



Protective cylinder covers reduce downtime

An accident at the Rand Refinery smelter saw the whole area being covered with hot molten metal, which destroyed everything in its path. Luckily the company had installed Seal Saver protective covers on the five metre long cylinders, which protected them from destruction. Seal Saver covers are resistant to heat, oil, chemicals and water and offer a simple solution to a variety of hydraulic and air cylinder rod maintenance issues.

Rand Refinery mechanical foreman, Jeffrey Mthithala notes that the refinery uses the cylinders to tilt the furnace when removing melted material from the furnace barrel – and protection from heat is essential. “Seal Saver covers prevent heat from entering the cylinder seals and also prevent contamination,” he says. He adds that a damaged cylinder results in costly downtime. “The furnace needs to be shut down for the cylinder to be replaced and this results in unscheduled downtime and interrupted production, which can prove to be exceptionally expensive. Seal Saver has shown to be highly valuable and in this specific incidence, the product saved us up to three weeks of lost production due to its ability to protect the cylinders from contact with molten gold.”

Filter Focus sales executive Riaan Coetsee emphasises that Seal Saver protective covers take only 20 minutes to fit to the cylinders, resulting in minimal downtime. “The Velcro

closure and wrap-around design makes installation quick and easy, with no disassembly of the cylinder required. It is a quicker and cheaper alternative to replacing the whole cylinder,” he says.

Once installed, the Seal Saver opens and closes like an accordion as the cylinder works. A major benefit is that it prevents silt-sized particles from entering the hydraulic system via the rod seals. Once in the system, these tiny particles can act as a lapping compound, causing wear to valves, servos and pumps and eventually damaging the entire hydraulic system.

“Seal Saver helps to prevent the influx of contaminants, ensuring that the hydraulic system remains clean and operational, while in the process saving time and money in repairs and unscheduled downtime,” Coetsee continues.

Rand Refinery refines at least 80% of Africa’s gold. Its customers include mints, jewellery designers and major gold producers. Filter Focus has been providing Seal Savers to the refinery for three years. The company also helped Rand Refinery achieve significant cost savings on its oil consumption by applying specialised lubricants to the gearboxes and cylinders inside the smelter.

Rand Refinery initially spent about R1,2 million a year on oil. Since Filter Focus was

appointed, it has only spent between R20 000 and R30 000 as the oil can be regenerated.

“There are a number of filtration systems on the refinery’s hydraulic system and the hydraulic power plants. We have set up a recycling bay for onsite oil regeneration and we clean it by draining the oil from the gearboxes and placing it into our filtration plant. Once clean and in specification, the oil is put back into storage containers,” says Coetsee.

According to Mthithala, the working environment at the refinery is extremely dusty, due to the unrefined gold bags. “Our gearboxes used to fail quite often due to the harsh conditions and our bucket elevator experienced corrosion, which meant that we had to replace bearings every month. Since we started using the Filter Focus lubricants, we only need to change them once a quarter.”

He adds that the gearboxes used to be replaced at least two to three times a year. “We are yet to replace them since switching to Filter Focus lubricants, which can last for up to 20 years in operation, provided they are correctly managed, thereby ensuring significant long-term cost savings,” he concludes.

**For more information contact
Craig FitzGerald, Filter Focus,
+27 (0)11 466 1268, cfitz@filterfocus.co.za,
www.filterfocus.co.za**