C- TECHNICAL SPECIFICATIONS OF SELF CLOSING TYPE VALVES FOR LPG CYLINDERS

SELF CLOSING LPG VALVES:

LPG Cylinder Valves, 25.6 mm Self Closing Type with Vertical outlet and incorporating vertical spring actuated spindle as detailed in Appendix - 4 (Page 6 of IOC "Implementation Report" dated March, 1985. Valves inlet and outlet confirming to Kosan Tecknova Drawing No.186N502 dated 23.1.1985 (Revision K) and valve outlet fitted with "Joint Packing" as per Drawing No.186N512 dated 04-06-1986 (Revision G). Valves should conform to Bureau of Indian Standards Specifications IS:8737 (Latest Revision) and duly inspected and certified / marked by BIS. The material of the valve housing (Valve body) shall comply with the physical & chemical properties of Brass as per IS:8737 and the same shall be mandatory.

The dimensional details as well as materials of construction for all other components of all the valves supplied would be in conformity with the Kosan Teknova Drawings specified above and maintenance of "Inspection and Quality Assurance Formats". Marking on the Valves shall be as per Drawing No.V/002/03 (Rev. 0) Dated 31.07.2003 attached herewith.

PLASTIC THREAD PROTECTOR CAP:

This cap shall be without markings and dimensions as per drawing (Page 16 Appendix 4 (X) of "Implementation Report").

SPECIFICATION FOR SAFETY CAPS:

1. Safety Caps shall be of "DUPONT DELRIN 500, CELCON M-90 / M-140 OR TENAC-5010 (all virgin materials) approved by Oil Industry Technical Committee (OITC) suitable for fixing at the outlet of Self Closing Compact Valve (25.6 mm dia outlet) as per our drawing attached with Tender Enquiry with Stainless Steel spring clip and soft twin Nylon chord of adequate strength. Material for safety caps should be of Virgin Material.

2. The safety Cap with spring shall be as detailed in the Drawing.

3. Safety Cap for Self Closing compact Valve for LPG Cylinder complete with spring and soft twin nylon chords with knot fused to ensure that it does not get opened under any circumstances. Safety Caps should satisfy all the requirement including material Specifications given in the said Drawing.

Signature:
Seal:
ANNEXURE – III

(a) Cap must withstand pneumatic pressure of 17 kgf. / sq. cm.

(b) Words **HP GAS** should be embossed on the top of the cap.

(c) Cap spring should be tempered in such a way that it should facilitate easy fitment / removal and it should not become loose after at least 1000 operations of opening and closing.

(d) (i) Nylon Cord : Twin Cord of diameter 2.50 mm (combined) and 275 +/- 5 mm long.
   (ii) Spring : Stainless Steel.

(e) Each Cap should have manufacturer’s identification mark embossed on it in addition to arrow mark. Each cap should be marked with "RD 158178". Month / Qtr. And year of manufacturing should be marked on the cap.

(f) The minimum weight of 10 Safety Caps picked up at random (bare, caps without spring and chords) shall be 80 +/- 5 gms.

(g) Safety Caps shall be moulded using Automatic Injection moulding machines only and not by semi automatic / hand moulding machines. Above requirements to be informed to your respective cap vendors.

(h) If it is deemed necessary the samples of Cap Assembly and or Delrin as well as spring material used would be tested by HPCL in a laboratory of choice and the results so obtained would be final and binding on the.

4. Safety Caps should be obtained only from OITC approved parties.

5. Joint Packing should be procured only from OITC approved parties and should bear manufacturers identification, Quarter and year of manufacturing.

**SPECIAL TERMS AND CONDITIONS**

1. Raw material for Valves shall be tested at regular interval through an independent test laboratory at a frequency which should not be more than once in a quarter. Minimum one sample to be tested for each lot of Raw material prior to manufacturing process.

2. A copy of Test certificate for Independent testing shall be sent along with each consignment of the valves.

Signature :
Seal :
3. Calibration of all testing/measuring equipment should be done as per BIS scheme of testing and Inspection or as advised by the Corporation.

4. Other specifications given in the IS standard and HPCL drawing but not covered in this specification should be followed along with instructions issued by HPCL/BIS from time to time.

5. Punching on the Valve Hexagonal faces shall be clear & strictly in line with the drawing requirements.

MANUFACTURING DEFECTS:

Following defects shall be treated as manufacturing defects for new cylinders:

1. Failure in dimensional checking for L1, L8 & Truncation and other critical dimensions
2. Wrong & illegible punching on Valve Hexagonal faces.
3. Any visible physical damage to Valve body.
4. Safety caps not found as per specifications or manufactured by party not approved by OITC. Only cost of safety caps shall be recovered which shall be Rs. 3/- per piece.
5. Valve “O” ring not found as per specifications or manufactured by party not approved by OITC.
6. Any other defect which in the view of HPC may affect the safety or alter the technical parameter of the valve.

For all S.C. Valves with manufacturing defects, action shall be taken as specified in Guarantee clause.