

ABSTRACT

HOT RUNNER HEATER DEVICE AND METHOD OF MANUFACTURE THEREOF

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A heater device (10) used for mold injection processes and related method for manufacturing the same is disclosed. The heater device (10) comprises an inner sleeve (12) having a hollow tubular body with opposed flanges (36) formed at either end thereof and a resistive element (16) wound around the body of the inner sleeve (12). In assembly, the inner sleeve (12) is disposed inside and engaged to an outer sleeve (14) having a hollow tubular body with opposed openings (50, 52) that communicate with a cavity (46) defined between the inner and outer sleeves (12, 14). The outer sleeve (14) further defines a first aperture (44) for permitting connection of terminal leads to the resistive element (16) inside the outer sleeve (14) during manufacturing. During manufacture, a slurry of ceramic insulation material (62) is injected through a second aperture (45) in order to completely fill the cavity (46) and encase the resistive element (16).

[Figure 2]