

Red Meters in line with mining slurry

Located in Orlando, Florida, Red Meters says it is breaking ground in the mining world with its RM series non-nuclear density meters that “provide a safe, accurate alternative to legacy density gauges.” The basis for what is now Red Meters came in 2012, when NASA consultant and inventor Dr Robert Batey searched for an alternate solution to the inaccurate and potentially hazardous density measurement systems in use at the time.

Built in-line with the mining slurry, the RM series boasts an accuracy of $\pm 0.25\%$ over a 6:1 density range. The non-nuclear technology is combined with an abrasion resistant liner to withstand rough materials. The highly sensitive laser measures cartridge deflection and translates the deflection into weight. Since the volume of the cartridge is constant, slurries do not have to be water-based. Laser readings are taken 3,000 times a second, ensuring a continuous measurement. An insulated housing is used to shield the cartridge and measurement devices from ambient temperature and weather. The casing is designed to have a sleek, curved top to prevent buildup from dust, snow, etc, thus eliminating any damage caused by weather.

All calculations are displayed in real-time on

a 7 in touch screen Human Machine Interface (HMI). The HMI output allows customers to choose which figures they need to see, with options including density, pressure, percent solids, totalised mass, and more. Figures can be shown in graphs for easier readings, and data can be connected via ethernet or wirelessly to the main server. Each meter is set with alarms to alert if there is any suspicious change in pressure or wear in the in-line

cartridge. Cartridges are easily replaceable, meaning that when one wears out there is no need to buy a whole new meter.

“Over time, savings from the low maintenance and lack of on-site safety personnel adds up to a significant change in the company’s bottom line. Originally designed for dredging, the Red Meter series has found a variety of applications to automate process control and increase efficiency. Most recently a RM3 was installed in Australia for Cristal Mining.”

www.redmeters.com



Aramine rolls out new truck class

With an increase in demand in the small to mid-size tonnage class for underground mining segment, Aramine has opted to manufacture not one but two different 15 t mine trucks and after a long R&D period, the French company has put on the market the T1601C and the T1601M. Developed for small to medium scale underground operations, both T1601 models are described as ideal for sections between 12 to 18 m² and they also fit 3 m x 3 m galleries. The operator compartments are very different in each version while they are both designed to offer the best comfort and ergonomics for the driver.

The trucks have been designed with strong welded boxes with angled corners for better protection, a smooth interior for easy material unloading and rear ducktail design to avoid material spillage during tramping. Customers can choose to add an optional rear mechanical tailgate to increase capacity and avoid material spillage on grade and/or an optional telescopic dump box for unloading on low back height or back filling application. Aramine offers one mechanical version, the T1601M and one

computerised version, the T1601C.

The T1601M mine truck, designed with no electronics, is equipped with a Deutz air-cooled engine. The operator is side seated for better visibility in both directions. The driver can easily operate the machine with mechanical gearshift and electric pilot control.

The T1601C mine truck, designed with a Canbus system, is equipped with a Cummins Tier 3 CE CMSHA Engine. The operator, forward seated, can operate the machine with an automatic gearshift and converter lock-up activation in an open cabin or can choose an optional fully enclosed pressurised cabin with sound suppression, air-cooled, heater,



wind shield washer and wipers.

For both trucks, Aramine offers an optional 17 t, X-tram cap which include larger wheels (16.00x25 and width 2,150 mm). Aramine says the 15 t mine trucks are already making a name for themselves “and excelling in multiple countries such as Algeria and Kazakhstan.” www.aramine.com

BBE new automation division

The BBE Group, specialists in mine ventilation, refrigeration and energy optimisation engineering, recently established a new automation division to extend

its services. BBE Automation primarily supports the group’s consulting services and turnkey projects, but also provides automation and electrical services to mining and process plants in

all commodities.

Launched in November 2016, BBE Automation comprises a team of experts skilled in medium and low voltage electrical systems, field instrumentation and equipment automation in mine ventilation, refrigeration and energy engineering. Other markets