

An Improved Control Chart for Non-Normal Processes

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Abstract

An improved control chart for non-normal processes is presented in this paper . This control chart is built with a least-squares L-estimator, which can replace the arithmetic mean and standard deviation usually calculated for Shewhart charts. This estimator has the property to provide a minimum variance estimation of the process position and scattering. This, disregarding data distribution. We focused our attention on "multi-generators" processes, like screw-machines or multi-die holder for injection molding, these processes have the property to be non-normally distributed.

Keywords: Control chart, non-normal process, L Statistics, Statistical Process Control, Injection Press

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