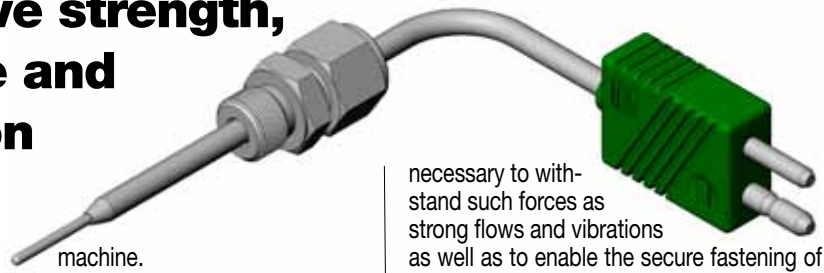


Supporting tubes give strength, a fast response time and simplified installation

Pentronic's thermocouples sheathed in a supporting tube are produced and sold in large quantities. The reason is that they meet machinery manufacturers' typical but often conflicting demands for robust construction and rapid response time.

In addition, mounting attachments can be supplied pre-attached to the sensor, enabling immediate installation either when a new machine is being manufactured or when a spare part is required for a pre-existing



machine.

Customers are increasingly demanding a fast response time because machines must be able to handle shorter and shorter cycle times. This means that the sensor's probe tip must be thin so that heat can easily be transferred to the thermocouple wires inside the sheath. On the other hand, the sheath must not have so large a cross section area that the heat is transferred to the surroundings, which leads to measurement errors. Mechanical strength is

necessary to withstand such forces as strong flows and vibrations as well as to enable the secure fastening of mounting attachments such as the compression fitting shown here. A supporting tube is an excellent solution which meets these requirements and which can also be made much thicker than the actual probe tip.

Pentronic's sensors sheathed in a supporting tube are available in and can be constructed in many different versions to facilitate both temperature measurement and installation in customers' products. 