

The Compression Measureo Aluminium Material at Distinctive Strain Rate

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Abstract: *Using powdered graphite combined with machine oil as a lubricant throughout the tests, compression tests of aluminum alloy at various strain rates were conducted on a universal testing machine at room temperature and under various strain rates ranging from 0.01/s to 0.15/s. In order to draw the genuine stress-strain curve for varying strain rates, which shows the mechanical properties of the metal for industrial applications, true stress and strain values were computed using the engineering equation.*

Keywords: Compression, True Stress, True Strain, Regression Analysis