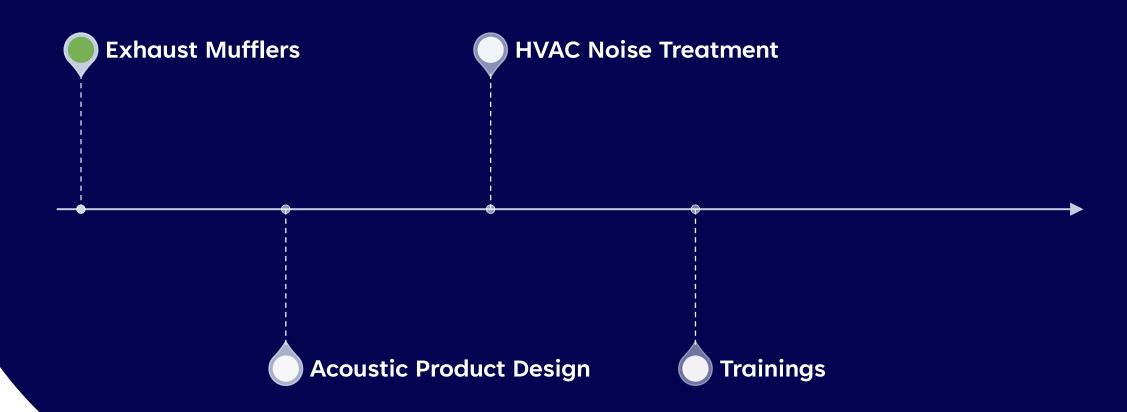
### **Exhaust Systems Services**

Portfolio



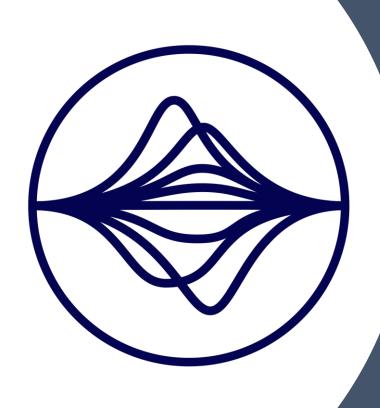
#### What we do





# Exhaust Mufflers Design

Work Samples





#### HITACHI EX5600-7 Excavator

**Summary:** Exhaust muffler design for one of the largest mining excavators in the world, the EX5600-7 from Hitachi. The OEM muffler was replaced with a custom designed muffler to reduce the noise level in the mining site. Used Engine: Cummins QSKTA50-CE V16 Twin Turbocharged.

Learn more about the Excavator from Hitachi's website.

**Industry:** Mining

Project date: July 2024.







#### NHL 450 Dump Truck

**Summary:** Exhaust muffler design for the NHL 450 haul truck used in mining services. Used Engine: MTU 20V 4000C22 Diesel, which produces a very high exhaust flow rate equal to 9.2 m3/sec at 1800 rpm.

More data is available in the engine's <u>datasheet</u>.

**Industry:** Mining

Project date: August 2024.





#### Caterpillar 795 Haul Truck

**Summary:** Exhaust muffler design for the CAT 795 haul truck used in mining services. Used Engine: CAT C175-16 Diesel running at 1800 rpm.

**Industry:** Mining

Project date: September 2024.







#### Caterpillar 793D Haul Truck

**Summary:** Exhaust muffler design for the CAT 793D haul truck used in mining services. Used Engine: CAT 3516B Direct Injection running at 1750 rpm and 2415 BHP.

More details about the truck are available on Caterpillar's website.

**Industry:** Mining

Project date: October 2024.





#### **KOMATSU 930E Dump Truck**

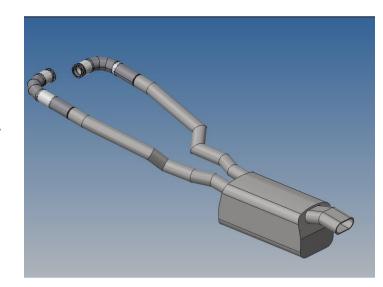
**Summary:** Exhaust muffler design for the KOMATSU 930E haul truck used in mining services. Used Engine: Cummins QSK60, 16V running at 1900 rpm.

Read more data about this giant dump truck from KOMATSU's <u>website</u>.

**Industry:** Mining

Project by: SIDLAB

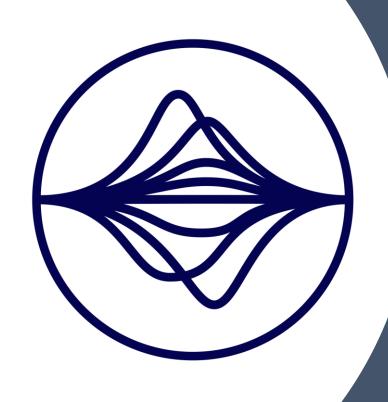
Project date: October 2024.





## Exhaust System Measurements

**Work Samples** 





**Summary:** Design and Manufacture a Test Bench to measure the exhaust systems performance under R&D in Ford's Dunton Technical Center. The Test Rig is able to measure the performance with air flow and available to measure twin outlet exhaust systems.

**Location:** Dunton, UK

Project by: SIDLAB

**Project Date:** June 2020

**Customer:** Ford Motors Company

**Industry:** Automotive







**Summary:** Design and Manufacture an impedance tube to measure the acoustic performance of aerospace induct products. The Test Rig was assembled and commissioned at Honeywell facility in USA.

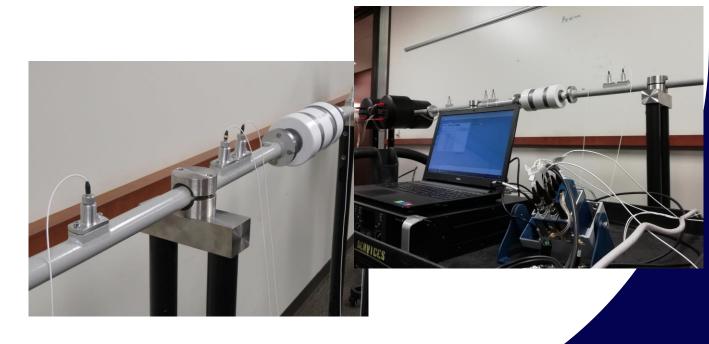
Location: Phoenix, USA

Project by: SIDLAB

**Project Date:** February 2019

**Customer:** Honeywell Aerospace

**Industry:** Aerospace





**Summary:** Design and Manufacture a Test Bench to measure the acoustic performance of exhaust system for the number one automotive manufacturer in China. The Test Rig was assembled and commissioned at TJ FAW facility.

Location: Changchun, China

Project by: SIDLAB

**Project Date:** August 2017

**Customer:** TJ FAW

**Industry:** Automotive





**Summary:** Design and Manufacture a Test Bench to measure the acoustic performance of exhaust system for the one of the biggest joint venture—automotive manufacturer in China. The Test Rig was assembled and commissioned at SAIC facility in Shanghai.

Location: Shanghai, China

Project by: SIDLAB

**Project Date:** September 2016

**Customer: SAIC** 

**Industry:** Automotive

