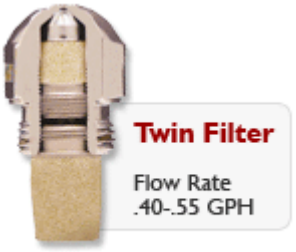
Steinen manufactures oil burner nozzles and accessories, industrial nozzles and mining industry nozzles. Our products have demonstrated a worldwide reputation for quality, performance and reliability. They are sold domestically and internationally through a company sales organization, independent sales representatives and distributors.

Steinen's worldwide reputation for quality and reliability is a direct result of our 100% devotion to producing the best oil burner nozzle on the market. Today, virtually every major burner manufacturer relies on Steinen nozzles to achieve optimum burner performance.



Twin Filter

Flow Rate
.40-.55 GPH

Standard Filter

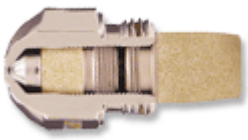
Flow Rate
.60-15.00 GPH

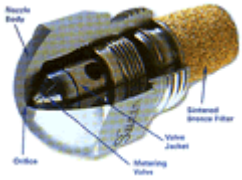
16.00 - 28.00 Finished Less Filter

Our state-of-the-art facilities are available to meet our customers' most demanding requirements. As one of the few nozzle manufacturers who fabricate all components on-site, Steinen completely controls every aspect of nozzle fabrication, ensuring the consistent quality and reliability that make Steinen the number one choice. Every Steinen nozzle is performance tested for flow capacity, spray characteristics and spray angle before leaving our factory. This assures our customers the quality, performance and consistency they have come to expect from Steinen nozzles.

With one of the largest sales and service organizations in the industry and office locations throughout the world, Steinen continues to provide its customers with the products they need to compete in a global market.

Steinen Dyna-Coin Process is a trademark of the Wm. Steinen Mfg. Co. The Dyna-Coin Process provides a high quality finish for a perfect seating surface between the metering valve and the nozzle body, thus assuring consistent, accurate fuel delivery.





Nozzle Body- The nozzle body is constructed from a specially formulated **stainless steel** in order to achieve long wear life and lower internal surface temperatures than low cost brass or similar high conductivity materials. Lower surface temperatures reduce heat transfer thus minimizing varnish accumulation and carbon deposits. Reduced heat absorption within the nozzle body is especially critical with today's smaller and hotter operating combustion conditions.

Valve Jacket - Round fuel inlet holes reduce the possibility of particle contamination while achieving a uniform flow and distribution of fuel oil through the nozzle. All nozzles contain an exclusive nickel alloy treated jacket assuring improved wear and corrosion resistance. The nickel alloy treated jacket provides a non-magnetic surface offering a smooth fuel delivery.

Dyna-Coin Process - The Dyna-Coin® process provides a high quality finish for a perfect seating surface between the metering valve and the nozzle body. This assures consistent, accurate fuel delivery.

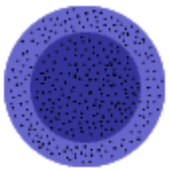
Sintered Bronze Filters - Are designed to provide maximum filtration capabilities. Bronze filters are furnished on all standard nozzles, .40 G.P.H. thru 15.00 G.P.H. (1, 51 thru 57, 0 l/h). Nozzles 16.00 G.P.H. (61,0 l/h) and larger are furnished less filters.

Nozzle Design and Operating Considerations - Nominal nozzle flow capacities are based on an operating pressure of 100 P.S.I. (6.9 Bar). Operation at higher pressures increases flow capacities. The effects of pressure, viscosity, density, grade and especially burner configurations, are important in the design and operating performance characteristics of oil fired equipment.

The Twin-Filter Nozzle is specifically designed for today's demanding requirements. The advanced design allows the interior of the nozzle to stay clean longer so that oil flows freely through the finely machined tangential slots into the swirl chamber and out the orifice with no restriction:

-
- Increased total filtering capacity by 62% over single filter technology
- Inner filter nominal filtration rate of 25 microns
- 15% more filter volume than the competition
- Anti-clog design stays cleaner longer even under today's flow rate specifications and fuel oil impurities thus insuring longer nozzle life
- 100% electronic and visual testing to ensure proper flow, angle and spray pattern
- Flow tolerance +/- 4%

- Trouble free operation, even at extreme temperatures, thanks to stainless steel construction



TYPE ST

.40 - .55 G.P.H. (1,32 - 1,76 Kg/h) at 6.9 bar

Solid cone nozzles are designed to produce a fine atomized uniform spray distribution pattern.

TYPE QT

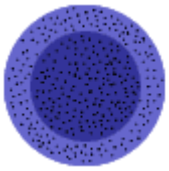
.50 - .55 G.P.H (1,59 - 1,76 Kg/h) at 6.9 bar

A specially designed nozzle with a distinctive spray pattern for use where the conventional Hollow or Solid Cone spray patterns do not match a particular air pattern. The Type QT is highly successful in solving critical noise and pulsating combustion problems.

TYPE HT

.40 - .55 G.P.H. (1,32 - 1,76 Kg/h) at 6.9 bar

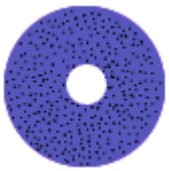
Produces a fine atomized hollow cone spray distribution pattern. The nozzle is designed for use with hollow cone air patterns to produce clean, quiet and efficient combustion. This nozzle is also recommended for burners where there is no distinct air pattern.



TYPE S

.60 - 4.00 G.P.H. (1,96 - 12,71 Kg/h) at 6.9 bar

Solid cone nozzles are designed to produce a fine atomized uniform spray distribution pattern.



TYPE SS

4.50 - 28.00 G.P.H. (14,31 - 89,03 Kg/h) at 6.9 bar

A general purpose nozzle in the larger sizes that delivers a semi-solid cone spray distribution pattern. As the flow rate of the nozzle increases, the spray pattern becomes more hollow. This nozzle, in addition to the type PH, is recommended for applications where large capacities are required.

TYPE Q

.60 - 3.00 G.P.H (1,96 - 9,54 Kg/h) at 6.9 bar

A specially designed nozzle with a distinctive spray pattern for use where the conventional Hollow or Solid Cone spray patterns do not match a particular air pattern. The Type Q is highly successful in solving critical noise and pulsating combustion problems.

TYPE H

.60 - 2.25 G.P.H. (1,96 - 7,15 Kg/h) at 6.9 bar

Produces a fine atomized hollow cone spray distribution pattern. The nozzle is designed for use with hollow cone air patterns to produce clean, quiet and efficient combustion. This nozzle is also recommended for burners where there is no distinct air pattern.

TYPE PH

2.50 - 10.00 G.P.H. (7,95 - 31,79 Kg/h) at 6.9 bar

Similar to the Type H spray patterns except that they are relatively more hollow. Made in the larger capacities for light and heavy oil applications where fine atomization is required.

Quality Control -- Every Steinen Dyna-Coin® nozzle is individually tested for flow capacity, spray characteristics and spray angle in accordance with the latest test standards utilizing the most advanced equipment available to the industry.

To facilitate easy nozzle identification and selection, each nozzle is packed in individual vials and each vial cap is clearly stamped with the nozzle capacity, spray angle and letter identifying the type of spray pattern as follows: "H" and "HT" for Hollow cone and Twin Filter series, "S" and "ST" for Solid cone and Twin Filter series, and "Q" and "QT" for all purpose and Twin Filter series. Twelve (12) nozzles of one type, flow and angle are packed with color coded labeling for easy identification - Red, Hollow; Blue, Solid; Green, Q, All Purpose.