

ULTRATEMP 6000

Ultrasonic melt temperature measurement

The ULTRATEMP 6000 is an ultrasonic temperature measuring device for the reliable non-contact measurement of polyethylene melts in demanding and temperature sensitive extrusion processes. Furthermore, the system detects inhomogeneities in the melt.

Typical application of the ULTRATEMP 6000 is the measurement of the XLPE melt temperature for HV cables or the material temperature in hose and tube extrusion lines.

Ultrasonic temperature measuring system for polyethylene melts

The ULTRATEMP 6000 is a temperature measuring device, which reliably measures the polyethylene melt in the flow channel between the extruder and the cross head. Therefore, it provides an essential parameter for the process. A too high temperature and, therefore, discoloration of the melt or scorches, can be countered as well as a too low temperature, which causes unmelted material. The ULTRATEMP 6000 makes an important contribution for process optimization and cost reduction.

Your Benefits

- Maximization of the extruder output through optimum melt temperature
- Elimination of "scorches" and early cross-linking in the extruder head
- Detects inhomogeneities in the melt
- Non-contact, no melt shear heating effects

Specifications

Measuring Principle	Non-contact, non-invasive temperature measurement based on ultrasonic technology
Measuring Range	+ 100 to + 180 °C
Measuring Accuracy	< ± 1 °C deviation
Interfaces	RS485 + RS232 diagnostic interface Optional: Profibus-DP interface, analog output
Power Supply	110 - 230 V AC ± 10 %, 50/60 Hz

Technical Article

[Subsea and EHV cables require a challenging purity degree of XLPE-material](#)