

ISO4406 Fuel Quality Solution for Diesel Fuel Delivery in Mining Operations

Market Application Publication
for **CLEANDiesel**® Filtration Solutions



Customer:

Mining Operations in the U.S.

Customer Value Position:

Mining companies in the United States acquiring new earth moving equipment have to ensure that diesel engines are Environmental Protection Agency (EPA) Tier 4F compliant. In order to maintain compliance, the new engines require the diesel fuel from providers to be validated at delivery with ISO 4406 specification of 18/16/13 or better to be consistent with the OEM fuel specifications.

Mining operations require a system of accountability for reception of fuel from fuel distributors to ensure compliance with OEM warranty specification.



Contact Information: Product Features:

Parker Hannifin Corporation
Velcon Filtration Division
1210 Garden of the Gods Road
Colorado Springs, CO 80907

phone 719 531 5855
fax 719 531 5690
vfsales@parker.com

www.velcon.com

- Independent online monitoring of system contamination trends
- Cost effective solution in monitoring fuel cleanliness and reducing machine downtime
- LCD display with alarm output warnings (IPM-200 only)
- Continuous performance for dependable analysis

- Diesel, kerosene fuel compatible construction
- PC/PLC integration technology using Data Acquisition RS-232 or CANBUS output (IPM-200)

Application:

- ISO 4406 Fuel Quality Assurance at Reception of Fuel from Supplier



CLEANDiesel®

ENGINEERING YOUR SUCCESS.

Results:

Parker Velcon IPM-230 was chosen by the Fuel Distributor because the device could provide ISO 4406 Fuel Quality reporting on site at the mining operation fuel depot 24/7/365. The Fuel Distributor procured the Parker IPM-230 on behalf of the mining operator in order to fulfill the requirement for a new fuel contract by the subject mine operator.

In addition to the IPM-230, the Fuel Distributor also procured an integrated Diesel Fuel filtration skid utilizing Parker Velcon DFO particulate filter cartridges to capture particulate matter from the fuel delivery stream.

In summary, both the Diesel Fuel Forwarding Filtration Skid and IPM-230 were integrated together as a complete solution.

How the Solution Works:

Advanced Fuel Services, an approved Parker Velcon CLEANDiesel distributor and systems integrator, collaborated with Parker Velcon to manufacture a Diesel Fuel Forwarding Skid solution that facilitated Fuel Quality Particle Filtration and integrated the Real Time Fuel Condition Monitoring and Treatment Metering by incorporating Parker Velcon's IPM-230. The integrated system enabled the mines to have visibility on the fuel quality at reception and to prevent harmful contaminants from entering their fuel supply. Fuel used on their operation equipment are now certified to meet ISO 4406 18/16/13 at delivery to the mine fuel depot storage tanks.



AFS Diesel Filtration Skid Enclosure with Parker Velcon IPM-230.