

# A CLEAN MACHINE



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**CLEANING SYSTEMS BY DUO-TECHNIK**

WE CREATE SOLUTIONS

**DUO-TECHNIK**

PRODUCTS FOR PRINT

# WHY CONSIDER AUTOMATIC PLATE CLEANING?

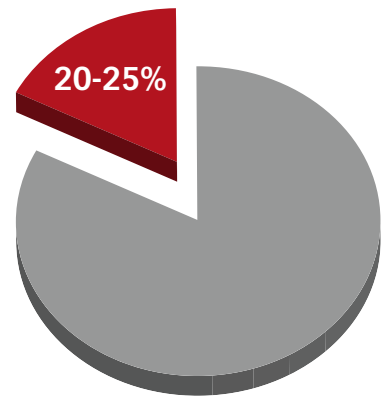
## // To save time and money

The cleaning of printing plates during your production process wastes a lot of time. We asked some of our customers who didn't have an automatic plate cleaning system to estimate how much of time they lose for washing plates, each year.

They answered that;

→ **20-25% of the effective machine production time is wasted for cleaning.**

To extrapolate, a print facility with a 2 shift operation of 3000 hr./year would need 600–750 hr./year just for cleaning. That's time that the printing machine is not productive.



High volume of cleaning time

## // Why do I need to clean so often?

**There are 3 fundamental situations when plate cleaning is usually necessary:**

- Cleaning after job set up due to ink drying on the plates during the approval process wait-time
- Interim cleaning after 3000-4000 sheets due to dust or dry ink defects
- Cleaning after the end of the job

## // We can suggest two options!

### • **Quick Plate Cleaner (QPC)**

Duo-Technik's QPC is a machine-integrated system that cleans dry ink and dust defects from the print plates without stopping the machine. This quick cleaning process, during printing, takes about 2 minutes with only about 8-10 waste boards. However, final cleaning is not possible.

### • **Auto Clean System (ACS)**

Duo-Technik's ACS is also a machine integrated system which is able to make interim plate cleaning which takes only 6 minutes and a effective final plate deep cleaning that takes only two minutes. The printing machine has to be stopped during the cleaning process.

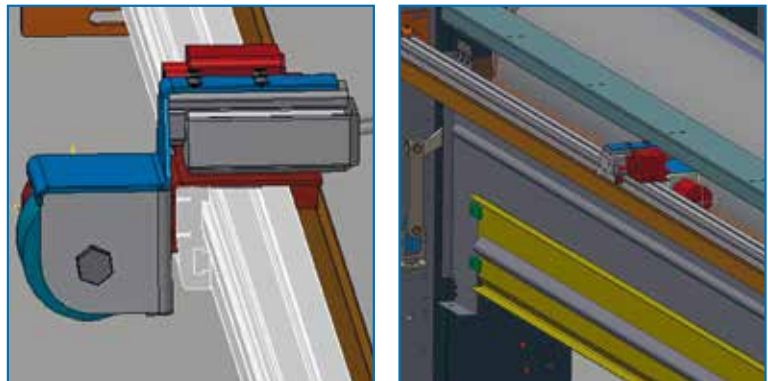
# QUICK PLATE CLEANER (QPC)

## // What is it used for?

- **Cleaning of specific dust-related defects on the printing plates – can be used at the discretion of the operator during production**
  - Increases quality output while reducing the machine down-time required for cleaning
- **Continuous (automatic, cyclic) cleaning of the printing plates during production**
  - Particularly recommended for “process” jobs, to improve overall job quality while reducing down-time of the machine required for cleaning of dried ink on the plates.
- **Quick plate cleaning during a sheet feeder stop**
  - Faster startup of the machine after press jam up or feeder stop. Down-time for cleaning is reduced to a minimum; creating only 8-10 waste boards.

## // How does it work?

The system consists of a moveable cleaning head with a unique rotating sponge. The cleaning head travels along the printing cylinder, removing dust and dried ink. The sponge head distance to the printing cylinder can be set through the touch panel in micrometers (0.1mm). After cleaning the printing plates, the cleaning head returns to the integrated docking station where the sponge is cleaned waiting for the next cleaning cycle.



## // What are its unique features?

- **The cleaning head is cleaned inside the printing machine**
  - Long lifetime of the cleaning head/ sponge, reduced replacement costs
- **The cleaning head is automatically set to the printing plates thickness**
  - Shorter set up times necessary for job set-up
- **The cleaning head can also be cleaned outside the machine**
  - Lower replacement spare part costs
- **Optionally, the Duo-Technik Final Cleaning Station (FCS) can also be added.**

# AUTO CLEAN SYSTEM (ACS)

## // What is it used for?

The goal of the ACS system is not only to remove dust spots or dry ink but to deep clean the printing plates. This is especially recommended for long inline production runs. However the printing machine has to be stopped to do the cleaning. This is an interesting feature, since based on the actual ink condition, more or less ink will dry and accumulate on the printing plates and this is really difficult to remove with an in-production cleaning system.

## What should you expect?:

- In-depth cleaning of all printing plates in 6 minutes
- The 3rd sheet after cleaning is marketable.
- Quick final cleaning of the wet printing plates in two minutes
- Final cleaning of the printing plates can take place during the set-up of a new job
- Metered make-up and controlled usage of soap for the cleaning cycle
- Printing plates are maintained in best condition

## // How does it work?

- Using the special nozzles, a metered soap-water mixture is sprayed onto the printing plates
- The special nozzles eliminate the possibility of water dripping after the spray cycle
- A stationary cleaning brush is also located underneath the nozzles
- This is a closed-cycle cleaning process, with rubber seals, to ensure that any water and the waste water are contained.
- A vacuum chamber between brush and the seal evacuates the waste water. Each unit has a separate vacuum pump
- Integrated drying units dry the printing plates after the cleaning process
- The ACS is integrated with the print machine process control system, allowing the information regarding decks used and board widths to be preset automatically in the operator software menu. The operator can readjust individual parameters for each deck
- The water and soap is automatically mixed by the unique integrated metering unit



Cleaning station