

IFI
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INSPECTION AND QUALITY ASSURANCE FOR GENERAL PURPOSE BLIND RIVETS

BLIND
RIVETS

1. General Purpose Blind Rivets.

1.1 Scope.

This standard outlines the inspection plan to be used when lot compliance after shipment of general purpose blind rivets is questioned by the user. The producer is responsible for supplying a product of satisfactory quality through judicious manufacturing controls and inspection.

1.2 Applicable Characteristics.

The general plan outlines the significant applicable characteristics that are described by related specifications and engineering drawings. Three levels of inspection — A, B, and C — are employed. Each characteristic is assigned an appropriate level. These characteristics and corresponding inspection levels are listed in Tables 1 thru 3.

Any additional characteristics deemed applicable by the user which do not appear in the plan shall be designated by the user, preferably on engineering drawings and related specifications at the time of ordering. If the reference procedure of this plan is applied and an unspecified characteristic questioned, the decision table included in Appendix I should be used to establish the inspection level of the characteristic in question.

1.3 Lot Definition.

A lot is a quantity of finished product of one part number, assembled together for inspection after shipment to the user. Maximum lot size for user inspection shall not exceed 250,000 pieces.

1.4 Purchased Processing.

Processing, including heat treating and plating, may be purchased by the prime contractor from others for use in the production of the rivets; however, the prime contractor shall be solely responsible for the quality of the final product.

1.5 Measuring and Testing Equipment.

All measuring instruments, gages, and testing equipment used to inspect incoming materials and parts in process and in final inspection shall be calibrated at planned intervals.

The date of calibration and fixture checks shall be recorded. Inspection records shall be kept for a minimum of one year.

1.6 Inspection for Lot Compliance After Shipment.

When parts have been found that the user considers nonconforming, the following inspection procedure shall apply:

- a. A random sample shall be obtained from the lot and jointly inspected, or as mutually agreed to, by the user and manufacturer for the characteristic(s) in question.
- b. The sample size shall be in accordance with Table 3 for each level of inspection and for each individual characteristic.

In the event of rejection, suitable disposition of the lot shall be negotiated by user and manufacturer.

Table 1 Nondestructive

Characteristic	Inspection Level
1. Body diameter	A
2. Head diameter	B
3. Head height	B
4. Radius of fillet	C
5. Mandrel diameter	C
6. Mandrel protrusion	C
7. Blind side protrusion	A
8. Rivet body length	A
9. Head angle	B

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Table 2 Destructive

Characteristic	Inspection Level
1. Ultimate tensile strength	A
2. Ultimate shear strength	A
3. Mandrel break load	A
4. Mandrel retention load	A
5. Blind head formation	A
6. Expansion	A

Table 3 Sample Size

Lot Size	Level of Inspection	Nondestructive Tests		Destructive Tests	
		Sample Size	Acceptance Number	Sample Size	Acceptance Number
Up to 250,000	A	100	2	8	0
Max	B	32	1	—	—
	C	8	0	—	—

**Appendix I
Inspection Level
Decision**

