

Examination Procedure	Beteckning /Document KBE EP-190
	Utgåva/Issue 2 (E)
	Datum/Date 2017-05-22
	Ersätter/Supersedes 1 (E)
Rubrik / Title Visual Inspection of Printed Board Assemblies	

1 Scope

This Examination Procedure is applicable as routine inspection or sample inspection to all equipment containing printed boards.

2 Objective

To verify that printed boards are manufactured according to specified standard.

3 Method

Workmanship and choice of components are checked for compliance with specified standard accepted by the Purchaser.

As a minimum, the visual inspection shall include the following:

- Workmanship of soldering
- Protrusion of leads
- Installation of components
- Workmanship of solderless connections
- Workmanship of modifications and repairs
- Damages on components, printed board and connections
- Coating and corrosion protection
- Mechanical workmanship
- Cleanliness
- Marking
- Mounting of large or heavy components

4 Acceptance Criteria

Components and workmanship of the product shall be in accordance with IPC-A-610 or other equivalent standard.

5 Documentation

Inspection performed shall be documented in an inspection certificate, record or technical report as required in the Inspection Plan. Several examinations within one and the same Inspection Plan may be reported in the same document.

Examinations carried out as routine (100 %) inspection shall be reported to the Purchaser as original documents.

The document shall as a minimum include the following:

- Items examined

Product, designation, quantity, serial numbers and reference to the Purchasers order.

- Identity / Traceability

The identity of the objects under examination in comparison with type tested items and in comparison with relevant specifications shall be specified, unless the identity is certified in a separate document (as per KBE EP-180).

- Examination procedure

It shall be clearly stated if the inspection has been performed according to this Examination Procedure or to any other procedure agreed upon.

- Measurement equipment

Type of equipment, accuracy, identification, etc. and current calibration data for the equipment used where performance is significant to the results

- Results

It shall be evident that the items have fulfilled stated requirements and acceptance criteria. Measured and recorded values that shall be documented as per the procedure as well as any deviations from requirements in applicable specifications or test procedures shall be reported. Deviations shall be clearly documented, preferably by means of photographs.

- Approval

Date of inspection and name of responsible inspector shall be included. The document shall be reviewed and approved in accordance with the Manufacturer's/Supplier's or the laboratory's internal QA/QC routines.