



CHP / Greenhouse Heat and Power

The Equipment

Caterpillar G3516H Gas Engine

The Challenge

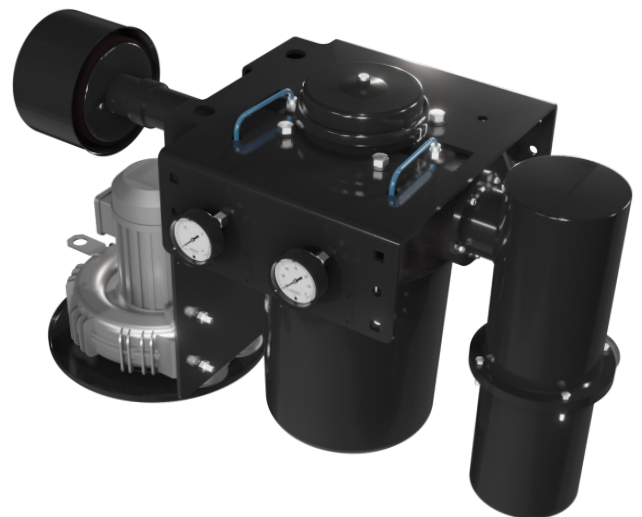
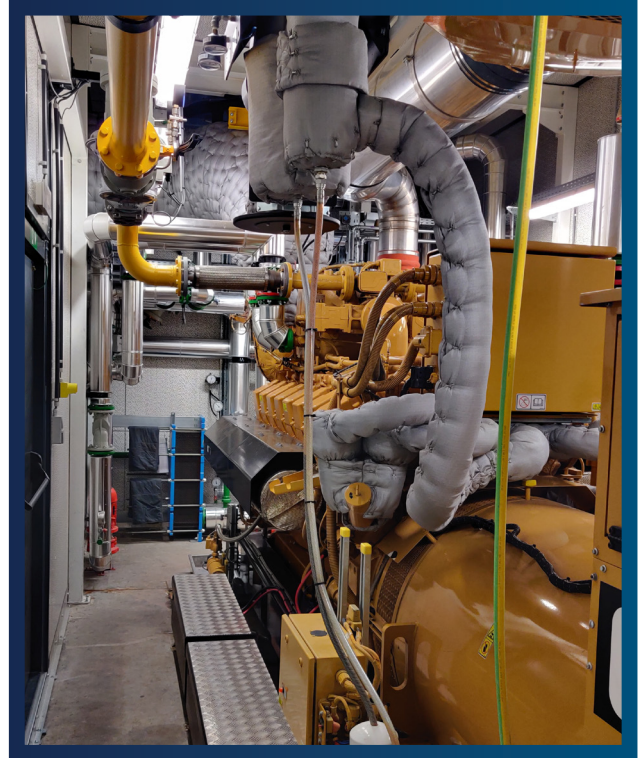
A large Caterpillar Power Systems dealer in Europe approached Solberg in 2013 as they were having challenges with their current crankcase ventilation system on three CAT G3516H gas engines. There was significant contamination of the turbo with oil mist from the crankcase. Maintaining a specific vacuum/suction level in the crankcase was also proving to be difficult.

The Solution

Their team performed a side by side comparison on the engines. They tested Solberg's filtration efficiency and vacuum regulation versus the previously installed unit. The main point of focus was cleanliness of the engine turbo as the filtered crankcase blowby was piped back to the turbo. Their team was hands on and very detailed in their approach, testing and follow up with Solberg. After 4000 hours of testing, it was clear that the Solberg unit was superior.

Results

Solberg provided an earlier version of its ACVB units. Since 2013 Solberg has provided over 30+ systems for use with the G3500 series gas engine. We have partnered and modified our system to meet the needs of the engines and packages.



Rev: ECAT ACVB US0221K

Solberg Products Provided

ACVB-80136-PS-J

Advanced Crankcase Ventilation System with Insulation Jacket on main canister and pre-separator.

ACV2825

Waste Oil Console Designed for use with ACVB Systems

The Product

The ACVB is designed to protect your engine's turbo, coolers, and inlet air filters as well as help ensure environmental compliance while keeping engine rooms clean, safe and free of oil mist. The series comes standard with industry leading automated vacuum control technology to regulate crankcase pressure and prevent seal leakage. The replaceable filter element contains a proprietary media pack offering exceptional efficiency levels with an extremely long life, allowing operators up to one year before an element change is required.



ACVB Design Features

- Integrated vacuum control valve to automatically maintain a 0-1" W.C. vacuum/suction level in the crankcase
- Drop down bucket for easy element change-out
- Minimal required drain mounting height (from Solberg canister drain port to high oil level of waste oil console)
- Gauges supplied as a standard to easily monitor vacuum level and filter life (change-out values listed on nameplates)
- High efficiency coalescing element – 99.97% @ droplet and particle size of 0.3um and larger
- Make up air is brought in downstream of coalescing element to provide maximum coalescing element longevity. Make up air is also filtered
- Vacuum relief valve as a standard
- Utilizes regenerative blower as suction source



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All model offerings and design parameters are subject to change without prior notice.
Contact your representative or Solberg for the most current information.