

## **SPECIFICATION FOR HELMET MOUNTED WITH ELECTRONIC INDUCTION TESTER**

### **1.0 SCOPE:**

This specification covers requirements regarding material, construction, workmanship, finish and performance requirement of helmets intended to provide protection against falling objects and other hazards while discharging works.

### **2.0 MATERIAL:**

The Helmet shall include Shell and Harness conforming to IS 2925:1984

### **3.0 CONSTRUCTION:**

#### **3.1 Protection:**

- The shell of the helmet shall be **yellow colour**, dome shaped made with fibre glass. There shall not be any metallic component passing through the shell. The Shell shall provide greater toughness thereby offering stronger protection.
- For those parts of the helmet that come in contact with the skin, materials which are likely to cause skin irritation or any adverse effect on health shall not be used.
- There shall be no sharp edges, roughness or projection on any part of the helmet which are in contact or potential contact with the wearer.
- The walls of the Anchor points in the shell where the cradle is anchored shall be extra thick to prevent any damages to the anchor points upon impact.

#### **3.2 Headband / Nape Strap:**

The length of the headband or nape strap shall be adjustable in increments of not more than 5 mm.

#### **3.3 Shock Absorption:**

The force transmitted to the head form shall not exceed 5.0 kN

#### **3.4 Comfort Band or Sweat Band:**

Forehead comfort band consisting of textile laminated foam sheet shall be provided to have extra softness and comfort to the user. Comfort band shall cover the inner front surface of the headband for a length of not less than 100 mm each side of the centre of the forehead. Further, comfort band shall have a width not less than that

of the headband over the length which it covers. The comfort band shall be non skin irritant.

### **3.5 Chin Strap:**

Either helmet shell or the headband shall be fitted with a chin strap

### **3.6 Size (Large size)**

## **4.0 REQUIREMENTS FOR ELECTRONIC INDUCTION TESTER**

**4.1** Induction tester should be able to sense voltage of LIVE AC lines through remote sensing.

**4.2** The dimensions should be less than 9 cms x 2cms x 1.8 cms (LxBxH)

**4.3** Should work on 2 x 1.5 Volts button type batteries (3VDC) & batteries should be replaceable type.

**4.4** The tester should be helmet mountable type.

**4.5** Minimum sensing distance for 11kV line should be 200 cms (2.0 mtrs).

**4.6** Should be equipped with a buzzer & audio level should not be less than 60 dB when measured from a distance of 2 inches from the tester.

**4.7** Should have flexible PVC insulated copper wire as an antenna.

## **5.0 WORKMANSHIP AND FINISH:**

The surface of the helmet shall be finished smooth, free from burrs, sharp edges shall be removed to ensure proper surface contact of all the fittings.

## **6.0 MASS:**

The mass of the helmet without attachment with or without peak shall not exceed 400gm.

## **7.0 Tests:**

Helmets shall be subjected to all the tests as per IS 2925:1984. Testing charges shall be borne by the firm.

## **8.0 MARKING:**

Each helmet (shell and harness) shall be legibly and indelibly marked with the following information:

1. Manufacturer's name or trade mark.
2. Size of the Helmet
3. Year and month of manufacture.
4. ISI certification mark.

**9.0 EMBOSSING:**

“BESCOM” logo in capital letters shall be prominently embossed in Blue Colour on all the helmets.

**General Manager (Ele)  
Q,S&S, BESCOM**