

# Courtoy

brings the accepted technique of automated washing to a higher level: No compromise on productivity is accepted

## WOL – Wash Off-Line: a new concept



### Your Benefits

**EXCHANGEABLE Module =**  
Retrofittable at a later stage on any  
**MODUL™ press**

**Washable MODULE =**  
A small section to be washed and dried

**Washing OUTSIDE the press =**  
No risk of failing seals

**Washing OFF-LINE =**  
No downtime = high productivity

**Looking at different systems for automated washing available on the market today, we at Courtoy could not be satisfied.**

- Product change-over should be fast, easy and without any risk.
- Automated washing should be combined with extremely short change-over times.
- Machine downtime of several hours such as in case of WIP tablet presses is unacceptable.

**Courtoy's MODUL™ uses a concept that overcomes all existing problems:**

- The MODUL™ is a press with an Exchangeable Compression Module.
- This means that all product contact parts are encapsulated in an isolated box.
- All product contact parts are removed from the press together, and in an isolated way.
- As soon as the ECM has been brought to the washing bay and is connected to the WOL skid, the washing procedure can start, remotely from the press, while the press is already producing its next batch using another ECM.

# The WOL ECM concept has clear advantages over the WIP concept:

- 1 Higher productivity
- 2 More flexible implementation at any time at lower cost
- 3 No risk of seal damage, contaminating the electromechanical section of the tablet press

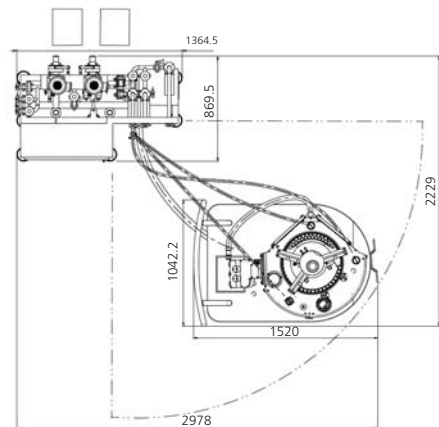
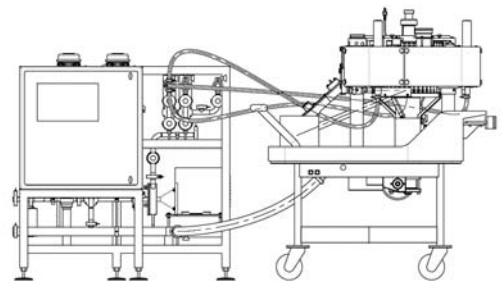
## After the automated WOL cycle is finished:

- All airborne particles will be knocked down.
- Most product will be washed away (the same as WIP).
- All remaining product residues will be wet.
- Final cleaning and drying is performed manually.

## Technical Data

- The WOL ECM is equipped with 3 - 360° special-purpose water jetheads.
- Washing in underpressure.
- During the cycle, the turret turns and the punches move up and down. This assures washing between dies and punch tips.
- Both paddles are oscillating to assure cleaning of the feeder and wetting of all residual powder in the feeder.
- No drying after the rinsing with purified water to prevent that particles become airborne again.
- All peripherals to the tablet press can also be supplied in WOL execution.

## COURTOY MODUL™ TECHNOLOGY - The fastest way to Containment and Productivity.



## Niro Pharma Systems

AEROMATIC  
BUCK  
COLLETTE  
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FIELDER  
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*Niro Pharma Systems unites the technologies of Aeromatic, Buck, Collette, Courtoy, Fielder, Lyophil, Nica and Niro to supply advanced processing solutions for solid dosage forms to the pharmaceutical industry.*

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