

### Aim-9x Process Capability

The Supplier shall implement a system for measuring process capability using the provided formula for Cpk. The Supplier shall assess process capability for all measurable drawing characteristics unless otherwise instructed by the Buyer. All characteristics shall be inspected 100% for the first 30 parts. Thereafter, characteristics measured below a Cpk of 1.33 shall be inspected 100% until a Cpk of 1.33 has been reached. Characteristics measured above a Cpk of 1.33 shall be inspected at an AQL of 4.0 or higher as defined by ANSI ASQ Z1.4-2003, General Inspection Level II. Process capability for all identified characteristics shall be continuously measured, and the Supplier shall provide a certification to the Buyer with each shipment. The Supplier shall include on the certification the identified characteristics and the measured process capability for each. Additionally, the certification shall include the Supplier's name, part number, manufacturing lot/date, and shall be signed by an authorized Supplier's representative. At the discretion of the Buyer, characteristics affected by events including but not limited to design changes, process changes, non-conformances, and escapements shall be inspected 100% on the first 30 parts following the event.

$$Cpk = \min\left[\frac{USL - \mu}{3\sigma}, \frac{\mu - LSL}{3\sigma}\right]$$

*USL = Upper specification limit*

*LSL = Lower specification limit*

$$\mu = \frac{1}{n} \sum_{i=1}^n x_i$$

$$\sigma = \sqrt{\frac{\sum_{i=1}^n (x_i - \mu)^2}{n - 1}}$$

*n = Population size*

*x<sub>i</sub> = Each value in population*