Effect of Rolling on the Microstructure and Wear Properties of Spray Cast Al-6Si-10Pb Alloy

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Abstract—Microstructural and tribological characteristics of cold rolled spray cast Al-6Si-10Pb alloy were studied for different percentage of thickness reduction. The length of aluminum grains and the distance between these grains was observed to increase with the increase in percentage of thickness reduction. Wear rate was found to decrease with the increase in percentage of thickness reduction for all the applied loads.

Keywords: Al-Si-Pb alloy, spray casting, rolling, wear.