

Scope: machine building, welding production, in particular determination of the dimensions of the thermal deformation effect of welded joint in operation during long time area. The invention can be used to estimate the resource of welded structures at determination of residual stresses. The essence of the invention: a method for determining the dimensions of the zone of thermal deformation effect of welded joints of steel, according to which the test surface of the welded joint is arranged as a microsection, with thermo-probe the dimensions of the zone of effect of thermo-deformation are determined. What is new is that the dimensions of the zone of thermal effect are measured by thermo-probe on the microsection and with substituting their values to respective formula determination of the relative linear heat input of welding cycle. By the results obtained the dimensions of the zone of thermo-deformation effect are determined. Technical result: a new method for the study of the welded joint, is proposed, with increase of accuracy and productivity, reduction of cost of works on research and opportunity to get information at testing.