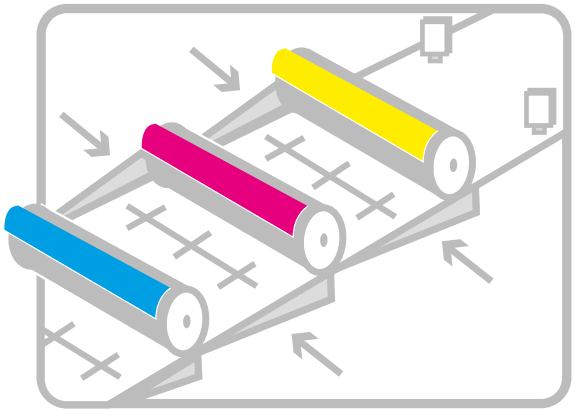
ABD II



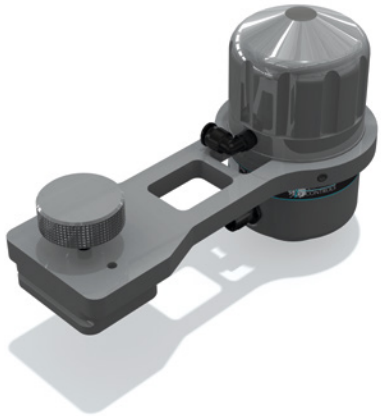
FAN-OUT CONTROL SYSTEM

Q.I. PRESS CONTROLS

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 0.6 inches.
- 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 using automatic color register system.
- The 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 thanks to closed-loop control.
- Time and labor-saving thanks to closed-loop control.
- Constant and economic use of compressed air resources (52% energy saving).
- The contact-less system prevents smearing, making it highly suitable to 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.
- 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.
- Eliminates the risk of the web creasing or breaking.
- Larger correction range than with conventional solutions.
- Warning system in the case of technical printing problems.
- Easy and accurate operation with 22” touch screen panel.
- System can be easily linked to Intelligent Quality Management for quality reporting.

Options:
- Fan-out control: several color register cameras measure the growth behavior of the web; the ABD II uses this information as feedback to automatically compensate errors.

Specifications

Number of nozzles:

Web widths up to 39 inches:	2
Web widths of 39 – 54 inches:	2-3
Web widths of 54 – 66 inches:	3-4
Web widths of 66 – 80 inches:	4-5
Web widths of 80 – 90 inches:	5-6
Web widths of 90 – 103 inches:	6-7
Web widths of 102 – 118 inches:	7-8

The above values are intended as indicative values.

Mechanical:

Maximum number of nozzles per bar:	12
Maximum web width:	118 inches
Maximum adjustment:	0.6 inches
Maximum number of bars per press:	Unlimited because of Ethernet network
Maximum number of nozzles per Air Bustle Controller:	12
Compressed air consumption:	20 liters / minute (0.7 c.f.m.) / nozzle

Temperature:

During operation:	23° F to + 135° F
In storage:	- 13° F to + 140° F

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.