



THE  
**SPRAY NOZZLE**  
PEOPLE

# EHPi

Electric nozzle  
Industrial version



## PRECISION SPRAYING KEY APPLICATIONS

- ✓ Apply pMDI or LPF resin in the blender
- ✓ Apply slack wax, tallow wax or e-wax in the blender
- ✓ Add surface moisture before pressing boards
- ✓ Apply mixed release agent on mats, cauls, or press belts when using pMDI resins
- ✓ Mark nail lines on oriented strand board (OSB)

## KEY BENEFITS

- ✓ Ensure precise application and reduce waste
- ✓ Integrate tonnage or line speed to maintain uniform coverage when variables change
- ✓ Reduce the use of expensive resins, waxes, or release agents by applying the exact volume required
- ✓ Apply the optimal amount of surface moisture to increase production by decreasing time in the press
- ✓ Confidently transition to running full pMDI products with non-stick press protection
- ✓ Eliminate compressed air from most pre-press and wax operations



**Electric HydroPulse® - Industrial Design**

| Electric HydroPulse® - Industrial Design          |                                                       |
|---------------------------------------------------|-------------------------------------------------------|
| Liquid inlet connection                           | 1/8", NPT or BSPP                                     |
| Maximum liquid flow rate                          | 3.8 LPS                                               |
| Maximum rated pressure                            | 20 bar                                                |
| Thermal insulation class                          | F (155°C/311°F)                                       |
| Power                                             | 10.4W @ 24VDC                                         |
| Maximum cycle frequency                           | 50 cycles/sec                                         |
| Nozzle construction                               | Stainless steel wetted components, Viton® (FKM) seals |
| Interchangeable BJ, BJH and CW nozzle tip options |                                                       |

Electric HydroPulse® nozzles for industrial applications (EHPi) ensure precision volumes of expensive ingredients and compounds are sprayed directly onto the processing target, with overspray waste virtually eliminated.

The EHPi spray nozzles can be paired with the FlexFlow™ Precision Spray Control system which provides ultimate timing control, achieving uniform coverage even if conveyor speed is adjusted.

**CALL NOW : +44 (0) 1273 400092**

[www.spray-nozzle.co.uk](http://www.spray-nozzle.co.uk)

The Go-to People for spray nozzle solutions

## How they work

EHPI spray nozzles do not require a compressed air source and are capable of cycling on/off up to 50 cycles per second. These features afford the option of using high-frequency cycling known as Pulse Width Modulation (PWM) to vary the liquid spray flow rate at constant supply pressure with little change in spray performance by adjusting the duty cycle. When the spray cycles at a high enough frequency, coverage uniformity is maintained because the duration between pulses of spray is short enough to ensure there are no gaps in the spray coverage. For ultimate control, use with the FlexFlow™ control system.

### EHPI BJ fan nozzle tips

Flow rate l/min\*

Angles : 0°, 15°, 40°, 50°, 65°, 80°, 95°, 110°, Material : 303, 316 ss

Litres per minute @ BAR

| Tip      | 0.3   | 0.5  | 1    | 2    | 5    | 10   | 15   |
|----------|-------|------|------|------|------|------|------|
| **BJ0067 | 0.083 | 0.11 | 0.15 | 0.21 | 0.26 | 0.49 | 0.61 |
| BJ01     | 0.12  | 0.16 | 0.22 | 0.31 | 0.38 | 0.72 | 0.87 |
| BJ015    | 0.18  | 0.23 | 0.33 | 0.45 | 0.57 | 1.1  | 1.3  |
| BJ02     | 0.23  | 0.3  | 0.42 | 0.61 | 0.76 | 1.4  | 1.7  |
| BJ03     | 0.34  | 0.45 | 0.61 | 0.87 | 1.1  | 2    | 2.5  |
| BJ04     | 0.42  | 0.57 | 0.79 | 1.1  | 1.4  | 2.5  | 3.1  |
| BJ05     | 0.53  | 0.68 | 0.95 | 1.3  | 1.6  | 2.9  | 3.5  |
| BJ06     | 0.61  | 0.76 | 1.1  | 1.5  | 1.8  | 3.2  | 3.8  |

\*\* Only available in angles up to and including 65°.

### EHPI BJH fan nozzle tips

Flow rate l/min\*

Angles: 5° - 120°, Material : Tungsten Carbide Insert with 303 ss housing

Litres per minute @ BAR

| Tip      | 2    | 3    | 5     | 10    | 15    |
|----------|------|------|-------|-------|-------|
| BJH-0.18 |      |      | 0.038 | 0.057 | 0.068 |
| BJH-0.28 |      |      | 0.098 | 0.14  | 0.17  |
| BJH-0.38 |      |      | 0.18  | 0.25  | 0.31  |
| BJH-0.45 | 0.16 | 0.19 | 0.25  | 0.35  | 0.42  |
| BJH-0.53 | 0.21 | 0.26 | 0.33  | 0.45  | 0.57  |
| BJH-0.66 | 0.33 | 0.42 | 0.53  | 0.72  | 0.91  |
| BJH-0.78 | 0.45 | 0.57 | 0.72  | 1     | 1.2   |
| BJH-0.89 | 0.57 | 0.72 | 0.91  | 1.3   | 1.6   |
| BJH-0.99 | 0.72 | 0.87 | 1.1   | 1.6   | 2     |
| BJH-1.14 | 0.95 | 1.1  | 1.5   | 2     | 2.5   |
| BJH-1.29 | 1.1  | 1.4  | 1.8   | 2.5   | 3     |
| BJH-1.45 | 1.4  | 1.7  | 2.1   | 2.9   | 3.5   |
| BJH-1.60 | 1.5  | 1.9  | 2.3   | 3.2   | 3.8   |

\* Maximum flows shown above. Flow rates can be turned down to 5% of listed value using PWM (Pulse Width Modulation).  
Contact us for more details.

## EHPI CW nozzle tips: full cone (F) and hollow cone (H)

Flow rate l/min\*

Angles : 80° and 120°, Material : 303, 316 ss

| Tip     | Litres per minute @ BAR |      |      |      |      |     |     |     |
|---------|-------------------------|------|------|------|------|-----|-----|-----|
|         | 0.3                     | 0.5  | 1    | 2    | 3    | 5   | 10  | 15  |
| CW-25F  | 0.31                    | 0.38 | 0.53 | 0.76 | 0.91 | 1.2 | 1.7 |     |
| CW-50F  | 0.53                    | 0.68 | 0.95 | 1.3  | 1.6  | 2   | 2.8 | 2   |
| CW-75F  | 0.72                    | 0.91 | 1.2  | 1.7  | 2    | 2.6 | 3.5 | 3.4 |
| CW-100F | 0.83                    | 1    | 1.4  | 1.9  | 2.2  | 2.8 | 3.8 |     |
|         |                         |      |      |      |      |     |     |     |
| CW-25H  | 0.31                    | 0.38 | 0.53 | 0.76 | 0.91 | 1.2 | 1.7 | 2   |
| CW-50H  | 0.53                    | 0.68 | 0.95 | 1.3  | 1.6  | 2   | 2.8 | 3.4 |
| CW-75H  | 0.72                    | 0.91 | 1.2  | 1.7  | 2    | 2.6 | 3.5 |     |
| CW-100H | 0.83                    | 1    | 1.4  | 1.9  | 2.2  | 2.8 | 3.8 |     |

\* Maximum flows shown above. Flow rates can be turned down to 5% of listed value using PWM (Pulse Width Modulation).  
Contact us for more details.

**Ask our technical sales engineers about additional products and services to optimise your spraying process.**

## Spray Calibration Solutions

Easy-to-use, fast measurement solutions to ensure accurate nozzle installation and maintenance, reduce water wastage and identify nozzle wear.



**Spray Pattern & Droplet Distribution**



**Nozzle Flow Calibrators**



**Nozzle Cleaning Kit**

## Complete Spray Bars

Tailored nozzle selections and spray bar designs that integrate seamlessly with your new or existing setup.

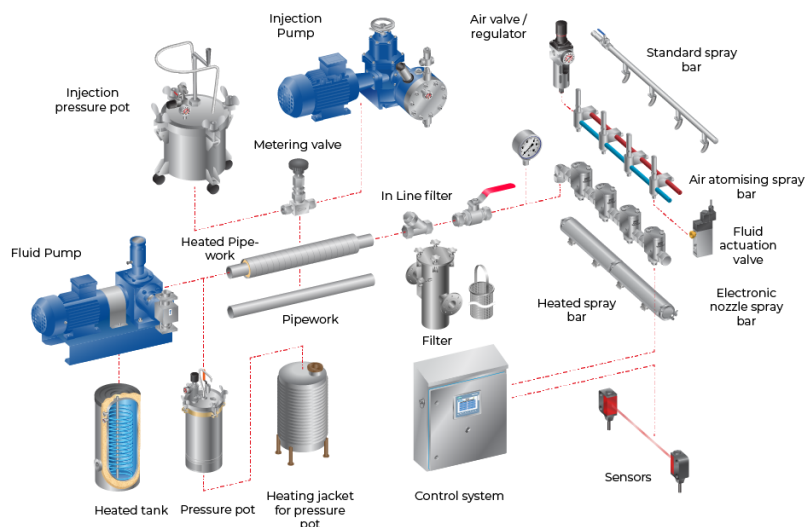
- ✓ Expert nozzle selection and placement
- ✓ Efficient spray coverage
- ✓ Fast turnaround time
- ✓ Reduced design burden
- ✓ High-quality spray bars



## Complete Custom Spraying Systems

Complete spraying systems built around your goals and application.

- ✓ Tailored upstream components supplied individually or as part of complete system
- ✓ Custom pipework, pumps, tanks, sensors, valves, heating, control panels and more
- ✓ Seamless integration with existing processes
- ✓ Built to budget and ROI targets
- ✓ End-to-end support: design, install, maintain



**THE GO-TO PEOPLE FOR SUCCESSFUL SPRAY ENGINEERING**