

## 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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<sup>1</sup> **Mortel R.R. & Runge G.C.**, *Statistical Process Control of Multiple Stream Process*, Journal of Quality Technology, Vol 27, N° 1, 1995.