

Saturn

Medium: Dry compressed air

Mass flow range: 0.005 – 2.7 lbm/sec (4 – 2160 SCFM)

Max MUT pressure: 135 psig

Repeatability (k=2): 0.21%

Uncertainty in mass flow rate (k=2): 0.25%

Primary UUTs: ultrasonic meters, laminar flow elements, critical flow venturis, subsonic venturis, turbines

The automated testing system Saturn was designed to utilize an array of 21 selectable parallel critical flow venturis (CFVs) as reference standards. Saturn employs fully automated flow and pressure control and has two parallel unit under test (UUT) sections that are capable of accommodating instruments up to 8”.

- Preselected and optimized reference CFV combinations based on test plan prebuilt to customer specifications
- Feedforward flow rate control
- Live selection of pressure transducers to minimize turndown and uncertainty

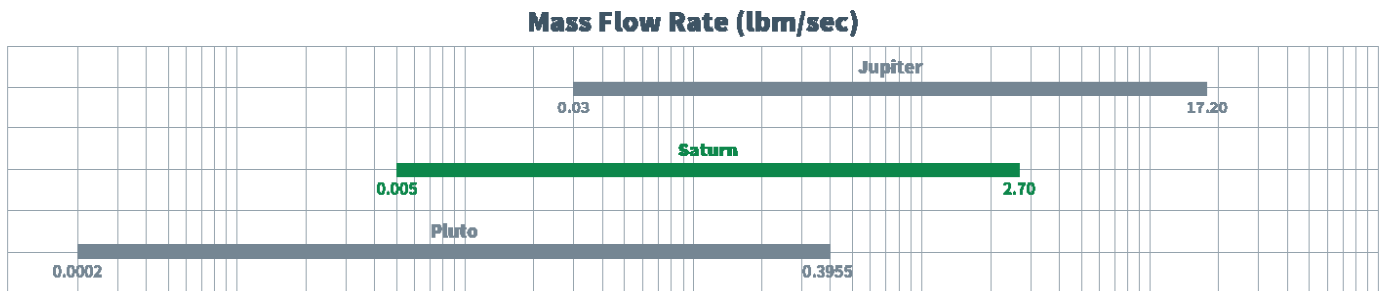
Reliable calibrations from an independent, accredited facility

- Calibration of the critical flow venturis versus NIST calibrated flow references
- Calibration of the pressure and temperature instrumentation versus NIST traceable CEESI standards
- Flow rate validation using existing CEESI critical flow references
- Control and pressure stability testing

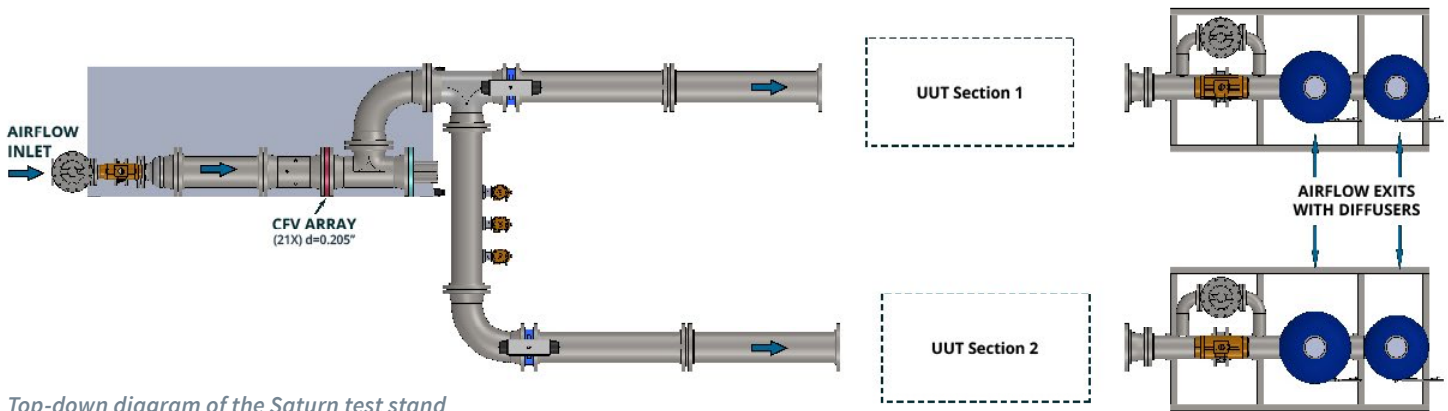
- Temperature stability testing
- Reproducibility
- Sample UUT type testing

The benefits of automated testing

- **Exceptional accuracy**
- **Superior repeatability**
- **Fast turnaround**



Comparison of mass flow rates (lbm/sec) for CEESI's automated test stands



Assure your flow measurements with automated calibration.

For more information on our calibration and testing capabilities, visit CEESI.com or call (970) 897-2711.

About CEESI

As part of the WEST family of measurement assurance companies, CEESI helps move our clients and the industry forward by establishing standards, educating and sharing knowledge, and developing world-class facilities and remote metrological services.