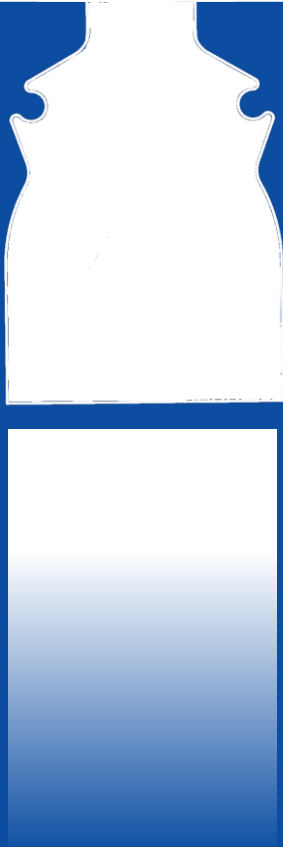


## CHAPTER 7

### ◆◆ Air Blower Nozzles



# ABOUT US

## We Are Here to Help

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### • Welcome to SPADFLOW

facing the **Challenges** of new industries and emerging markets.

### • Spray Technologies

with over **Thousands of Spray Nozzle Types** SPADFLOW has become Iran's leading producer.

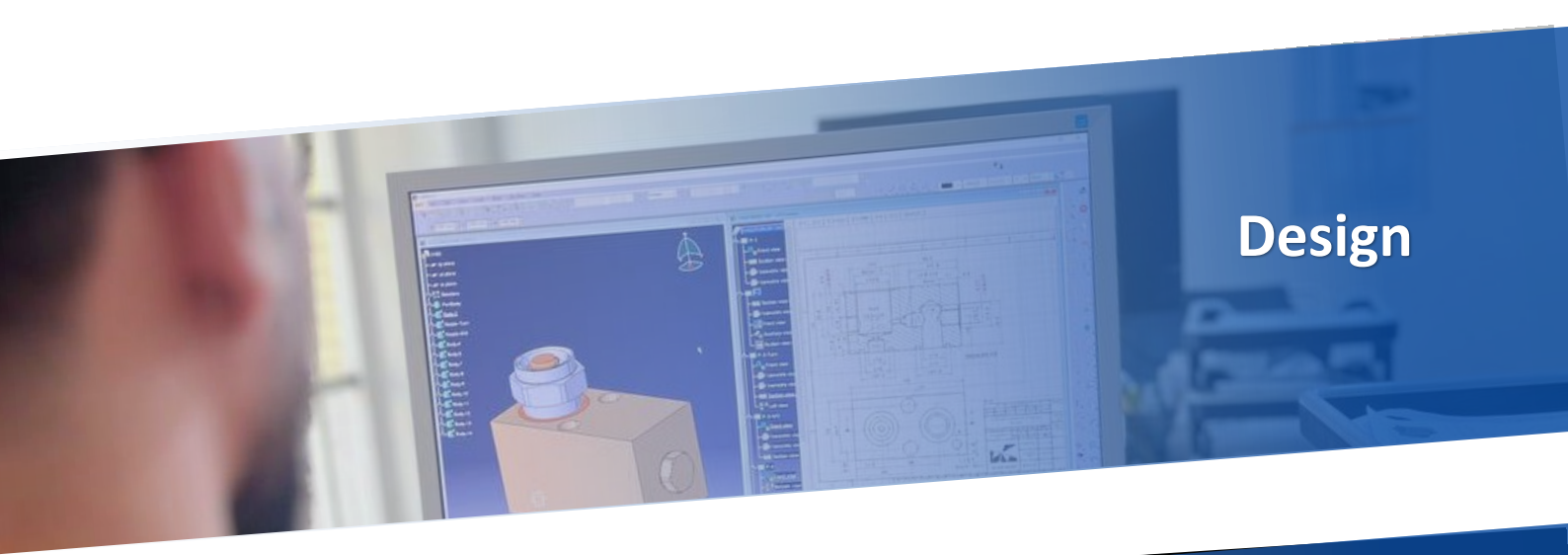
### • From Design to Installation

with **Skilled** engineers and project managers, SPADFLOW is providing consultancy and support services.

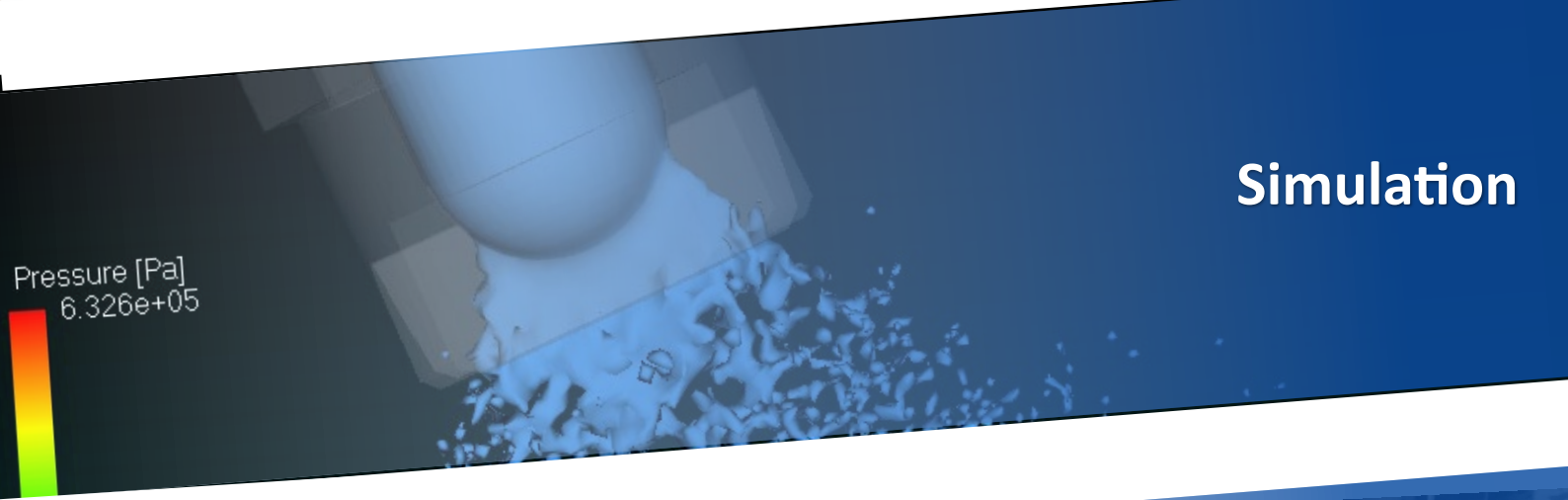
### • Knowledge and Experience

as an **Expert** on spray technology, SPADFLOW is at the forefront of production and innovation.

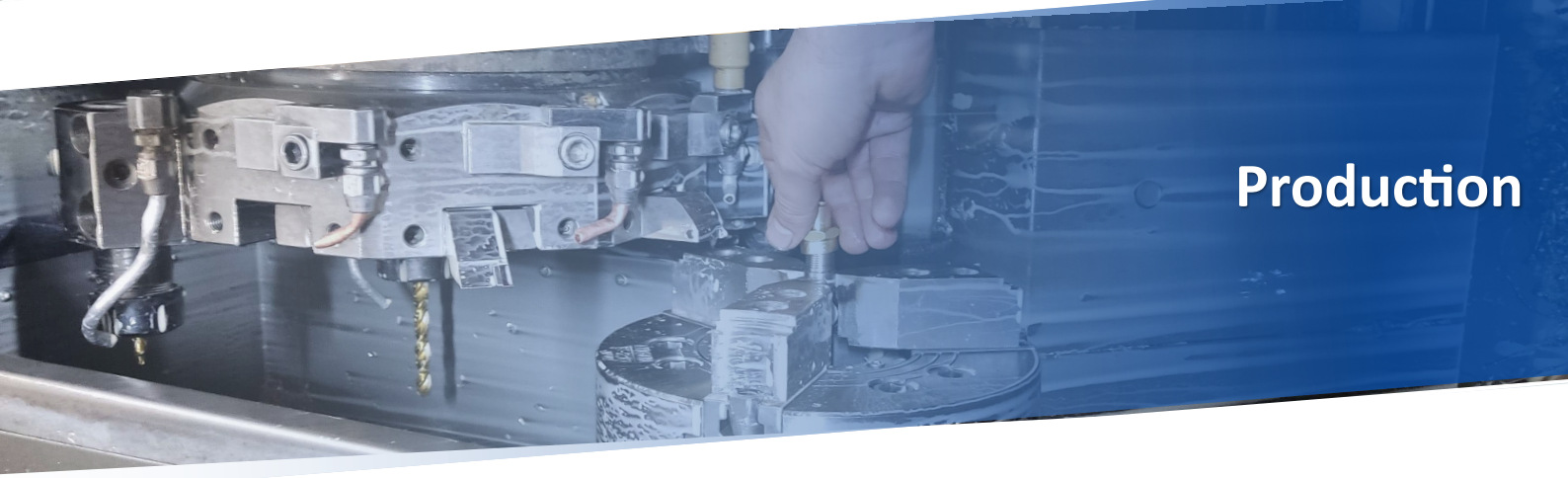




Design



Simulation



Production



Installation

# PRODUCT NUMBERS

## Everything You Need to Know





# PRODUCT NUMBERS

## Everything You Need to Know

### E

#### Connection

1/8" to 4" connections. The exact specification is mentioned in tables on the product pages.

T = BSBT Thread Type Connection

P = BSPP Thread Type Connection

N = NPT Thread Type Connection

R = Retaining Nut

### F

#### Material

| Material                      | Code | Material                        | Code |
|-------------------------------|------|---------------------------------|------|
| Brass                         | 1    | Polyvinylchloride               | PVC  |
| AISI 304/304L Stainless Steel | 2    | Polypropylene                   | PP   |
| AISI 316/316L Stainless Steel | 3    | Polyamide                       | PA   |
| AISI 310 Stainless Steel      | 4    | Polyvinylidene fluoride         | PVDF |
| AISI 321 Stainless Steel      | 5    | Polytetrafluorethylene          | PTFE |
| AISI 420 Stainless Steel      | 6    | Polyoxymethylene                | POM  |
| Tungsten Carbide              | TN   | Nitrile Butadiene Rubber        | NBR  |
| Phosphor Bronze               | CuSn | Poly lactic Acid                | PLA  |
| Copper                        | Cu   | Acrylonitrile Butadiene Styrene | ABS  |
| Titanium                      | TI   | Nylon Polyamide                 | PA6  |
| Aluminum                      | AL   | Polycarbonate                   | PC   |

#### Ø B (Equivalent Bore Diameter)

Applies to elliptical discharge holes of flat fan nozzles. A cylindrical hole with a diameter A has the same surface area as the ellipse.

#### Ø E (Narrowest Free Cross Section)

Important Characteristics for determining the pre-filtration of a nozzle. Can be less than a due to several swirl ducts.

Conversion Formula:  $K \text{ factor} \times \sqrt{P(\text{bar})} = Q \text{ (l/min)}$

All flow rate data in this catalogue is based on measurements with water,

| Spray angle (α) | Code            | Connection Size [inch] | Ø B [mm] | Ø E [mm] | Flow rate (Q) [l/min] |                        |       |       |       |       |       |
|-----------------|-----------------|------------------------|----------|----------|-----------------------|------------------------|-------|-------|-------|-------|-------|
|                 |                 |                        |          |          | Pressure (P) [bar]    |                        |       |       |       |       |       |
|                 |                 |                        |          |          | 0.5                   | 1.0<br><i>K factor</i> | 2.0   | 3.0   | 5.0   | 7.0   | 10.0  |
| 45°             | 3L 490 40 . 045 | 1/8"                   | 1.25     | 1.25     | 0.57                  | 0.76                   | 1.00  | 1.18  | 1.44  | 1.65  | 1.90  |
|                 | 3L 490 60 . 045 | 1/4"                   | 2.00     | 2.00     | 1.81                  | 2.39                   | 3.15  | 3.70  | 4.54  | 5.20  | 6.00  |
|                 | 3L 490 70 . 045 | 3/8"                   | 2.65     | 2.65     | 3.22                  | 4.24                   | 5.60  | 6.59  | 8.08  | 9.24  | 10.66 |
|                 | 3L 490 78 . 045 | 1/2"                   | 3.45     | 3.45     | 5.17                  | 6.82                   | 9.00  | 10.58 | 12.98 | 14.85 | 17.12 |
| 60°             | 3L 490 40 . 060 | 1/8"                   | 1.15     | 1.15     | 0.57                  | 0.76                   | 1.00  | 1.18  | 1.44  | 1.65  | 1.90  |
|                 | 3L 490 80 . 060 | 3/8"                   | 3.70     | 3.70     | 5.74                  | 7.58                   | 10.00 | 11.76 | 14.43 | 16.51 | 19.04 |
|                 | 3L 490 88 . 060 | 1/2"                   | 4.65     | 4.65     | 9.19                  | 12.13                  | 16.00 | 18.82 | 23.08 | 26.41 | 30.46 |
|                 | 3L 490 96 . 060 | 3/4"                   | 5.80     | 5.80     | 14.36                 | 18.95                  | 25.00 | 29.40 | 36.07 | 41.26 | 47.59 |
|                 | 3L 491 08 . 060 | 1"                     | 8.15     | 8.15     | 28.72                 | 37.89                  | 50.00 | 58.80 | 72.14 | 82.53 | 95.18 |

**SPADFLOW** spray nozzles are manufactured with the highest precision and undergo permanent quality checks. However, production-related tolerances can affect the spray angle, flow rate, droplet size and droplet distribution.

# Air Blower Nozzles

## Selection Guide

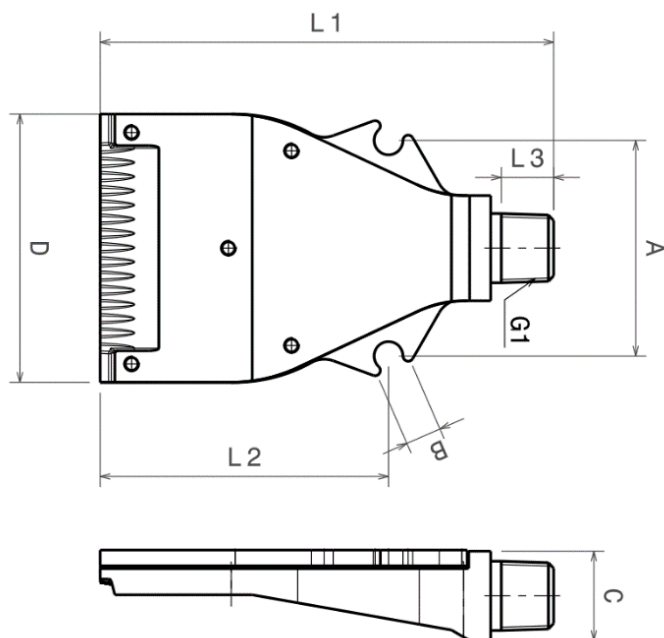


| Nozzle Series                                                                                           | Consumption                                                                     | Operating Pressures                | Spray Angle                   | Application                                                                         | Page |
|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|------------------------------------|-------------------------------|-------------------------------------------------------------------------------------|------|
| <br><b>7L 600.606</b> | <b>Normal Flow</b><br>Up to 60 liters<br>per Minute (in<br>Normal<br>Condition) | <b>Low Pressure</b><br>Up to 6 bar | <b>Narrow Spray<br/>Angle</b> | Cleaning<br>Drying<br>Blowing off/Out<br>Cooling<br>Transporting<br>Protection Wall | 92   |



# SPADFLOW 7L 600.606

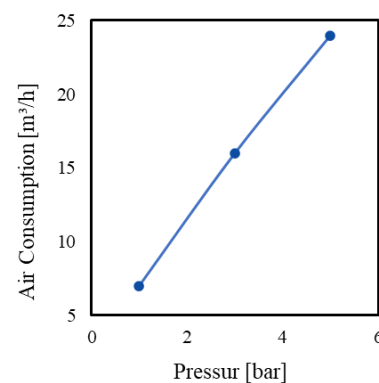
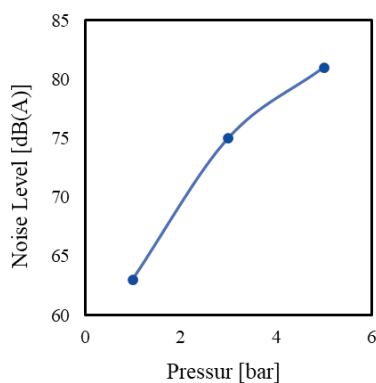
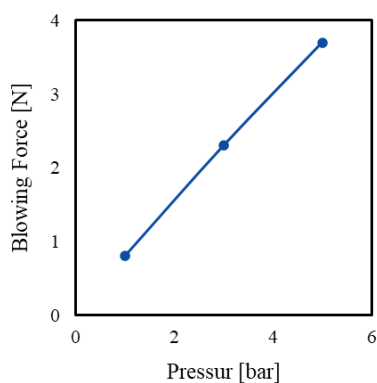
Multi-Channel Flat Fan Nozzle



## Properties:

Laminar Flow  
Powerful Air Stream  
High Blowing Force  
For High Thermal Condition

| G1   | Thread Type |      |      | Dimensions [mm] |                |                |      |     |      |      | Weight |
|------|-------------|------|------|-----------------|----------------|----------------|------|-----|------|------|--------|
|      | BSPT        | BSPP | NPT  | L <sub>1</sub>  | L <sub>2</sub> | L <sub>3</sub> | A    | B   | C    | D    |        |
| 1/4" | 014T        | 014P | 014N | 86.5            | 55.0           | 10.5           | 41.0 | 5.1 | 17.0 | 51.0 | 60 gr  |



| Material* | Code |
|-----------|------|
| S.S.316   | 3    |
| Aluminum  | AL   |

\* Different materials are available upon request