



ULTRA FINE FILTERED VENT KEEPS LARGE MINE TRUCK FLEET WORKING

Banlaw has helped MTU Indonesia to filter its mining engine fuel tanks by installing fuel tank vent filters to minimise fuel system failures at one of Indonesia's largest mines.

Heavy vehicle engines are becoming increasingly sophisticated and sensitive to dirty fuel. Banlaw's Ultra Fine Filtered Vent is the perfect solution for keeping particles out of fuel systems to keep engines running at optimum performance, bringing greater productivity and better fuel efficiency.

KEY CHALLENGES

MTU Indonesia needed to minimise downtime caused by premature wear of fuel components. In the mine environment, particles were getting into the fuel through the unfiltered fuel tank breather. A super class mining truck uses between 4,000 and 5,000 litres of fuel a day, so an equivalent amount of unfiltered air was entering the trucks' fuel tanks.

MTU needed an effective 3 micron fuel tank breather suitable for mining trucks.

RESULTS

MTU now recommends its customers use the Banlaw Ultrafine Tank Filter on its vehicle's fuel tank breathers if they are operating in mining environments.

The filter has now been installed on the rest of Indonesian mine's fleet. MTU has noticed improved performance and lesser fuel system component failures on those units that are now equipped with the filter.



THE SOLUTION

Banlaw's Ultrafine Filtered Tank Vent was installed on two trucks for a trial period of 2,500 hours. Filter samples were evaluated at 500 and 2,000 hours and to the maximum restriction of filter shown on indicator. The results were verified by MTU's head office in Germany.

KEYS TO SUCCESS

- ▶ Banlaw's quick response
- ▶ The vent is built tough to withstand harsh mining conditions
- ▶ It effectively filters out particles 3 micron and above
- ▶ Cost effective to retrofit the whole fleet.

Ultra-fine Filtered Vent

A complete vent assembly with all key functions integrated.

FAST FACTS

- ▶ 3um abs. rated air filter element
- ▶ 800LPM (211GPM) refuelling capability
- ▶ Integrated design protects against moisture
- ▶ Check valves create dedicated intake and exhaust pathways to protect the filter
- ▶ A custom gasket seals the outer circumference of the filter element
- ▶ Various styles to suit different applications and tank shapes
- ▶ Condition element makes it easy to know when to replace the filter
- ▶ 49 kPa (7psi) or 110 kPa (16psi) pressure relief settings
- ▶ Part No: BFV225A

FROM THE CLIENT

"The filter is very effective in trapping foreign particles at 3 micron. Banlaw was helpful in meeting our request in a short time period and was also very supportive of their product."

Steve Dieckmann
PT MTU Indonesia

CASE STUDY: MTU INDONESIA

BANLAW'S ULTRA FINE FILTERED VENT KEEPS LARGE MINE TRUCK FLEET WORKING

A controlled field trial has helped MTU Indonesia achieve measurable gains in heavy mining equipment reliability after installing the Banlaw Ultra Fine Filtered Vent onto the fuel tank of a number of their haul trucks operated at one of Indonesia's largest mines. MTU Indonesia now recommends the Banlaw vents are fitted to all diesel powered equipment operating in harsh mining environments.

EQUIPMENT DOWNTIME IS COSTLY

Heavy diesel powered equipment fuel systems and engines are becoming increasingly sophisticated and sensitive to contaminated fuel. Banlaw's Ultra Fine Filtered Vent is the ideal solution for tank vent filtration, to help reduce fuel contamination and keep engines running at optimum performance, bringing greater productivity and better fuel efficiency.

CHALLENGES

MTU Indonesia needed to minimise downtime caused by premature wear of fuel components. In the mine environment, particles were getting into the fuel through the unfiltered fuel tank vents. A super class mining truck uses between 4,000 and 5,000 litres of fuel a day, so an equivalent amount of "unfiltered" air was entering the trucks' fuel tanks.

MTU needed an effective 3 micron fuel tank breather suitable for mining trucks.

SOLUTION

Banlaw's Ultra Fine Filtered Vent was installed on two trucks for a trial period of 2,500 hours. Filter samples were evaluated at 500 and 2,000 hours. The results were verified by MTU's head office in Germany.



KEYS TO SUCCESS

- ▶ Banlaw's quick response – working with the client.
- ▶ The vent is designed to withstand harsh mining conditions.
- ▶ The filter fitted to the vent is rated at 3µm absolute (abs.) effectively removing particles at and above 3µm.
- ▶ Cost effective to retrofit the whole fleet.

RESULTS

MTU now recommends its customers use the Banlaw Ultra Fine Filtered Vent on all its vehicles if operating in harsh mining environments.

The filter has now been installed on the rest of the Indonesian mine's fleet. MTU has noticed improved performance and lesser fuel system component failures on those units that are now equipped with the Banlaw vent.

FAST FACTS

- ▶ Industry standard 2" NPT (M) connection to the tank.
- ▶ 3µm abs. rated air filter element.
- ▶ 800LPM (211GPM) refuelling capability for a single vent (multiple vents used for higher refuelling flow rates).
- ▶ Revolutionary product, combining all essential features into a single integrated vent assembly.
- ▶ Various styles to suit different applications and tank shapes
- ▶ 49 kPa (7psi) or 110 kPa (16psi) pressure relief settings.
- ▶ Model No: BFV225 series.



KEY BENEFITS

- Maintain low engine emissions
- Maintain engine performance
- Optimise fuel efficiency
- Reduce fuel filter maintenance intervals
- Reduce unscheduled breakdowns and costly downtime.

FROM THE CLIENT

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