

# Watt-Flex<sup>®</sup> Split-Sheath Cartridge Heaters

T E C H N I C A L   B R I E F

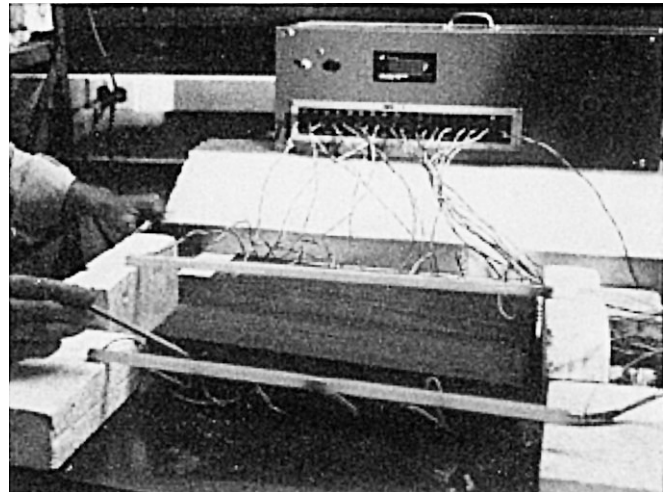
## UNEVEN HEATING CAN CAUSE PROBLEMS!

*Uniform sheath temperature is critical when working with engineered plastics, most of which require tight temperature windows for processing. If heating is uneven, sealing bars will not form a continuous seal and platens can be thrown out of balance. Cold sections in conventional cartridge heaters can restrict plastic flow in a manifold. In an attempt to compensate for lost heat, conventional heaters can also burn molten plastic in a probe.*

Conventional heaters have coil segments which are wired in parallel and can burn out independently, leaving half of the heater cold. Lack of heater coils at segment junctions results in cold spots along the profile of the heater as seen in the picture to the right.

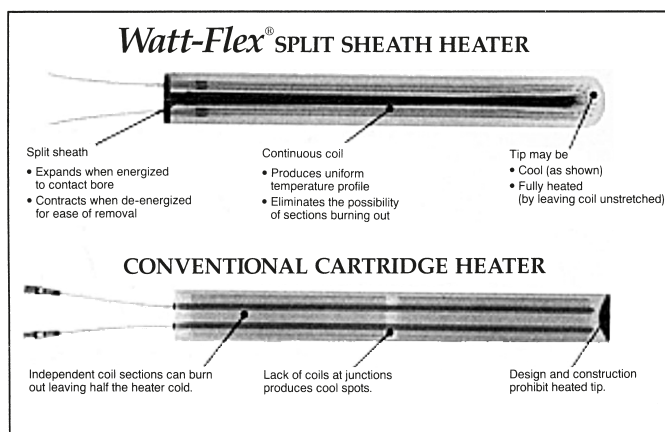
In contrast, Watt-Flex Split-Sheath Cartridge Heaters (shown below) have a continuous coil which acts like one large on/off resistor. This continuous coil produces an extremely even heat profile with no cool spots.

Watt-Flex heaters are used extensively in package sealing applications where temperature profile is crucial for insuring the continuity of a seal. They also provide an exceptionally consistent temperature profile when used in platens and dies for laminating or curing applications.



For applications where heat is lost inconsistently from the workpiece, the Watt-Flex heater can be zoned. This process of distributing wattage ensures that the heater is custom matched to application requirements.

Since the heating coil passes across the tip of the cartridge, Watt-Flex heaters can be ordered with a fully heated tip. Unique to the split-sheath design, this feature can provide heat to the tip of a gate probe, punch die, or any closed-end bore. ●



**ELECTRIC  
HEATING CO., INC.**

28 Hayward Street, Ipswich, MA 01938  
Tel. (978) 356-9844 • Fax: (978) 356-9846