

James Walker	Batch Inspection Sampling –Non O Rings	Date: Aug 24, 2021	Rev: 9	Page: Page 1 of 2	Document No: QPD79A Approved by: M.Richardson
--------------	---	-----------------------	-----------	----------------------	--

REASON FOR UPDATE: Change of owner. Appendix 1 & 2 removed no longer in use.

ASSOCIATED DOCUMENTS: FMP Ref: [FMP 14](#)

1. PURPOSE

1.1 To provide a procedure for the Batch Inspection Sampling of Non O Rings.

2. SCOPE

2.1 This document applies to all those with the Batch Inspection Sampling of Non O Rings.

3. RESPONSIBILITY

3.1 The Quality Manager is responsible for updating and communicating the details within this procedure.

4. PROCEDURE

GENERAL: Batch, or final inspection for the dimensional features of manufactured product is based on the "Accept on Zero" principle.

An appropriate random sample of appropriate size to be selected from the table below (derived from ISO 3951 [BS6002, MIL 414, ANSI/ASQC Z1.9]). Inspection level "IV" is the default, unless otherwise specified by the customer. Refer to drawing and DJ. "Tightened" and "reduced" sampling for this level is considered too similar to the "normal" inspection level for small batch sizes so instead we have used inspection level "III" for reduced sampling and level "V" for tightened sampling.

Tightened sampling is to be used on those parts with a known history of problems, active customer concerns for dimensional issues or Cpk below 1.33.

Normal sampling is used for Cpk 1.33 – 1.67

Reduced sampling may be used where sufficient data has been accumulated to confirm a capability of Cpk 1.67 or above.

REACTION: If a single measured item from the sample does not meet dimensional tolerances the batch is rejectable.

DISPOSITION: Failed batches are to be scrapped or 100% dimensionally inspected. Parts that marginally fail inspection may be released only under formal concession (**Form F 029**).

IMPORTANT: Unless otherwise agreed, 100% of all Rolls-Royce parts must be dimensionally inspected before release.

James Walker	Batch Inspection Sampling –Non O Rings	Date: Aug 24, 2021	Rev: 9	Page: Page 2 of 2	Document No: QPD79A Approved by: M.Richardson
---------------------	---	------------------------------	------------------	-----------------------------	--

Note: “Reordered” parts (to make up shortfalls due to rejects on original DJs) are to be sampled as if separate orders, i.e. sampling to table below.

BATCH SIZE	REDUCED	NORMAL	TIGHTENED
3 - 8	*4	*4	*4
9 – 15	4	4	5
16 – 25	4	4	7
26 - 40	4	5	10
41 - 65	4	7	15
66 - 110	4	10	20
111 -180	7	15	25
181 - 300	10	20	30
301 - 500	15	25	35
501 - 800	20	30	40
801 - 1300	25	35	40
1301 - 3200	30	40	50

- Where the sample size exceeds the batch size measure all parts in a batch.