



Section 6 : QUALITY ASSURANCE CLAUSES / CQAR

612. Key Characteristics Identification and Control (8/26/97).

(a) Seller and Buyer will jointly identify the key characteristics of Seller's product. Seller will effectively control the variation in each key characteristic such that the nominal design/target value of each key characteristic is closely approached. Seller will:

- (1) Identify and document each of the manufacturing processes associated with each key characteristic;
- (2) Determine the present process capability standard (Cpk), or equivalent, for each manufacturing process associated with each key characteristic;
- (3) Document process control plans for manufacturing processes associated with each key characteristic. The plans must document Seller's continuous control over unstable processes, including the means by which Seller will discover and eliminate specific causes of defects;
- (4) Apply process variability reduction techniques, as required, for each key characteristic;
- (5) Determine the improved process capability for each key characteristic. A capability index will be used to monitor performance; and
- (6) Participate with Buyer in establishment and implementation of metrics that measure the performance of Seller's process control plans.

(b) Definitions.

- (1) Key Characteristic - Those features of a part, assembly, or operational system that define its function and fit and that dictate the tools required for its manufacture and the equipment required for its testing.
- (2) Variation - The deviation of a key characteristic value about its nominal design/target value. Variation is controlled by adjusting the processes associated with a key characteristic such that its nominal design/target value is closely approached.
- (3) Process Capability Standard (Cpk) - An index providing a relationship between the process variation and the tolerance limits. When the process is near normal distribution and in control, the Cpk is useful in estimating whether the process will produce conforming units.