

# 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		BT	BT	BT	BT		
	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	1691
2.2		Axle load, with load, drive/castor/fork wheel		kg	430/577/1599	580/214/1855	580/172/2047	600/559/2532	
2.3		Axle load, without load, drive/castor/fork wheel		kg	340/510/432	370/474/505	370/474/505	350/752/589	
Wheels	3.1	Drive/castor/fork wheel		Vulkollan®/Polyurethane/Vulkollan®					
	3.2	Wheel size, front		mm	Ø 85	Ø 85	Ø 85	Ø 85	
	3.3	Wheel size, rear		mm	Ø 230	Ø 230	Ø 230	Ø 230	
	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	5056	5056	5056	
	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	85	85	85	85	
	4.19	Overall length	platform up	l	mm	2037	2101	2101	2113
			platform down	l	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/—	790/—	
	4.22	Fork dimensions	s/e/l	mm	78/180/1150	78/180/1150	78/180/1150	78/180/1150	
	4.25	Width over forks	b <sub>5</sub>	mm	570	570	570	570	
	4.32	Ground clearance, center of wheelbase	m <sub>2</sub>	mm	38	38	38	38	
	4.33	Aisle width for pallets 1000 × 1200 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 800 × 1200 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>s</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		km/h	6,0/6,0	6,0/6,0	6,0/6,0	6,0/6,0	
				km/h	7,5/8,0	7,5/8,0	7,5/8,0	—	
				km/h	—	8,0/10,0	8,0/10,0	—	
	5.2	Lift speed, with/without load		m/s	0,18/0,33	0,17/0,33	0,15/0,31	0,15/0,24	
	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		
5.10	Service brake			Electromagnetic	Electromagnetic	Electromagnetic	Electromagnetic		
Electric motor	6.1	Drive motor rating (S2 60min)		kW	1,8	1,8	1,8	1,8	
				kW	1,8	1,8	1,8	—	
				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	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.

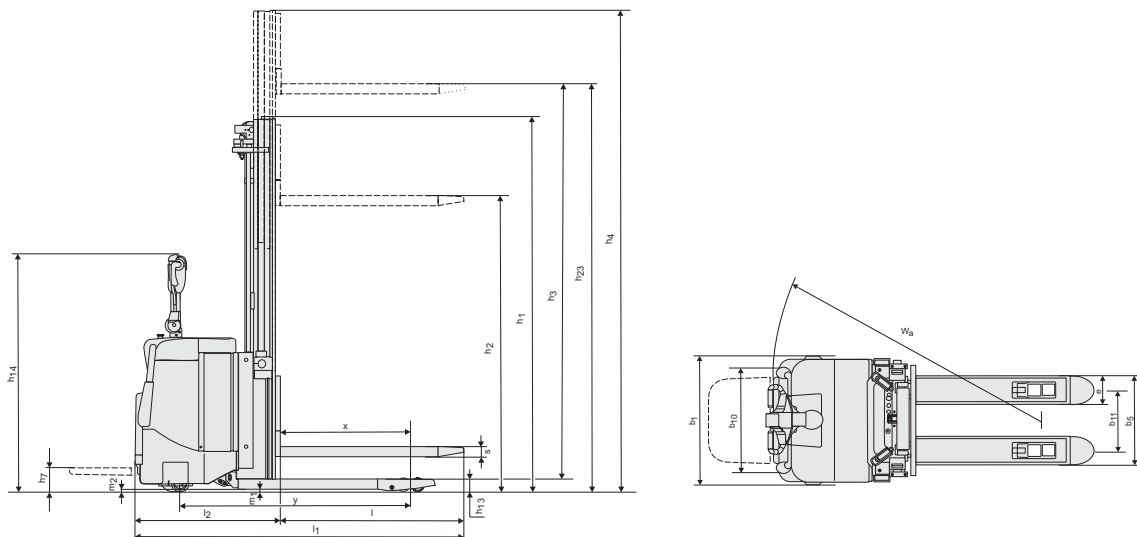
# Battery dependent dimensions

Dimensions		Battery		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	$l_1$	mm	2037	2136	2036	2136	2101	2198	2101	2198	2101	2198	2101	2198	2113	2210	2113	2210
	platform up			2489	2586	2489	2586	2563	2660	2563	2660	2563	2660	2563	2660	2574	2671	2574	2671
4.20	Length to face of forks	$l_2$	mm	887	986	886	986	951	1048	951	1048	951	1048	951	1048	963	1060	963	1060
	platform down			1339	1436	1339	1436	1413	1510	1413	1510	1413	1510	1413	1510	1424	1521	1424	1521
4.33	Aisle width for pallets 1000x1200 crossways	$A_{st}$	mm	2541	2637	2541	2637	2563	2659	2563	2659	2563	2659	2563	2659	2570	2666	2570	2666
	platform down			2990	3086	2990	3086	3012	3108	3012	3108	3012	3108	3012	3108	3019	3115	3019	3115
4.34	Aisle width for pallets 800x1200 lengthways	$A_{st}$	mm	2435	2531	2435	2531	2462	2558	2462	2558	2462	2558	2462	2558	2471	2567	2471	2567
	platform down			2884	2980	2884	2980	2911	3007	2911	3007	2911	3007	2911	3007	2920	3016	2920	3016
4.35	Turning radius	$W_a$	mm	1581	1677	1581	1677	1581	1677	1581	1677	1581	1677	1581	1677	1581	1677	1581	1677
	platform down			2030	2126	2030	2126	2030	2126	2030	2126	2030	2126	2030	2126	2030	2126	2030	2126
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										
SPE120	$h_{23}$	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	—	—
SPE140	$h_{23}$	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	—
SPE160	$h_{23}$	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					
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
	$h_3$	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)

