

BUREAU OF INDIAN STANDARDS
(Western Region Office, Mumbai)

DRAFT PRODUCT CERTIFICATION MANUAL FOR COMMENTS

Our Ref: DDGW Sectt(PCO/RD)

23 Jan 2014

Sub: Preparation & review of draft manuals for product certification

This has reference to CMD circular CMD-1/31 dtd:11 Nov 2013 on the above subject. In this connection, please find enclosed the draft product certification manuals prepared by WRO as indicated in **Annex-I**

Kindly examine the draft product certification manuals and forward your comments on the drafts to the ROs/ BO'S indicated against them in **Annex-I** and a copy of the comments may also be forwarded to at wro@bis.org.in

Last date for comments: **3 Feb 2014**.

Comments, if any, may please be made in the format as given below:

Sl. No.	Name of RO / BO	Clause/ Sub-clause	Paragraph / Figure / Table	Type of comment (General / Technical / Editorial)	Comments	Proposed Change

Note: Separate sheets may be attached in case comments are lengthy and cannot be incorporated in the table.

(Rosy Dhawan)
Sc 'E' & PCO (DDGW Sectt)

DRAFT

MANUAL FOR CERTIFICATION OF LANDING VALVES

IS 5290:1993 (Amendment No 1 to 6)

FORWARD

The present manual attempts in highlighting requirements of Landing valves as per IS 5290 for providing handy and significant information related to the products. It elaborate principle manufacturing processes and desired controls, and further monitoring thereof expected to be exercised by BIS Inspecting Officials (IO) during planned visits to those units and monitoring of BIS Certification Marks (CM) activities. Different tests as contained in the standards and referred standards thereof need be carried out at the licencees laboratory by the visiting, such documentation of manual aims in providing basic inputs and all essential aspects with the expectation of bringing uniformity of vision and enabling adoption of rational practices by concerned BIS officials during their visits for inspections as well as follow of actions.

This document is intended for internal use by BIS inspecting officers who should however do not treat such document as replacement for referred Standards or that of relevant Scheme for Testing and Inspection (STI).

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Approved By.....

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Appendices

- 1) Scheme(s) of Testing and Inspection (Available on BIS Website).
- 2) Marking fee Schedule(s) (Available on BIS Website).
- 3) List of laboratories where samples can be tested(Available on BIS Website).
- 4) BIS testing Charges (Available on BIS Website).

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Section –I

1.0 PRODUCT DESCRIPTION

The landing valves are sometimes also referred to as internal hydrants because these are **usually fitted** inside the buildings for wet hydrant system. These are primarily intended for being installed at the staircase landing at each floor level, from where fire-hose could be laid out by the fire brigade or trained men for fighting fire on the concerned floor. Because of this, the design of these valves has to be compact so as not to cause any obstruction to the passage where these may be installed. Landing valves may be installed in different ways and altitudes and for yielding varying output of water, requiring different shape and sizes. Two types which are mostly used have been covered in IS 5290 . The landing valves when used for sea water should not be made of aluminium alloy. principle buyers are Govt. Depts, CPWD, various Jal Nigam, Municipal Corporations, Public Health Engg., NGOs and allied agencies.

1.1 INDIAN STANDARDS

Latest Indian Standards IS 5290 Specifications for Landing Valves Amendment No 1 to 6 implemented vide CMD-III circular dated 6 June 2013.

SECTION –II

1.2 RAW MATERIALS/COMPONENTS

- 1.2.1 The valve body, bonnet, stop valve, check nut, instantaneous female outlet and blank cap shall be made either of leaded-tin-bronze con- forming to Grade LTB-2 of IS 318 : 1981 or aluminium alloy conforming to 19 designation 4225, 4450 and 4600 of IS 617 : 1975.
- 1.2.2 All aluminium and zinc alloy shall be of die casting only. 4.X.1 Zinc-aluminium alloy (copper 0.5 to 1.5 percent, aluminium 10.5 to 11.5 percent, magnesium 0.015 to 0.03 percent and balance zinc) or stainless steel designation 04Cr17NiMOa con- forming to IS 6529 : 1972. All aluminium and zinc alloy shall be of die casting.
- 1.2.3 The valve spindle shall be made of brass rod conforming to IS 320 : 1980 or IS 319 : 1989 for use with body of leaded-tin-bronze and of stainless steel conforming to IS 6603 : 1972 for use with body of aluminium or zinc alloy or stainless steel.
- 1.2.4 The hand wheel shall be made of mild steel conforming to IS 1030 : 1989 or cast iron conforming to IS 210 : 1978.

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- 1.2.5 Washers, gaskets shall be made of rubber conforming to IS 937 : 1981 or leather conforming to IS 581
- 1.2.6 Gland packing shall be of asbestos thread conforming to IS 4687 : 1980
- 1.2.7 The spring shall be of phosphor wire conforming to IS 7608 : 1987 for copper alloy landing valve and stainless steel wire conforming to IS 6528 : 1972 for aluminium alloy, zinc alloy and stainless steel landing valves.
- 1.2.8 The valve top except the face of flange and the instantaneous outlet **shall be painted fire red of shade No. 536 of IS 5 : 1978**. The outside of instantaneous outlet shall be highly polished. The handwheel shall be painted black. Paints shall conform to IS 2932 : 1974.
- 1.3 Check list for GoL- Annexure-A
- 1.4 The landing valves shall be of two types as under:
- a) Type A - Landing valve single outlet
 - b) Type B - Landing valve double head with double outlet

SECTION -III

LIST OF MACHINERY

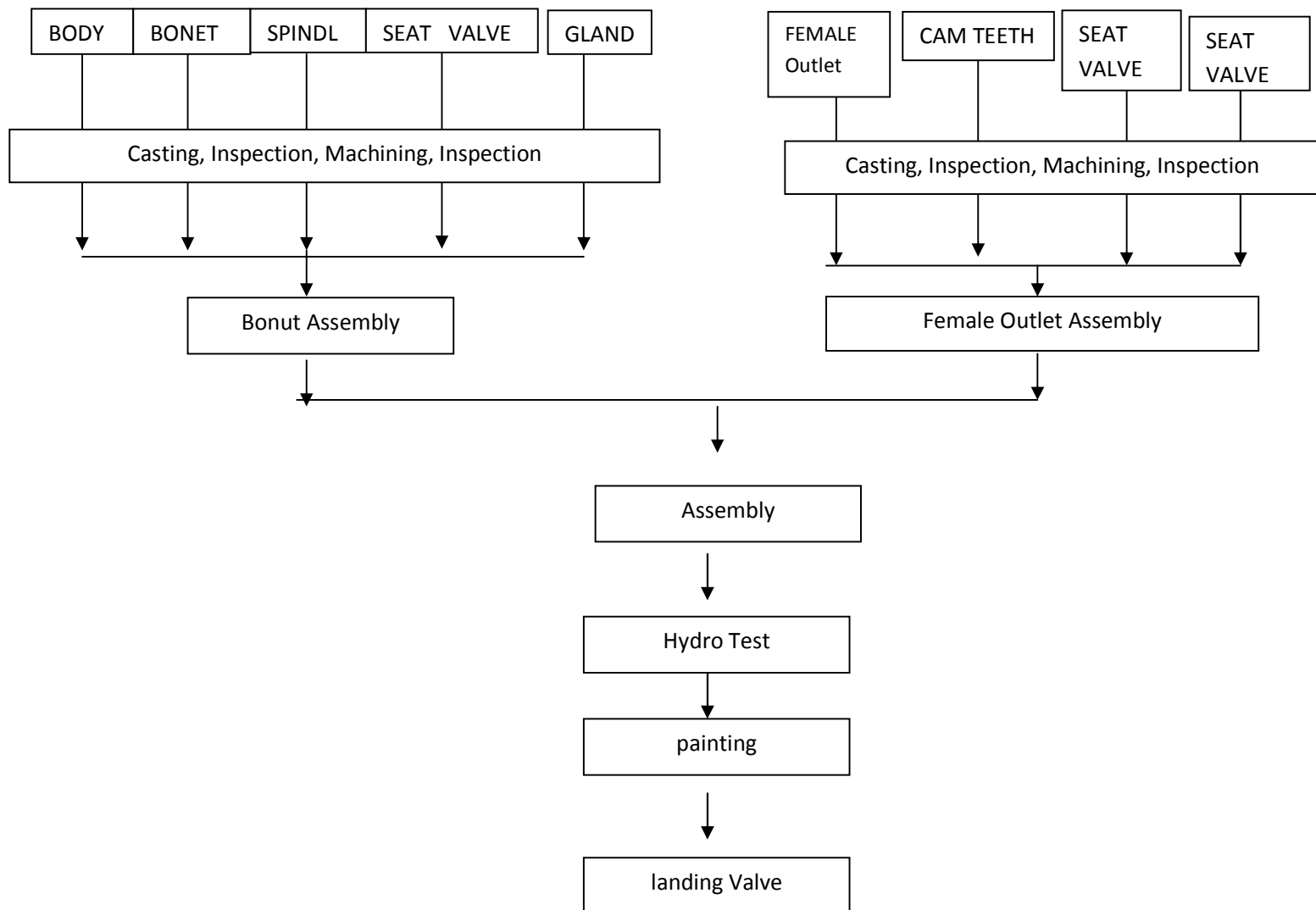
<u>S.N</u>	<u>MACINARY</u>	<u>Make</u>	<u>Range /List Count</u>	<u>Remarks</u>
1	Air Compressor			
2	Flexible soft grinder			
3	Buffing machine			
4	Argon gas welding			
5	Double Wheel Tool Bench Grinder			
6	Hydrostatic pump			
7	Emery Belt			
8	CNC lath machine			
9	LATHE MACHINE Of different centre Height and Length			
10	Inside Caliper			
11	Outside Caliper			
12	Flow Testing Pump and Engine of adequate rating			
13	Petrol driven centrifugal pump			

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SECTION –III

MANUFACTURING PROCESES & CONTROLS



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SECTION –IV

Certification Criteria

- 4.1 Identification of critical requirement:
 - i. Dimensional requirements
 - ii. Water Tightness Test
 - iii. Hydrostatic Test
 - iv. Raw material Test
- 4.2 STI: www.bis.org.in/intranet
- 4.3 Marking fee rates: Available on bis website www.bis.org.in.
- 4.4 Grouping Guidelines: Not Available
- 4.5 Manner of sealing of sample: Packed in carton/ bag and wax sealed.
- 5.5 Remnants are returnable/ to be de shaped before disposal.
- 5.6 Licence is to be granted for Type-A and Type-B. Samples are being drawn separately for both the types.

SECTION –V

INSPECTION AND TESTING

- 5.1 Packing materials: Carton packed.
- 5.2 Status of Test Facility: As per latest information available in BIS website www.bis.org.in
- 5.3 GOL will be based on Independent Test basis.
- 5.4 Details of Test to be carried out in Factory:
 - i. Dimensional requirements
 - ii. Water Tightness Test
 - iii. Hydrostatic Test
 - iv Raw Material Test

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Annex A

LIST OF DOCUMENTS TO BE ATTACHED WITH APPLICATION

No.	Title of Document	Page
1	Check-list	
2	In case the application is filed under “simplified Procedure”, the test report(s) in original from BIS or its recognized laboratories for all the requirements of the product and, where applicable, of raw material(s)/ component(s)	
3	Document of Central/State Government (e.g. Registration Certificate, Memorandum of Articles, etc) authenticating the address and purpose of the establishment of the manufacturing unit for which the application is made for grant of licence.	
4	In case the applicant applies as SSI unit, copy of valid Registration Certificate from the Local/State authority or from a Chartered Accountant?	
5	In case the application is signed by the authorized signatory of the applicant, authorization letter from CEO in the name of the authorized signatory.	
6	Process Flow-chart covering all processes of manufacture (from raw material to finished product stage), including details of in-process controls at each stage, even for those stages which have been outsourced ?	
7	Complete list of manufacturing machinery, clearly indicating the name of the machinery, the details of the process for which it is used, its capacity and quality	
8	In case some of the manufacturing processes are outsourced, provided details of such processes and the controls exercised by you before receipt of such material/components, etc. Also attach an authenticated copy of the agreement.	
9	Complete list of testing facilities, clearly indicating the name of the equipment, the test for which it is used (mention clause No. of the Indian Standards), range / least count/ accuracy of the test equipment, calibration status and quality Note- Model lists of testing facilities for some of the Indian Standards already covered under product certification are available on the BIS website and may be referred. However, for other Indian Standards, you are advised to study the relevant Indian Standard(s) and / or contact the concerned Branch Office of BIS for guidance.	
10	Copies of calibration certificates of testing equipment valid at least till 3 months of acceptance of application	
11	Where applicable, consent letter’ from BIS recognized (for requirements which have got to be and/ or are purposed to be got tested from outside lab for which the application does not have in- house test facilities)	
12	Plant Layout clearly indicating location of manufacturing machinery, lab, office, workshop, amenities, storage area, etc., available in the factory premises, with the	

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	application ?	
13	Appointment letter of QC personnel indicating names, experience, qualifications, date of appointment and also attach a copy each of the qualification certificates	
14	Copy each of the test reports/suppliers' test certificates for each of the raw materials/components.	
15	Copy of in-house or independent test report for the product covering all requirements as per the relevant Indian Standard	
16	In case application is under simplified procedure, an undertaking from the applicant on his letter- head that the licence if granted to him shall be put under Stop Marking by BIS if the verification sample(s) drawn during verification visit of the BIS officer prior to grant of licence fail to conform to the Indian Standard. In case the licensee does not take corrective actions, informs BIS and offers two improved lots to BIS for inspection and testing within one month of the date of Stop Marking, the licence shall be processed for cancellation and no further chance would be given to the licensee.	

Annex B

CHECK- LIST FOR APPLICATION TO BE SUBMITTED BY APPLICANT TO BIS WHILE APPLYING FOR BIS LICENCE UNDER PRODUCT CERTIFICATIONS SCHEME OF BIS

The following check-list is required to be submitted with all the applications for grant of BIS licence under the product certification Scheme of BIS. Please tick (✓) in the relevant box.

Whether applied under: Simplified procedure ☐
Normal procedure ☐

No	Check-point	Requirement	Observations	Page No.
	General	Is the application form completely filled?		
1.	Name & Address	Is the name and address of applicant (manufacturing unit applying for licence) same in the application as given in the attached document of central/State Government		
2.	Status of applicant (Manufacturing Unit)	a. Has it been indicated whether the applicant is a large scale or small scale unit? b. In case the applicant is a small scale unit, does the applicant hold valid Registration Certificate from the Local/ State authority or from a chartered Accountant, and is the certificate attached c. Has it been indicated whether the applicant is a public sector or a private sector company?		
3.	IS No. & Varieties	A. Has applicant recorded the applicable Indian standard with correct title of the standard? B. Where applicable, has applicant mentioned designation, grade, type, variety, size, etc., of the product for which the BIS licence is sought?		
5.	History	a. Where applicable, has the applicant provided information		

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		regarding earlier BIS licence(s) held by them and/ or cancelled in the past?		
		b. Where applicable, has the applicant provided information regarding BIS licence currently held by them?		
6.	Signature	a. Is the application signed by the CEO of the applicant?		
		b. In case the application is signed by a person other than the CEO, is the application signed by the authorised signatory of the applicant and his authorization is attached by the authorized signatory?		
7.	Machinery	a. Does applicant possess requisite manufacturing infrastructure to manufacture the product as per the Indian standard?		
		b. Is installed capacity of production indicated in the application?		
		c. Does applicant have all machineries installed as per manufacturing process at the applicant's manufacturing premises?		
		d. If answer to 'c' above is no, does the applicant outsource any of its manufacturing processes and possesses valid agreement(s) with other manufacturing units for the outsourced processes and traceability of material, thus produced, etc.?		
		e. If answer to 'd' above is yes, the applicant has any control over such outsourced activity? Are these outsourced process will ensure testing the quality of final product for all requirements at the applicant's manufacturing premises?		
8.	Test equipment & calibration	a. Does applicant possess requisite test facilities in- house as per the relevant Indian standard at its factory address?		
		b. Are valid calibration certificates for relevant test equipment attached are complete and valid at least 3 month after the date of recording?		
		c. If reply to 'a' above is no, does applicant have arrangement with a BIS recognized outside lab for testing of the requirements for which it does not possess test facilities in-house? Is the consent letter as attached by applicant in this regard in order? Note : Relaxation in in-house test facilities may be allowed on submission of proper justification for requirements which are obligatory to get tested and for which frequency of testing, as prescribed in the relevant scheme of testing and inspection(STI) ,is, Normally, One month or more.		
9.	QC Personnel	Does the applicant employ qualified and experienced Quality Control (QC) personnel on permanent basis and possess documentary evidence to establish the same? Are the copies of the qualification certificates and appointment letters of the QC personnel are in order.		
10.	Raw Materials &	Where ever requirement for raw materials/ components used		

	components	in the manufacturing of the product are specified in the standard, do test report/ suppliers' test certificates, as submitted by the applicant show that these requirements are met as per the Standard ?		
11.	Plant Layout	Does copy of the plant (applicant manufacturing premises) layout clearly indicate locations of manufacturing machinery, Laboratory, Office, Workshop, Amenities, Storage area etc.		
13.	Test Report(s)	a. Is the attached test reports of in- house or from independent laboratory cover all requirements of the Indian standard and is passing in such requirements?		
		b. In case the application is filed under "simplified Procedure" is the test report(s), in original, as submitted a) from BIS or its recognized laboratories? b) the test report is not older than one month from the date of submission of application, c) Covers all the requirements of the standards & d) passes in all such requirements		
14	Undertaking	In case application is under simplified procedure, an undertaking shall be obtained from the applicant on his letter head that the licence if granted against his application shall be put under Stop Marking by BIS if the verification sample(s) (any sample including the long duration test samples) drawn during visit of BIS officers prior to grant of licence fail to conform to the requirements of relevant Indian Standards. The licensee shall take necessary corrective actions and inform the same to BIS along with samples (of rating/size/variety which facilitates verification of corrective actions on the reported failures) manufactured after taking the corrective actions. The resumption of Marking in such cases shall be allowed only on the basis of independent satisfactory test reports of the fresh samples offered (including long duration tests where failure were in long duration tests). In case the fresh samples drawn by BIS for independent testing fails, or the licence does not inform corrective actions taken and does not offer improve samples within one month of the date of stop marking, the licence shall be processed for cancellation and no further chance would be given to the licensee.		