

HEATING APPARATUS FOR A WELDING OPERATION AND METHOD
THEREFOR

ABSTRACT OF THE DISCLOSURE

A heating apparatus (10) and method for pre-weld heat treating, welding and post-weld heat treating a superalloy article in a single enclosure (12) while avoiding oxidation of the article. The enclosure (12) is preferably equipped with a one-way valve (32) that permits the escape of gases, but otherwise seals the enclosure (12) to prevent the ingress of air during welding and heat treatment as a result of thermal gradients induced when the article is inductively heated. To provide access to the article and a device (20) used to weld the article, the enclosure (12) is equipped with gloves (30) by which the welding device (20) and the article can be manipulated while a nonreactive atmosphere is fully maintained within the enclosure (12) and the article is inductively heating.

Figure 1.