

UFS Corporation

330 North 400 East
Valparaiso, IN 46383-9704 USA
PH: 219-464-2027 FAX: 219-464-8646
www.ufsc.com
email: service@ufsc.com

Service Reference

Topic: Removing Paint Solids From Inside of Cells

Please read carefully before performing work or unpacking any further

Required Materials

- ED paint solvent & solubilizer

Required Tools

- 100 micron filter bag

ED paints are considered a contaminant if they are able to get inside of a Cell. The ED paint solids have a charge the same as the Electrode of the Cell and so try to leave the Cell, but only wind up as a fouling agent. The result is higher, than necessary voltage, and in some cases -so much that the ED system will not function properly. In most cases, it is possible to remove enough of the solids to return the Cells to a normal condition. The first step is to find the location, or entry point, where the paint solids enter the Cells. The matter of this Reference is how to clean out the Cells and related hardware.

1. If the solids are being dripped in from above, then order a Splash Guard, PN 1751001, or equal. If the Cells are being cut, punctured, torn, then review the tools used to fish fallen parts from the ED tank and consider using a Membrane Guard to protect the membrane (ask your sales and service engineer for more information).
2. Once the entry point is identified and closed off, it then becomes a matter of removing the paint solids from the Cells, holding tank, and manifolds.
3. Drain the electrolyte-holding tank and refill with DI water. Turn off all the individual Cell supply valves. Create a connection between the terminus of the Supply Manifold and the terminus of the Return Manifold.
4. Add the filter/strainer bag to the end of the Return Manifold before it empties into the Electrolyte holding tank.
5. Add enough solvent to equal about 2% of the total volume. A method the reduce the amount of solvent used is to lower the electrolyte tank level to the minimum height above the pump suction. Add enough solubilizer so the pH for cathodic paints is between 2.0 and 2.5, and for anodic paints, the pH is between 12.5 and 13.
6. Circulate this cleaning solution for 24 to 36 hours over a weekend and make sure the DI water valve is turned off.
7. With the start of production, turn the DI water valve to its proper position. If possible, save the cleaning solution in a 55-gallon drum if additional cleaning is necessary.
8. Repeat the cleaning until the filter/strainer bag has no more solids.

For more information see the original manual that came with the equipment or else call UFS at the phone number shown above.