



UNIVERSAL
Acoustic & Emission Technologies



Universal
Full-Line Exhaust Catalog

- Absorptive Silencers
- Combination Silencers
- Reactive Silencers
- Spark Arrestors Only
- Spark Arrestor Silencers



Company Profile

Innovation, design and manufacturing expertise provide the solid foundation of our reputation in the specialist field of exhaust, emission and filtration systems at Universal, formerly Universal Silencer and Nelson-Burgess.

For more than 50 years our name has been synonymous with quality and innovation of design achieved through partnerships with our customers.

Our product range of industrial and marine silencers, mufflers and filtration products have been internationally recognized for offering the highest standard of quality, reliability, and performance. Our insight and expertise justify our reputation as the leader in exhaust and filtration systems.

We take pride in providing a total value package of the most technologically advanced products and innovative services in the industry. Working hand in hand with our customers, we tailor solutions to specific applications.

In this rapidly changing world, our advanced design and development testing facilities will help our customers meet the environmental challenges of the 21st century and beyond.

Silencer Sizing

You must know the following information:

- A** exhaust flow rate (m³/sec)
- B** silencer inlet size (mm²)
- C** level of silencing required

Calculate exhaust gas velocity by dividing the flow rate by the pipe area:

$$\frac{\text{exhaust flow rate (m}^3\text{/sec)}}{\text{silencer inlet pipe area (m}^2\text{)}}$$

Reference the pressure drop curve in the silencer spec sheets. Using the calculated exhaust gas velocity, find the corresponding estimated pressure drop on the curve. If you have selected a silencer that achieves your silencing level requirements at an acceptable pressure drop level, you have identified the silencer that is right for you!

Selection Assistance

If you need help with selecting and sizing your silencer, please contact your nearest Universal commercial office (see back cover of catalog). Please also visit our interactive sizing application software on our website: www.universalaet.com. The software also has some current engine manufacturer performance data from which to select. Dimensional drawings for most silencers are also available for download on the website.

Notes

Keep in mind that silencers are not designed to support their weight from the inlet or outlet tube, or support other components of the exhaust system, such as stacks. For the most efficient operation of all silencing units, proper mounting attachments are required. Domed heads or flat plates with gussets vary by model and size.