

# SPRAY DRYING

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# PIONEERS OF SPRAY DRYING TECHNOLOGY

Spray drying is a means of producing a dried powder from a liquid or thick, semisolid solution by rapidly drying with a hot gas. This is a common method used to dry many temperature-sensitive materials like foods, chemicals and pharmaceuticals. The roots of spray drying can be traced back to the 1800's when rotary atomizers were used to produce particles. Spraying Systems Co. developed the first line of commercially available nozzles for spray drying in the 1940's.

The term "SprayDry®" was first used by Spraying Systems Co. in 1943 and became a registered trademark of the company in 1951. As demand for products like dried milk and eggs increased during World War II and after, our SprayDry line evolved rapidly to accommodate a wide variety of applications. Spraying Systems Co. offers the broadest selection of SprayDry® nozzles available, including core, whirlchamber and swirlchamber designs.



## ADDITIONAL RESOURCES

For more information on spray drying,  
[click here ▶](#)



**SV SERIES SPRAYDRY® NOZZLE**

**PRODUCT OVERVIEW**

New SV Series SprayDry® nozzles feature maximum-free-passage orifices and a one-piece swirlchamber made from special tungsten carbide material to deliver consistent performance with superior resistance to wear and clogging.

**FEATURES AND BENEFITS**

- Hand-tight design for easy assembly and disassembly
- Large maximum-free-passage helps reduce clogging and maintenance downtime
- Rated at 10,000 psi
- Long wear life
- Quick delivery



SV Series  
SprayDry® Nozzles

**ADDITIONAL  
RESOURCES**

For more information on SV Series SprayDry® Nozzles including performance data, [click here ▶](#)

**DIMENSIONS**

	Nozzle Type	Inlet Conn.	A Dia. in. (mm)	B Length in. (mm)	C Length in. (mm)	D Flat in. (mm)	E Dia. in. (mm)	F Flat in. (mm)	Weight lbs. (kg)
	SV	1/4", 3/8", 1/2"	1.90 (48.3)	2.62 (66.4)	2.00 (50.8)	1.5 (38.1)	1.74 (44.2)	1.75 (44.5)	1.5 (0.67)

**SK SERIES SPRAYDRY® NOZZLE**

**PRODUCT OVERVIEW**

SK series SprayDry® nozzles produce a fine, hollow-cone spray with a very narrow drop size distribution ideal for spray drying applications. SK SprayDry® nozzles are also available with hand-tight (H) and maximum-free-passage features (MFP) and are available with 145 different orifice insert/core combinations to suit your application’s exact needs.

**FEATURES AND BENEFITS**

- Hand-tight design for easy assembly and disassembly
- Large maximum-free-passage helps reduce clogging and maintenance downtime
- Anti-bearding design reduces dangerous contamination
- Long wear life
- Improved sanitary features for regulatory compliance in pharmaceutical applications

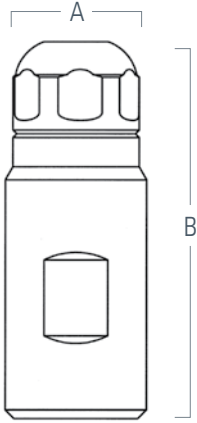


SB Series  
SprayDry® Nozzles

**ADDITIONAL  
RESOURCES**

For more information on SK Series SprayDry® Nozzles including performance data, [click here](#) ►

**DIMENSIONS**

	Nozzle Type	Inlet Conn.	A Dia. in. (mm)	B Length in. (mm)	Weight lb. (kg)
	SKH-MFP	1/4"	1.12 (28.4)	2.99 (75.9)	0.75 (0.34)
		3/8"	1.12 (28.4)	2.99 (75.9)	0.69 (.031)

**SB SERIES SPRAYDRY® NOZZLE**

**PRODUCT OVERVIEW**

SB series SprayDry® nozzles are similar to the SK series nozzles. The SB SprayDry® nozzle is available with hand-tight (H) and maximum-free-passage features (MFP) as well as over 120 different orifice insert/core combinations to suit your application’s exact needs.

**FEATURES AND BENEFITS**

- Hand-tight design for easy assembly and disassembly
- Large maximum-free-passage helps reduce clogging and maintenance downtime
- Anti-bearding design reduces dangerous contamination
- Long wear life
- Improved sanitary features for regulatory compliance in pharmaceutical applications




SK Series  
SprayDry® Nozzles

**ADDITIONAL  
RESOURCES**

For more information on SB Series SprayDry® Nozzles including performance data, [click here](#) ▶

**DIMENSIONS**

	Nozzle Type	Inlet Conn.	A Dia. in. (mm)	B Length in. (mm)	Weight lb. (kg)
	SBH-MFP	3/8"	1.49 (37.8)	4.01 (101.9)	1.6 (0.73)
		1/2"	1.49 (37.8)	4.17 (105.9)	1.7 (0.77)