

Technology of treatment of building materials with the plasma torch

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Abstract

The paper describes the solutions of the building materials heat conduction problems - heating source power and size definition based on temperature measurements on a material surface and on layers, heating source characteristics and surface temperature identification by temperature measurements on a treated area. The basic problem of the building concrete block heating by mobile Gauss type thermal source are addressed. As a result there are given formulae for an estimation of the plasmatron useful power and maximal temperature on the depth $z \geq 1$ mm with accuracy enough for a practical appliance. Also values of the main technological parameters during the treatment are recommended and the technology of concrete block finish is shown.

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