

PURPOSE: To explain the development and use of boundary samples as a supplement to the Inspection Standard

SCOPE: Applies to qualitative part characteristics, Inspection Standard or otherwise, for which acceptance criteria is subjective

EXPLANATION: Boundary samples are physical pieces which establish a sensory standard when the characteristic is difficult to define or communicate by any other method. Boundary samples may be temporary or permanent, define the acceptable limits, and are intended to be used only when absolutely necessary.

REQUIRED DOCUMENT:

BOUNDARY SAMPLE TAG - TMI APPENDIX 19A

RESPONSIBILITIES:

- 1) Boundary samples are to be developed and submitted per two separate occurrences:
 - a) the Inspection Standard references a boundary sample as criteria
(NOTE: In this instance, parts may NOT be shipped until the boundary is developed and approved.)
 - b) problems are discovered in pilot or mass production stages
- 2) Boundary sample requests are to be negotiated with TMI QC and, in most cases, must be approved by TMI's customer.
- 3) Boundary samples must represent current process capability, and the supplier must be prepared to discuss process capability and previously tried countermeasures when proposing boundary samples for mass production parts.
- 4) The supplier should prepare multiple sets of boundary samples per TMI QC requirements and instructions, complete the Boundary Sample Tag (Appendix 19A), affix to each sample, and submit to TMI QC for approval. If parts are supplied to multiple TMI facilities, multiple samples will be required. Samples will be dispositioned per the following:

SUPPLIER - 2 samples - One for master / one for working set

TMI - Minimum two samples per each TMI facility where part is used

- 5) The supplier must maintain the master boundary sample in a way to prevent deterioration, degradation, or damage throughout the life of the boundary. The working boundary sample should be located at the work site in the same manner. Routine reviews of all boundaries should be done to ensure that boundaries are still in effect and have maintained their original appearance, dimensions, etc.
- 6) The supplier must maintain a master boundary list that is available for review upon TMI request.



SECTION 19: BOUNDARY SAMPLES

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REVISION	REVISED DATE	SECTION	UPDATING DESCRIPTION
0	07/09/01	ALL	Initial release
1	05/21/03	ALL	Revision record added
2	10/15/03	19	RESPONSIBILITIES - 2: Added statement of TMI customer approval. - 4. Clarified number of boundary samples needed