

## Structure of Al-Mg-Si Cast and Extruded Rods for Die Forgings

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The manufacture of die forgings from Al-Mg-Si type alloys is one of important topics of material and forming technology development. One of innovation factors affecting the forging technology is based on the use of continually cast rods instead of extruded ones. This change of technology is, however, connected with some problems concerning the structure, an inhomogeneous surface layer, surface morphology of cast rods and increased flow stress of the cast structure as well. The present paper deals with some aspects relating to the inhomogeneity of structure, intermetallic phases and thermomechanical treatment. The investigation of the cast and extruded structure was carried out with the help of optical and electron microscopy.

**Keywords:** aluminium alloy, casting, extrusion, forging, car industry

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