

Thermocouple Depth

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[\(10\)](#) » [Pressure Gauge](#) » [Borescoping an Extruder](#) » [Thermocouple Depth](#)

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Vol. 17 #4, March 1991

Estimates of the inner barrel wall temperature can be made by measuring the surface temperature at the outer wall and the control thermocouple. By proportioning the depth of the thermocouple to the barrel wall thickness, the temperature at the inner barrel wall can also be proportioned from the other two temperatures as the is relatively constant through the barrel wall. In some cases, the direction of the heat flow both axially and radially can be determined. This can be very useful in troubleshooting extruder performance.

—Jim Frankland

See also:

- [Correcting flow instability in coextrusion](#)
- [Defining screw performance](#)
- [Extrusion evaluation through pressure and melt temperature analysis](#)
- [Immersed thermocouples](#)
- [Interfacial instabilities during coextrusion of LDPEs](#)
- [Melt temperature measurement](#)
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