

MICROFLOW Flow Tuning



HIGHFLOW

Heavy duty market high precision flow targeting system

The HIGHFLOW system is designed to address the ever growing needs of calibration of injection nozzlesfor marine, truck and off-highway vehicles. HIGHFLOW can accommodate variety of designs with great flexibility in realizing the necessary flow rate increase and / or fine tuning of the geometry.

HIGHFLOW is your partner of choice in meeting the stringent emission regulation requirements.

FEATURES and BENEFITS

- + Tremendous flowrateincrease
 HIGHFLOW can achieve above 30% and up to
 60% flowrateincrease
- + Broad range of flow-rates
 HIGHFLOW addresses application requirements
 from 0,35 l/min 40 l/min.
- + Designed for flexible set-up
 HIGHFLOW has short set up & change over
 times to improve productivity while addressing
 variety of components
- + Optimized for Microflow media

 The system delivers smooth entrance and consistent bore resulting in a fine mist atomization and optimum fuel burn in comparison to hydrogrinding





TECHNICAL INFORMATION

MICROFLOW HIGHFLOW





MACHINE SPECIFICATIONS

Loading height from floor 1050mm (41.50")

Overall size 1500mm (60") W x 3000mm (119") L x 3100mm (123") H

Weight approx. 4500 kg

PNEUMATICS

0.6 MPa minimum input pressure at 850 l/min

Equipped with automatic pressure release at E-Stop. Equipped with input pressure switch to ensure incoming pressure is suitable for operation.

PROCESSING CAPACITY

Maximum processing pressure

Minimum processing pressure

1.5 MPa (NOTE: At pressures <10 MPa, flow correlation may diminish.)

Pressure control

±0.1% achieving stability in <3 seconds

Process media temperature range (with recommended chilled water)

18–35 °C controlled to ±0.5 °C

FLOW RATE

Minimum 0.35 I / min at 14 MPa

Maximum 40 I / min at 1.5 Mpa

HYDRAULICS L-shaped reservoir (151 I/40 gal-Power unit lon) with flooded suction pumps. 20 hp (14.9 kW) motor for Motor media pressure supply. Temperature and fluid levels Indicators are displayed on HMI. High pressure – 10 µm canister type with dirty filter indicator. **Filtration** Low pressure – 12 µm spin-on cartridge with dirty filter indicator. Maximum working noise level is Noise 75 dBA Inside machine base. Location A water-/oil-type heat exchanger sized to remove required heat at Cooling maximum ambient temperature of 40 °C. Straight-thread, o-ring, sealtype **Fittings** SAE J1926-1 (ISO 11926-1).

ELECTRICAL

Input power 200–480 VAC, 3 Phase, 50/60 Hz
Input current 50/25 A depending on input voltage

CONTROLS

Programmable Logic
Controller (PLC)

Allen Bradley

Allen Bradley

Human Machine
Interface (HMI)

Remote connectivity

Fast ethernet switch enables remote access to PLC and HMI and dial-in modem.

Production data logging and process data filing.

CHILLED WATER

Supplied by customer as specified by Extrude Hone - incoming at 10 $^{\circ}\text{C}$ at 28.3 l/min (6 ton chiller)

FLUSH SYSTEM

Туре	Pressure flush
Pressure	1.38 Mpa
Filter coarse	10 microns
Filter fine	3 microns
Flush motor	5 Hp (3.7kW)
Cooling motor	1.5 Hp (1.1kW)

All systems comply with the applicable EU Machinery Directive governing machine safety and bear the CE mark. They also comply with accident prevention and the VDE and VDI regulations, as well as the requirements concerning electromagnetic compatibility regulations.



NOTE: Specifications and availability are subject to change without notice.

NOTE: Refer to MICROFLOW on the webpage for process methods