

## INVESTIGATION OF LASER HEATED SPOTS ON THE SURFACE OF CARBON STEEL

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Laser heat treatment is the surface process (not voluminous in contrast to other thermal hardening processes). The feature of laser radiation is high energy density and low radiation exposure time that provide high-speed heating and cooling of the workpiece.

We investigate the local divided spots after laser radiation on the surface of carbon steel – the microstructure on the surface and the influence of the spot matrix on the properties of steel under tension.

**Keywords:** *laser heated spots, carbon steel, metal structure.*