

# Gas Turbine Acoustics





# ABOUT US

Since 1976, SPL Control has been providing acoustical solutions to companies in the Oil and Gas and Power sectors. Our products have been engineered for clients in every continent across the globe.

Test Stand 3



# PRODUCT OVERVIEW

## EXHAUST SYSTEMS

Gas turbine exhaust systems designed to meet critical noise levels while withstanding exhaust gas flow and temperatures.

## INTAKE SYSTEMS

Gas turbine intake systems reducing intake noise while maintaining system cleanliness.

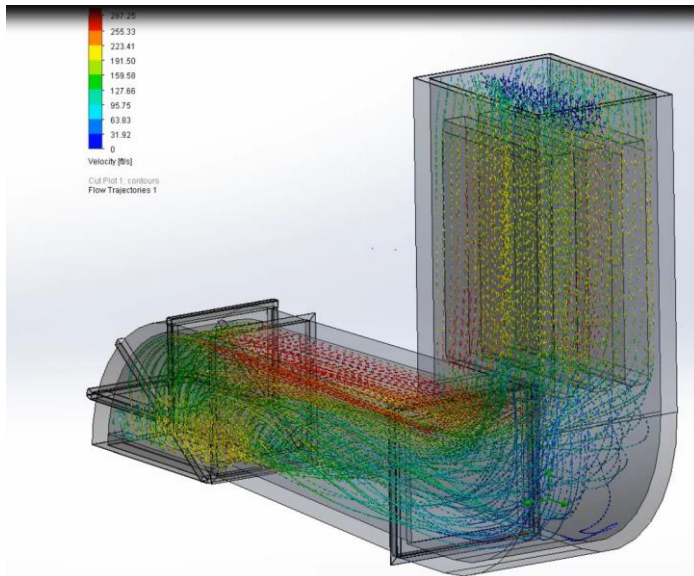
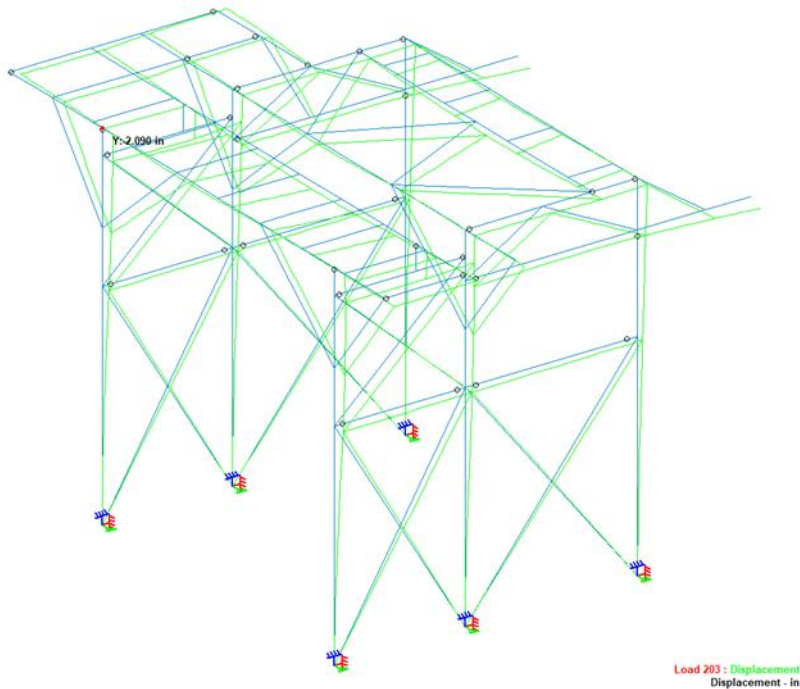
## ENCLOSURES

Designed to reduce gas turbine casing radiated noise, while providing personnel access and fire protection.

## VENTILATION

Enclosure silenced ventilation systems designed to provide critical cooling for the turbine casing.

# Gas Turbine Acoustics



# ENGINEERING CAPABILITIES

## ACOUSTIC DESIGN

Our experienced team of acousticians are able to develop, model and optimize a noise control solution to meet your needs, using the latest software.

## STRUCTURAL DESIGN

Our structural engineers have experience using building codes across North America and around the world.

## FINITE ELEMENT ANALYSIS

Regions of high stress due to thermal cycling or high loading are assessed by means of FEA software to ensure equipment life cycle and structural requirements are met.

## CFD ANALYSIS

The ability to determine gas turbine inlet and exhaust component performance in the presence of highly turbulent flows is critical to our clients. Our engineering team has the know-how and experience to use CFD as a tool to validate our system designs.





# GAS TURBINE ACOUSTIC DESIGN

## PROVEN DESIGNS

Over the past 40 years SPL Control have developed proprietary acoustical calculations and designs which have proven to consistently meet our clients' needs on both new and retrofit design applications.

## CRITICAL NOISE APPLICATIONS

SPL Control shines on applications that require custom engineered solutions. We have a long history of achieving critical dBA, dBC, octave band and low frequency noise criteria.

## SITE ACOUSTIC MODELING

SPL have the state-of-the-art diagnostic tools and 3D acoustic modeling software to assess existing noise and the acoustic impact of new or retrofitted equipment. These tools and our experience assist our clients in achieving optimized solutions.

## GUARANTEED COMPLIANCE

The strength of our engineering team and our long history of installations allows SPL Control to stand behind our guaranteed performance for even the most challenging requirements.

ACOUSTICS

58.4

58.2

## QUALITY SYSTEM

SPL Control's Business Management System (QMS) is certified by SGS North America, Inc. to the latest ISO 9001:2015 standard and is audited annually, ensuring that our client requirements are transferred into every project we deliver.



## CLIENT QUALIFICATION

We are an ISNet World approved supplier, ensuring that our health, safety, quality, insurance, training and cybersecurity procedures are evaluated and approved. This streamlines our qualification process with participating clients.



## PROFESSIONAL ENGINEERING

SPL have on staff qualified structural and acoustical engineers and perform our engineering activities under a Certificate of Authorization issued by Professional Engineers Ontario and APEGA in Alberta, Canada.



**Professional Engineers**  
Ontario



# QUALIFICATIONS

# EXPERIENCE

400+ ENGINEERING SOLUTIONS AROUND THE GLOBE

## OEM SOLUTIONS

SPL Control has been the Gas Turbine OEM supplier of choice for decades. Our customer support, technical expertise, repeatable quality system and competitive pricing all work together to make us a Tier 1 supplier.

## RETROFIT SOLUTIONS

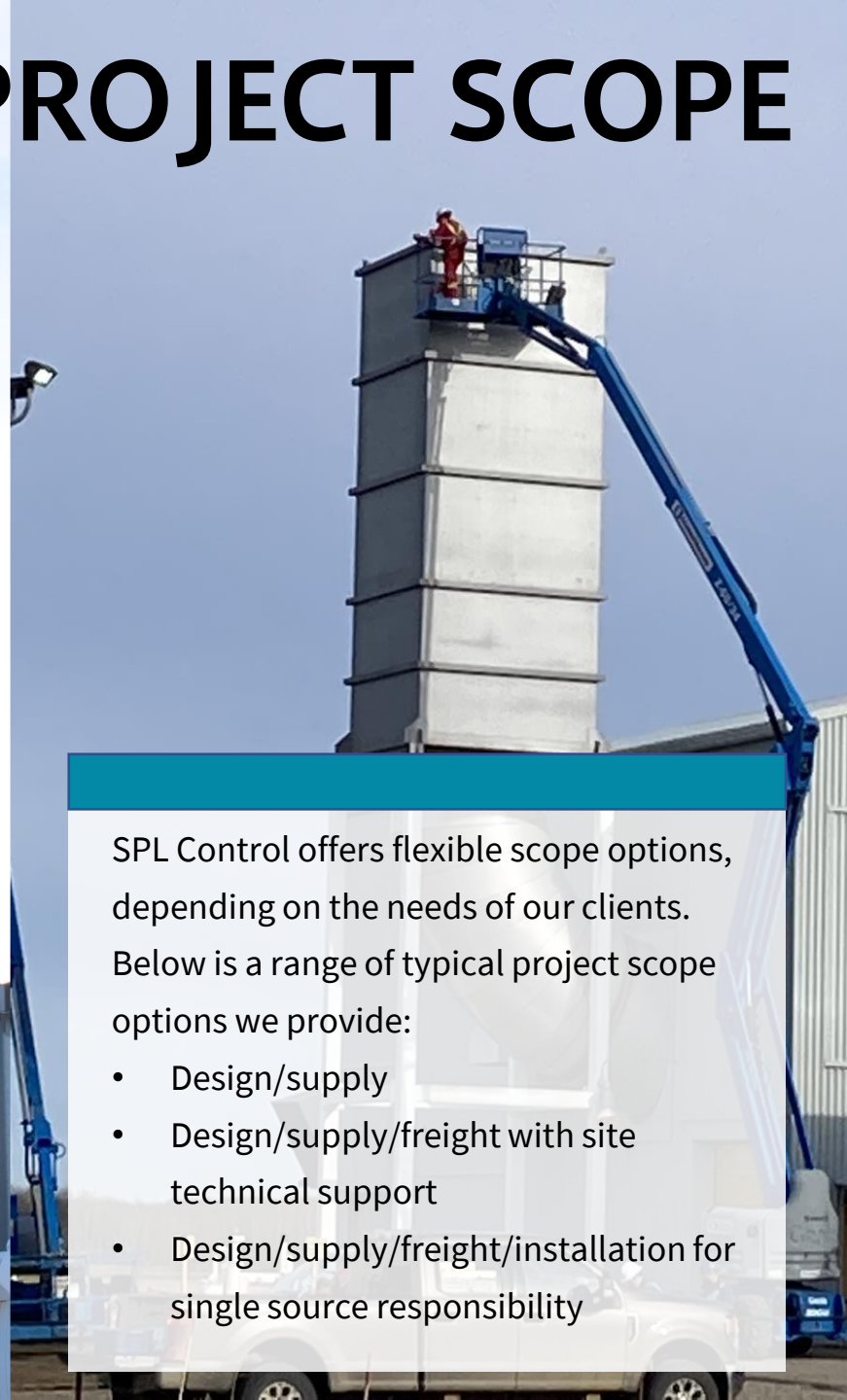
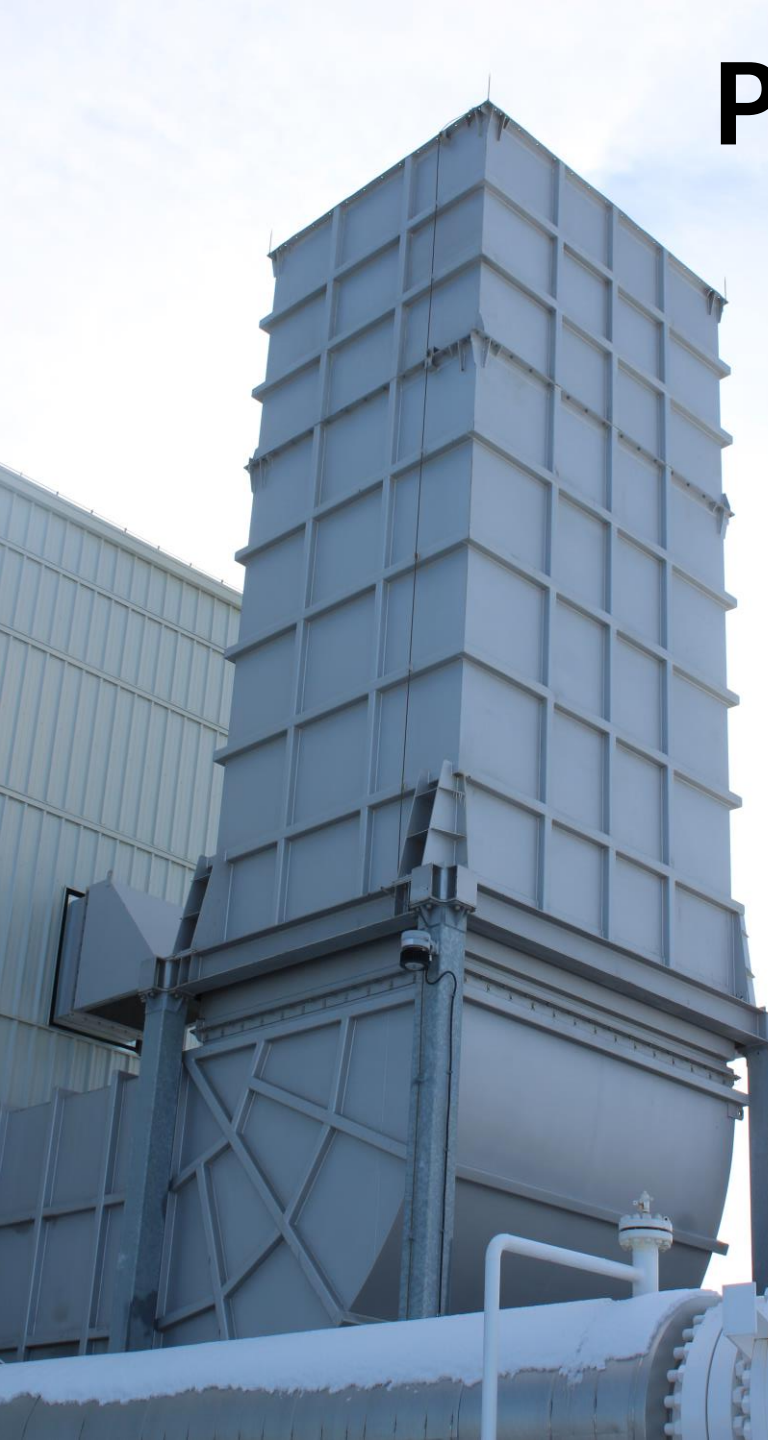
Based on our vast experience and site support capabilities, SPL is the preferred retrofit solution provider for many end users. We provide supply-only, as well as turn-key solutions for gas turbine silencing applications.

## REPEAT CLIENTS


Many of our clients have been working with SPL Control for 40 years or more. They have come to rely on us due to our technical expertise, optimized solutions, proven designs and on-time delivery.



# PROJECT SCOPE



SPL Control offers flexible scope options, depending on the needs of our clients. Below is a range of typical project scope options we provide:

- Design/supply
  - Design/supply/freight with site technical support
  - Design/supply/freight/installation for single source responsibility
- 



The background image shows a large industrial manufacturing facility. In the foreground, there are several large, circular, metallic tanks or vessels, some with blue protective coverings. The facility has a high ceiling with visible steel beams and various pieces of machinery and equipment. The overall scene depicts a complex industrial environment.

# FABRICATION

SPL Control fabricates our products using 3<sup>rd</sup> party sub-vendors in Canada and globally. All of our sub-vendors are audited and approved under SPL Control's ISO 9001:2015 quality program.

In Brantford, Ontario Canada, we have access to 250,000 square feet of manufacturing space with a full range of machinery and expertise in steel cutting, forming, welding, CNC machining, blasting and finish painting.

Use of 3<sup>rd</sup> party sub-vendors allows for capacity flexibility, while our quality program and QC inspectors ensure compliance with client specifications.





# SUMMARY



SPL Control has been providing gas turbine silencing equipment for the Oil & Gas and Power industries since 1976. Our many repeat clients continue working with us because of our deep experience, engineering expertise, quality system and culture of customer support.

Please let us know how we can assist with your gas turbine acoustic needs. We are ready to support you with early budgetary estimates and design optimization, right through to project execution.

SUMMARY





# CONTACT

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