


## 108. ICE PITON

| <b>QUALITATIVE REQUIREMENTS</b>  | <b>PICTURE OF EQUIPMENT</b> |         |        |              |           |           |         |             |        |              |          |            |            |            |   |
|--|-----------------------------|---------|--------|--------------|-----------|-----------|---------|-------------|--------|--------------|----------|------------|------------|------------|---|
| <p>Ice pitons is piece of metal designed to be hammered or screwed in ice and to be used as means of static belay running belay or as an artificial aid, the piton consist of a blade or screw and head having a hole or provided with the hole of such dimension as to allow the passage of one or two carabineers .specification of general purpose para winner mountaineering the loads that may be applied to various type of pitons depended on their designee and the angle between the body of piton and rope belay.</p> <p>Material :- steel having following composition of material shall be used for the manufacture of ice piton.</p> <table style="margin-left: auto; margin-right: auto; border: none;"> <thead> <tr> <th style="text-align: left;">Constituents</th> <th style="text-align: right;">Percent</th> </tr> </thead> <tbody> <tr> <td>Carbon</td> <td style="text-align: right;">0.35 to 0.44</td> </tr> <tr> <td>Manganese</td> <td style="text-align: right;">0.4 o 0.7</td> </tr> <tr> <td>Silicon</td> <td style="text-align: right;">0.1 to 0.35</td> </tr> <tr> <td>Nickel</td> <td style="text-align: right;">2.25 to 2.75</td> </tr> <tr> <td>Chromium</td> <td style="text-align: right;">0.5 TO 0.8</td> </tr> <tr> <td>Molybdenum</td> <td style="text-align: right;">0.4 to 0.7</td> </tr> </tbody> </table> <p><b>HARDNESS :</b> The Ice pitons shall have a hardness of 350 to 450 HV.</p> <p><b>MANUFACTURE, WORKMANSHIP AND FINISH:-</b><br/>Pitons shall be finished smooth and shall be free from burrs and cracks and other defect. The holes shall be finished smooth to avoid scrapping .the pitons shall be given suitable anti-corrosive treatment.</p> <p><b>DESIGNATION :-</b> An ice piton shall be designated by commonly used name of size ( in case of more than size) and IS number.</p> <p><b>EXAMPLE :-</b> An ice piton of type D and of nominal size 2 shall be designated follows.</p> <p><b>TEST :</b> a) Strength of Piton :- A load of 13 kn shall be applied to the piton eye at right angles to the gripping of surface for a periodof 5 minutes. The pull shall be applied gradually. On completion of the test the pet ion shall not show any show sign of fracture of permanent deformation.</p> <p>b) Crack test :- Each ice piton shall be subjected to crack detection test .</p> <p>c) Soundness test :- The pet ion shall be laid flat on an anvil or mild steel block and struck several light blows at different places on the shank with ball pein hammer,250g.The pet ion shall have no sign of damage, cracking or fracture on completion of the test. Ice piton D X 2 IS : 8907.</p> <p><b>MARKING :-</b> Ice pet ion shall be shall be suitably embossed or marked with acid etching with the manufacture name or trade mark.</p> | Constituents                | Percent | Carbon | 0.35 to 0.44 | Manganese | 0.4 o 0.7 | Silicon | 0.1 to 0.35 | Nickel | 2.25 to 2.75 | Chromium | 0.5 TO 0.8 | Molybdenum | 0.4 to 0.7 |  |
| Constituents   | Percent                     |         |        |              |           |           |         |             |        |              |          |            |            |            |   |
| Carbon   | 0.35 to 0.44                |         |        |              |           |           |         |             |        |              |          |            |            |            |   |
| Manganese  | 0.4 o 0.7                   |         |        |              |           |           |         |             |        |              |          |            |            |            |   |
| Silicon  | 0.1 to 0.35                 |         |        |              |           |           |         |             |        |              |          |            |            |            |   |
| Nickel   | 2.25 to 2.75                |         |        |              |           |           |         |             |        |              |          |            |            |            |   |
| Chromium   | 0.5 TO 0.8                  |         |        |              |           |           |         |             |        |              |          |            |            |            |   |
| Molybdenum   | 0.4 to 0.7                  |         |        |              |           |           |         |             |        |              |          |            |            |            |   |