

# PRINTING INDUSTRY: SPRAY DAMPENING



## WHAT IS SPRAY DAMPENING?

Spray dampening is a common technology used in newspaper printing presses to apply ink release solutions to the non-printing surface of ink rollers. The precise dosing of the solution controls the dot gain and a high resolution. This technic allows to moisten the paper accurately and to reduce the waste of the waste water coming from the spray dampening system. As such, the amount of water is precisely managed and the amount of waste in the printing industry is reduced.

### What’s the role?

The spray dampening system transfers a fine and uniform wet film to the printing plate. This also serves to avoid the return of particles coming from the printing plate or ink rollers.

Spray dampening must complete the following tasks:

- Wetting** of the no-printing areas of the plate quickly, uniformly and without excess.
- Creating a good **emulsion** in the ink
- Maintaining the hydrophilic type of the plate while protecting it against wear (by lubrication) and oxidation (by adsorption of a protective film)
- To evaporate** as much as possible before being transferred to the paper
- Cooling** the ink film
- To evacuate** all particles that appear on the plate or the blanket
- To protect** the rolls against wear because of abrasion



The different advantages of spray dampening:

- More precision
- Different formats are available
- Reduce the consummation of additives, water, alcohol and filters
- Easy installation
- Not expensive
- Return on investment can be fast

This no-contact system projects the spray from the bubbler to the other dampening rollers. This projection can be done in 3 ways:

- With a brush in the tank which rubs against a blade
- With a rotating system that uses the centrifugal force
- With nozzles that spray drops under pressure

LDA has a replacement system for Baldwin or Technotrans valves. This system allows you to save money while increasing production and reducing the labour cost. It also allows you to use less replacement parts.

Customer requirements	Customer benefits
Easy maintenance	Drop-in replacement compatible with existing spray dampening system
Reduce set up time and associated costs	Replacement of water and the air/water systems
Similar flow from valve to valve ensuring consistent spray volumes	Easy valve replacement -> no manifold removal needed
Longer life	Balanced design
	Liquid Bullet valve with D-Flex technology tested over billions of cycles
	Consistent and repeatable response times over the lifetime of the valve.