

Barrow Engineering Pty Ltd
Procedures
Document No. QM-2.9

INSPECTION AND CHECKING

Prepared _____

Approved _____

Date _____

Date _____

1.0 PURPOSE:

To establish and maintain a system of inspections and checks that will ensure that the products of Barrow will maintain a high level of quality.

2.0 SCOPE:

This procedure applies to all products manufactured by Barrow Engineering.

3.0 RESPONSIBILITIES:

The Manager is responsible for monitoring the procedure to ensure its effectiveness and for maintaining the Inspection and Checking records.

4.0 PROCEDURES:**4.1 General**

The inspection and Checking requirements of Barrow processes are described in the 'Inspection and Test Plan (Ref, Manufacturing Process Flow Chart) QAD-0902 & QAD-0903. Inspection and checks shall be performed as per the requirements shown thereon.

At least once per day the Manager or an appointed delegate shall randomly select a product item from each of the work stations. The item shall be inspected and checked for correct dimensions, material and general quality. The result of the check shall be recoded on an 'Inspection and Checking Record', refer QAD-0907 (Quality Assurance).

Completed Inspection and Checking records shall be maintained as a Quality Record, refer Procedure QM-2.15.

4.2 Receiving Inspection and Checking

All incoming product, including raw material, shall be checked, by the receiver, against the delivery advice for quantity and visual quality. Any discrepancies shall be noted on the delivery advice and the Manager advised. The Manager shall treat the discrepancy as a non-conformance and take action as per Sections 12 (Control of Non-Conforming Product) of the Quality Assurance manual and associated procedures Document QAD-1202.

Where the incoming items are raw material and there is a requirement under a contract to produce compliance certificates the Manager shall seek,

receive and maintain such certificates. They shall be treated as 'Quality Records', refer Procedure QM-2.15.

Prior to use, incoming product shall be verified by the Manager against the Purchase Order. Where such goods are required for urgent production purposes, they may be released prior to verification, however, they shall be positively identified by marking and verified as soon as practical.

4.3 In-process Inspection and Checking

Each stage of production shall be inspected by the following methods:-

- (a) 1st off part must be checked and signed off by two (2) setters/operators prior to production.
- (b) By the Manager or a delegated checker performing random inspection.
- (c) By the operator inspecting the output on a daily basis according to Sampling Plan AS1199 Level II: Acceptance Level: 2.5 Table 2-A (In-process Inspection, Quality Control).
- (d) By the operator comparing his or her work against an acceptable standard sample.

The person performing the operation shall perform the checks as per the details in the appropriate section of the ITP.

4.4 Final Inspection and Checking

Random samples in accordance with AS1199 Standards and Sampling Plan General Inspection Level II: Acceptance Level: 2.5 of finished product shall be checked and if practical tested for fit with a mating part. Final Inspection shall be performed by either the Manager or a delegated person. The inspection shall ensure that:-

- (a) All stages of production have been completed.
- (b) The finished product is clean, in good repair and tidily presented.
- (c) The product conforms to the appropriate drawings and/or specifications.
- (d) In-process Inspection Acceptable Quality Level (AQL) was performed in accordance to Sampling Plan AS1199 Level II: Acceptance Level: 2.5.

- (e) Any quantity (AQL) short fall during in-process inspection in Accordance with Sampling Plan AS1199 Level II: Acceptance Level: 2.5 (Table 2A) will be drawn from batch and inspected.
- (f) If AQL complies to Sampling Plan AS1199 Level II: Acceptance Level: 2.5 (Table 2A), only two (2) components will be 100% inspected for final acceptance.
- (g) Should any problems be detected during final inspection in Accordance to Table 2A, a tightened inspection level S-4 will be performed to Table 2B.
- (h) Should further problems be detected during the final inspection and checking (Table 2B) the product batch shall be segregated and a Non-Conformance and Corrective Action Report initiated, refer Procedure QM-2.12 (Control of Non-Conforming Product), QM-2.13 (Corrective Action and form QAD-1202 (NCAR).

4.5 Inspection and Check Records

The manager shall maintain any inspection records to adequately support and substantiate that inspection and checking has been performed and that the product has passed the criteria of the inspection.

5.0 REFERENCE DOCUMENTATION

- 5.1** Control of Non-Conforming Product (Procedure)QM-2.12
- 5.2** Corrective Action (Procedure)QM-2.13
- 5.3** Inspection, Measuring and Test Equipment (Procedure)QM-2.10
- 5.4** Quality Records (Procedure).....QM-2.15
- 5.5** Non-Conformance and Corrective Action Report (NCAR) QAD-1202
- 5.6** Inspection records Index (All relative documents) QAD-0901