Experiment No. 15

Statement:

Identification, measuring and stripping of different types of electrical cables

Desired Learning Objectives

2. This practical aim is to distinguish between the different parts of cables and use of Stripping Tool for electrical cables. After going through this practical, trainees would be able to **distinguish** between the different parts of cables, measure wire gauge and use stripping tool for Electrical cables.

Equipment / Material Required

3. Required apparatus are: -

(a) Different types of electrical wires

(b) Wire gauge

(c) Stripping tool

(d) FOD pouches

Safety Precautions

4. During the practical, trainees make ensure following precautions: -

(a) Care should be taken for transportation of cables.
(b) Always consult the relevant Technical Order for selection of electrical cable.
(c) Don't make any sharp bend while laying the cable on working table.
(d) Always use proper tool for stripping.
(e) Don't use plier etc for un-stripping the wire, it may damage the conductor.

(f) After stripping the conductor, inspect for mechanical failure.

(g) Safe the removed insulations in FOD pouch.

Procedure

5. Following procedure must be adopted while performing this practical:

(a) To show the different cables and explain its parts like tinned copper conductor, polyvinyl chloride insulation and extruded nylon jacket.

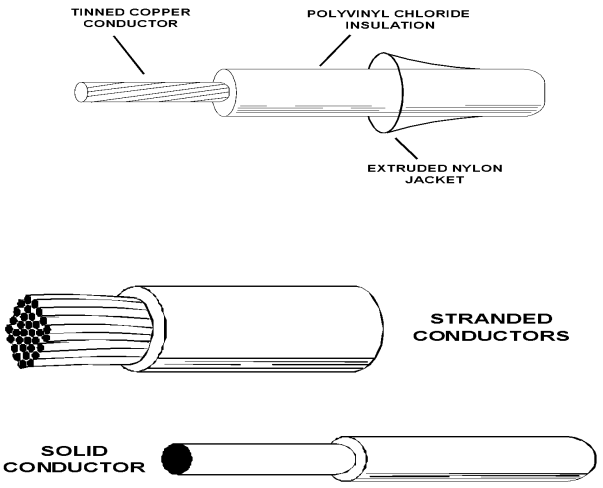

FIG 6.15.1: Different types of electrical cables

(b) First measure the size of electrical wires with the help of Wire Gauge Tool.

(c) Insert wire in an appropriate jaw of stripping tool.

(d) Ratchet mechanism may be adjusted accordingly.

(e) Insulation of wire cable is removed by pressing the handle grip and pulling of cable.

(f) Inspect the conductor for any mechanical signs.

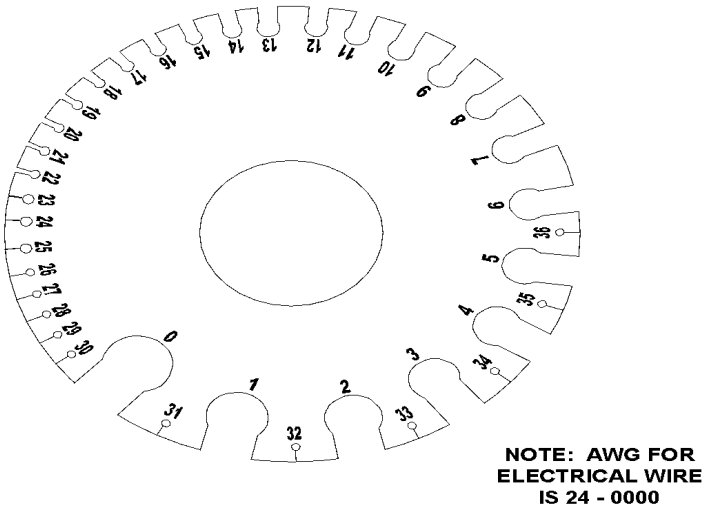

FIG 6.15.2 : Wire Gauge Tool

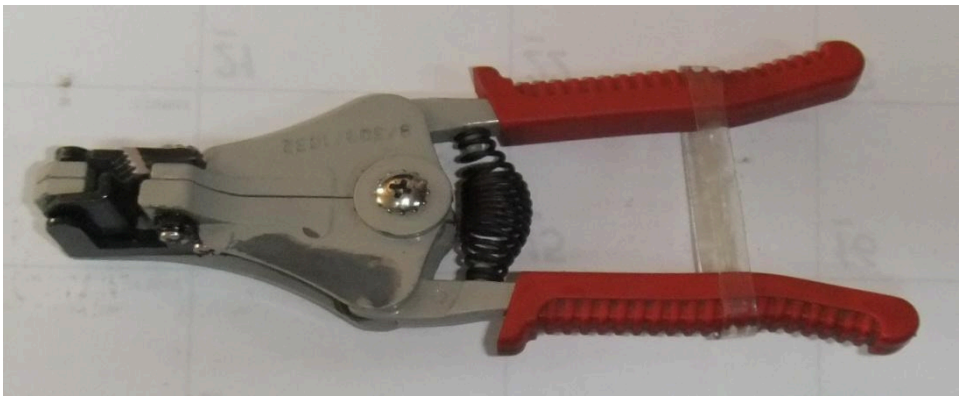

FIG 6.15.3: Stripping Tool

Conclusion: