

HORIZON INTEGRATION SYSTEMS INTEGRATOR

CHEMICAL CONTROL

Designing control systems that bring your application to life.

Horizon was asked to provide a dosing control system for an existing manual chlorination machine. The machine consists of a rotating drum that allows rubber products manufactured by the customer to be chlorinated, an



industry specific technique. The rotating drum is filled with product and then a solution of chemicals is added, these chemicals combined with the rotating motion of the drum provide a specific surface finish to the products. The chemicals used need to be dosed in accurate quantities in a very reliable and stable manor. The control system provided controls 5 chemical dosing pumps, actuated water valves, drain valves and the drum motor. These control elements are connected to a Mitsubishi PLC and dual touch screen control system that provides accurate and reliable dosing and process control of the machine.



The dual touch screen arrangement allows control tasks to be split, the first touch screen situated inside the building provides recipe settings and chemical storage level reporting to the operator, over 100 recipes can be created in the touch screen to allow the machine to be as flexible as possible. A second touch screen mounted outside is used to select the desired recipe to run for the machine and provides the operator with live feedback of the current cycle stage, time remaining and chemical amount values inside the drum.

Using automation components from leading manufactures integrated together to produce a coherent, precise control system that ensures the consistency of production for the customer.

Shown left, the main mixing drum and outside touch screen enclosure. The enclosure is food grade stainless steel providing protection against the elements.



Above, the inside touch screen display currently showing a recipe setup page. All touch screen pages are designed bespoke for the application and convey complex detailed information in a from that is clear, and simple to follow.

- Design, Draw, Manufacture, Install, commission.
- Skid mounted dosing pumps with drip tray and splash guard
- Complex automation and recipe handling presented in a simple format.
- Making complex production activites simple to use and repeatable.
- Full language switching utalised on the touch screens making operator training faster.
- Robust, Future Proof automation and control. "Its just what we do"

Contact us

Horizon Integration, Unit
19, White Hays South, West
Wilts Trading Estate, BA13
4JT
Tel: 01373 827599