	5310	—
	$h_1$	Height, mast lowered	mm	1652	1877	2127	2327	2552	1536	1652	1727	1877	2127	2327	2552	1662	1796	1879	1946	2062	2162	2362	—
	$h_2$	Free lift, ground to top of forks	mm	—	—	—	—	—	1056	1354	1430	1580	1830	2030	2254	1382	1516	1598	1666	1782	1882	2082	—
	$h_4$	Height, mast extended	mm	2892	3342	3842	4242	4692	2491	2891	3041	3341	3841	4241	4691	3816	4218	4467	4668	5016	5316	5916	—
SPE160L	$h_{23}$	Lift height ( $h_{13}+h_3$ )	mm	2350	2800	3300	3700	4150	1950	2350	2500	2800	3300	3700	4150	3300	3700	3950	4150	4500	4800	5400	6000
	$h_3$	Lift	mm	2260	2710	3210	3610	4060	1860	2260	2410	2710	3210	3610	4060	3210	3610	3860	4060	4410	4710	5310	5910
	$h_1$	Height, mast lowered	mm	1737	1962	2212	2412	2637	1536	1736	1811	1961	2211	2411	2636	1662	1796	1879	1946	2062	2162	2362	2562
	$h_2$	Free lift, ground to top of forks	mm	—	—	—	—	—	1056	1256	1332	1482	1732	1932	2156	1382	1516	1598	1666	1782	1882	2082	2284
	$h_4$	Height, mast extended	mm	2892	3342	3842	4242	4692	2491	2891	3041	3341	3841	4241	4691	3816	4218	4467	4668	5016	5316	5916	6520

Mast			Duplex Tele Panoramic View					Duplex HiLo					Triplex HiLo					
SPE200L	$h_{23}$	Lift height ( $h_{13}+h_3$ )	mm	2150	2600	3100	3500	3950	2150	2300	2600	3100	3500	3950	3200	3600	3850	4050
	$h_3$	Lift	mm	2060	2510	3010	3410	3860	2060	2210	2510	3010	3410	3860	3110	3510	3760	3960
	$h_1$	Height, mast lowered	mm	1737	1962	2212	2412	2637	1737	1812	1962	2212	2412	2637	1662	1796	1879	1946
	$h_2$	Free lift, ground to top of forks	mm	—	—	—	—	—	1344	1420	1570	1820	2020	2244	1282	1416	1498	1566
	$h_4$	Height, mast extended	mm	2792	3242	3742	4142	4592	2792	2942	3242	3742	4142	4592	3816	4218	4467	4668



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## Truck features:

- BT Powertrak traction system
- Optimised 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)

