



New ATEX pumping system

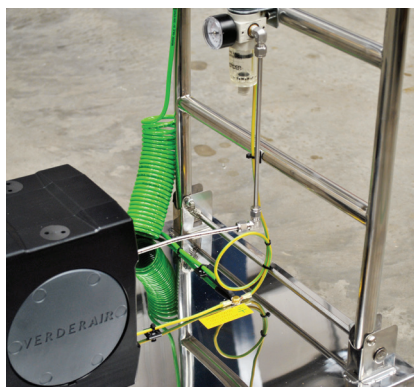
A major manufacturer of chemicals required a pumping solution for a pilot plant, where it could be established whether chemicals which had recently been developed could be produced profitably.

The pilot plant scales up from a small, laboratory-sized quantity to a production yield large enough to require an IBC. There is a multitude of different compounds being handled in the plant, with a flushing of hot water at 90°C between the different types. The pump was also required to run-dry and self-prime due to the nature container emptying.

As the IBCs cover a wide area, the pump was required to be portable. As with any chemical production facility handling aggressive chemicals, it is an ATEX-rated zone and the pumping solution had to be compliant.

The Verder Service Centre produced a mobile trolley pumping system.

The system features a Verder Pure 15 air-operated double diaphragm pump. The ATEX compliance required the pump to be conductive and to be able to be earthed during the pumping process.

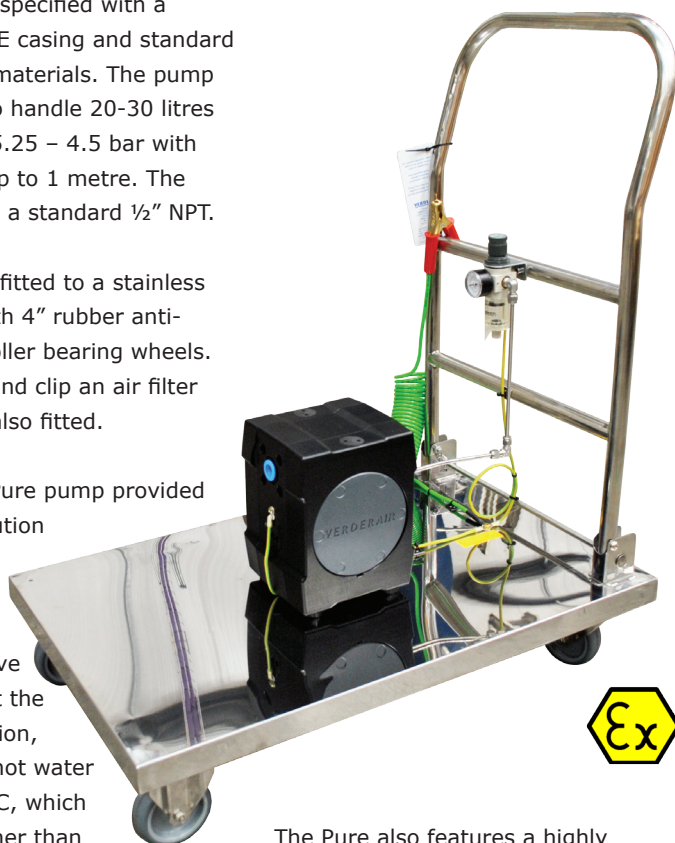


The pump was specified with a conductive PTFE casing and standard PTFE wet side materials. The pump was required to handle 20-30 litres per minute at 5.25 – 4.5 bar with suction lift of up to 1 metre. The connection was a standard ½” NPT.

The pump was fitted to a stainless steel trolley with 4” rubber anti-static rubber roller bearing wheels. An earth wire and clip an air filter regulator was also fitted.

The Verderair Pure pump provided the perfect solution with not only being able to handle all of the aggressive fluids and meet the ATEX specification, but also allow hot water flushing at 90°C, which is 25-30°C higher than many other AODD PTFE pumps.

The Verderair Pure is machined from a single block of 100% pure virgin PTFE (with conductive material in this ATEX model). As the pump is machined rather than cast, the pump has fewer stress lines which makes the pumps integral build structure much stronger. All pumps in the Pure range feature over-moulded diaphragms so as to not have an inherent weakness from the pneumatic mechanism directly working on them.



The Pure also features a highly responsive air valve which is extremely fast acting when opening and closing. This prevents any air being wasted and instead, all of the air being used to move the fluid. This provides a huge cost-saving on the quantity of compressed air required to operate the pump.

The trolley build itself was produced and tested by our workshop technicians at the Verder Service Centre in West Yorkshire.



www.verder.co.uk

AT Wien BE Aartselaar BG Sofia CH Basel CN Shanghai CZ Praha DE Haan
DK Rødovre FR Eragny s/Oise GB Castleford HU Budapest IN Pune
NL Groningen/Vleuten PL Katowice RO Bucuresti/Sibiu SK Bratislava
TH Bangkok US Macon (GA) ZA Northriding

VERDER
passion for pumps