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A HEATING APPARATUS FOR FORMABLE METALS

Abstract

5 Some metals, for example magnesium alloy, require pre-heating prior to fabrication processes such as forming. A conventional pre-heating practice of placing these metals in furnaces is time-consuming. An alternative practice of pre-heating the die of a forming machine may result in shortening the lifespan of the die or lowering the productivity of a production line. The invention achieves shorter heating time and
10 reduces thermal shock induced, by heating the metal progressively using a heating apparatus. The heating process of a metal is segregated: first, by heating a second portion of a metal by conducting heat from a first portion of the metal that is being heated, and next, by directly heating the partially heated second portion of the metal to a formable temperature.

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Figure 1

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