



# EV<sup>Online</sup> Cleaning System™

DIVES IN YOUR WET END AND KEEPS IT CLEAN

# BECAUSE OF CLEANLINESS AND HYGIENE PROBLEMS

“Do you notice cleanliness problems in different positions of your wet end?”

Tanks and towers: slime and bacteria growth above the surface



Open areas and surfaces: slime cause unhealthy and even dangerous conditions



Channels: accumulations may even cause blocking



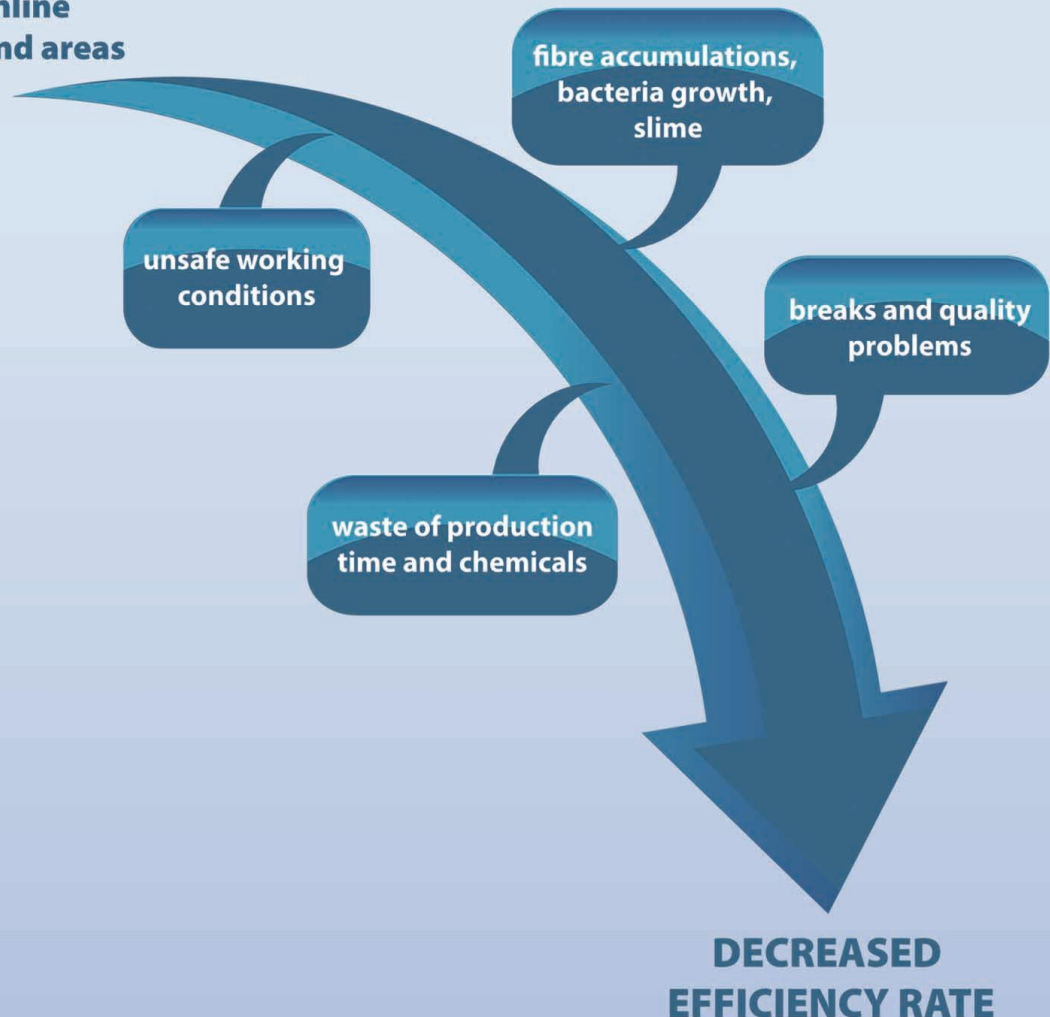
# BREAKS ARE CAUSED MOSTLY IN THE WET END

Wet end cleanliness is a question of your efficiency rate

Poor wet end hygiene causes problems like accumulation of fibres and bacteria growth, leading to quality problems and breaks. It also risks safety in the mill, because of slippery surfaces or impurities in the air.

Manual cleaning during breaks is not enough to keep the entire section clean. It cannot reach many positions like tanks, towers or channels and means wasted production time and chemicals.

**No efficient online  
cleaning of wet end areas**





## Take 4 steps for efficient wet end cleaning:



### CLEAN ONLINE

With online cleaning your mill has remarkably less need for washing stops and chemicals. Constantly high wet end hygiene means better process efficiency and quality.



### CLEAN THE TOTAL AREA IN EVERY CLEANING POSITION

Cleaning should always remove all accumulations from the area, not only remove from one place to another. Online cleaning with washing bars rotating 360 degrees ensure accumulations are completely removed.



### CLEAN ALSO POSITIONS YOU CANNOT SEE OR CLEAN MANUALLY

Manual cleaning typically cleans only outer areas, while inner or unreachable areas stay uncleaned. Take care also the inner areas are cleaned online and you improve your efficiency and quality.



### START WITH SURVEY FOR GOOD DIAGNOSIS

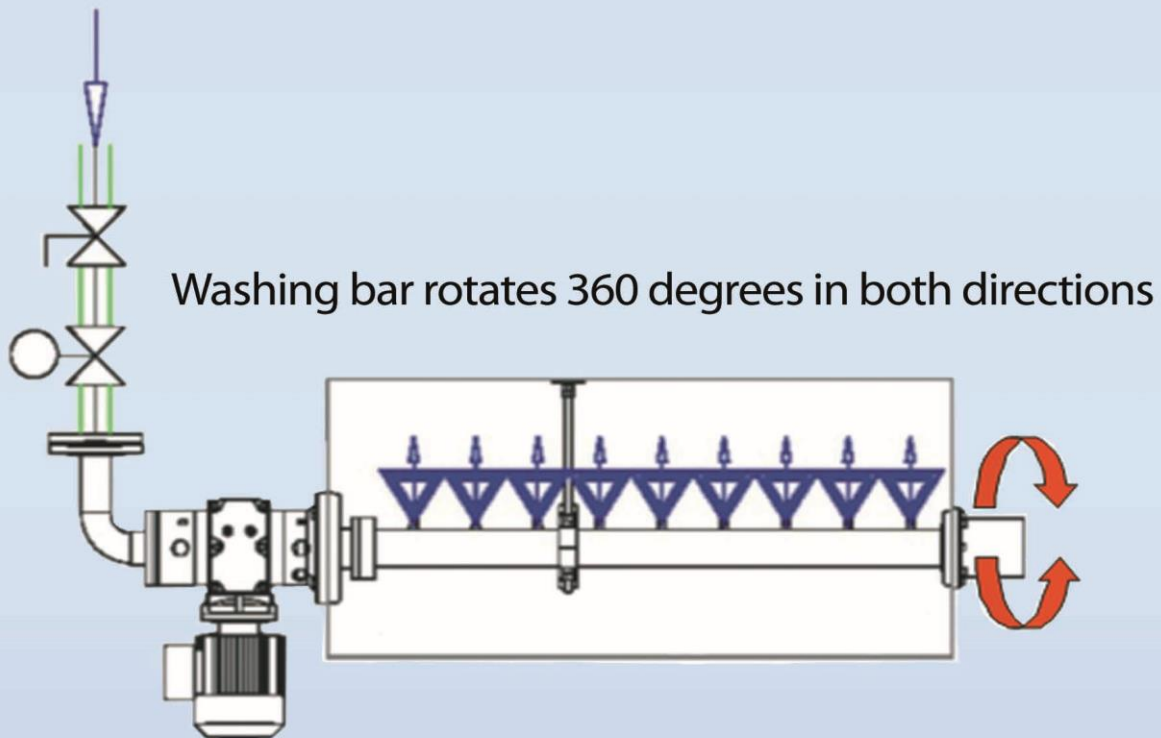
Which are all your wet end positions that should stay clean?  
How to take care of efficient cleaning in all these positions?

Contact the EV Survey Team for a good start  
and complete solution for your wet end cleaning.

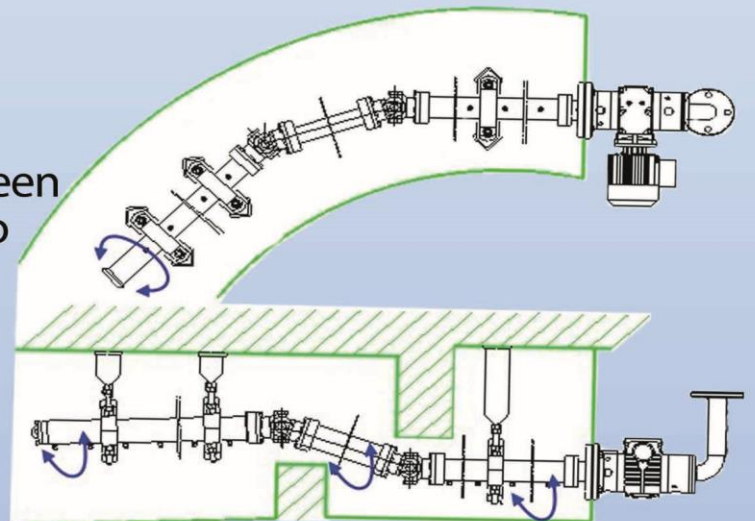
# CLEAN WET END MEANS

Efficient online cleaning prevents fibre accumulations, bacteria growth and slime in different wire section positions.

This results in fewer breaks, paper defects and safer working conditions. No time or chemicals are required for manual cleaning during breaks. All this means better efficiency rate for your paper machine.



Unique type of connection between washing bars ensures flexibility to reach all areas.



# BETTER EFFICIENCY

EV Online Cleaning System keeps the all wet end areas clean:

**EV**Online  
**Cleaning**  
**System**<sup>TM</sup>

- Channels
- Towers
- Tanks
- Bow screens
- Disc filters
- Water plates
- Surface of open areas
- Thickeners



2-Stage driving unit on top of white water tank

Forming section forming roll before and after cleaning



# Metsä Board Kyro PM1, 45 Online Cleaning units

“Thanks to online cleaning, our boxboard for beauty care and pharmaceutical industry meets high hygiene and quality requirements. Now we need a washing stop only every fifth week.”

Raimo Salmi, Technical Manager

Tanks, towers, channels and open areas are cleaned with over 850 online cleaning units, in over 50 mills world wide.



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