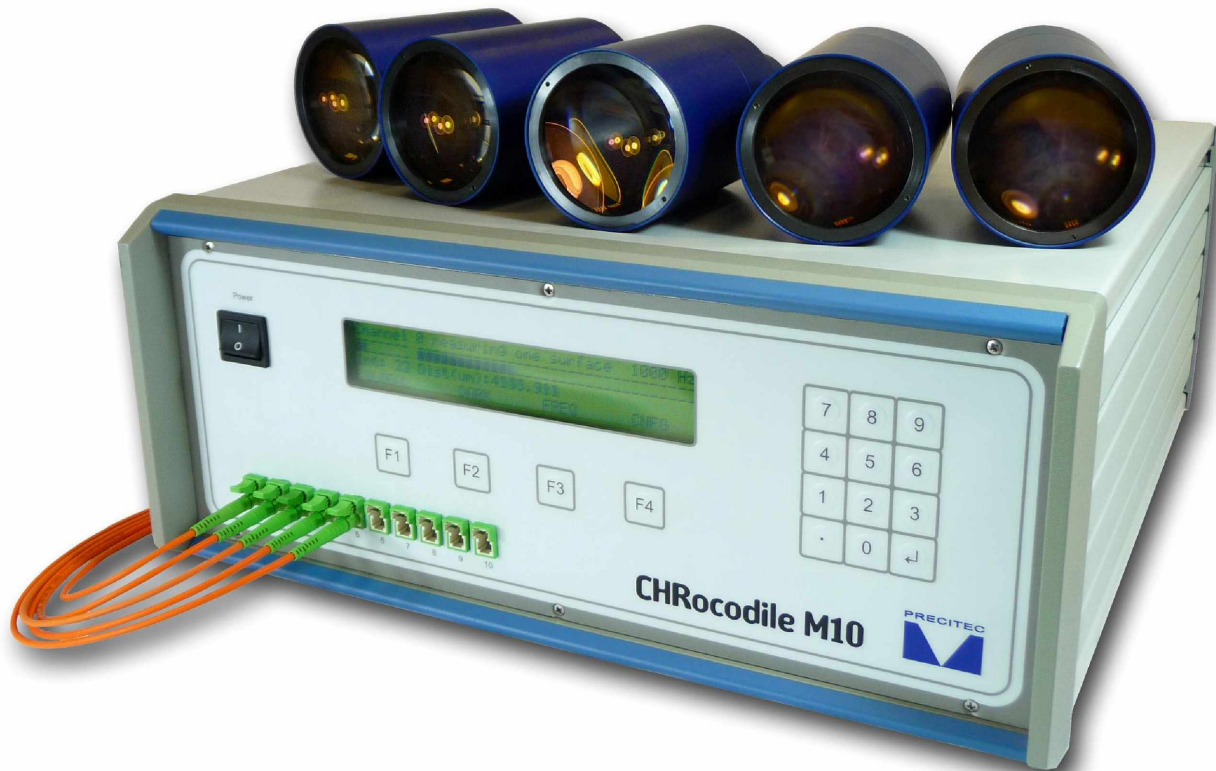


Even more efficient measurement of product belt material thickness.

## Simultaneous non-contact measurement at 10 points with the new CHRcodile M10 sensor

The CHRcodile M10 optical sensor represents a new approach to non-contact, high-precision thickness measurement of transparent and non-transparent materials. The system measures values for up to 10 measuring points simultaneously during the production of glass, film, metal or paper for example.

The CHRcodile M10 thus offers significant rationalization potential in both inline and offline operation for quick and reliable analysis of the thickness and topography of materials. Whereas in the past several sensors had to be used to monitor 10 measuring points simultaneously, all that is needed today is one CHRcodile M10 with 10 independent channels to measure values synchronously. The simultaneous nature of the measurement eliminates the need for synchronization between sensors measuring product belt material thickness of non transparent materials like metal or paper.



**Figure: CHRcodile M10**



An optical fibre transmits the halogen light to the extremely compact measuring heads that are designed as purely passive lenses without electronic or moving parts. That facilitates the integration of the system into production and inspection lines, e.g. in the glass industry, and allows measurements to be carried out even under difficult ambient conditions, such as on hot flat glass.

To ensure even the slightest flaws are detected at high belt speeds, the new CHRocodile M10 boasts a high measuring rate of up to 14,000 measurements per second. With 10 measurement points, for example, the single module thus measures the thickness and condition of the material 1400 times per second. As the spot size is only a few hundredths of a millimetre in diameter, even minute flaws do not go undetected during both inline and offline operation.

The new system is configured via an integral PC.

The outgoing measurement data is integrated reliably into the process of the production line via an Ethernet link.

In summary the new CHRocodile M10 sensor offers significant advantages for production:

- Ø Simultaneous non-contact measurement of the material thickness and condition at up to 10 measurement points with just one sensor
- Ø Designed for inline and offline operation
- Ø High measurement rate of 14,000 measurements per second
- Ø Easy integration into the production process