

INSPECTION OF ELECTRICAL & ELECTRONIC GOODS
WORK INSTRUCTION
UIS-I-31

An inspection plan should be agreed upon prior to inspection, loading and shipping with the seller's representative.

Hereafter an outline of main inspection steps, which can be followed to conduct a normal inspection for Electrical & Electronic materials, Goods and Equipment such as: Cables, Electrical Fittings, TV Sets, Computers, **Medical Equipment**...etc.

1 Meeting & Documents Review:

- 1.1 Review of inspector assignment and relevant documents (Contract, L/C, Proforma Invoice, Technical Specification and any special instructions), also to acquire and review any additional relevant standards and / or regulations.
- 1.2 A meeting is to be held with the supplier representative at the inspection site in order to meet the supplier's representative in charge of inspection, to review the documents and to discuss the implementation of the inspection plan and to request any assistance, if necessary.
- 1.3 Inspector is to be informed by the supplier on main quality system & standards applied for production and testing of items subject to inspection.
- 1.4 Check test result records of routine and daily analysis and tests done by quality control personnel at production facilities on each batch or lot of the product.
- 1.5 Review records and certificates for calibration of the instruments & devices used for testing, measuring or weighing to assure their accuracy.
- 1.6 Inspector shall ask for and obtain technical specifications and certificates of components and materials and their sub suppliers to ensure they meet the requirements and that they are from the specified origins.
- 1.7 Inspector should ask for and obtain records and certificates of 'Type Test' of relevant products as well as technical information of relevant models.

2. Visual and Dimensional Inspection

- 2.1 Inspector visually checks goods for appearance, newness, and physical defects; such as rust or damage, etc. Such discrepancies to be recorded photographed and reported on the daily and final inspection reports indicating extent and number or percentage of detected discrepancies.
- 2.2 Check for proper packaging (wrap, insulation handling etc.) All markings are to be checked as well.
- 2.3 Items or representative sample (as per the inspection plan) should be checked for quality, dimensions, per unit weight, etc. Such parameters represent vital importance to many electric and electronic goods such as cables, lighting equipment, control panels, diesel generators, OHL conductors, TV tubes, electric poles and insulators.... etc.

3. Sampling & Testing

- 3.1 Random sampling of product should be conducted according the agreed contract standards (if mentioned) or to any applicable National and / or International Standards and inspection plan.
- 3.2 Check of earthing system, class of insulation, protection, name plate data....etc. against requirements.
- 3.3 According to applicable standards, a certain number of samples are subjected to relevant tests. Results should be clearly recorded on adequate form or sheet mentioning the method applied. (Safety procedures should be followed when in high voltage lab). When goods are Semi Knocked Down or Completely Knocked Down, components as well as assembled units should be checked. All test forms and sheets should be jointly signed by inspector and seller's representative.
- 3.4 The results of tests carried out or witnessed should be checked to determine conformity with contract requirements. If a certain degree of non-conformity is detected, the technical department should be immediately informed and change of sampling plan and QAL maybe required according to UIS procedures and/or relevant international standards.

4. Packing and Loading:

- 4.1 The inspector shall follow UIS common practice to supervise loading, to verify proper loading and verification of quantities.
- 4.2 The inspector should make sure that packaging is suitable and give adequate protection during transporting and handling. Also noting that many electrical & electronic goods need special protection from wet weather conditions by proper

wrapping , silica gel bags...etc. Clear marking for handling of heavy equipment such as transformers, generators, cable drums... etc.

4.3 The inspector should check for O.M. manuals, spare part ref. ...etc.

5. Reporting to Technical Department

5.1 Daily reporting directly to Technical Department shall be made on UIS-F-29 form and should cover clearly the progress of inspection, testing activities non-conformities and any other remarks, with photos. Photos and supporting documents shall be included with Daily Inspectors' Reports.

5.2 Upon completion of any given inspection, final inspection reports should be forwarded to the Technical Department by fax or email, as soon as possible but not later than (24) hours of inspection completion, together with the packing list, calibration certificates and any other document, signed, stamped and dated by the inspector.