



Landfill Gas to Energy

The Equipment

Jenbacher J420GS Gas Engines

The Challenge

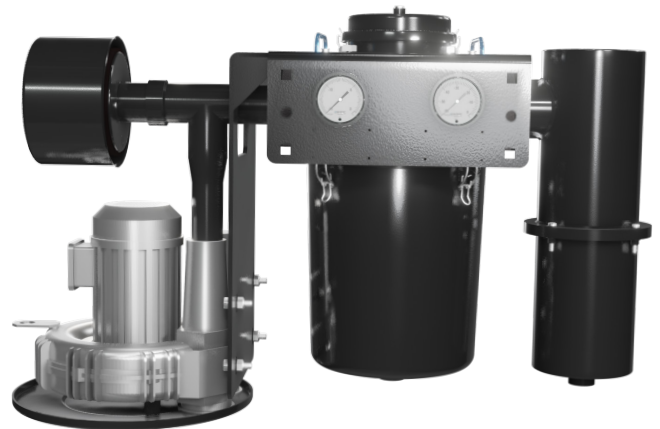
A landfill gas to energy facility had ten enclosure mounted J420GS engines. These engines are powered by landfill gas and used to generate electricity. The site was experiencing inter-cooler issues and other engine challenges. The existing crankcase ventilation filter routed the crankcase blow-by back into the turbo where bypass and carryover were being seen. They wanted to eliminate and isolate the crankcase ventilation system and vent to atmosphere. Space was at a premium within the engine enclosure.

The Solution

Solberg scheduled multiple on-site visits to review installation details and provide installation location recommendations. Solberg provided its ACVB Series, Vacuum Assisted Advanced Crankcase Ventilation System. This includes Solberg's vacuum regulation technology packaged with a blower and motor to provide a vacuum/suction source pulling oily mist/blow-by from the crankcase. A Solberg pre-separator was selected to offer an additional stage of filtration to knock out heavy oil blow-by.

Results

The facility owner was extremely happy with the Solberg ACVB unit and the support provided throughout the process. With the installation, there are no longer issues with inter-cooler and there are no visible oil mist emissions from the crankcase. The Solberg ACVB upgrade was mounted externally in a secondary enclosure, complete with insulation jackets also provided by Solberg. With this success, the facility is planning on adding nine additional units. One for each remaining engine.



Rev: J420GS ACVB US0320K

Solberg Products Provided

ACVB-80134-PS
Advanced Crankcase Ventilation System
(Blower Assisted)

ACVB-J-BKT / ACVB-J-PS
Insulation jackets for the main canister and
pre-separator

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

PART NUMBER	ACVB-80134-PS-J
INLET/OUTLET	3" NPT
DRAIN	1" NPT
GAUGE TAP	Dual
FLOW RATE	80 CFM
HEIGHT	31.0"
LENGTH	46.2"
DEPTH	16.0"

