Helios – Cartridges, Injector

The Solutions Company

Helios-Cartridge, Injector

- Designed to far exceed OEM and 3rd party specification
- Calibrated for operational precision in house
- Calibration accuracy at .4% of reading
- Drop in replacement in OEM or Helios MPI Injector Flange (200 or 300MM)
- Design incorporates user requested actual zero stop
- Incorporates aerospace quality seal
- Repeatability from cartridge to cartridge
- Designed to refurbish at 65% of cost, guaranteed performance
- Clocking of vernier (micrometer) is field adjustable
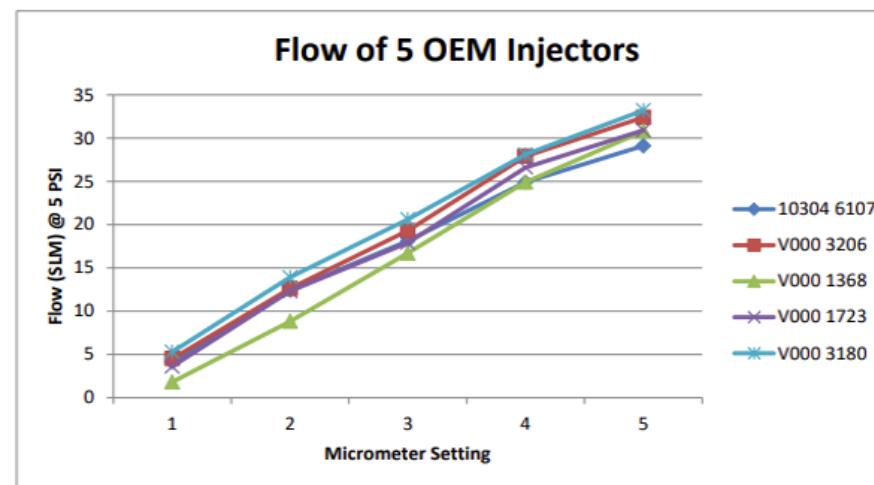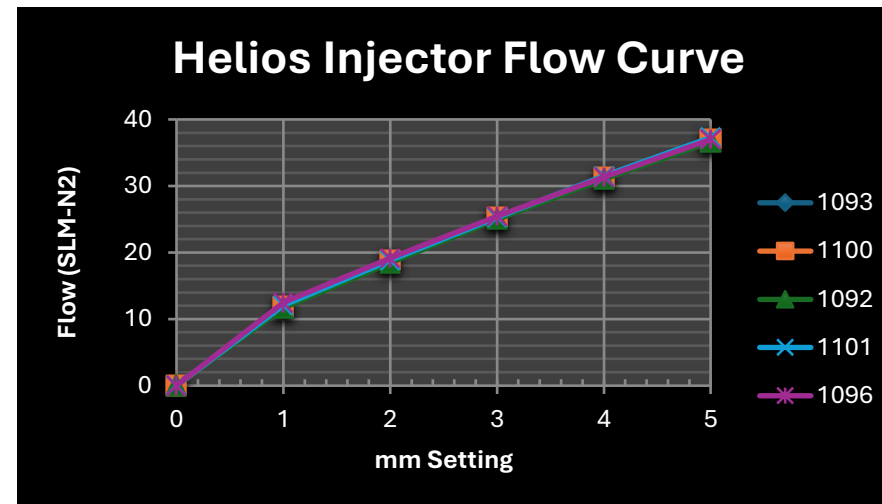- Field resettable zero (does not change calibration)

Accurate, linear, repeatable results
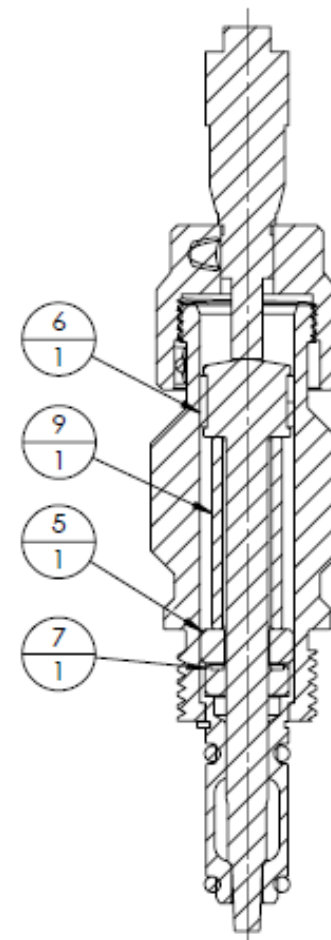
Helios-Cartridge, Injector

- **Calibration accuracy at .4% of reading**
  - **Helios in−house calibration**

- **Repeatability from cartridge to cartridge**
  - **Std-Dev typically <.28 SLM**

- **Performance to OEM**
  - **Helios Std-Dev is 4x better (400%)**

- *Note: Helios flow from 0-5mm*

Helios-Cartridge, Injector

- **Areas redesigned with Engineering precision:**

  - **Seal**
    - **Aerospace quality, 300 series, SS energized graphite impregnated seal**
    - **Increased seal life**
  - **Needle and Jet Orifice**
    - **Precision manufactured to scientific instrument standards**
  - **Wear Band**
    - **Eliminates stiction**
  - **User requested 'shut off' seat incorporated**
    - **Zero datum**

All dimensions and manufacturing techniques are proprietary to Helios

Parameter	OEM Performance	Helios Performance	Detail
Calibration accuracy	unknown	.4% of reading	Generated flows are accurate
Calibrated Working Range	1-5mm	0-5mm	Wider working range
Repeatability Standard Deviation	<1.48 SLM	<.28 SLM	Helios is accurate and repeatable
Design for remanufacture / rebuild	Difficult	Designed for remanufacture at 65% of cost, guaranteed performance	Helios is indefinitely reusable
Clocking of vernier (field)	Difficult	Designed for field use	Field resettable for easy viewing, readability (does not affect calibration)
Zero reset (field)	Not available	Designed for field use	Does not affect calibration slope, only affects zero offset

Helios performance compared to OEM and 3rd party