BESPOKE TROLLEY MOUNTED MOBILE DECANTING SYSTEM BATCHING SYSTEM

Tapflo UK were approached by one of our trusted distributors for the supply of a bespoke version of our popular TPUK-MDU-20 Mobile Decanting Systems for use in a Cider Brewery. Thanks to Tapflo UK's vast knowledge and experience in designing and producing Bespoke Mobile Decanting Systems, we were perfectly placed to come up with an ideal solution matching the end user's requirements.

Our in-house design team liaised with the client to ensure that the system was suitable for their needs, ensuring we incorporated all the features and functionality they required for the process going forward.



Application Details

One of our trusted distributors were in the market for a bespoke version of our popular TPUK-MDU-20 Mobile Decanting Systems for use in a Cider Brewery.

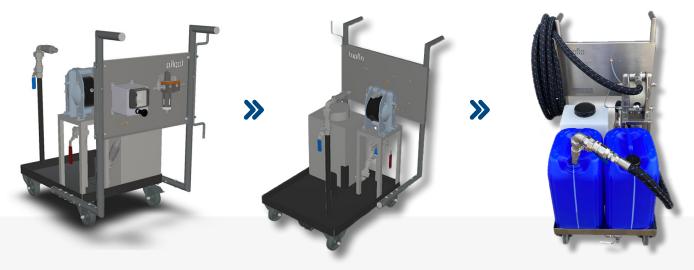
Our customer wanted the system to dose 5 to 10 Litres of Hydrogen Peroxide @ 35% concentration from an on-board reservoir into several storage vessels within their tank farm as part of a CIP procedure. The customer also

wanted to have the facility to swap over to a secondary onboard Water Reservoir to facilitate a 2 to 10 Litre water flush of the tanks and associated pipework/ hosing.

By doing this, there would be no chemicals left in the lines which would put the operator at any risk when detaching the lines from the storage vessels once the transfers have been completed. To further reduce risk and cross contamination, the customer also wanted each on-board reservoir to be double isolated via isolation valves and have a 3-way valve at the pump suction to facilitate easy and quick changeover between the reservoirs.

The requested 10m discharge hose assembly was also requested to be fitted with a non-drip point of dispense valve (POD Valve).

From Render to Reality



System Specification

- ✓ **TL70 STT** ³⁄₄" Air Operated Diaphragm Pump in AISI 316L with PTFE Diaphragms & Valve Balls fitted with Manual Ball Lifters. The Manual Ball Lifters fitted onto all 4 of the pump's ball valves can be manually lifted to drain the fluid in the pump and discharge line back into either the water tank or jerry can.
- ✓ Air Treatment & Control Set
 Manual On/Off Valve, Filter
 Regulator, Needle Valve, Modified Muffler, Blocking Needle
 Valve & Interconnecting Hosing
 all located next to the batcher
 on the back of the trolley for
 ease of setting and use. This facilitates isolation of the incoming mains air supply and flow
 and pressure regulation of the
 pump, as well as suitable set-up
 for batch controlling.
- ✓ TPUK-BP Pneumatic Batch Controller - Mounted to operator side of Trolley Brace Bar for ease of use. This provides the operator with the facility to batch the required 2, 5 & 10 Litre batches of Hydrogen

Peroxide and Water onto the process. The pump can also be manually primed with the controller before starting the batch.

- ✓ 20 Litre PE Water Storage

 Tank with ½" Bottom Outlet
 & 4"' Vented Screw Cap Lid it
 can be filled via the Lid and
 emptied via the bottom outlet.
 Fitted with a 2-Piece Manual
 Isolation Ball Valve in AISI 316/
 PTFE.
- ✓ Modified Tapflo HM0S
 Hygienic Trolley with Drip
 Pan (AISI 304 Glass Blasted),
 Drainage Valve, 2 x Removable
 Handles & Brace Bar, Discharge
 Hose Stowage, Pump Stand,
 Container Stay Points (can fit 2
 x 20-25 Litre Jerry Cans at the
 front) & 4 x Castors (Rear Swivel with Brake).
- ✓ Pump Suction Side Accessories & Fittings The Pump Suction Assembly was positioned downwards and underneath the Pump Stand with a 3-Way T-Port Ball Valve for Fluid Source Control with 0.5 m Convoluted PTFE Hosing (PP Overbraid) onto the outlet

of the 20 Litre Water Storage
Tank & 1.0 m Convoluted PTFE
Hosing (PP Overbraid) onto the
Suction Lance for Hydrogen
Peroxide Jerry Can (~500 mm w/
Chamfer Cut). The Suction Lance
& Hosing were also fitted with
AISI 316/Viton Parker SnapTite
H Valved Quick Release Adaptors for easy, non-spill connection and disconnection from interconnecting components.

✓ Pump Discharge Side
Accessories & Fittings - The
Pump Discharge was fitted
with a 2-Piece Manual Isolation
Ball Valve in AISI 316/PTFE
and 10 m of Convoluted PTFE
Hosing (PP Overbraid) &
POD Valve. An AISI 316/Viton
Parker SnapTite H Valved Quick
Release Adaptor was used in
between the isolation ball valve
and hose assembly to facilitate
easy, non-spill connection and
disconnection.

This system is a compact workhorse with a footprint of 925mm x 687mm x 968mm (L x W x H) to enable easy transportation in and around doorways and tight spaces in the tank farm.