PUMPS (FOR DRUM SLURRY REMOVAL IN THE PHARMACEUTICAL INDUSTRY)

A design house came to us requiring a pump for their powder system, being manufactured for an end-user to be used for drum slurry removal in the pharmaceutical industry. The fluid being pumped was classed as Pharmaceutical Slurry (<2000cP) and stored in drums. For this application, we selected a 2" bi-wing Lobe Pump, due to its cleanability (fully drainable design), viscous slurry handling capabilities, and low pulsation output. Whilst the pump was an easy selection, the motor proved to be a challenge due to the necessary requirements from the end-user.

Pump Specifications:

- ✓ Indoors Ambient Temperature: -15°C to +30°
- ✓ Flowrate: variable, between 4 to 40l/min
- ✓ Wetted parts: PTFE, FKM, & AISI316L
- ✓ Discharge: 1 Bar (g)
- ✓ Fully drainable design
- ✓ 2" DIN32676 (Series C) Clamps

As the end-user is based in America and required the pump to be explosion-proof, we sourced the pump motor from America to ensure it met NEMA Certifications, as opposed to ATEX Certifications, which are not recognised in America.



General Benefits the Pump Selection Include:

- ✓ All pumps have a no-nut, clean face, one-piece bonded diaphragm, offering on average double the life of the industry standard and no leak passage.
- ✓ Ease of maintenance; 70% less working parts than nearly all other pumps on the market less time to repair = less down time
- ✓ Versatile in/outlet to best suit pipework

Overall, a great selection of pumps supplied to our client to work hand in hand with their own manufactured skid system.

Final Motor Selection:

US Recognised NRTL Explosion Proof (NEMA) Motor, suited for 6 to 60Hz (480v =/-5%), and fitted with a thermostat temperature sensor. The final rating of the motor was Class I, Division II, Gas Group C & D, and Temperature Classification T2B.

- ✓ Painting of the Motor & Gearbox was RAL9003 Signal White, 2 Pac Epoxy Food Grade finish.
- ✓ 1x Solvent Transfer AODD Pump
- √ T120 STT-3S
- ✓ 1x Waste Transfer AODD Pump
- √ T420 STT-3S