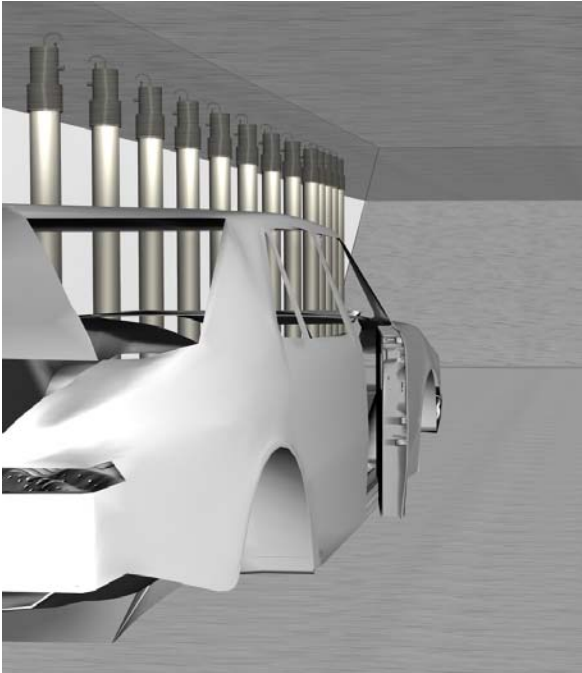


UFS CORPORATION INSTRUMENTATION PRODUCTS FOR ELECTROCOAT



2012

Replenishment Paint Feeder System

By measuring amp-hours, the Replenishment Paint Feeder System allows for paint to be added only as required. Consistent paint additions result in less variation in E-coat film thickness, therefore, variable costs will be considerably less. Replacement paint is added throughout the day as needed, resulting in additional savings because of reduced manpower. A complete system includes: an ampp-hour controller, one pump for each paint component, pump suction kit, magnetic proximity switch for counting pump cycles, and static mixer. Piston pumps are recommended because they are more reliable than diaphragm pumps. Whether your paint is delivered in 55 gallon drums or totes there is a complete package available.



Amp-hour Controller



Static mixer

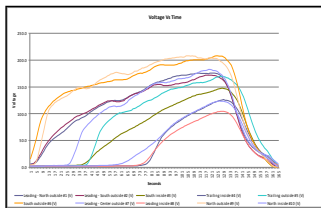


Piston Pump with Lid, & Lift for use with 55 gallon drums

TruIDL™ Data Logger



View of TruIDL Module



Voltage vs Time Chart

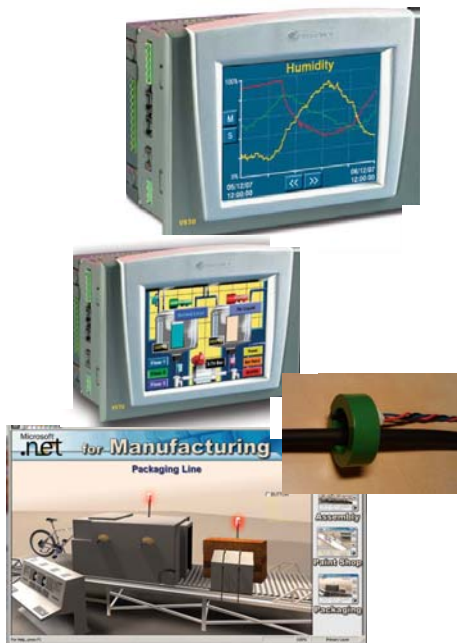
This affordable, miniature, submersible data logger with intuitive interface measures and records voltage on the surface of your ware as it travels through an E-coat paint tank. After a run, the portable module connects to your computer via a mini USB cable and allows you to quickly analyze the Excel based data to:

- Monitor the condition of anode cells for optimal E-Coat tank efficiency
- Ensure enhanced quality ware through preventative maintenance
- Modify anode cell placement to optimize film builds

This low-cost diagnostic tool is a “must have” for automotive and appliance manufacturers as well as small job shops.

New Generation Anode Monitor

This system is designed with the end-user in mind, eliminating the need to visit the E-coat tank to record data from all the anode cell amp meters. The monitor will collect real-time data and display the DC amps for each ME Cell. Also shown is the most recent peak value and a running tally of amp-hours for each ME Cell.



Monitoring Software Example

The system includes a Hall Effect electric current sensor for each anode and a PLC for collecting the data. The PLC screen can visualize the data using color codes to show quickly which anodes are out of spec. A remote viewing program allows the PLC data to be sent to any PC on the company's network.

In addition UFS provides an enhanced visualization package for use on the customer's PC.

Anolyte Conductivity Controller

UFS offers a Myron L digital conductivity controller pre-installed in a metal enclosure. This controller will work with either anodic or cathodic paint systems, and has a range of 0-20 milli-Siemens/cm (same as 0-20,000 milli-Mho/cm). It has a set of dry contacts that close on rising conductivity so a DI water valve can be turned on to add water and dilute to conductivity to below its set point.



Controller and sensor assembly

UF Process Monitoring



Permeate Flow Equipment

Permeate Flow data is important to collect and analyze as well. With a paddle wheel sensor installed at the output of each UF element, permeate flow data is collected in a micro PLC. This equipment can be retrofitted to any spiral wound UF System.



TigerMag Flowmeter

Proper knowledge of actual ED paint flow is important in troubleshooting UF performance. An electromagnetic flowmeter installed in-line before the ultrafilter system will provide consistent day to day readings of paint flow through the Elements. UFS promotes the use of the TigerMag brand of flowmeter in accordance with paint company recommendations.



Turbidity Sensor

Can be used to inform the operator if the permeate is contaminated with paint solids.

330 North 400 East
Valparaiso, Indiana 46383 USA
+(219) 464 -2027
+(219) 464-8646 (Fax)
www.ufsc.com
info@ufsc.com

