

Cogeneration / CHP

The Equipment

Caterpillar G3520H

The Challenge

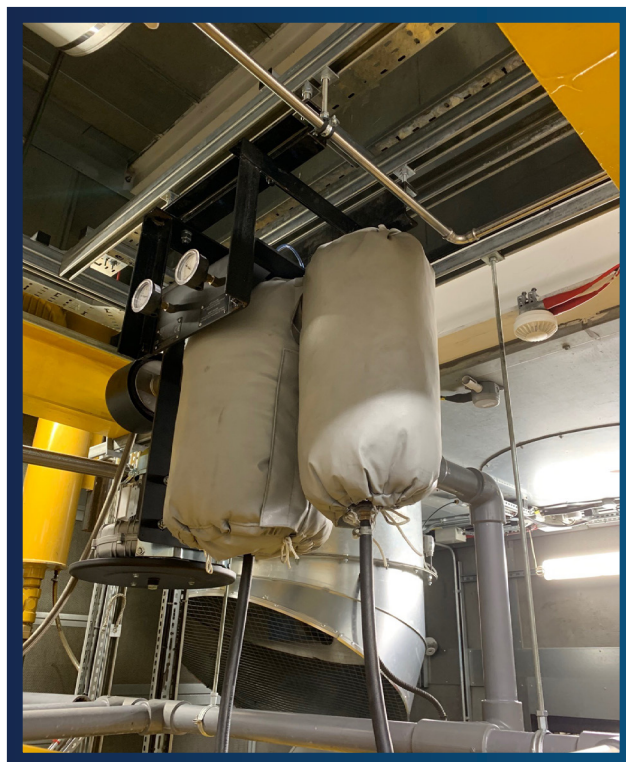
A power systems dealer in the UK partnered with an infirmity to supply three gas engines for a CHP project. The existing crankcase breather systems were allowing bypass to contaminate the engine intake air filters and subsequently the internal engine components, the turbo charger and inter coolers. The construction manager stated, "This became quite serious when we found crystallized oil on the turbo blades which led to a costly overhaul."

The Solution

Solberg UK visited the site to complete a survey. Solberg's recommendations for a successful installation included the ACVB Series, high efficiency, advanced crankcase ventilation system. This unit was developed for the G3500H series. Solberg delivered three ACVB systems which included a pre-separator, thermal insulation jackets and waste oil consoles.

Results

Feedback from the construction manager: "Your attendance at site during the installation was extremely helpful and assured the equipment was both suitable and working correctly. In service, the equipment has run perfectly and we have had no issues. The filter swaps are very simple and the gauge gives a clear indication of functionality and filter status. This is a good product that functions well and has ease of maintenance. In the future I will be recommending that we install your product as part of our package."



Rev: G3520H-UK ACVB US0320K

Solberg Products Provided

ACVB-80136-PS-J
Advanced Crankcase Ventilation System

Optional Pre-Separator (ACVB-PS)
Optional Insulation Jackets (ACVB-J-BKT &
ACVB-J-PS)

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



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

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