

TRESU Printing Plate Cleaning System For Tissue and Napkin Industry

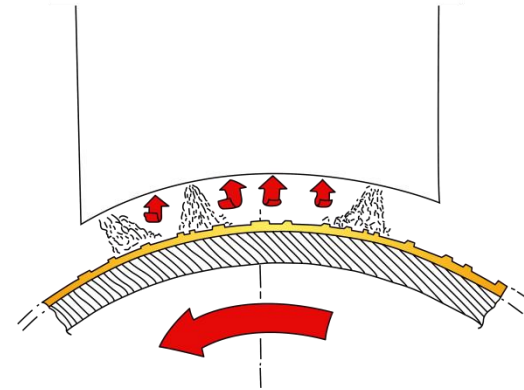
TRESU Printing Plate Cleaning System for Tissue and Napkin Industry

The TRESU printing plate cleaner is a modular built system with a central PLC control, which enables repeated cleaning frequencies of each of the printing units of a printing machine. The control is integrated in a basic module (cabinet) together with vacuum-, filter-, air- and cleaning systems. From this basic module each cleaning module is supplied with water, compressed air and vacuum.

The cleaning head is mounted on an AC-driven linear guide for large systems or on an air-driven linear guide for narrow machines. The linear guide moves across the plate roller during the cleaning process.

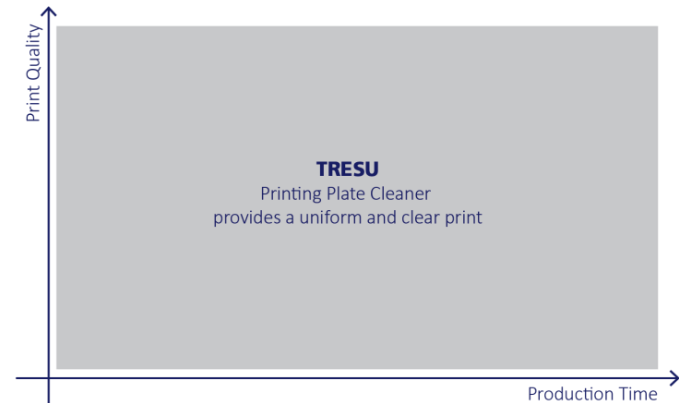
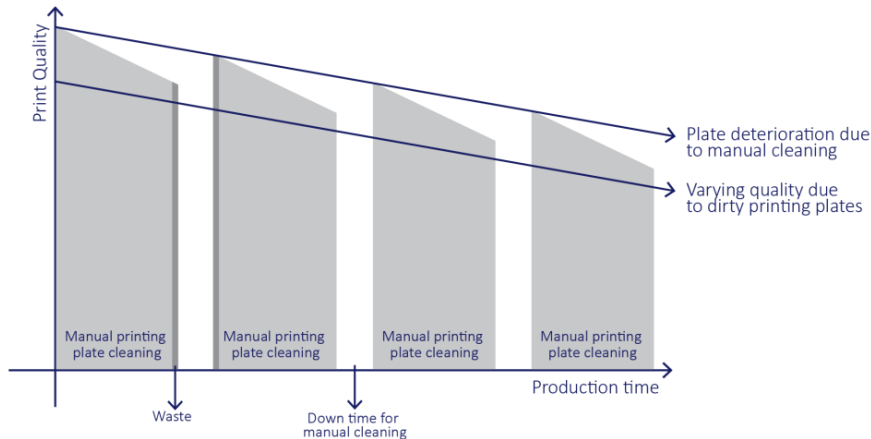
Placed on the cleaning head is a micro nozzle system which mixes a fine-grained composition of air and cleaning water. This very fine-grained composition is blown down onto the plate roller surface at high speed thereby breaking off attached ink residues and dirt particles. A powerful vacuum leads these residues to a cyclone where the fluid, the ink residues, and the dirt particles are separated from the air.

Finally a drying process leaves the plate surface ready before it receives ink from the anilox roller again. The entire process takes place during production.



The TRESU printing plate cleaning system is characterized by the following features:

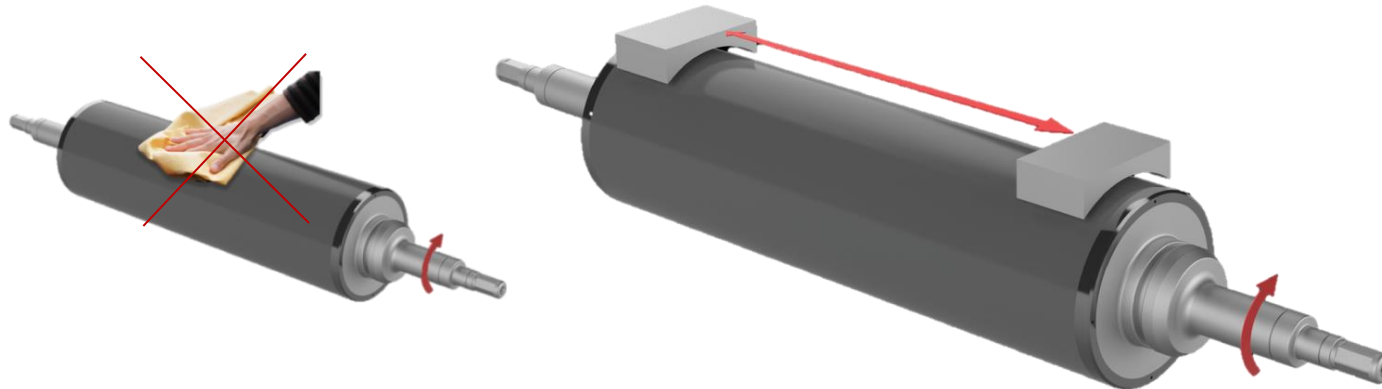
- Cleaning of printing plates without down time
- No touching of the plate -> increases the life of the plate -> maximum safety
- Less waste due to printing plate cleaning
- Uniform print quality
- Improved production output



Touch-free cleaning of the printing plate with minimum production stop

The cleaning head runs during axially across the printing plate due to the small cleaning area.

The cleaning process is carried out as Clean mode which is a cleaning process during operation where the plate cleaner cleans the area on the printing plate which has just applied ink onto the substrate before the anilox roller applies ink to the printing plate again.



No manual touching of the printing plate = **maximum safety** =
increased production output = **increased lifetime of the printing plate**



Job examples that will not provide optimum results without the TRESU Printing Plate Cleaner.



Examples of impurities in a printing process which did not use the TRESU Printing Plate Cleaner in Clean mode

No manual touching of the printing plate = **maximum safety** =
increased production output = **increased lifetime of the printing plate**

- No damage of the printing plate due to the automatic and touch-free cleaning during production.
- No manual activation from operators during the printing process is required which ensures high personal safety and compliance with in-house safety requirements.
- No time loss due to manual cleaning as the printing plate is being cleaned automatically during the printing process.
- No manual cleaning required after adjustment of the register or after a machine stop. A higher and more uniform quality results in customer satisfaction and the possibility of meeting high printing demands.
- Fewer stops result in reduction of costs and thus a better economy.
- Less waste means easy handling and maximum environmental friendliness.



Manual cleaning



TRESU Printing Plate Cleaning
System

Financial aspects: Napkin printing

Experiences from narrow Napkin printing machines without plate cleaning systems:

Approx. 2-3 min. cleaning per printing unit, at 6 printing units this is approx. 15 min. per stop

After approx. ½ or 1 hour the machine is stopped for cleaning.

Experiences from narrow Napkin printing machines with TRESU plate cleaning system

Approx. 75-80% reduction in manual cleaning

Machine hours per year: (e.g. 220 days x 24 hours)

5280 hours/year

Manual cleaning time:

15 min.

Cleaning time with TRESU printing plate cleaner:

3-4 min.

Downtime in hours at 24 stops of 15min. at 24 hours per day (man. cleaning)

1320 hours/year

Downtime in hours at 75-80% savings at 24 hours/day (plate cleaning)

330 hours/year

Savings in downtime

990 hours/year

Machine costs per hour (as example)

€ 200.-

Financial savings with the use of TRESU printing plate cleaning system (990 * 200.-)

€ 198,000.-

Financial aspects: Tissue printing

Experiences from large Tissue printing machines without plate cleaning system

Approx. 5 min. cleaning per printing unit, at 4 printing units this is approx. 20 min per stop
After approx. ½ or 1 hour the machine is stopped for cleaning.

Experiences from large Tissue printing machines with TRESU plate cleaning system

Approx. 75-80% reduction in manual cleaning

Machine hours per year: (e.g. 220 days x 24 hours)	5280 hours/year
Manual cleaning time:	20 min.
Cleaning time with TRESU printing plate cleaner:	5 min.
Downtime in hours at 24 stops of 20 min. at 24 hours per day (man. cleaning)	1760 hours/year
<u>Downtime in hours at 75-80% savings at 24 hours/day (plate cleaning)</u>	<u>440 hours/year</u>
Savings in downtime	990 hours/year
Machine costs per hour (as example)	€ 300.-

Financial savings with the use of TRESU printing plate cleaning system (990 * 300.-) € 297,000.-

TRESU Printing Plate Cleaning System for Tissue printing machines



TRESU basic modul



TRESU cleaning head during operation



TRESU cleaning head during operation

[Watch our video on YouTube](#)



TRESU
Group