

Analysis of Magnesium Alloy Wheel Forming Technologies for Light Vehicles

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Abstract : The applications of magnesium alloys in transport include all kinds of vehicle wheels for cars, motorcycles, bicycles, trolleys, etc. Modern technologies of manufacturing products from these materials have been noticeably improved recently, creating new possibilities for their application. Continuously developed technologies for forming Mg alloys must not be overlooked, which make it possible to manufacture products with better properties compared to those obtained by casting only. The article reviews the specialized literature on magnesium wheel forming and presents a concept of technology for forging magnesium wheels for light vehicles from cast preforms. The research leading to these results has received funding from the Norway Grants 2014-2021 via the National Centre for Research and Development.

Keywords : forming, forging, magnesium alloy, wheels, vehicles

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