Specification of Hand Cuffs

1. **Materials**

All parts of the handcuff including two keys per set must be fabricated of carbon steel.

2. **Design & Construction**

a) Design and construction of the handcuff and keys must be as shown in figure 1 (attached herewith) and as specified herein.

b) The handcuffs finish shall be black oxide

c) Each pair of handcuffs must contain a right and left configuration as indicated Fig. 1 (i.e. the cheek plates with the keyhole on the same side of the assembled pair and the jaws rotating on the same side of the longitudinal centre line).

3. **Locks**

a) Each handcuff shall be provided with a double locking mechanism (a mechanism that shall be capable of locking automatically when the cuff is applied to the wrist and that is capable of securing the jaw of the cuff against travelling in either direction).

b) Locks must be capable of being released by the use of the key without undue force.

c) The locking mechanism must not unlock without the use of the keys

d) Locking mechanisms must not unlock by tampering when tested.

e) The locking mechanism must consist of at least two independent tumblers that can be opened by a universal key.

4. **Unlocking**

Each cuff must be capable of being unlocked from the double locking position by rotating the key in one or two directions.

5. **Jaw**

The jaw retched must be machined to provide a positive rocking profile with the pawls. The jaw must be retained against the locking mechanism by means of two circumferential grooves with corresponding lugs in each cheek.

6. **Dimensions**

Each cuff must have the following dimensions.

a) Minimum opening for the insertion of the wrist: 50.8 mm.

b) Minimum inside diameter when the jaw is engaged at the first notch entering the locking mechanism: 73mm.

c) Maximum inside diameter when the jaw is engaged at the last notch entering the locking mechanism: 45mm.

d) Maximum overall length of the pair of handcuffs: 210mm

e) Maximum weight of the pair of handcuffs: 425 g.
**General**
The handcuffs must be free of burrs, slivers, sharp edges, dents, tool marks or corrosion. The finish must not be scratched, damaged or marred exposing base metal.

**Testing Procedures**

**Proof load: cuffs:** Cuffs must be locked with the jaw engaged at the first notch entering the locking mechanism. A static load of 225 kg must be applied longitudinally from the outer edge of one cuff to the outer edge of the other cuff as shown in Figure 1 (enclosed).

**Proof load: Locking mechanism:** Cuffs must be locked with the jaw engaged at the first notch entering the locking mechanism. A static load of 225 kg must be applied at right angles to the longitudinal axis of the cuffs from one side of the cuff to the other side of the same cuff as shown in Figure 1 (enclosed).

**Proof tampering: Locking mechanism:** The cuff must be locked with the jaw engaged at the seventh notch in the locking mechanism and double locked. Using a flat narrow piece of metal pry between the notched jaw and the locking mechanism in an attempt to open the cuff.
SPECIFICATION FOR HANDCUFFS

Figure 1: General shape of the handcuffs