

Engineering Capabilities

Research & Development

LINCOLN, RHODE ISLAND



USA MEXICO CHINA



IN-HOUSE MACHINE SERVICES

CREATIVE SOLUTIONS AND ENGINEERED INNOVATION

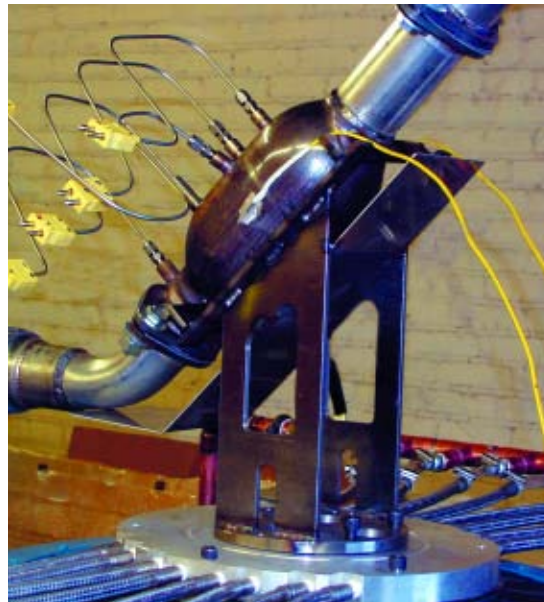
RESEARCH & DEVELOPMENT

TO SERVICE A WIDE VARIETY OF INDUSTRIES



Hot Vibration Testing

ACS Industries, Inc. has been performing durability testing on gasoline and diesel after-treatment exhaust systems since 1998. Our experience and accuracy in testing and results analysis has proven to be a valuable tool in support of our OEM and Tier I customers' development projects. The hot vibration machine used at ACS can be programmed to meet almost any accelerated aging protocol. It's used very effectively to test exhaust seals, heat shields, catalytic converter/DPF systems and other vibration or temperature sensitive systems associated with the automotive components industry.



Our hot vibration machine is fueled by a propane burner capable of up to 900° C with sine, random and sine on random testing.

Support components ACS test equipment can evaluate



Z-Seals



V-Seals



Knitted Wire Mesh



Static Exhaust Joint



Mesh Ring



NVH Isolation Cushion for Heat Shield



Wire Mesh Support & V Seal

RESEARCH & development

ACS is working closely on product development with OEM & Tier 1 Manufacturers around the World





Qualified to get results
whether built to your specs or custom engineered

Hot Vibration Testing:

- Propane Fueled Burner Rated at 100 standard cubic feet per minute (SCFM) and 1500° F
- Frequency Range of 5-3000 Hz
- Programmable Water Quench
- Sine, Random and Sine on Random Testing Capability
- Rated Force 15,000 Lbf
- 150 g Free Table Acceleration



Flow Bench

Filtration Testing

Filtration testing is conducted to predict new product performance prior to construction. ACS uses a capillary flow porometer to perform different product performance evaluations:

1. GAS PERMEABILITY

This test determines gas phase pressure drop in a low flow, high pressure condition.

2. LIQUID PERMEABILITY

This test determines liquid phase pressure drop.

3. BUBBLE POINT TESTING

Used to determine maximum pore size.

4. CAPILLARY FLOW POROMETRY

A sample's mean flow pore size, bubble point, cumulative flow and pore size distribution are the result of this test.

5. PRESSURE HOLD TEST

Tests the ability to hold a set pressure over a specific period of time.



ACS has been a dependable supplier to the automotive industry since 1975. We have developed our reputation and global market share by being an innovator and pursuing advancement.



Capillary Flow Porometer



ACS Research & Development

One New England Way, Lincoln, RI 02865

Toll Free: 800-227-1939

Tel: 401-769-4700

Fax: 401-333-2294

Email: engineering@acsind.com

**Diversified
Manufacturing
Since 1939**

Research & Development

Since 1939, ACS Industries, Inc. has helped companies around the world find solutions to complex engineering problems. Backed by a first-rate facility and state-of-the-art equipment, our highly-skilled team of engineers and machinists brings this expertise and experience to every client's project. Over the years, our ability to test and accurately analyze the results of our research has led to the development and production of many innovative components spanning a variety of industries. With worldwide customer service and engineering support, we work equally well with both US and foreign companies and we welcome the challenge of solving your particular needs. We are confident that you will be satisfied.

FOR ADDITIONAL INFORMATION:

Call 800-222-2880 or go to
www.acsindustries.com/engineering



ACS INDUSTRIES, INC. One New England Way, Lincoln, Rhode Island 02865
toll free: 800-343-2257 • tel: 401-769-4700 • fax: 401-333-2294 • email: info@acsind.com
WWW.ACSINDUSTRIES.COM