

Evaluation Report

Prepared For:

Prepared By:
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Scope:

A shipment of 30 cables was received from ABC Company Inc. at BEST Inc. for inspection. The cables were inspected per IPC-A-620 Class 2 criteria. All 30 cables were found to be defective. The defect conditions are listed below.

Wire Tinning:

It was communicated to BEST by ABC Company that the brown wire on the cable was pre-tinned, however the blue wire was not pre-tinned. This is considered a defect per IPC-A-620 section 4.4 which states that stranded wires that are not tinned prior to attachment to terminals is a defect for class 2 and 3 products.

Conductor Deformation/Birdcaging:

Per IPC-A-620 section 3.3 criteria, any wire whose general spiral lay or whose wire strands extend beyond the wire insulation (birdcaging) or whose strands are kinked is considered a defect. Almost all of the cables had at least one of these defect conditions. In particular, the blue wire had severe birdcaging in many cases. The reason for this is because the wire was not tinned prior to the attachment to the terminal. See Fig.1 and Fig.2

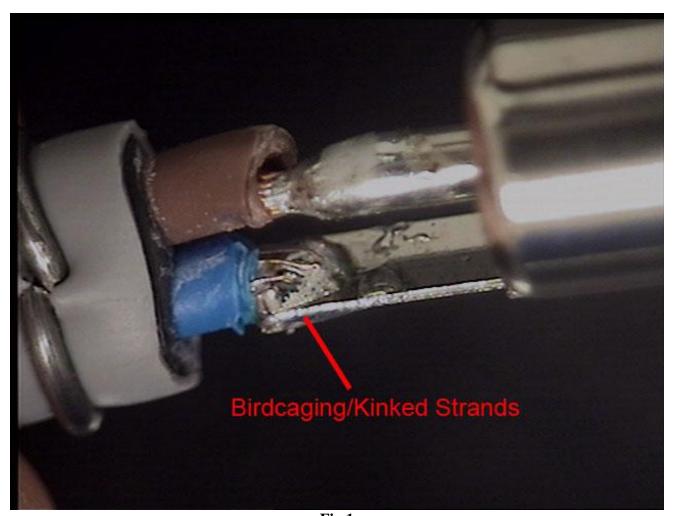


Fig.1

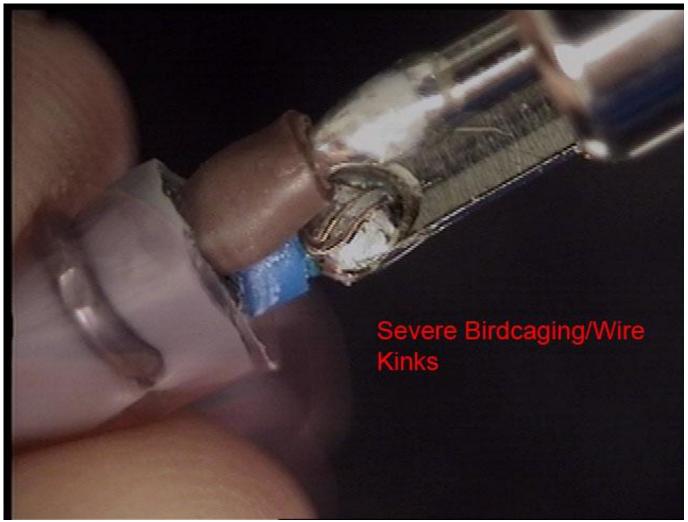


Fig.2

Wire Insulation Deformation:

Per IPC-A-620 section 3.5 criteria, any wire insulation that has cuts, breaks, cracks, splits or whose insulation thickness is reduced by more than 20% is considered a defect. Many of the cables exhibited these defects. In particular, the brown wire had many instances where the insulation was reduced by more than 20%. See Fig.3.

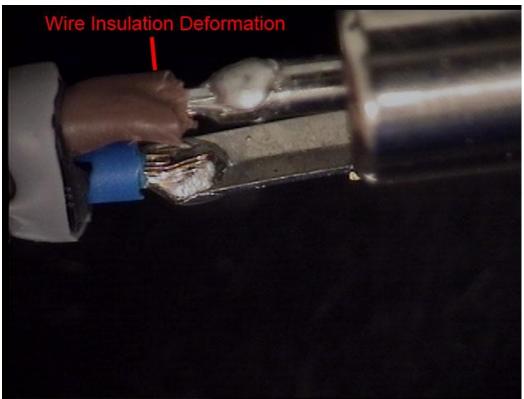


Fig.3

Flux Residue:

Flux residue was observed on many of the cables. However, it has been communicated to BEST by ABC Company that the solder being used is Kester 275 no-clean cored wire. Because it is no-clean flux, this would be considered acceptable per IPC-A-620 section 4.2.2.2.1.