

sd.line

Dampening solution and spray dampening systems for newspaper printing



delta.sd

Advantages at a glance:

- High reliability thanks to powerful circulation pump for cooling
- Pressure control valve for constant feed line pressure in the return flow
- Minimal contamination of the system
- Feed line pressure display
- Ease of use thanks to multicom microprocessor system with colour display



> Spray dampening, type delta.sd

Dampening solution

Spray dampening systems in web offset presse are self-contained. Only a perfectly configured dampening solution circuit can ensure the required conditions, supply pressure and filtration that are substantial for highest possible reliability and precision of the spray bars.

The dampening solution circulators of the delta.sd series are designed for large presses with double- or triplewidth spray dampening systems and demand a high level scope of functions and equipment.

The delta.sd stands out due to its clear, space-saving and service-friendly design and the sturdy cabinet with easily accessible operational controls.









Configuration options:

- High-pressure spare pump, with automatic base load and fault changeover
- Automatic dampening solution mixing unit, single or double version fluidos type, with different capacities
- Automatic dampening solution mixing unit digidos.p, with mixture conductivity measurement and consumption measurement
- Conductivity and/or pH value display
- UV light degermination lamps
- Data interface for control station connection
- Interface for remote maintenance via internet
- Filter systems for waste water return flow

Control system

All delta.line units are equipped with the technotrans multicom microprocessor control system. The self-explanatory menu system offers a perfect overview of all system functions and parameters.

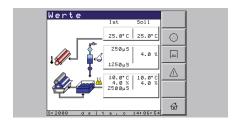
The trend display and the visualisation of all operating parameters such as temperature, IPA concentration, conductivity and pH etc., are important in offset printing and provide a highly useful tool for evaluating process stability.

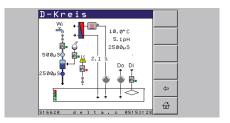
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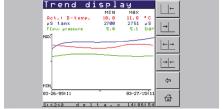
Features:

The display is intuitive to use and offers the following features:

- 5.7" colour touch screen display
- Clear operational visuals pinpointing setpoints and actual values at a glance
- Easy adjustment of setpoints and parameters within input fields on the operating screen
- Detailed information on the status of the main unit functions
- Trends display giving operating process parameters in chronological order
- Function display menu for individual system components for a customised unit configurationGerätekonfiguration
- Fault message storage and online help







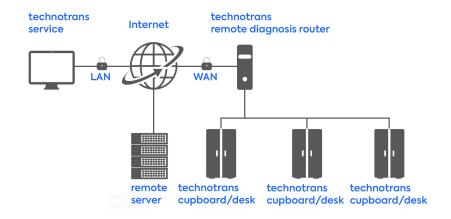
Diagnostics:

If required, a system check can be easily performed online by way of the technotrans remote diagnostics system. Following a release by the client, these records can be read on site or via the Internet by means of the remote diagnostics system. The technotrans service department specialists identify all potential sources of errors and then provide recommendations for uninterrupted, smooth operation.

Machine availability is considerably increased – the remote diagnostics can be performed without interfering with the running operations. In case of a fault, the remote diagnostics system enables a quick and precise analysis of the status of the entire system.

For the fastest possible response, a technotrans specialist can access the system via the Internet and promptly solve the problem together with the on-site contact person. You are the one who decides when to set up a secure connection to the support team by switching on the router.

The remote diagnostics system is based on a mobile phone or network connection that is set up via a secure VPN connection (end-to-end). The system uses the SSL/TLS protocol. This connection of the units can be either permanent or set up as required. The connection via a mobile router causes running costs on an ongoing basis. A network router only requires a connection to the Internet



delta.f

Advantages at a glance:

- Drastically reduced costs of disposal
- Ideal filtration quality
- No need for consumables due to cramic membrane
- Ergonomic design makes servicing easy
- Permeate capacities of 80 l/h and 140 l/h respectively
- Fully automatic backwash
- Quick and easy installation
- Ergeneration of all dissolved dampening



> Cross-flow filtration, Typ delta.f

Cross-flow filtration

The quality of the dampening solution used has a direct effect on the stability of the printing process, especially when using spray dampening bars.

Based on 40 years of experience in dampening solution circulation, technotrans developed the delta.f crossflow filtration, improving the conditions for using spray dampening units such as the technotrans delta.spray line. It was specifically designed to prepare the dripping and reflex water from the spray bars.

The high filtration quality of the ceramic membrane even allows separation of oilbased contamination. Used dampening solution is thoroughly filtered and by using the delta.f 99 % of the filtered dampening solution can be reintroduced into the cycle. Costs of disposal along with the need for fresh additives are reduced drastically. The disposal rate is reduced to 1%.

The integrated sensor continuously monitors the filtration performance. Should it decrease a rinsing process is automatically initiated.

Dilution and contamination of the dampening solution is prevented by rinsing the membrane with permeate. The dampening solution circuit remains un affected by the rinsing process. – algae and bacteria are retained.

The connection of delta.f enables a fully automate filtration, while the dampening solution circuit remains uneffected. This ensures stable production conditions.



 Space-saving and powerful: for full supply, delta.sdf the dampening solution circulator with integrated crossflow filtration is the recommended made to-match system.

gamma.sd

Advantages at a glance:

- Compact, space-saving design
- Air cooled self contained refrigeration unit, with environmentally friendly CFCfree refrigerant
- Efficient high pressure pump
- Control valve ensuring constant feed pressure
- Dampening solution fine filter asstandard in water feed
- Digital temperature display

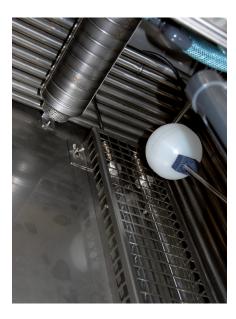


Dampening solution

Compact gamma.sd line dampening solution circulators are especially designed to operate with spray bars. With cooling capacities from 2–16 kW these units fit a wide range of application requirements and are especially suited for use with small to medium format installations.

Starting from small spray dampening systems with one to eight spray bars up to medium-sized installations, for single to triple width spray bars dampening systems – gamma.sd line units offer the right solution with demand-oriented and economical concepts.

This unit is based on the well-proven alpha.d series and offers the same complete scope of functions and equipment as well as a high degree of user-friendly features and serviceability at a good price/performance ratio



Configuration options:

- High-pressure standby pump, with automatic base load and fault switchover
- Automatic dampening solution mixing unit, fluidos type, single or double design, in different capacities
- Conductivity display
- PH value display
- UV light disinfection lamps
- -Filter system for dirty water return

deltaspray

Advantages at a glance:

- Dampening solution is transferred without contact at a high and controlled spraying frequency
- Individual activation of each spray nozzle
- Quick and tool-free replacement of nozzles through bayonet catch
- Symmetrical design no ,left' or ,right' spray bar
- Service door for tool-free maintenance



- > deltaspray modular spray dampening system for consistent print quality
- > Noxious nozzle cleaning protects against contamination

High performance in a small space

Spray dampening units are an important part of web offset printing presses and have a strong impact on the quality of the printing result.

The innovative and reliable technology of the modular delta.spray line helps printers achieve consistant printing quality and high process stability.

Individual activation of each spray nozzle and shutters allow great flexibility of the system configuration and give full control over the spray patterns and dampening – independent of paper widths.

The unique nozzle cleaning concept does not need an additional power supply and reliably prevents the nozzles from clogging. This lifts machine availability to a maximum and clearly cuts down maintenance and repairs to a minimum.

Spray dampening units are constantly used and always need to be ready for operation. With the practical service door, checking and maintaining the spray bar is quick and easy. The great serviceability of the system allows for the quick exchange of nozzles or the easy removal of the entire bar without the need for tools.

Together with a specially designed dampening solution circulator, a complete system is created to optimise the functionality of the dampening units.



> Spraying valve with magnetic coil and venturi cover

The venturi effect

The unrivalled endurance of the valves and the practically non-wearing nozzles ensure the longest possible service life. High reproducibility allows great process stability while maintaining the optimum ink/water balance.

To meet the rising demands of contemporary production delta.spray line spray bars operate with a unique nozzle cleaning concept.

Sophisticated structures within the cap generate the Venturi Effect. By using basic physics, negative pressure is created.

Clean air is taken in through a filter in the bar and circulated around the nozzle. This ensures it stays free from dirt and ink particles. Active produced compressed air, which causes high energy costs, will be obsolete.

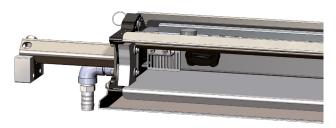
As an effect the service life of each nozzle is greatly increased, and press availability as well as productivity are actively improved.



> Venturi cap - unique nozzle cleaning

Advantages of innovative nozzle cleaning:

- Low operating costs no external energy requirement for compressed air
- Low installation effort
- No contamination of the nozzles
- Noticeably less maintenance effort
- Significantly increased machine availability and productivity



Manual shutter for high flexibility

Prominent features are:

- Manual adjustable shutters
- Complete integration into control console
- Quick and precise variation of web widths

Fully integrated into the control station

To efficiently and lostlessly print variable formats, delta. spray spray dampening systems can optionally be equipped with manual shutters.

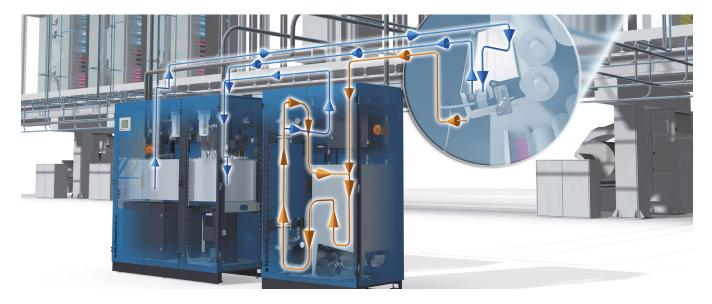
The delta.spray line system can be seamlessly integrated into the printing presses control console, making adjustments during production quick and easy. This leads to an improved flexibility of the production process. The control system of the spray dampening communicates

with the printing machines and this with the control console.

Moreover, the sophisticated software enables extremely accurate and repeatable control of the spray pattern.

The operation of the damping fluid conduction takes place at the console of the printing machine. Preferences are executed automatically when loading the production data.





 System solution for spray dampening: dampening solution preparation, cross-flow filtration and spray dampening unit

Small details deserve special attention

delta.spray line has a unique costruction and the built-in features give further genuine advantages. The internal circulation helps to assure the dampening solution is never stagnant, which in turn reduces the formation of micro-organisms.

Another advantage is the constant dampening solution temperature, which significantly reduces the number of waste copies on start-up.

Robust electrical connectors and stainless steel quick couplings guarantee troublefree handling even after years of use. A modular and user-friendly electronic control system allows optimum connection of the delta.spray dampening units to the control console.

This all contributes to greater process stability and directly influences the profitability of each print job. Reducing effort and the number of parameters that need monitoring saves time and money.

Systematic dampening solution supply

technotrans offers complete solutions from a single source. As a system provider, we configure complete dampening solution supply systems for our customers, whether it's a large-scale project or an individual application.

The technotrans sd.line offers dampening solution circulators and filtration units designed specifically for operation in conjunction with spray dampening bars.

Our employees will gladly provide more detailed advice and information – we are also available for on-site consultation.

delta.spray

Functionality at a glance:

- Automatic and manual overdampening
- Storage of individual dampening solution curves per printing unit
- Individual nozzle adjustment
- Freely configurable presets and start parameters
- Configurable password for protection of sensitive functions
- Detailed presentation of the operating parameters, status and error messages