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Press Release  
For immediate release

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## New Exhaust System Sizing Program

Mississauga, Ontario Canada (February 20, 2004) – Silex Innovations Inc., a leader and innovator in the manufacturing of silencers and exhaust systems for power generation and gas compression markets, announces a major advancement in the sizing and selection of exhaust systems for diesel and natural gas engines.

This revolutionary new program is the fastest and easiest way to select the appropriate silencer from a database of engines and gensets. It also takes the time and frustration out of calculating pressure loss through each system component and at the same time predicting overall acoustical performance at specific distances.

The web based program is a significant enhancement to Silex's current sizing program and is now available over the internet.

***“Moving the program to a browser based system on our own servers gives us the ability to keep the databases current as well as have a state of the art platform for future program enhancements”*** stated Lorne Gauer, President of Silex Innovations Inc. ***“Another major benefit to this type of system is that our customers can now instantly access the program from anywhere in the world with a simple click of the mouse”***.

The screenshot displays the 'New Project (12) - System Summary' interface. It includes sections for 'Project Details', 'Engine Details', 'Silencer Details', and 'Connection Details'. A table shows 'Silencer Insertion Loss (dB)' across frequency bands (63, 125, 250, 500, 1000, 2000, 4000, 8000 Hz) with values ranging from 21 to 48 dB. Other parameters include flow rate (11,233.6 CFM), flow velocity (10,500 FPM), and pressure drop (15.854 in wg).

Silex worked closely with Agora Consulting Partners Inc. ([www.agorainc.com](http://www.agorainc.com)) in designing the program. Agora's professionalism and experience with this type of advanced application combined with Silex's in-depth knowledge of the product requirements enabled the program to be developed and launched quickly. Agora not only acted as the programming resource for the project but also assisted with the network info structure to support the application.

Some of the program's major features include:

- Access to an up to date engine database of hundreds of diesel and gas engines from major OEM manufacturers such as Caterpillar, Cummins, Kohler, Detroit Diesel, Waukesha, Generac and Mitsubishi. These databases are being updated constantly and continue to grow.



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- Database of pre-engineered silencers from standard Industrial Grade (15 to 25 dBA) to high performance Super Hospital Plus (45-55 dBA) including reactive, low profile, low pressure drop, hockey puck, power puck, spark arrestor and absorptive silencer designs.
- Automatic silencer selection based on the characteristics of the engine or genset model and application environment.
- Users have the ability to select single inlet, dual inlet or dual silencer configurations.
- Optional user defined engine information that allows the user to enter and size exhaust systems for non-database engine models.

**Silex**  
INNOVATIONS INC.

Silex Engineer  
Silencer and Exhaust System Selection Program

Project Name: **New Project** Date: 2/26/2004 10:43:57 AM  
User Name: **SilexDemo**  
License:  
Address:  
Notes:

**Summary of Exhaust System Configuration:**

Engine Selection:	25120 TA-1230kW-1000RPM	Manufacturer:	Caterpillar
Application:	Construction - Emissions	Model:	25120 TA
Brake Horsepower:	1,654.0 hp	Electrical Power:	1,230 kW
Allowable Backpressure:	27.0 in wg	Design Backpressure:	27.0 in wg
BMEP:	0.0 psi	RPM:	1000
Exhaust Temp:	822.0 deg F	Exhaust Flow:	11,233.6 CFM
Outlet Diameter:	8.0 in	# of Outlets:	1
Outlet Configuration:	ANSI Flange	Fuel Type:	Diesel
		Silencer Configuration:	Single Silencer

Silencer Selection:  
1. JDDPP-14-EISO - Reactive, Hospital Plus (35.5dBA), 14.0" Inlet, 14.0" Outlet, End In / Side Out

Connector Selection:  
1. Flex Connector - 8.0" Inlet Flange, 14.0" Outlet Flange, 18.0" OAL

Piping System Selection:

Product	Tube	Elbow	Outlet	OSL	Albite	Termination
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**Acoustics Summary**

Engine Sound Pressure Levels (dBS) by Octave Band @ 3.0' & 90 deg to exhaust exit:  
(Transmission Loss)

	63	125	250	500	1000	2000	4000	8000	Overall
25120 TA-1230kW-1000RPM :	124	130	126	117	113	106	96	88	121 dBA

- Built-in warning messages and error checking to ensure each component fits into the overall system design.
  - Online comparison of silencer grades and series based on backpressure and acoustical performance.
  - Acoustic and pressure loss predictions based on your exhaust component selections.
  - Automatic flex or wye connector selection based on engine outlet configuration and the silencer inlet configuration.
  - Hyperlinks to specification sheets, price lists, product sales drawings and general arrangement drawings.
  - Enhanced piping and exhaust component selections with user defined options.
- Acoustical predictions by octave band based on distance and elevation.
  - Ability to save, duplicate and recall projects by user.
  - Improved Project Summary and Bill of Material Reports.

The program is designed to make our customers' job easier and Silex is not finished yet. Silex is committed to continually enhancing the program based on the feedback and requirements of our customers.

The program is now available on Silex's Secure Web Site and you can register online at [www.silex.com](http://www.silex.com) or call 800-387-7818 toll free.

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