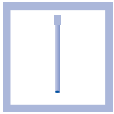


Solid stream nozzles

- Cleaning
- High pressure cleaning
- Jet cutting
- Recycling of liquids and many others...



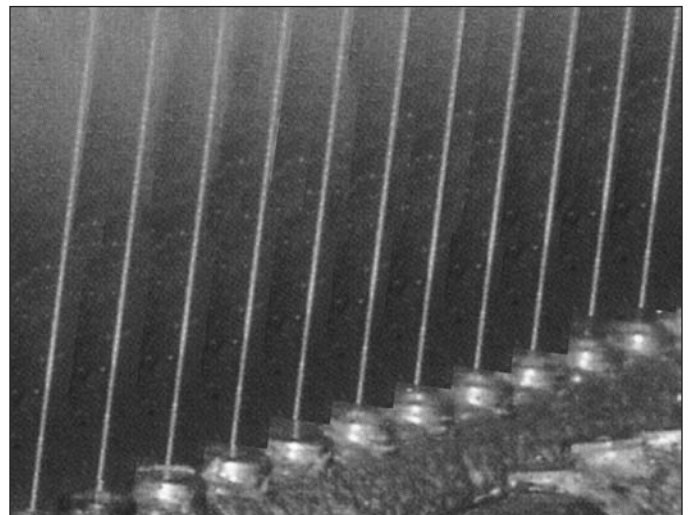
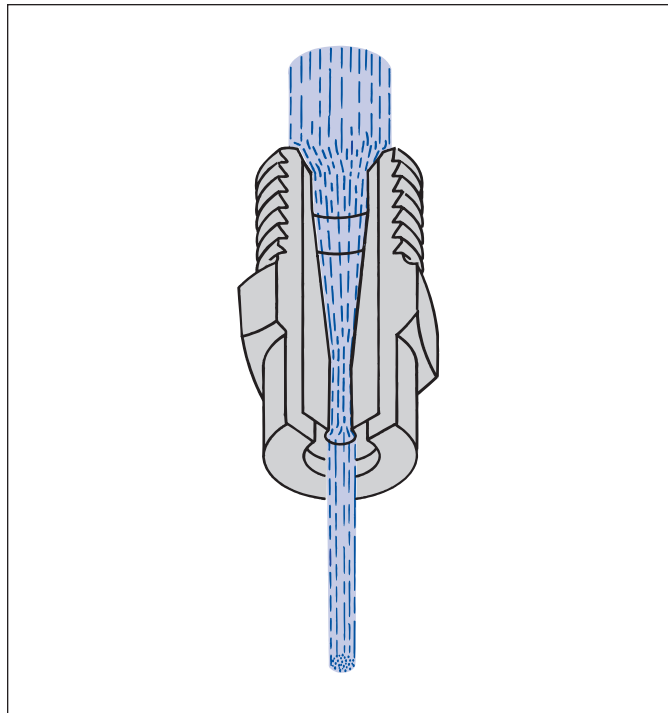
Solid stream nozzles

Thanks to optimum flow geometries, Lechler solid stream nozzles produce compact, solid stream jets of defined lengths. The almost turbulence-free liquid inflow results in excellent spray efficiency, even without jet stabilizer inserts.

Solid stream nozzles provide the greatest impact per square inch of any other type of nozzle, all other factors being equal (such as flow rate, pressure, and spray distance). A solid stream nozzle is considered a 0° flat fan nozzle, and a flat fan nozzle's impact per square inch increases as the spray angle decreases. That is why a 0° nozzle (i.e., a solid stream nozzle) provides the greatest impact.

So for all cleaning processes, cutting operations, and applications requiring perfect columnar impacts in order to generate concentrated jet power, the precision and power of Lechler solid stream nozzles enhances the productivity and performance of your plant.

For applications requiring high pressure, Lechler has a comprehensive range of solid stream nozzles in stainless steel with special hardening or with Tungsten Carbide inserts for longer life under such conditions. **Lechler high pressure solid stream nozzles** create tight, stable, and powerful solid jets which do not break apart even when operating at high pressures.



Solid stream header in use at a paper mill



Solid stream nozzles

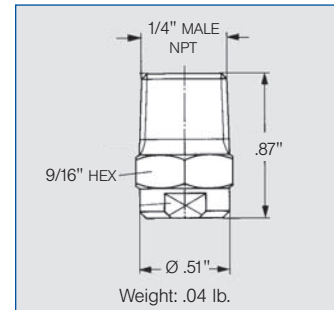
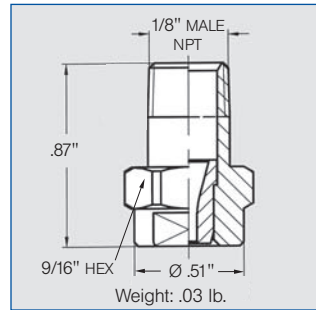
Series 544



Solid stream with excellent stability offers the highest impact. Orifice design maintains integrity over long distances.

Applications:

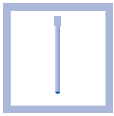
- Concentrated cleaning
- Paper trimming



Ordering no.				Orifice diam. (in.)	Flow Rate (Gallons Per Minute)						
Type	Mat. no.		Connection Male NPT 1/8" 1/4"		10 psi	20 psi	litres per minute 2 bar	40 psi	60 psi	80 psi	100 psi
	303 SS 16	Brass 30									
544. 110	○	○	BA BC	.009	.006	.009	.04	.012	.015	.018	.020
544. 160	○	-	BA BC	.013	.009	.013	.06	.019	.023	.026	.029
544. 200	○	○	BA BC	.015	.016	.022	.10	.031	.038	.044	.049
544. 240	○	-	BA BC	.020	.025	.035	.16	.05	.06	.07	.08
544. 280	○	-	BA BC	.025	.04	.05	.25	.08	.10	.11	.12
544. 320	○	○	BA BC	.032	.06	.09	.40	.12	.15	.18	.20
544. 360	○	○	BA BC	.041	.10	.14	.63	.20	.24	.28	.31
544. 400	○	○	BA BC	.051	.16	.22	1.0	.31	.38	.44	.49
544. 480	○	○	BA BC	.052	.25	.35	1.6	.50	.61	.70	.78
544. 560	○	○	BA BC	.065	.39	.55	2.5	.78	.95	1.1	1.2
544. 640	○	○	BA BC	.082	.62	.88	4.0	1.2	1.5	1.8	2.0
544. 720	○	○	BA BC	.104	.98	1.4	6.3	2.0	2.4	2.8	3.1
544. 800	○	○	BA BC	.130	1.6	2.2	10.0	3.1	3.8	4.4	4.9

Example Type + Material no. + Conn. = Ordering no.
for ordering: 544. 720 + 30 + BC = 544. 720. 30. BC

The folded page on the back cover of this catalog provides a listing of alternatives of various assembly possibilities. For more information on assembly accessories, please refer to the Accessories section beginning on page 123.



High pressure solid stream nozzles

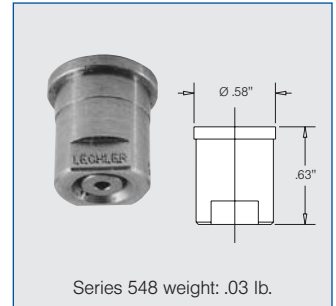
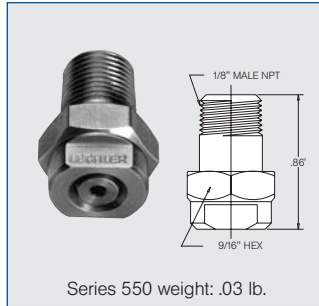
Series 546 / 548 / 550



Exceptionally tight solid stream nozzles for pressures up to 4500 psi. Hardened stainless steel insert is mounted in a 303 stainless steel body for longer service life. Available in 1/8" NPT, 1/4" NPT or tip version.

Applications:

- High pressure cleaning
- Trimming
- Jet cutting



Nozzle Code			Flow Rate Code	Orifice diam. (in.)	Flow Rate (Gallons Per Minute)								
1/8" Male NPT	1/4" Male NPT	Tip			300 psi	450 psi	725 psi	1000 psi	litres per minute 100 bar	1500 psi	2000 psi	3000 psi	4500 psi
550	546	548	360	.033	.54	.67	.84	.99	4.5	1.2	1.4	1.7	2.1
550	546	548	400	.041	.82	1.0	1.3	1.5	6.8	1.8	2.1	2.6	3.2
550	546	548	410	.042	.90	1.1	1.4	1.6	7.5	2.0	2.3	2.8	3.5
550	546	548	420	.044	.96	1.2	1.5	1.8	8.0	2.1	2.5	3.0	3.7
550	546	548	450	.047	1.1	1.3	1.7	2.0	9.2	2.5	2.8	3.5	4.3
550	546	548	470	.050	1.2	1.5	1.9	2.3	10.3	2.8	3.2	3.9	4.8
550	546	548	480	.052	1.4	1.7	2.2	2.5	11.5	3.1	3.6	4.4	5.4
550	546	548	500	.055	1.5	1.9	2.4	2.8	12.6	3.4	3.9	4.8	5.9
550	546	548	520	.058	1.7	2.0	2.6	3.0	13.8	3.7	4.3	5.2	6.4
550	546	548	570	.067	2.2	2.7	3.4	4.0	18.2	4.9	5.6	6.9	8.4
550	546	548	600	.074	2.7	3.3	4.2	5.0	23	6.1	7.0	8.6	10.5
550	546	548	670	.091	4.1	5.0	6.4	7.5	34	9.2	10.6	13.0	15.9
550	546	548	720	.105	5.5	6.7	8.5	10.0	46	12.3	14.2	17.3	21

Connection Code	Connection	Maximum pressure
A3. 00	Male BSPT	ca. 5000 psi
A3. 07	Male NPT	ca. 5000 psi
A3. 29	Retainer cap	ca. 3000 psi

Example for ordering: Nozzle code 550. + Flow rate code 360. + Connection code A3. 07 = Ordering no. 550. 360. A3. 07
 (.99 gpm & 0° spray angle @ 1000 psi; 1/8" Male NPT)

Solid stream



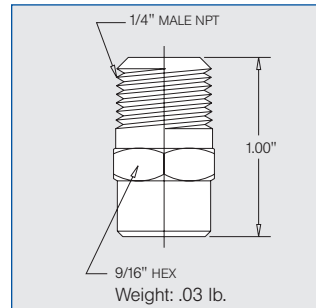
High pressure solid stream nozzles Tungsten carbide orifice Series 546



Exceptionally tight solid stream nozzles for pressures up to 10,000 psi. Tungsten carbide orifice insert is mounted in a 303 stainless steel body. Available in 1/4" NPT version only.

Applications:

- High pressure cleaning
- Trimming
- Jet cutting



Spray angle	Ordering no.	Orifice diam. (in.)	Flow Rate (Gallons Per Minute)					
			1000 psi	3000 psi	litres per minute 300 bar	5000 psi	7000 psi	9000 psi
0°	546. 370. 27. 07	.033	1.1	1.9	8.7	2.5	2.9	3.3
	546. 390. 27. 07	.037	1.4	2.4	10.8	3.1	3.6	4.1
	546. 420. 27. 07	.042	1.8	3.0	13.8	3.9	4.6	5.2
	546. 460. 27. 07	.049	2.2	3.8	17.3	4.9	5.8	6.6
	546. 500. 27. 07	.055	2.7	4.7	22	6.1	7.2	8.2
	546. 540. 27. 07	.061	3.5	6.1	28	7.9	9.3	10.5
	546. 580. 27. 07	.068	4.4	7.6	35	9.8	11.6	13.1
	546. 620. 27. 07	.079	5.5	9.5	43	12.3	14.5	16.5
	546. 660. 27. 07	.086	6.9	12.0	55	15.4	18.3	21
	546. 700. 27. 07	.096	8.8	15.2	69	20	23	26

