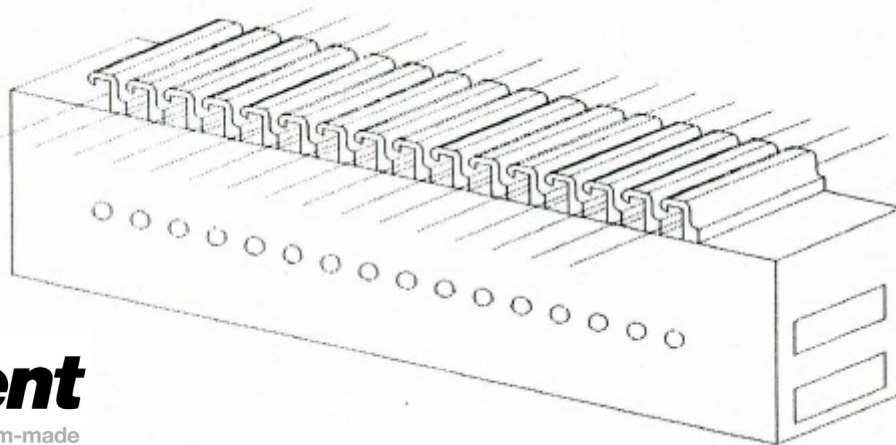


# THE CREEL BAR SENSOR



**Dent**  
Custom-made  
textile sensors

An innovative range of cost effective multi-end sensors for creels and similar applications. Using advanced optical techniques the creel bar sensor is capable of extremely reliable detection with advantages as follows: Fast Reaction Times.

- No contact with the yarn.
- Not affected by vibration.
- Not affected by yarn type or count.
- Not affected by spin finish, dirt, etc.

The standard system is capable of detecting a wide range of yarn counts from crawl to maximum operating speeds with break reaction time selection to suit the process. The units are self-contained, are self threading and integrate with existing yarn transport systems quite easily.

The basic form of the Creel Bar Sensor provides the following:

- Yarn sensing of 20 dtex or greater.
- Yarn sensing at speeds from 3 m/min to greater than 1500 m/min.
- Yarn break reaction time as low as 10 ms.
- Individual bars can have 8, 16, 24 or 32 positions.
- 10, 12 or 15 mm yarn spacing.
- Provides a machine stop signal in the event of a yarn break.
- Indicates where the broken yarn is positioned locally.

More advanced systems are available which are programmable. In such systems several Creel Bar Sensors are coupled together and connected to a Control Unit. Some of the features of these systems are:

- Counts and displays the number of running yarns.
- Provides Alarm signal in the event of number of running yarns becoming different to a pre-set number.
- Control Unit indicates location of a yarn break.
- Programmable system parameters for greater operating flexibility.

These features ensure that the creel is processing the correct number of ends at all times. If the creel has an incorrect number of ends at the start then the Control Unit will indicate this. From the information provided by the Control Unit it is possible to analyse the performance of the creel and highlight positions which are not functioning correctly.