



Case Study

Automaker Saves Money with Water Conservation in Paint Sludge System

Situation

- Galaxy noticed that the conductivity of a 150,000 gallon sludge pit was not cycling up as it normally should
- It was suspected the water was being dumped to waste water treatment somehow and the plant was likely losing a lot of water

Background

- Galaxy was treating an automotive assembly plant paint sludge system
- Galaxy began to look for ways that the booth water could be getting out of the system because the water chemistry was not cycling up
- The process was studied and it was found that water was being added to the sludge system when the booth went into entry mode - the reduced air volume allowed water to fill the booth impact pond
- This dropped the water level in the sludge pit, causing the auto water fill to add fresh water
- When the booth came out of entry mode, the increase air velocity blew the excess water out of the impact pond
- This caused the sludge pit level to increase and activated the automatic blow down to waste water

Solution

- The PLC was programed to disable the make-up water to the sludge system while the booth was in auto mode

Results

- The automaker verified that over 15.5 million gallons of fresh water was saved on an annual basis
- The annual flow to the waste treatment plant was reduced by the above amount