Chilled Water System

High Velocity Chemical Cleaning Service

The Situation

The chilled water system on Press 12 produced large amounts of rust and corrosion in the 24 chill rollers causing temperature and printing quality problems. This caused the chill rollers to not set the ink properly and the inability to keep the web temperature from exceeding quality thresholds. This caused production downtime and waste.

The Solution

Allow IAS to perform a High Velocity Chemical Cleaning service using environmentally friendly chemistry to dissolve and remove rust and corrosion in the chilled

Project Objectives

- To provide a 100% turnkey service
- Complete a 100% environmentally safe and accident free project
- Decontaminate Press 12 chilled water rollers from rust and corrosion
- Improve heat transfer capability of chilled water rollers
- Minimize ink smudging and improve drying time of ink
- Start and finish the project during the weekend

Benefits

⇒ **100% Safe** Project Execution and Completion
⇒ Improve Press Production
⇒ Decrease waste — improve profitability
⇒ Minimize Future Maintenance and Repair Costs
⇒ Achieved 100% Customer Satisfaction

Process Equipment Setup at Press 12

IAS WORKS SAFELY

IAS worked 124 man-hours without any safety incidents, near misses or accidents.

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Huntington, Texas 75949
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SYNCHRONIZING RELIABILITY WITH PRODUCTION

IAS
INDUSTRIAL ACTION SERVICES, INC.

Project Scope

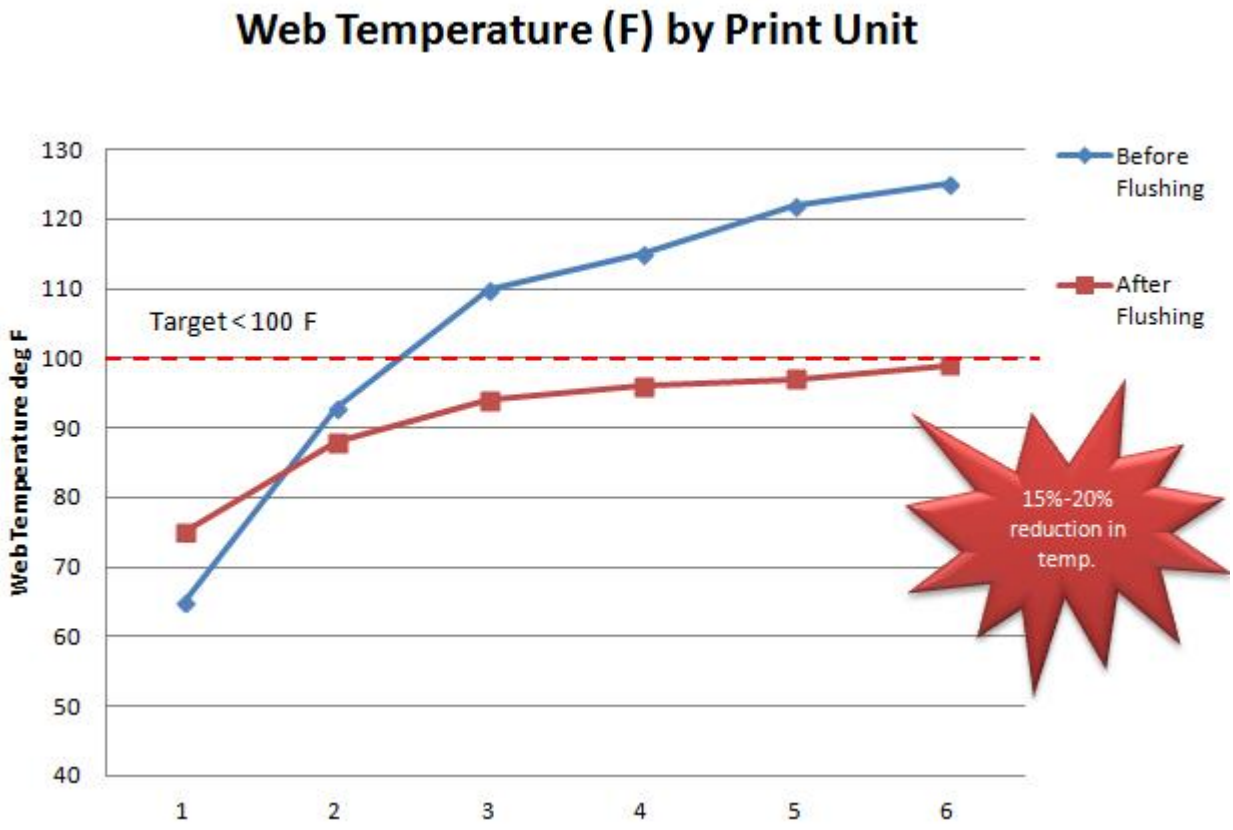
- Flow Circuitry Engineering
- Safety Training, Permits and Project Set up
- Install Flow Circuitry to IAS Skid
- Safe Start. Leak Check all Lines and Connections
- High Velocity Chemical Cleaning
- Chelation and Passivation Process
- Drain down system including all low points
- Flow Circuitry Re-Installation
- Tear Down Equipment, Clean up Work Site and Load in Equipment for Demobilization

Project Results

Dissolved rust plugged off strainer basket on High Velocity Flush skid after 4 hours run time.

IAS Multi Stage Bag Filter was completely saturated with rust, dissolved rust and other solids after 8 hours run time

Threshold is 100°, IAS service has significantly improved the customer's ability to control web temperatures in each of the six press units, containing 4 chilled rollers each.



Recommendations

- Perform High Velocity Chemical Cleaning on Press 14 and Laminator to improve temperature and minimize waste
- Decontaminate chilled water tank and chill water supply lines to production machines
- Consider converting to a glycol based chilled water system. Glycol offers corrosion inhibition, reduced microbial growth and better temperature control. IAS can recommend glycol provider convert the existing chilled water system to a glycol system.