



Industrial Noise Control

www.pricenoisecontrol.com



Industrial Silencers

The need for noise abatement in the industrial market continues to increase due to governmental regulations and societal encroachment on previously secluded industrial sites. These Custom Industrial Silencers are constructed of heavier gauges of materials and vary from carbon steel to stainless steel, horizontal or vertical inlet or discharge applications with options such as support legs, drilled flanges, bird screens, rain hoods, lifting lugs and special paint if required.

Turbine Inlet Silencer: Paramount, California

Shown here is a small side Inlet Industrial Silencer for a 70kw Ingersoll-Rand Micro turbine. Applications can include straight on, vertical inlet or outlets, circular construction and circular fan connections for most industrial fan systems. Standard options include heavy-duty construction, urethane enamel paint finish, mounting flanges, support legs and bird screens.



LEFT A Frame 5 Discharge Silencer destined for an offshore heat recovery application in Bohai Bay, China and manufactured to withstand salt water environments. This silencer operating capacity is 680,000 ACFM at 927° F

RIGHT Solar Taurus 60 Turbine Bypass Silencer at time of shipment. Designed for 112,260 ACFM with an operating temperature of 1000° F. Designed for the Gulf of Mexico offshore production unit.

BELOW Stainless Steel Stack Insert Silencer in production. Price Noise Control custom design and manufacturing capabilities can provide retrofit noise control solutions for various applications.



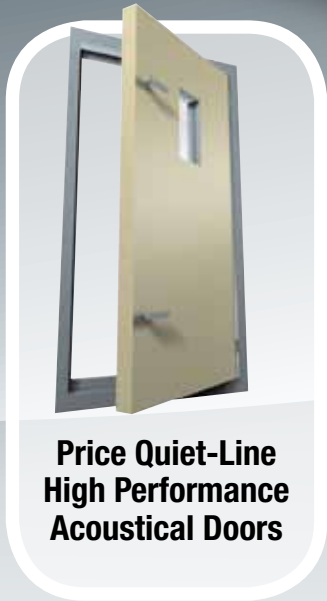


Panels & Enclosures

Price enclosure systems have been used in a wide range of applications including test cells, pumps, generator sets, built up air handlers, compressors, gas turbines and many more. Our engineers have developed a panel system that is extremely flexible and can be customized to suit almost any application.

Price Quiet-Line High Performance Acoustical Doors are ideal for use where high amplitude noise sources must be quarantined to prevent contamination of sensitive environments. Quiet-Line doors offer superior protection for personnel and equipment operating in or around equipment rooms, test cells and anywhere access to noisy rooms is necessary.

Price Quiet-Line High Performance Panels are ideal for use in walls, barriers and enclosures to solve your noise problems. Quiet-Line panels feature tongue and groove construction for ease of assembly and disassembly. Panels come in a wide selection of shapes and sizes for use as single wall barriers, multiple wall barriers and wall ceiling assemblies to fit your needs.



Price Quiet-Line High Performance Acoustical Doors



Price Quiet-Line High Performance Panels

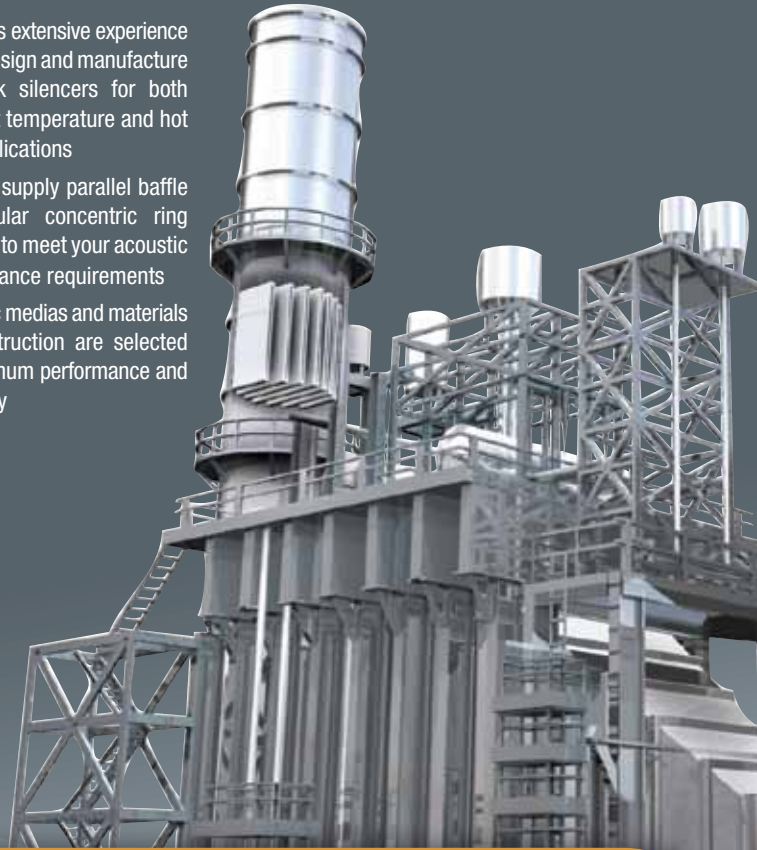
Acoustic Pump Enclosure : Rockford, Illinois

This 52" w x 75" l x 84" h acoustic enclosure was designed to fit over existing pumping station skids provided by others. One side contained 2 small access doors and the other had 2 large access doors. The walls were 16ga with 2" acoustic media and 22ga galvanized perforated metal on the interior. The final paint finish was acrylic urethane enamel with the color being chosen by the owner. A 1600 CFM exhaust fan with acoustic baffling, an acoustic inlet hood and thermostat ensure a constant temperature inside the enclosure with minimal noise being transferred to the outside of the unit.



Stack Silencers

- Price has extensive experience in the design and manufacture of stack silencers for both ambient temperature and hot gas applications
- We can supply parallel baffle or annular concentric ring designs to meet your acoustic performance requirements
- Acoustic medias and materials of construction are selected for optimum performance and longevity



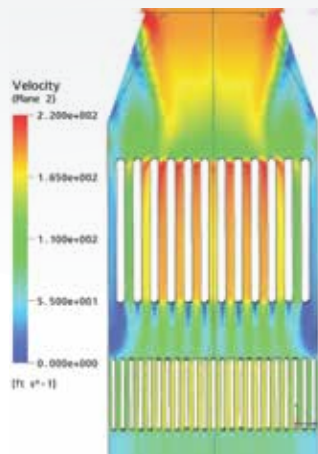
Turbine By-Pass and Simple Cycle Exhaust Silencers

- Proper selection of construction materials such as stiffeners, shells, perforated materials, stand-offs, acoustic media, erosion protection and flanges is critical to service life of the system
- Our proprietary acoustical prediction programs for hot gas applications and years of application experience are used on every project



Computational Analysis

Price routinely performs Computational Fluid Dynamic analysis on a variety of systems. The option of having the performance of a product or system analyzed and validated at the design stage and/or prior to installation can help expose potential challenges early avoiding costly field modifications. A variety of report options are available for all solutions provided by Price. Computational Fluid Dynamic analysis can be performed on a range of spaces and applications, from equipment enclosure air distribution to turbine exhaust silencer shown here.

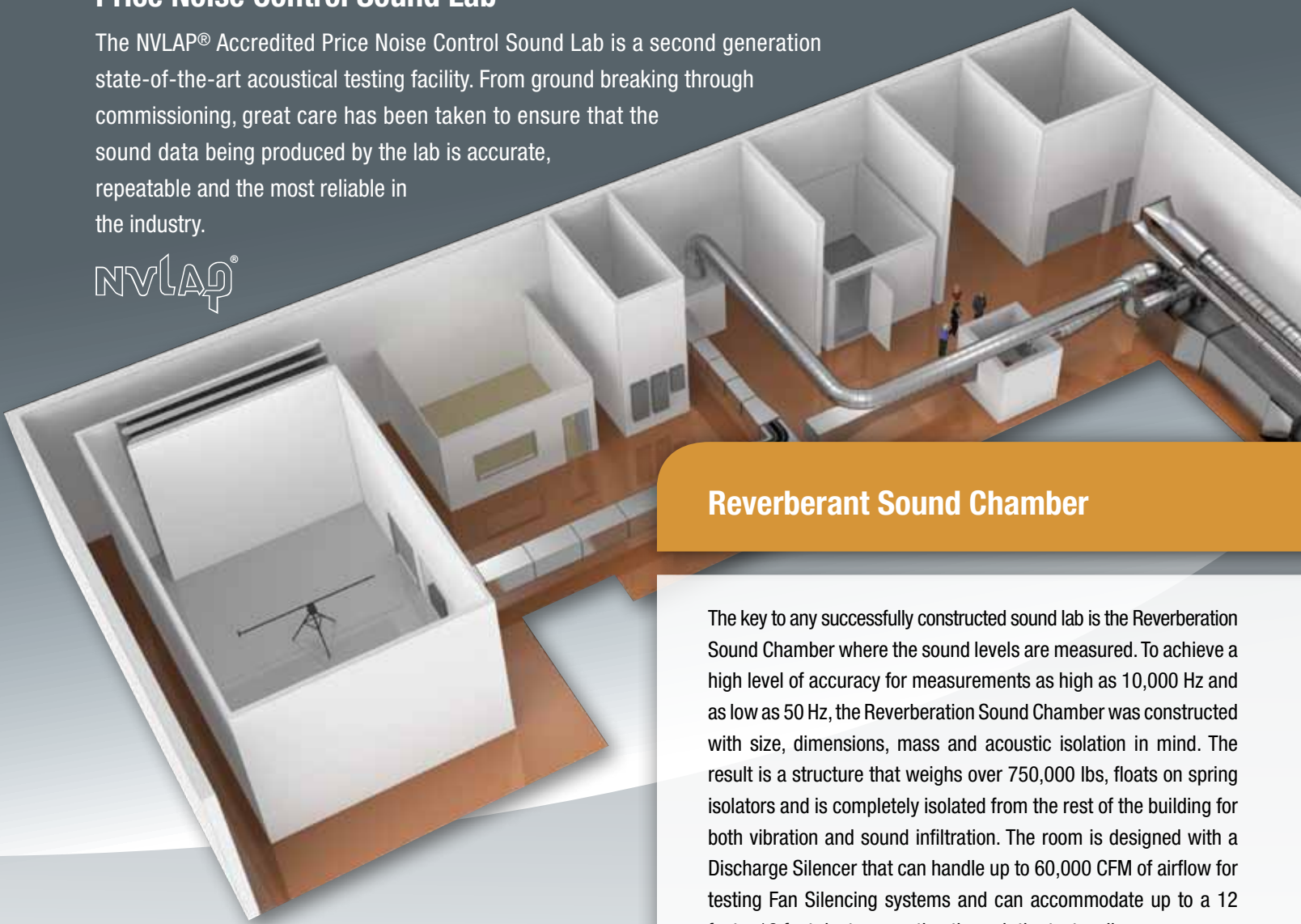


Turbine Inlet Silencers

While ambient inlet air silencers are less complicated than hot gas exhaust applications, the importance of proper design and manufacturing of a turbine combustion air intake silencer system can not be overlooked. Inadequate material selection or construction can lead to flow induced vibrations that can result in metal fatigue and structural failure. Poor designs can lead to turbine performance problems or worse, catastrophic failure from the ingestion of manufacturing debris. Price Noise Control takes extra caution to assure combustion intake air silencers are free of contaminants from manufacturing, packaging or shipping.

Price Noise Control Sound Lab

The NVLAP® Accredited Price Noise Control Sound Lab is a second generation state-of-the-art acoustical testing facility. From ground breaking through commissioning, great care has been taken to ensure that the sound data being produced by the lab is accurate, repeatable and the most reliable in the industry.



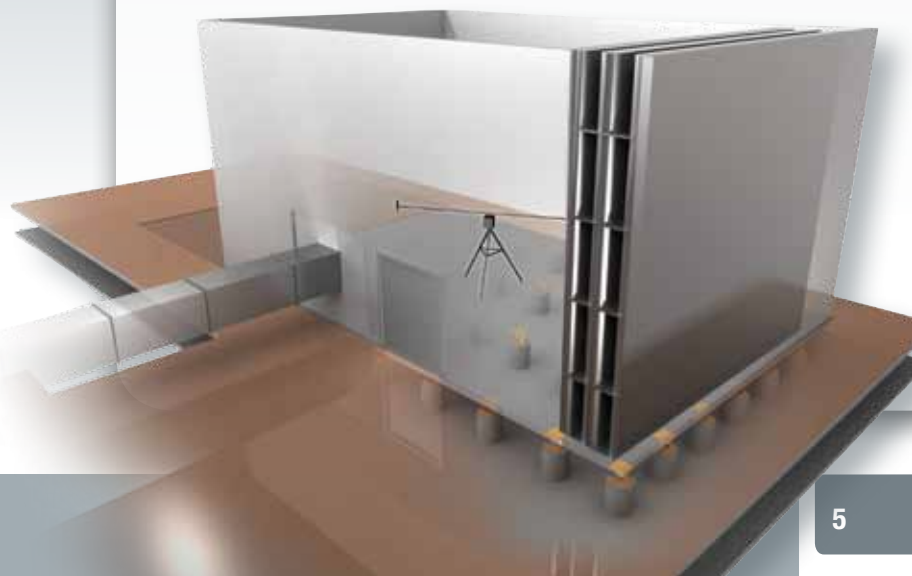
Reverberant Sound Chamber

The key to any successfully constructed sound lab is the Reverberation Sound Chamber where the sound levels are measured. To achieve a high level of accuracy for measurements as high as 10,000 Hz and as low as 50 Hz, the Reverberation Sound Chamber was constructed with size, dimensions, mass and acoustic isolation in mind. The result is a structure that weighs over 750,000 lbs, floats on spring isolators and is completely isolated from the rest of the building for both vibration and sound infiltration. The room is designed with a Discharge Silencer that can handle up to 60,000 CFM of airflow for testing Fan Silencing systems and can accommodate up to a 12 foot x 12 foot duct connection through the test wall.

Sound Source Chambers

The solid concrete Sound Source Chambers generate up to 120 decibels of overall sound pressure level using 3000 watts of power. These high sound levels allow us to attain accurate insertion loss measurements for long silencers, and give us the flexibility to test a very wide range of products.

All components of the lab have been designed to meet or exceed the current ASTM E-477 and ISO 7235 standards for testing acoustical duct silencers.





This 138" x 138" x 105" deep inlet silencers installed on an 84" axial fans at 130,000CFM each and 3" static pressure.

Industrial Process Fan Silencing

With encroaching residential developments on industrial sites and increasingly stringent governmental noise regulations, applications in noise abatement are under pressure to reduce noise emissions. Increase awareness leads to strict environmental noise regulation and specifications in most areas.

The Price Noise Control division offers Industrial Process Fan silencers for various manufacturing processes, including inlet and discharge silencers, enclosures and other noise control treatment.

The general Price line of fan silencers encompasses the broad range of applications with standard and optional features to meet customer requirements. These are designed for direct mounting onto fan inlet or discharge. The internal geometry is optimized to provide the maximum attenuation with minimum pressure loss.

Standard features includes: Mild steel construction with exterior rust inhibitive primer coating, Heavy casing gauges compatible with fan construction, Continuously welded casing construction, Galvanized steel internal components, Internal and external stiffening for structural integrity, Perforated metal facing and fiberglass cloth protecting acoustic fibrous media, Inlet and Outlet flanges to match customer specifications and Support legs on all free standing silencers.



Model CFIB
Centrifugal Fan
Inlet Box Silencer



Model CFHB
Centrifugal Fan
Horizontal Box
Silencer



Model CFDS
Centrifugal
Fan Discharge
Silencer



Model CFSB
Centrifugal Fan
Side Box Silencer



**Model CFIS,
CFRD, AFIS, AFDS**
Centrifugal/Axial
Inlet and Discharge
Silencers



TruMatic 6000, Punching and Laser Cutting Combined Technology capable up to ¼" thick material.

Design Engineering

Price Noise Control Engineering team is dedicated in providing optimum engineered solutions to various industrial noise control applications. To ensure reliability of our product, the performance data of our designs are derived from Price's state of the art noise control sound laboratory. In addition, Price utilizes computational fluid dynamic modeling to achieve desired performance with minimized pressure drop. 3D design software is the primary tool to generate customer and manufacturing drawings.



Manufacturing Advantage

Price utilizes lean/flow manufacturing principles in all manufacturing processes. Price is one manufacturing team, tightly integrated and dedicated to work closely together to achieve the common goal of customer service. It's efficient and cost effective manufacturing processes and design provides a reliable, consistent and on time delivery of its products.

Price invests in the latest manufacturing equipment and utilizes modern manufacturing techniques and has the ability to react quickly to changing customer needs. Highly skilled, cross trained employees provides a high level of flexibility that enables Price to manufacture custom products in commodity timelines.

Price's quality culture is everyone's responsibility. All employees participate in the continuous improvement strategy to have a better work environment and move the company forward to higher standards.



IN CANADA

e.h. price
LIMITED

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The founding principles of our company have never changed - business integrity, first class service and a commitment to people. Price manufacturing endeavors arose from our belief that we could supply superior products and services at a reasonable price. Our design and manufacturing engineering staff at Price are dedicated to ensuring that customer performance and product quality expectations are fully met. You can rely on the experience at Price with confidence.

ABBREVIATED PROJECT LIST

INSTALLATION	CAPACITY	EQUIPMENT
3 - Solar Titan 130	219,000-234,000 ACFM	By Pass Stack Silencer
3 - Solar Taurus 70	124, 000 ACFM	By Pass Stack Silencer
2 - Solar Mars 100	195,000 ACFM	By Pass Stack Silencer
2 - GE Frame 5	630,000 ACFM	HRSB Exhaust Silencer
3 - Solar Taurus 60	108,000 ACFM	Stack Insert Silencer
10 - GE LM 2500+	358,000-375,000 ACFM	Stack Silencer
2 - Solar Taurus 60	112,000 ACFM	Stack Silencer
3 - GE LM 5000	508,000 ACFM	Stack Silencer

SENIOR ENGINEERING STAFF



JIM PATTERSON, P. ENG. ENGINEERING MANAGER

Jim Patterson has been involved in the design and commissioning of noise and vibration control projects in the power generation industry for over 15 years. He is a registered engineer with post graduate education in noise control engineering. He has developed acoustic and fluid dynamic prediction schemes for high temperature and high pressure silencer applications. He has acted as a consultant to various segments of the noise control industry.



PATRICK OLIVER, M.SC, P. ENG. SENIOR NOISE CONTROL ENGINEER

Patrick Oliver has over 8 years of experience in designing and selecting noise control equipment. He has developed software to optimize the selection and design of fan silencer systems, developed industrial silencers for “dirty” airflow applications, and been involved in many custom applications of noise control products for a number of diverse industries. Patrick is a registered professional engineer with post graduate education in noise control engineering.



JOSEPH RAMOS, C. TECH. INDUSTRIAL PROJECT MANAGER

Joseph Ramos has over 12 years of technical sales experience and project management in the industrial and custom fan equipment applications. He has been involved in various engineered fan solutions for noise sensitive applications, including industrial ventilation, pollution control, automotive paint finishing applications, to more complex induced and forced draft fans for the power and petrochemical-gas industry. Joseph has a B.Sc. Degree from the Philippine Military Academy and a B.Sc. Degree in Civil Engineering.



LIONEL FOWLER SENIOR DESIGNER

Lionel Fowler has over 20 years experience designing industrial and custom fan equipment including induced draft and forced draft fans, and pressure blowers. He has worked with manufacturing teams to develop welding and process standards for air moving equipment and accessories including silencers and high horsepower motor bases. He has led the development of programs and standards that enabled manufactured automation of common components. Lionel has regularly been called on for supervision during field installation as well as commissioning of large industrial fan systems.