



THORNE AND DERRICK UK – LEAK DETECTION
TEL: 0044 (0)191 490 1547 FAX: 0044 (0)191 477 5371
TEL: 0044 (0)117 977 4647 FAX: 0044 (0)117 477 5582
WWW.HEATTRACING.CO.UK
WWW.THORNEANDDERRICK.CO.UK

e-mail: northernsales@thorneandderrick.co.uk

# 1.Scope

The equipment illustrated in Figs 1 to 6 provides portable earthing for maintenance in accordance with the CEGB Safely Rules and National Safety Code of Practice SR-EM 21.

## 2. Design and Construction

Both Line end clamp and earth end clamp are designed with an ultimate strength well in excess of normal working loads and all designs are type tested at normal loading before being approved.

### 3.Equipment

#### 3.1-Line End Clamp

This is designed to make positive line contact with the spherical stub no matter what the angle of application and it should be applied by means of the operating socket Fig 6 attached to the appropriate insulated operating pole.

### 3.2-Earth End Clamp

This should be applied by hand to the appropriate earth bar to the maximum torque possible without the use of mechanical aids.

### 3.3-Operating Socket

Made in light alloy and illustrated in Fig 6 and is fitted with an enclosed spring to give a positive hold to the conductor clamp when it is being applied.

### 3.4-Operating Poles – Insulated

These are limited in length to a maximum of 2440mm. There are two types.

 $1.A\,1220 mm$  long top section fitted with the appropriate socket, plus a 1220 mm bottom section Figs  $7a\,\&$  b.  $2.A\,2440 mm$  long telescopic pole also fitted with the appropriate socket but capable of closing down to  $1220\,$  mm for ease of transportation. Fig 7c.

#### 3.5-Earth Leads

Only cables by approved manufactures and fitted with approved compression lugs shall be supplied for the

earthing lead connection between the conductor clamps and earth end clamps.

The flexible conductor shall be stranded 312/0.45mm aluminium (50mm² aluminium) with clear /green translucent PVC sheathing to an overall diameter of approximately 12.4mm.

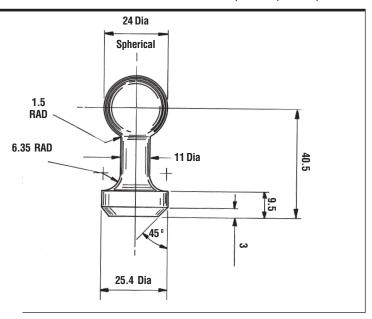
## 4.Certification of clamps and cables.

All completed equipment i.e. conductor clamp, earth clamp and interconnection lead are to be subjected to a resistance test as appropriate.

All measurements in milimeters

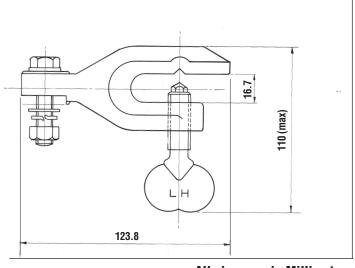
Stub ST/M.S/225/1

Fig. 1.
CodeST/M.S./225/1
Stub – Weld on type



Earth Clamp CE10/GS

Fig. 2.
Code CE10/GS/A/225/3
Earth End Clamp
Max Conductor 15.9 mm (5/8")



All sizes are in Millimetres