

SHOT SLEEVE ASSEMBLY WITH MATERIALS OF DIFFERENT COEFFICIENTS OF THERMAL EXPANSION

ABSTRACT

A shot sleeve assembly for a die casting process includes a housing defining a bore open at both a front end and a rear end and a pour opening for receiving molten material, the housing includes a first coefficient of thermal expansion. A core is received within the bore and includes a second coefficient of thermal expansion lower than the first coefficient of thermal expansion. Front and rear covers attached to the housing hold the core in place within the bore and accommodate differences in thermal expansion between the housing and core.

Figure 1