



## TENSION MEASUREMENT PREVENTS WEB BREAKS

www.dfe.com controlling process tension

Newspaper printers throughout North America who have installed Dover Flexo tension transducers (tension sensing devices) and indication electronics on their web presses are experiencing fewer tension-related web breaks, improved print quality and lower operating costs.

By alerting the press operator during a print run to a high-tension condition in one or more zones, a tension monitoring system also acts as a warning for potential web breaks.

Tension measurement at key locations on a running press is a proven diagnostic aid, but one that can become costly for larger presses. The greater the number of print stations and tension zones, the more expensive it is to outfit an entire press with sensors and single-channel tension amplifiers/ interfaces.

To address the cost issue, DFE has developed an economic approach for measuring tension from a series of sensor points using a single circuit card. The **MAC 8-channel Multiple Amplifier Card** manages the unamplified tension signals from up to eight pairs of tension transducers (sensor points) in the web path.

The MAC provides excitation voltage to connected tension transducer pairs and puts out a 0-to-10VDC signal proportional to tension for each pair of transducer signal inputs. The 0-to-10V outputs can be used as inputs to drives, PLC's or other tension monitoring or closed-



MAC™ Circuit Card

loop tension control devices. An additional 0 - 1mA (or 0 - 100µA) is supplied for a meter output.

The TLS (tension limit switch) option allows high and low alarm trip points to be set that warn the press operator if tension in a particular zone moves outside desired operating limits.

Advantages of the MAC as compared to single-channel interface cards are: 1) ability to read out tension from multiple sensor points from one location; 2) lower cost of installation; and 3) space savings.

An optional accessory, the IMUX Multiplexer, allows the press operator to view, as desired, up to 32 amplified tension signals (from 4 MAC cards) on its switch-selectable display meter. The IMUX can also take 0-to-10VDC inputs from other sensor devices.

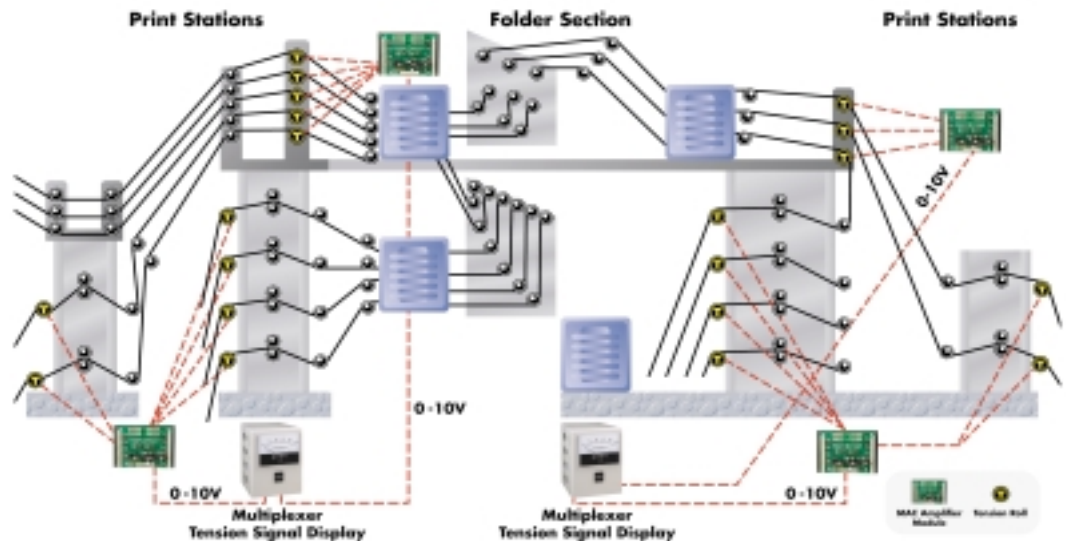


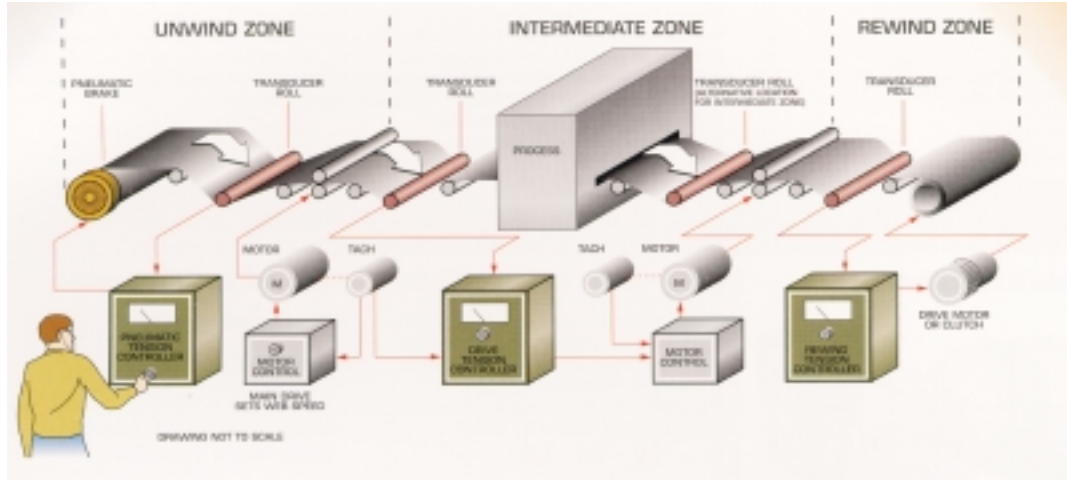
Illustration shows tension transducers installed between print stations and folder section of newspaper press. Connections are made to MACs and multiplexers.





# INFO REQUEST

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Stable tension control compensates for process deviations that cause web and roll defects. It's a fact. Dover Flexo tension measurement components or a closed loop control system can be integrated smoothly into your press' web path in only the tension zones that need them.

For fast information complete and **fax** this form to DFE at **(603) 332-3758**. Or call us at (603) 332-6150.

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

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Tel. \_\_\_\_\_ E-mail \_\_\_\_\_

We manufacture/process (material):  
\_\_\_\_\_

The project we're considering involves:  
\_\_\_\_\_  
\_\_\_\_\_

Send me your recent white paper on:  
**"Improving Web-Processes with  
Direct Tension-Sensing"**

### Please send:

- Product Guide (14 page overview)
- DFE catalog (80 page 3-ring binder with complete product specs)
- CD ROM with product CAD library
- Tension Transducer data sheets
- Indicator/Transducer interface data sheets
- Tension Controller data sheets
- Pneumatic Brakes Catalog
- Application Note/Case History on: \_\_\_\_\_
- Data sheet on: \_\_\_\_\_
- Other: \_\_\_\_\_
- Have a Sales Rep call me



THE TENSION CONTROL SPECIALISTS

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