



HIGHFLOW

Heavy duty market high precision flow targeting system

The HIGHFLOW system is designed to address the ever growing needs of calibration of injection nozzles for 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 flow rate increase**
HIGHFLOW can achieve above 30% and up to 60% flow rate increase
- + **Broad range of flow-rates**
HIGHFLOW addresses application requirements from 0,5 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 hydro grinding





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

PROCESSING CAPACITY

Maximum processing pressure	14 MPa
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 specification)	18–35 °C controlled to ±0.5 °C

FLOW RATE

Minimum	0.35 l / min at 14 MPa
Maximum	40 l / min at 1.5 Mpa

HYDRAULICS

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

PNEUMATICS

0.6 MPa minimum input pressure at 170 l/min
Equipped with automatic pressure release at E-Stop. Equipped with input pressure switch to ensure incoming pressure is suitable for operation.

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
Software	Allen Bradley
Human Machine Interface (HMI)	10" industrial touch screen
Remote connectivity	Fast ethernet switch enables remote access to PLC and HMI and dial-in modem.
Data collection	Production data logging and process data filing.

CHILLED WATER

Supplied by customer as specified by Extrude Hone - incoming at 10 °C at 28.3 l/min (6 ton chiller)

FLUSH SYSTEM

Type	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