

TRESU F10 iCon

Intelligent ink control system



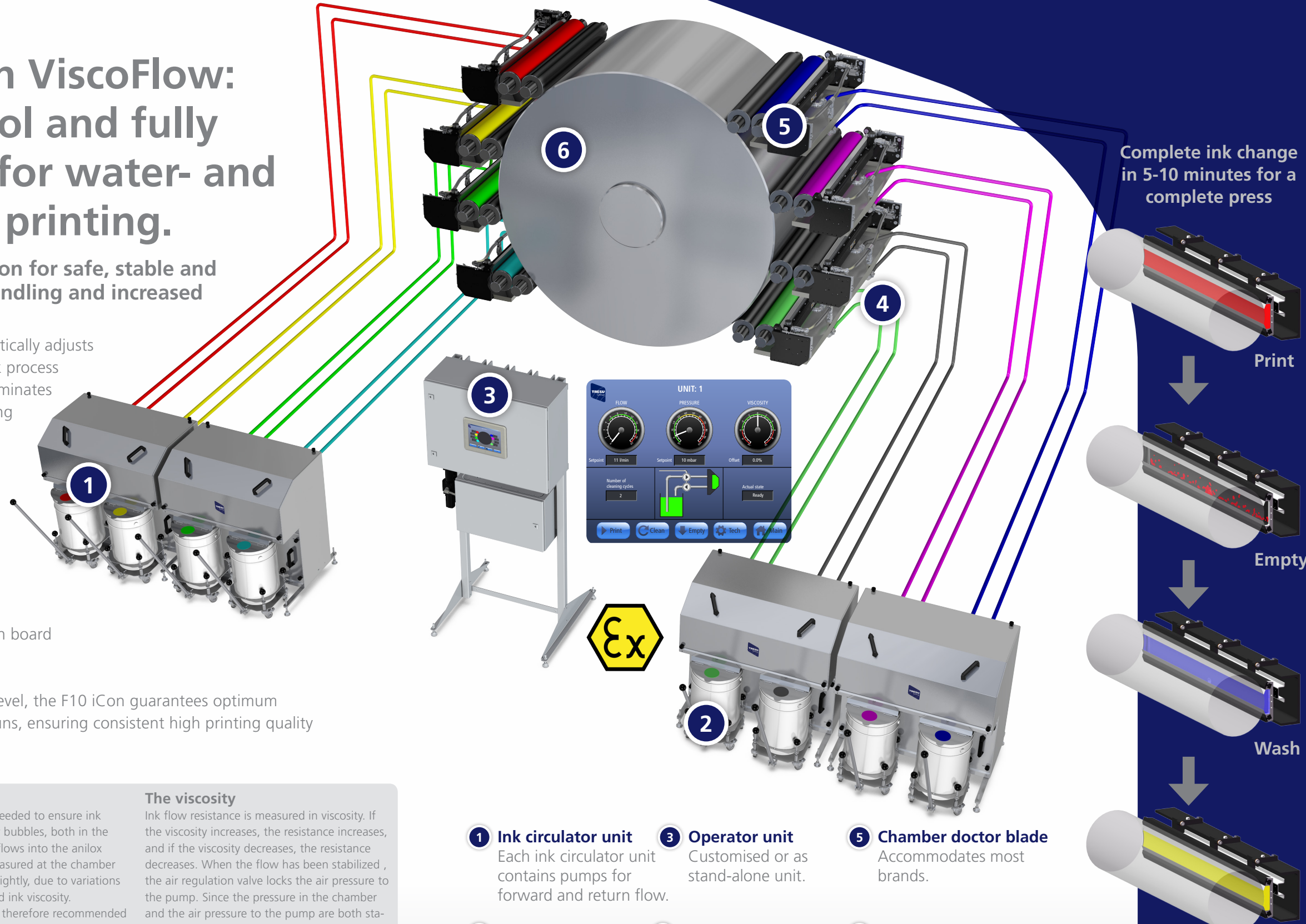
TRESU F10 iCon with ViscoFlow: intelligent ink control and fully automatic cleaning for water- and solvent based flexo printing.

The F10 iCon is a lean, innovative solution for safe, stable and controlled ink circulation – with easy handling and increased production output.

With patented TRESU ViscoFlow, the F10 iCon automatically adjusts flow, ink pressure and viscosity, providing complete ink process control and outstanding print quality. The F10 iCon eliminates the labour-intensive, time-consuming task of monitoring ink flow.

An essential component in today's lean manufacturing workflow, the F10 iCon is energy-efficient, reduces waste and downtime. It is the ideal setup for common impression (CI) printing machines with TRESU chambers, stack presses and other press configurations. The F10 iCon is also retrofittable as an upgrade of your existing equipment and works on numerous substrates, including plastic, foil, film, carton board and paper.

By maintaining stable ink flow, pressure and viscosity level, the F10 iCon guarantees optimum dot-gain values. The F10 iCon is well-suited for long runs, ensuring consistent high printing quality throughout production.



Key parameters

The ink circulation system, chamber doctor blade and anilox roller, provide the key to controlling the ink process during production. There are three aspects of ink control:

The flow

The F10 iCon measures the flow by counting the pump strokes. Since the stroke volume of the pump is already known, highly accurate software calculations ensure the current flow is monitored and can be managed on the touchscreen. Precise, simple and user-friendly.

The ink pressure

Optimum pressure is needed to ensure ink or coating is free of air bubbles, both in the chamber and when it flows into the anilox cells. The pressure, measured at the chamber inlet, typically drops slightly, due to variations in chamber lengths and ink viscosity. For optimal results, it's therefore recommended to operate at a slightly raised pressure.

The viscosity

Ink flow resistance is measured in viscosity. If the viscosity increases, the resistance increases, and if the viscosity decreases, the resistance decreases. When the flow has been stabilized, the air regulation valve locks the air pressure to the pump. Since the pressure in the chamber and the air pressure to the pump are both stable, only a change in ink resistance can change the pumping frequency. When the viscosity increases, it is automatically lowered by advanced TRESU ViscoFlow software.

- 1 Ink circulator unit**
Each ink circulator unit contains pumps for forward and return flow.
- 2 Trolley**
Movable and adjustable trolleys for ink buckets.
- 3 Operator unit**
Customised or as stand-alone unit.
- 4 Ink hoses**
Ink hose/pipes for forward and return flow. For water- and solvent based inks.
- 5 Chamber doctor blade**
Accommodates most brands.
- 6 Press configuration**
CI-press or other press configurations.

The F10 iCon enables fully automatic cleaning for water- and solvent-based inks with an easily adjustable menu. The cleaning system removes ink, ensures the chamber is clear of residue and has low water/solvent consumption



F10 iCon Benefits

- Quick and reliable automatic ink control
- Consistent ink laydowns
- Fully automatic cleaning procedure
- For water- and solvent based inks
- Energy efficient
- For CI printing machines, stack type presses and other configurations
- Available with pressure controlled ink chambers
- PLC controlled with touch panel display and HMI access



Technical Data

| | |
|--|---|
| Machine type | CI-, Stark, In-Line or other press configurations |
| Coating type | Water- or Solvent based ink and coating |
| Approval | Atex/EX |
| Dimension (HxWxD) | |
| Pumpunit (Dual Unit) | 965x900x536 mm |
| Operation unit | 1872x810x800 mm |
| Weight | |
| Pumpunit (Dual Units) | 103 kg |
| Operation unit | 130 kg |
| External Connections | |
| Voltage | 100-230 VAC - 50-60 Hz |
| Max Current | 13A |
| Cable connection | 3g 1,5 mm² |
| I/O Signal from external PLC | Yes |
| Air supply | Min 6 bar - max 10 bar, clean and dry (ISO) |
| Air Consumption | 100-200 l/min per unit |
| Pump hose connections | 3/4"/1" |
| Cleaning with water based ink | |
| Water supply | 0,5-1 bar, 50-100 l/min |
| Cleaning program | Up to 15 minutes for a 8 color press |
| Water consumption | Approx. 20-25 liter per unit |
| Detergent | Approx 1 liter per unit |
| Cleaning with solvent based ink | |
| Solvent supply | 0,5-1 bar, 50-100 l/min |
| Cleaning program | Up to 10 minutes for a 8 color press |
| Solvent consumption | Approx. 14 liter per unit |
| Dataloging | Optional |
| Filter solution | Yes |
| Alarm history | Yes |
| iCon-based HMI touch screen | Yes |
| Multi-option cleaning process | Yes |



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The Best Part of Innovation