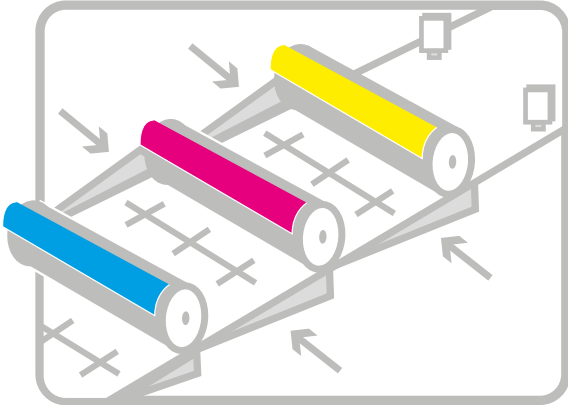


**ABD II**



FAN-OUT CONTROL SYSTEM

# AIR BUSTLE DEVICE

## FAN-OUT CONTROL SYSTEM

ABD II is a fan-out correction system, which functions without contact with the web. It works by means of a motorised adjustment of the nozzle top, the ABD II exercises pressure on the paper web without actually touching the paper or using more air. The compressed air outlet of the nozzle top is ring-shaped with an air gap of only 30 µm. As a result, air consumption has been reduced from 42 liters per minute to only 20 liters per minute. The compressed air exit reaches a speed of almost 1 Mach, resulting in substantially greater pressure on the paper web compared with the old design.



### Applications

- Fan-out control between heatset printing units.
- Fan-out control between H-printing units in newspaper printing.

### What are the unique features?

- No physical contact with the paper or printed image.
- Compressed air exit at 1 Mach with greater contact surface on the printing web.
- Mechanical movement of individual nozzle, elevation range of 15 mm.
- Extruded mounting bar incorporates flexible positioning of each air nozzle.
- The possibility to make presets per paper type.
- Manual back-up system with ability to position and adjust nozzles manually.
- Fully closed-loop fan-out control possible using automatic colour register system.
- Removable air nozzle bar with its click system offers easy access to the press.
- Part of a flexible and extendable Ethernet network.

### What are the benefits of the ABD II?

- Consistent printing quality.
- Insensitive to vibration and flapping effects of the printing web.
- High start-up savings when incorporating closed-loop control.
- Time and labour-saving thanks to desk mounted controls.
- Constant and economic use of compressed air resources (52% energy saving).
- The contact-less system prevents smearing, making it highly suitable for poster or tabloid productions with continuous image areas.
- In closed-loop mode, the system uses an intelligent algorithm to calculate the deviation between the individual fan-out register errors. As a result, the printer does not have to select an individual "air nozzle" to make corrections but can simply adjust the profile.
- The air nozzle seals automatically when it has reached its zero position. It can be sent to its zero position manually or by entering a command on the touch screen, for example when producing on a half web.
- Substantially reduces the risk of the web creasing or breaking due to contact-less design.
- Larger correction range than with conventional solutions.
- Easy and accurate operation with 22" touch screen panel.
- System can be easily linked to Intelligent Quality Management for quality reporting.

### Options:

- Closed loop fan-out control: several colour register cameras measure the growth behaviour of the web; the ABD II uses this information as feedback to automatically compensate errors.

### Specifications

#### Number of nozzles:

Web widths up to 1000 mm:	2
Web widths of 1000 mm to 1380 mm:	2-3
Web widths of 1380 mm to 1680 mm:	3-4
Web widths of 1680 mm to 1980 mm:	4-5
Web widths of 1980 mm to 2280 mm:	5-6
Web widths of 2280 mm to 2580 mm:	6-7
Web widths of 2580 mm to 3000 mm:	7-8

The above values are intended as indicative values.

#### Mechanical:

Maximum number of nozzles per bar:	12
Maximum web width:	3000 mm
Maximum adjustment:	15 mm
Maximum number of bars per press:	Unlimited because of Ethernet network
Maximum number of nozzles per Air Bustle Controller:	12
Compressed air consumption:	20 litres / minute (0.7 c.f.m.) / nozzle

#### Temperature:

During operation:	- 5° C to + 45° C
In storage:	- 25° C to + 60° C

#### Certification:

CE / UL / FCC

#### Compressed air requirements:

DIN – ISO 8573-1-2001-241

#### Used Q.I. Press Controls owned patented technology

Patent number: US6604463, GB2354230, DE19983340, AU703647B

Specifications may change without further notice.

