

TD - Twist & Dry™ Spray Drying Nozzle

The TD hollow cone nozzle is easy to assemble and easy to handle with fewer parts than many spray drying nozzles.

It has a large, one-piece swirl chamber, and no separate end plate, with the orifice disc and swirl chamber made of tungsten carbide for excellent longevity.



Characteristics

Flow Rates: 35.3 to 5,970 l/h

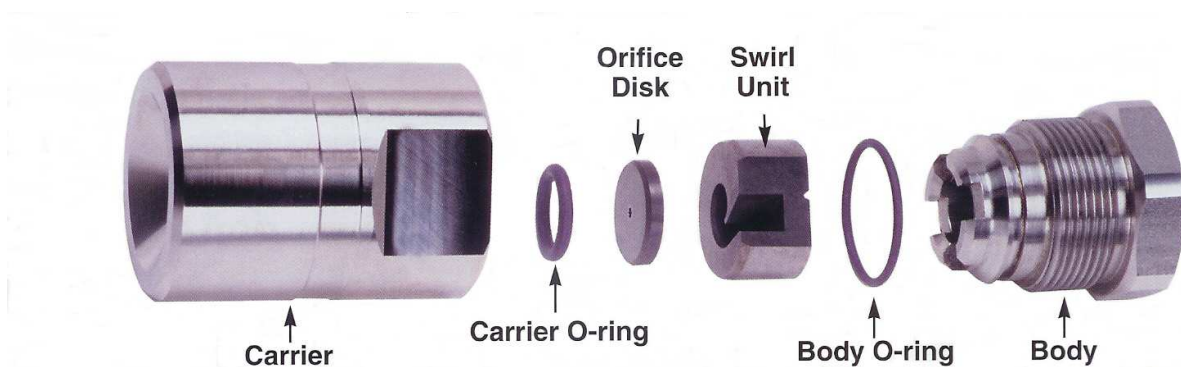
Spray angles: 50° ; 55° ; 60° ; 65° ; 70° ; 75° ; 80°

1/4", 3/8", 1/2" and 3/4" pipe size NPT, BSP or welded

Design pressure: 350 bar

Construction

Constructed from corrosion resistant SS316 (body), tungsten carbide (swirl chamber & orifice disc), and EPDM (O-rings).



**see below for flow charts

TD Twist & Dry™ Spray Drying Flow Charts



Nozzle No	Spray Angle	Swirl orifice	Orifice diameter (mm)	Litres per hour @ bar											
				15	35	50	70	90	100	120	150	175	200	275	350
TD2-34 TD1-37	70 80	SW2 SW1	0.864 0.940	35.3	53.9	64.5	76.3	86.5	91.2	99.9	112	121	129	151	171
TD2-40 TD1-49	75 85	SW2 SW1	1.02 1.24	44.1	67.4	80.6	95.3	108	114	125	140	151	161	189	213
TD4-34 TD3-40	60 70	SW4 SW3	0.864 1.02	53.0	80.9	96.7	114	130	137	150	167	181	193	227	256
TD5-34 TD4-40	50 65	SW5 SW4	0.864 1.02	61.8	94.4	113	133	151	160	175	195	211	226	265	298
TD4-43 TD3-49	65 75	SW4 SW3	1.09 1.24	70.6	108	129	153	173	182	200	223	241	258	302	341
TD6-37 TD5-40 TD4-46 TD3-55	50 60 70 75	SW6 SW5 SW4 SW3	0.940 1.02 1.17 1.40	79.4	121	145	172	195	205	225	251	271	290	340	384
TD6-40 TD5-43 TD4-52	50 60 70	SW6 SW5 SW4	1.02 1.098 1.32	88.3	135	161	191	216	228	250	279	301	322	378	426
TD5-49 TD4-58 TD3-67	60 70 80	SW5 SW4 SW3	1.24 1.47 1.70	97.1	148	177	210	238	251	275	307	332	355	416	469
TD6-46 TD5-52 TD4-61 TD3-70	55 65 75 80	SW6 SW5 SW4 SW3	1.17 1.32 1.55 1.78	106	162	193	229	259	273	300	335	362	387	453	512
TD6-52 TD5-58 TD4-70	55 65 75	SW6 SW5 SW4	1.32 1.47 1.78	124	189	226	267	303	319	349	391	422	451	529	597
TD7-49 TD6-55 TD5-64 TD4-76	50 60 70 80	SW7 SW6 SW5 SW4	1.24 1.40 1.63 1.93	141	216	258	305	346	365	399	447	482	516	605	682
TD7-52 TD6-61 TD5-70	50 60 70	SW7 SW6 SW5	1.32 1.55 1.78	159	243	290	343	389	410	449	502	543	580	680	767
TD7-58 TD6-64 TD5-76 TD4-91	55 65 75 80	SW7 SW6 SW5 SW4	1.47 1.63 1.93 2.31	177	270	322	381	432	456	499	558	603	645	756	853
TD7-61 TD6-70 TD5-82	55 65 75	SW7 SW6 SW5	1.55 1.78 2.08	194	297	355	419	476	501	549	614	663	709	831	938
TD7-64 TD6-76 TD5-88	55 65 75	SW7 SW6 SW5	1.63 1.93 2.24	212	324	387	458	519	547	599	670	724	773	907	1020
TD8-67 TD7-78 TD6-88 TD5-109	50 60 70 80	SW8 SW7 SW6 SW5	1.70 1.93 2.24 2.77	265	404	483	572	649	684	749	837	904	967	1130	1280



Nozzle No	Spray Angle	Swirl orifice	Orifice diameter (mm)	Litres per hour @ bar											
				15	35	50	70	90	100	120	150	175	200	275	350
TD8-76 TD7-85 TD6-103	50 65 75	SW8 SW7 SW6	1.93 2.16 2.62	318	485	580	686	778	820	899	1010	1090	1160	1360	1540
TD8-82 TD7-97 TD6-115	55 65 75	SW8 SW7 SW6	2.08 2.46 2.92	371	566	677	801	908	957	1050	1170	1270	1350	1590	1790
TD9-82 TD8-91 TD7-106 TD6-127	50 60 70 80	SW9 SW8 SW7 SW6	2.08 2.31 2.69 3.23	424	647	773	915	1040	1090	1200	1340	1450	1550	1810	2050
TD9-88 TD8-100 TD7-118 TD6-142	50 60 70 80	SW9 SW8 SW7 SW6	2.24 2.54 3.00 3.61	477	728	870	1030	1170	1230	1350	1510	1630	1740	2040	2300
TD9-94 TD8-106 TD7-127	55 65 75	SW9 SW8 SW7	2.39 2.69 3.23	530	809	967	1140	1300	1370	1500	1680	1810	1930	2270	2560
TD9-106 TD8-121 TD7-145	55 65 75	SW9 SW8 SW7	2.69 3.07 3.68	618	944	1130	1340	1510	1600	1750	1950	2110	2260	2650	2980
TD10-103 TD9-115 TD8-133	50 60 70	SW10 SW9 SW8	2.62 2.92 3.38	706	1080	1290	1530	1730	1820	2000	2230	2410	2580	3020	3410
TD10-118 TD9-127 TD8-145	55 60 70	SW10 SW9 SW8	3.00 3.23 3.68	794	1210	1450	1720	1950	2050	2250	2510	2710	2900	3400	3840
TD9-136 TD8-157	65 75	SW9 SW8	3.45 3.99	883	1350	1610	1910	2160	2280	2500	2790	3020	3220	3780	4260
TD9-148	65	SW9	3.76	971	1480	1770	2100	2380	2510	2750	3070	3320	3550	4160	4690
TD10-136 TD9-154	60 70	SW10 SW9	3.45 3.91	1060	1620	1930	2290	2590	2740	3000	3350	3620	3870	4540	5120
TD10-151	60	SW10	3.84	1150	1750	2100	2480	2810	2960	3250	3630	3920	4190	4910	5540
TD10-157	65	SW10	3.99	1240	1890	2260	2670	3030	3190	3500	3910	4220	4510	5290	5970