

SYSTEMATIC COLD WORKING OF WELDS

ABSTRACT

A method for welding a component (10) includes the steps of: selecting a weld area (120) in the part which is located near a feature of interest; applying a weld (22) to a portion of the weld area (120), wherein solidification of the first weld (126, 158) causes deviation of the feature from a desired position; and cold working the first weld (126, 158) so as to impart plastic deformation therein to a degree that material is extruded outward from the first weld (126, 158). The deviation of the feature is at least partially reversed. The method may include the step of applying and cold working a series of spaced-apart tack welds (126) in a defect, and then applying and cold-working a series of welds between the tack welds (126).

Fig. 5