

Paper Machine - Forming, Press and Dryer Cleaning

HelioJET® provides a comprehensive new technology program designed to prevent and remove system contamination from paper machine clothing. The program improves paper machine economics by maintaining the performance of the machine fabrics and the associated parts of the forming press and dryer section unit operations on a paper machine.

The performance of the forming, press and dryer sections on a paper machine is critical in determining the financial competitiveness of a machine operation, because it impacts machine efficiency, energy usage and the quality of the finished sheet. Contaminants interfere with the paper machine operation of these units by reducing the ability of the fabrics to handle water in a consistent, uniform and effective manner and by causing sheet breaks due to build-up on rolls and vacuum elements. Paper machines that use recycled fiber are more susceptible to these issues, but this situation can also occur in virgin furnishes from pitch, starch and coating materials such as latex.

For removal of paper machine contaminants when the deposit load exceeds the system's capacity to purge on its own, the application of mechanical action (e.g. high-pressure showering), high temperature water and the correct chemical cleaning agent will yield the optimum result, especially when these factors are combined. Thus, fabric properties and performance can be maintained over the clothing lifetime. This integrated approach effectively prevents and removes contaminants from the fabrics and paper machine surfaces in a safe and effective manner during production.

- 1.) What are your objectives for improving your paper machine(s)?
- 2.) Would you like to take a meeting with our partners TriSolve to discuss how we can improve your machine efficiency?

We TriSolve (Ware/HelioJET/Solve) offer a comprehensive mechanical and chemical paper machine cleaning solution that can improve machine efficiency in a number of key areas. The solution can increase production, improve paper quality and reduce material costs.

The offering incorporates 3 key components that are essential to optimizing machine cleaning for your wire, felt and dryer fabrics. The solution will lead to an increase in machine efficiency by incorporating:

- 1.) Elevated temperature HelioJET unit delivering elevated shower water temperature up to 180F (82C)
- 2.) Pressure Pressurized shower water at 250 psi (17 bar)
- 3.) Chemical Proper chemical program designed to prevent and remove felt/fabric contamination

Deliverables

- HelioJET Fixed Flow unit
- Showers - Automatic and manual self cleaning brush fan showers
- Support - Ware/HelioJET/Solve operational expertise and on site support
- Chemical Programs tailored to your machine and to work with elevated temperatures

Paper Machine Areas of Impact

- Significantly improve moisture profiles
- Extend felt life
- Maintain production over the entire life of your felts
- Increase production by reducing sheet breaks and quality rejects
- Improve felt permeability
- Increase sheet solids leaving the press section
- Reduce energy/steam consumption drying your sheet
- Maintain original vacuum levels throughout the life of your felts
- Increase production by reducing batch down wire/felt cleaning
- Increase machine speed