M-clean™ Cleaning System
Dryer Fabric and Backing Roll Cleaning

High-performance cleaning to effectively remove contaminants from dryer fabrics and backing rolls.
The M-clean cleaning system uses high-pressure water in combination with an effective evacuation and air knife system. This patented method offers excellent results in removing contaminants. The water pressure is optimized to ensure optimum cleaning, and other factors – such as the final dryness of the cleaned surface – can be adjusted individually for each paper machine.

The M-clean cleaning system cleans during production without leaving moisture streaks or negatively affecting the paper quality. The cleaning method is gentle but effective and no chemicals or other additional ingredients are necessary. In addition, there is no contact with the surface other than from the air and water jets.

The system effectively cleans both the surface and deep in the fabric, while ensuring that all removed contaminants are collected and discharged outside the paper machine.

**Overview**

### Features
- Stainless steel construction
- Designed for up to 140° C (285° F) ambient temperature
- One central unit for up to six cleaning units
- Efficient cleaning with up to 600 bar (8,700 psi) water pressure

### Benefits
- No paper breaks during cleaning
- No water marks in paper during cleaning
- All contaminants collected outside the paper machine
- Improved paper machine runnability
- High permeability value during fabric life
- No paper machine shutdown for fabric cleaning
- Increased drying efficiency
- Increased dryer fabric life
- Low maintenance cost
The M-clean backing roll cleaning system uses the same patented method of high-pressure water, evacuation and air knife system as the M-clean cleaning system in combination with an effective rotating brush to remove contaminants.

The high-pressure water, brush, and air knife system working in combination enables the removal of impurities, coating color residue, and contaminants from the backing roll.

The M-clean backing roll cleaning system cleans during production without leaving moisture streaks or negatively affecting the paper quality. The cleaning method is gentle and effective on the rolls.

**Overview**

**Features**
- Designed for up to 70º C (160º F) ambient temperature
- One central unit for up to four cleaning units
- Efficient cleaning with up to 400 bar (5,800 psi) water pressure
- Integrated rotating brush with evacuation

**Benefits**
- Efficient cleaning of all types of surface contaminations
- No moisture left on the backing roll
- No paper breaks during cleaning
- Minimized backing roll related waste
- Minimized still stand for backing roll cleaning at web break
- Improved paper machine runnability
- Reduced number of web breaks
- Improved paper quality
- Decreased paper machine shutdown time
- Low maintenance cost
The system consists of a central unit to which up to six M-clean cleaning systems or four M-clean backing roll cleaning systems can be connected.

The systems consists of:

- Cleaning unit with integrated multiple water jet, air knives, and evacuation vacuum traversing the surface
- High-pressure water pump unit up to 600 bar (8,700 psi) pressure
- High capacity vacuum fan for vacuum of -0.3 bar (8.9” Hg) at 17m³/min (600 ft³/min)
- Cyclone separator and water lock for successful evacuation of all contaminants
- Electric cabinet with PLC control system and logic
- Operator touch panel

![High-pressure water unit](image1)

![PLC control system](image2)

![Vacuum pump, cyclone separator, and water lock](image3)