



## FLS1 High Pressure Flow Stand

The AA EDM FLS1 is a free standing, manual load, high pressure oil flow stand used to test the flow rates of diesel fuel injectors, fuel metering components and other parts requiring precise flows. It is based upon our years of experience designing high production Microhole EDM machines with integrated flow test and adaptive control. With this design we have raised the bar to high pressure oil flow testing. It is designed for ease of use with intuitive touch screen controls along with simple fixture change over to handle many different parts. You create a simple program that selects the flow rate and pressure you need, if you desire a pre test back flush and the flow direction you desire. Then simply press the palm buttons and the test is executed. The flow results are saved to a data log that can be sent to a USB thumb drive, a network or just saved locally. A 2-D bar code reader is available if you wish to scan the part and automatically select the flow program.

The "spark" of innovation.



### Features

- Test Pressure upto 10Mpa
- Flow rates upto 16kg/min
- Accuracy +/- 0.1% of range
- Pre-Test back flush
- Easy part changeover
- Intuitive operation via industrial touch screen computer with Windows
- Easy interface to customer automation
- Test pressure and temperature automatically controlled

# FLS1

<b>MACHINE SPECIFICATIONS</b>	
Loading Height	40 inches (1020mm)
Overall size	37" (940mm) W
	64" (1625mm) L
	80" (2025mm) H
Clamping Stroke	4" (100mm)
Approximate Weight	2500lbs (1135kg)

<b>FLOW TEST COMPONENTS</b>	
Motors	5hp motor for test fluid pressure 1hp for hydraulic circulation
Indicators	Temperature and fluid levels are displayed on HMI and assorted liquid filled gauges
Filtration	High pressure, 3µm Low pressure, 1µm Canister type with dirty filter indicator
Cooling	Water/Oil type heat exchanger sized to remove heat at maximum ambient temperature of 40°C

<b>Pneumatics</b>	<b>Electrical</b>
5 bar minimum input pressure	Input power 200-480v AC, 3 Phase, 50/60 Hz, 25/50A
Equipped with automatic pressure release	Discrete I/O 24VDC for optional customer automation
Equipped with input pressure switch to insure incoming pressure is suitable for operation	

<b>TESTING SPECIFICATION</b>	
Maximum test pressure	100 Bar (10MPa) or 1450psi
Flow Rate range	.5 to 16kg/min
Calibration fluid temperature range	20 to 40°C controlled to ±1.5°C
Calibration Fluid	Viscor 1487 (ISO 4113 compliant)

<b>CONTROLS</b>	
Programmable Logic Controller (PLC)	Allen Bradley
Human Machine Interface (HMI)	12" Industrial touch screen PC running MS Windows
Remote connectivity	Ethernet, Bar code reader, parallel I/O (options)
Data collection	Production data logging, Ethernet, Flash Drives



**ISO 9001-2000 Certified**

**AA EDM Corporation**  
 140 North Staebler Road  
 Ann Arbor MI 48103  
 PH: 734-222-4847  
 FX: 734-222-4863  
[sales@aaedmcorp.com](mailto:sales@aaedmcorp.com)