

alpha.line

First choice for small and
medium formarts





- › alpha.d with capacity options of 0.5 kW to 8 kW
- › Proven series for small and medium formats

Advantages at a glance:

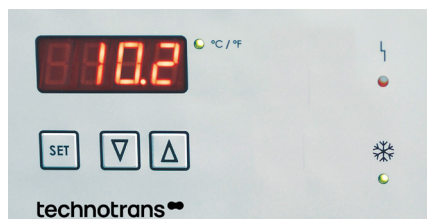
- Highly flexible system configuration and options
- Electrical box with control unit located well above the tank:
- Unrivalled ergonomics
- Electronic system fully protected from contact with dampening solution or cleaning agents
- Easy access to filter bag through large tank opening

Dampening solution circulation

The latest and re-designed alpha.d is a dampening solution circulator for small and medium formats. It has capacity options of 0.5 kW to 8 kW and it is easy to operate and reliable.

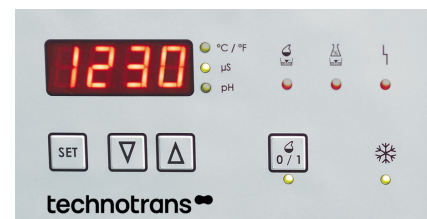
Available in various configurations, it provides full functionality on press.

The two alternative control devices have identical dimensions and the same interfaces. This Plug & Play functionality means installation and system upgrades are easy.



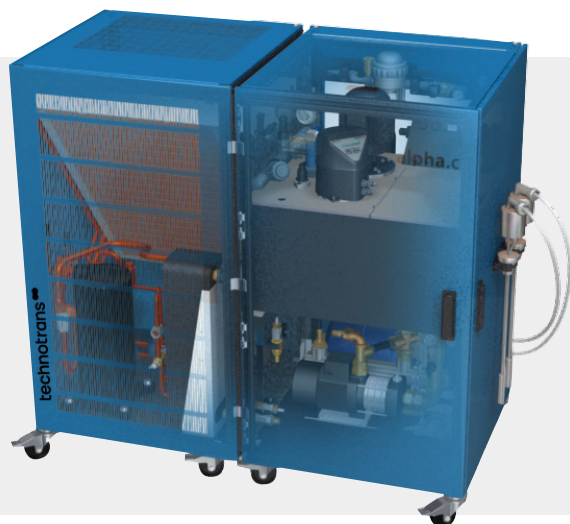
In standard configuration with the basic TEC 41 controller the alpha.d offers:

- › Digital temperature control
- › A fault warning alert
- › A display giving the operating status of the refrigeration unit.



When using the TEC 120 controller, additional options are available, e. g.:

- › Alcohol stabiliser
- › Automatic dosing of dampening solution
- › Conductivity and pH measurement



Advantages at a glance:

- Compact design, reduced space requirements
- Extended product range offering five performance levels of 6–18 kW
- Integrated pump module for central water cooling
- Alcocontrol or alcosmart DSP available for high precision alcohol-dosing
- Easy to operate through intuitive and multilingual LCD display

- › alpha.c line with a wide range of advantages
- › Space-saving, service-friendly design

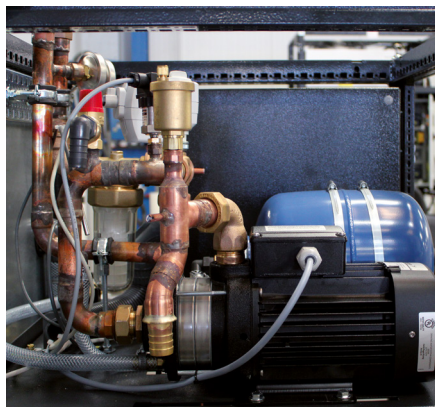
Combination unit

The line of combination units, type alpha.c, was also re-designed and upgraded to meet a growing demand in small and medium format sheetfed offset printing. As a result, the standard options for large format equipment are now available for smaller formats.

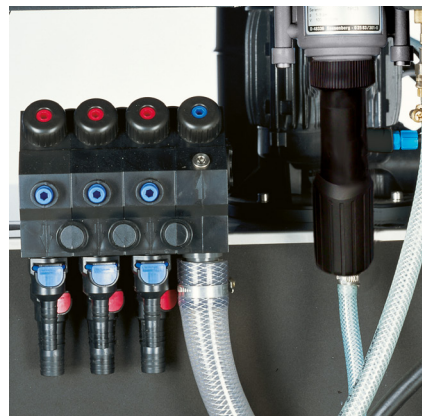
Alongside the combination of dampening solution and ink unit temperature control in one system, the alpha.c offers a whole range of benefits, e. g.:

- Cooling air supply from the front to the top

- Efficient cooling systems also available with water-/glycol-cooled condensers for connection to a central cooling system
- More accurate control of the dampening solution and ink unit temperature
- Microprocessor control
- Easy switchover between conventional and waterless offset printing by selecting the distribution of the cooling capacity between both circuits



› Pump module central water cooling alpha.c



› Rear view with ejector block, dampening solution connections and additive dosing system fluids

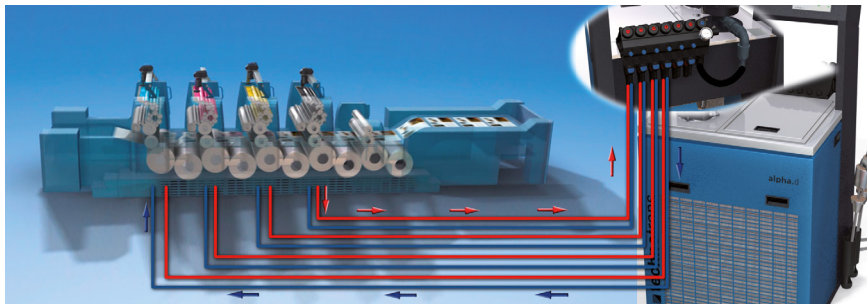
Equipment options

The alpha.line offers a wide range of variable configuration options, allowing it to adapt to specific printing press requirements. The return suction and filtration system is designed to meet the requirements of small to mid-size dampening solution pans. High quality filters minimise foam levels and improve the quality and service life of the dampening solution.

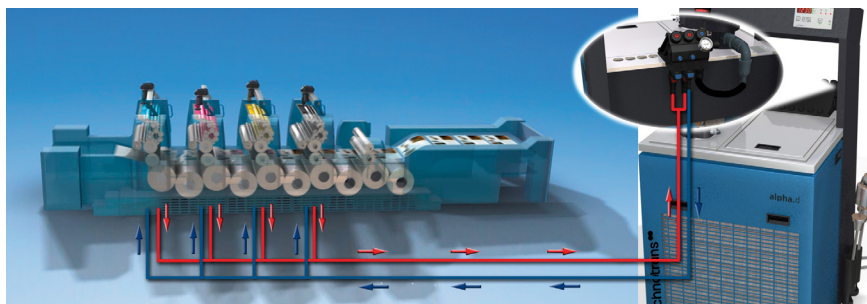
The section return and filter system of alpha.line is designed to cope with the dampening pans on small and midrange offset presses.

Advantages at a glance:

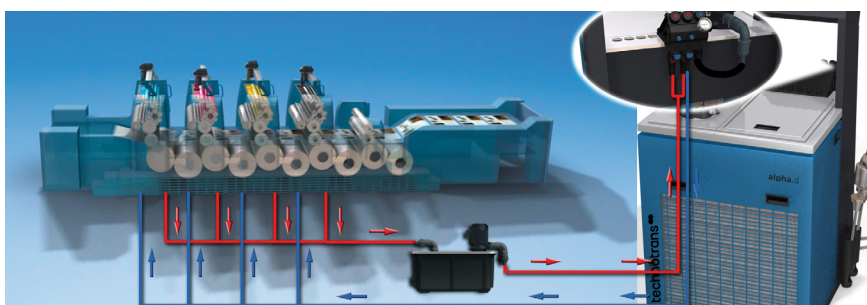
- Individually adjustable ejector suction pumps; collective suction return optional
- High quality filters with outstanding contamination separation properties
- Four different options for alcohol dosing
- Optionally upgradeable conductivity and pH measurement



- › Separate return suction for each dampening unit, individually adjustable and separate filter bag per water pan



- › Manifold return suction for the complete printing press, adjustable suction capacity for manifold connection, several filter bags in parallel connection depending on the unit size



- › Return flow via prefilter intermediate tank with pump, no foaming due to free return flow into prefilter tank and float controlled return feed pump

For the alpha.d 5 to alpha.d 50 models, the optional dampening solution storage tank can noticeably reduce the number of refilling processes required. A scale on the tank makes it easy to prepare the correct mixture.

The additive dosing process can be automated by using the fluidos dosing system, which includes a tank filling level monitoring system and does not require any external power. This option is particularly suitable for multi-unit printing presses for which precise dosing is indispensable and manual mixing and refilling is unacceptable.

Additional options include the measurement of conductivity and pH. Here the proven technique of inductive conductivity measurement is adapted from larger systems. This method is especially resistant to contamination and is virtually maintenance-free.

These two options complete the circle and provide small and medium format systems with all the important tools for IPA-reduced offset printing.



combicontrol.m

- Reliable because of the continuous density measurement via float system
- Patented ball valve seat
- Automatic redosing
- Easy to operate and to set IPA value
- Low maintenance and easy to clean



combicontrol.e

- Includes suction lance
- Automatic dosing
- LED display of system status
- Density compensation for dampening solution additives
- Intelligent electronics control the solenoid valve
- Unit can be quickly disassembled



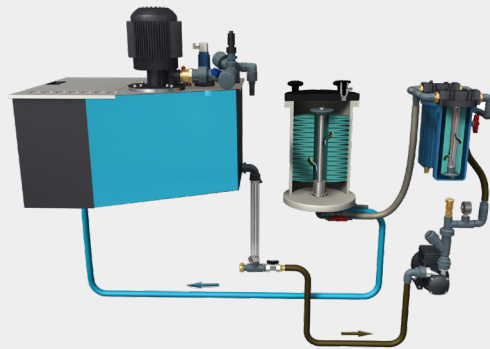
alcocontrol

- Inductive sensors continuously detect the measurement value
- Processor for intelligent control
- Fully automated IPA dosing, including empty signal
- Electronic density compensation for dampening solution additives can be controlled via display



alcosmart DSP opt

- Not affected by impurities or additives
- Fully automated zero point calibration
- IPA control of
- 0–15 % of volume, with accuracy of 0.5 % of volume
- Integrated detergent detection (A1/A2)



Advantages at a glance:

- Ideal for UV and spot colours
- Compact and user-friendly
- Reduced disposal costs
- Reduced consumables
- Reduced maintenance costs
- Perpetually monitors the quality of the filter modules
- Safe and efficient

› left picture: compact alpha.f
› right picture: bypass principle

Dampening solution fine filtration

Contemporary offset printing requires the optimum dampening solution filtration. Based on many years of experience in dampening solution circulation, technotrans first developed the beta.f, fine filtration for medium and large printing presses. alpha.f now offers this successful cleaning concept for small and medium format sheetfed offset printing presses.

The compact alpha.f relies on a two-step filtration method. The pre-filter system with its filter cartridges is used to thoroughly pre-clean the dampening solution and to relieve the strain on the main filter module. Intensive cleaning of the dampening solution is performed using a powerful deep-bed filter.

The condition of the filter modules is continuously monitored by integrated pressure sensors. The result of this continuous bypass cleaning process is perfectly decontaminated dampening solution and a clean system from the dampening solution

tank to the dampening solution trays of the printing units.

The replacement intervals for the dampening solution are lengthened considerably by the alpha.f, if not rendered obsolete. Since the dampening solution system requires only minimal cleaning, the operating costs are drastically reduced while press availability is maximised. The alpha.f can optionally be equipped with an additional UV degerminating system.

Thanks to its easy bypass principle, the alpha.f is easy to retrofit at nearly all dampening solution units. The dampening solution circulation to the printing press remains unchanged. This ensures stable production conditions. Worldwide over 1,600 technotrans filtration units are in operation.

The beta.f, makes this successful cleaning concept also available for medium to large format sheetfed offset printing presses.



Advantages at a glance:

- Functional, compact unit cabinet
- Combined pre-filtration using activated carbon
- Double water pre-softener
- High-pressure pump
- Reverse osmosis membrane with concentrated recirculation
- Conductivity measurement system with display
- Re-hardening doser, type fluidos
- Pump tank with pressure control or membrane pressure tank (optional uv degerminating system)

› High-performance, modular water preparation

Water preparation system

Water is the major constituent of the dampening solution used for offset printing. As an experienced supplier to printing companies worldwide, we know that the quality of the water used has a significant impact on the final printed result.

Only consistently high quality water can ensure that the dampening solution is the best for printing. It also enables printers to reduce the use of additives and alcohol.

The recirculation of concentrate ensures maximum efficiency. The quality of the permeate is continuously monitored using an integrated conductivity measurement system.

With its double pre-softener and highperformance reverse osmosis membranes, the alpha.r ensures the highest standard of water preparation.

The main components of the alpha.r include:

- Functional and mobile unit cabinet
- Combined pre-filtration using activated carbon
- Double water pre-softener
- High-pressure pump
- Reverse osmosis membrane with concentrate recirculation
- Pump tank with pressure control
- Conductivity measurement system with display
- Re-hardening doser
- Optional UV degerminating system

The water preparation units of the alpha.line are also available with additional performance levels and features. Depending on the requirements of the printing company, press type and quality, we will gladly provide further information about customised solutions.

alpha.v

Advantages at a glance:

- Usage of dispersion and uv coatings
- High level of user-friendliness and automation
- Space-saving solution
- Process monitoring directly at the coating tanks via standard remote control
- Flexible, easy solution with coating heater module



Coating preparation alpha.v

Coating Preparation

Using our experience in coating preparation and with input from a number of users, technotrans has developed the alpha.v unit, a cost-effective coating circulator supplying coating units with dispersion and UV coatings. With this system it does not matter whether the coating unit is equipped with a chamber doctor blade or rollers.

The following features ensure a high level of user-friendliness and automation:

- Coating circulation
- Preliminary cleaning using residual coating water
- Cleaning of the system using warm water
- Draining the system of residual coating or residual cleaning agents

The compact, electrically-driven coating circulator alpha.v is fully equipped with:

- Two independently controllable and reversible electrical pumps
- Pneumatic valves
- Warm water preparation system
- Remote control with text display
- Coating pan sensor

A signal which alerts the user when coating and cleaning agents have run out is available as an option.

Lots of varnish need a higher temperature for best results and quality. The zeta.v consists of a heating system and a heat exchanger with temperature sensor.