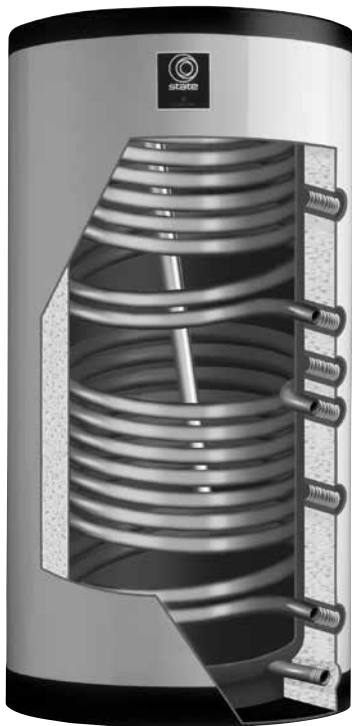


# SID COMMERCIAL DUAL COIL INDIRECT TANKS

SID - 80/100/125/170/190/270



SID range of dual coil indirect storage tanks are suitable for installations with solar and other heat recovery systems. The units are manufactured with heavy gauge steel and protected from corrosion by an advanced glass lining process. The range includes a selection of 6 models with capacities from 289 to 1007 litres.

- Single-wall spiral heat exchanger
- Glass lined steel tank with two coils
- Output primary coil 27 - 58 kW
- Output secondary coil 46 - 87 kW
- Electrolytic protection - magnesium anode
- Removable polyurethane soft foam insulation jacket
- Clean out inspection port
- Maximum tank working pressure 7 bar (700 kPa)
- Tank operation temperatures up to 95°C
- Coil operation temperature up to 110°C
- Suitable for vented (open) or unvented (sealed) systems
- Optional accessories:
  - Temperature meter
  - Temperature & pressure relief valve
  - Electric heating elements up to 7.5 kW



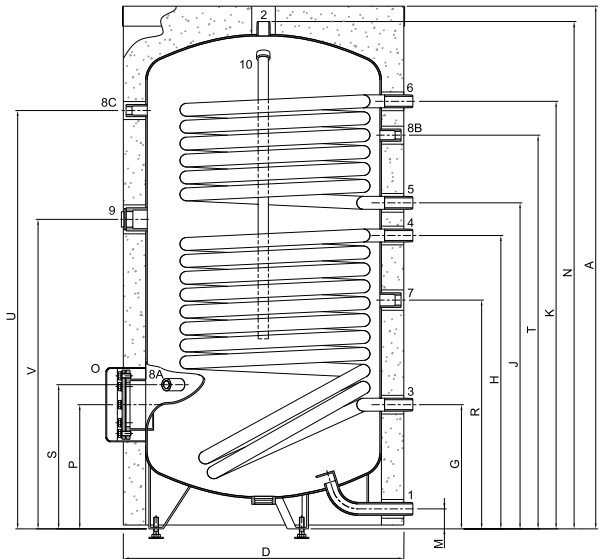
#### SAMPLE SPECIFICATION

*The tanks shall be State Water Heaters SID series industrial Indirect hot water storage calorifier, model number \_SID\_ xxxx (400-1000L) or an approved equal. The tank shall be for vertical installation. Vessel shall be constructed to European Pressure Directive for minimum 7 bar working pressure. Vessel shall be glass-lined, have up to 3 sacrificial magnesium anodes for additional corrosion protection. Entire vessel shall be insulated with 70-100 MM insulation with ABS cladding. Heat loss will meet ErP standards. A combined temperature and pressure relieve valve will be factory supplied. Two factory installed boiler water/solar heat exchanger will meet the heating requirement as specified for this project. The tank will have the option to install a back-up electric element up to 7.5 kW*

		SID 80	SID 100	SID 125	SID 170	SID 190	SID 270
<b>General</b>							
Output solar coil	kW	46	52	68	72	80	87
Surface area solar coil	m <sup>2</sup>	1.45	1.64	2.13	2.39	2.66	2.89
Water capacity solar coil	l	9.5	9.9	12.8	20.3	22.6	24.6
Flow rate solar coil (80-60°C)	l/h	1978	2236	2924	3096	3440	3741
Pressure drop solar coil	mbar	44	78	166	37	50	61
Output primary coil	kW	27	37	42	40	56	58
Surface area primary coil	m <sup>2</sup>	0.85	1.15	1.31	1.33	1.86	1.93
Water capacity primary coil	l	5.7	6.9	7.9	11.3	15.8	16.4
Flow rate primary coil (80-60°C)	l/h	1161	1591	1806	1720	2408	2494
Pressure drop primary coil	mbar	12	30	43	7	18	80
Maximum working pressure tank	kPa (bar)	800 (8)					
Maximum working pressure coil	kPa (bar)	1600 (16)					
Maximum operating temperature tank	°C	95					
Maximum operating temperature coil	°C	110					
Standby loss	kWh/24h	1.32	1.60	1.88	1.85	2.03	2.19
<b>Draw-off capacity T<sub>cold</sub> = 10°C/T<sub>set</sub> = 80°C</b>							
Storage capacity	l	289	382	470	641	718	1007
30 min. ΔT=28°C	l	1608	1994	2460	2830	3316	4018
60 min. ΔT=28°C	l	2727	3361	4150	4550	5404	6245
90 min. ΔT=28°C	l	3847	4728	5839	6270	7493	8472
120 min. ΔT=28°C	l	4966	6095	7528	7990	9582	10699
Continuous ΔT=28°C	l/h	2239	2734	3379	3440	4177	4454
Heating-up time ΔT=28°C	min.	8	8	8	11	10	14
30 min. ΔT=50°C	l	900	1117	1378	1585	1857	2250
60 min. ΔT=50°C	l	1527	1882	2324	2548	3026	3497
90 min. ΔT=50°C	l	2154	2648	3270	3511	4196	4744
120 min. ΔT=50°C	l	2781	3413	4216	4474	5366	5991
Continuous ΔT=50°C	l/h	1254	1531	1892	1926	2339	2494
Heating-up time ΔT=50°C	min.	14	15	15	20	18	24
30 min. ΔT=70°C	l	643	798	984	1132	1326	1607
60 min. ΔT=70°C	l	1091	1344	1660	1820	2162	2498
90 min. ΔT=70°C	l	1539	1891	2336	2505	2997	3389
120 min. ΔT=70°C	l	1986	2438	3011	3196	3833	4279
Continuous ΔT=70°C	l/h	896	1093	1351	1376	1671	1781
Heating-up time ΔT=70°C	min.	20	21	21	28	26	34
<b>Shipping data</b>							
Weight empty	kg	133	145	196	246	262	340
Maximum weight	kg	422	527	666	887	980	1347
Weight incl. packaging	kg	144	156	207	257	273	352
Width packaging	mm	780	780	780	870	870	1010
Height packaging	mm	1510	1850	2150	1930	2150	2100
Depth packaging	mm	780	780	780	870	870	1010

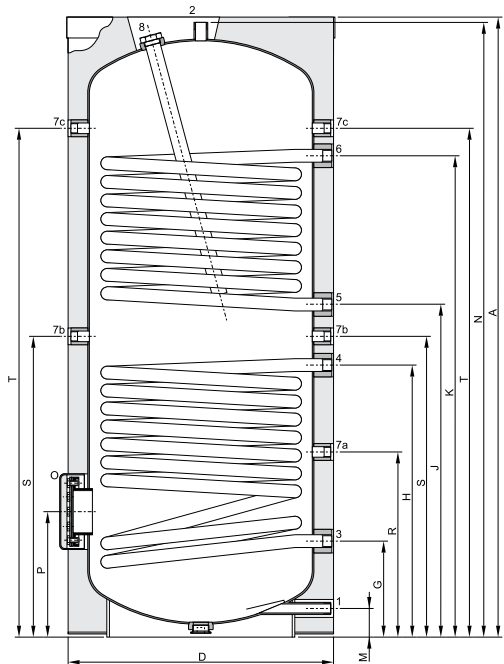
	SID 80	SID 100	SID 125	SID 170	SID 190	SID 270
A	1710	2045	1840	2035	2005	2000
D	600	600	750	750	900	1060
	740	760	910	930	1100	345
G	260	260	310	310	350	947
H	775	920	910	970	950	1127
J	945	1090	1090	1150	1130	1487
K	1280	1470	390	1570	1490	95
M	70	70	85	85	85	1962
N	1655	1995	1805	2000	1965	180
P	330	330	420	420	420	440
R	860	1000	1000	1080	1040	710
S	500	500	655	655	705	1035
T	1365	1700	1480	1875	1605	1600
Z	-	-	-	-	-	-

SID 80



1	Cold water inlet	R 2"	R 2"	R 2½"	R 2½"	R 2½"	R 2½"
2	Hot water outlet	R 2"	R 2"	R 2½"	R 2½"	R 2½"	R 2½"
3	Heat exchanger outlet	Rp 1"	Rp 1"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"
4	Heat exchanger inlet	Rp 1"	Rp 1"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"
5	Circulation connection	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"
6	Diameter inspection opening	115	115	180	180	180	-
7	T&P connection	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp 1¼"
8	Immerison well	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	
10	Anode connection	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	
11	Connection electrical element	-	-	-	-	-	-

SID 100 - 270



All dimensions are in mm

- 1 Pressure reducing valve
- 3 T&P valve
- 4 Stop valve
- 5 Non-return valve
- 6 Circulation pump

- A Cold water supply
- B Hot water outlet
- C Circulation pipe
- F1 Solar flow in
- G1 Solar flow return

In the instruction manual you will find all the necessary information regarding connection, installation and maintenance of the product; including information on the electrical connections.

Information regarding the recycling or disposal of the product can also be found in the manual. This manual is delivered with the appliance and can also be found on our website; [www.statewaterheatersme.com](http://www.statewaterheatersme.com)

