

Creep Behavior of an Industrial Aluminum Drawn Wire

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Abstract

This paper presents an investigation of the creep behavior of an industrial aluminum drawn wire, where uni-axial tension creep testing was used to characterize the general creep behaviour. This material was crept at different stress with constant temperature. The scanning electronic microscopy and X-ray diffraction were used at different steps of creep test in order to identify the creep mechanism. From this investigation, the effects of applied stress and temperature on the life time of drawn wires were observed during many tests.

Keywords : Aluminum (Al), Creep, Drawn Wire, Stress, Temperature

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