



enter the world of fire & safety equipments...



ISO 9001:2008
Certified Company

Manufacturers:

ESSEL VALVES PVT. LTD.

G-1310/B, Metoda G.I.D.C,
Near Kadwani Forge, Kishan Road,
Kalawad Road, Rajkot - 360 021, Gujarat, India.
t/f: +91 02827 287097
m: 098250 65436
e: info@esselfire.com
w: esselfire.com



COMPU KRUTI - 97245 00173





product family

we don't take chance....



Note



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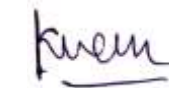
List of Machinery & Testing Facilities **24**



QUALITY POLICY

“ESSEL VALVE PRIVATE LIMITED
HAS AIM TO SATISFY IT'S CUSTOMERS
BY MANUFACTURING AND SUPPLYING
OF ALL PRODUCTS OF COMMITTED QUALITY
AT COMPETITIVE PRICES,
WITH PROMPT SERVICES”

Managing Director

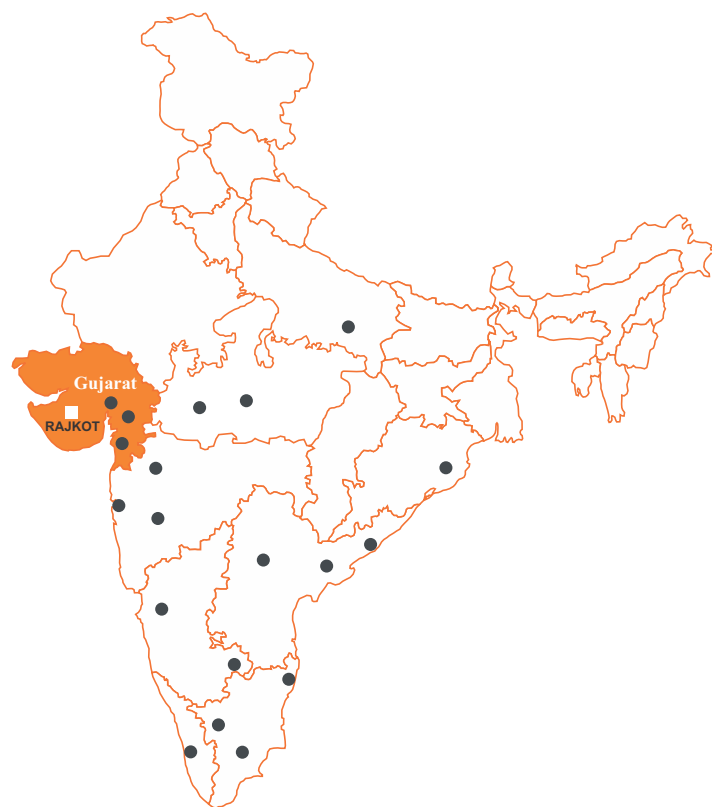


KALPESH M. MEHTA

Place: RAJKOT
Date: 01.01.2016



Registered Office & Works:
ESSEL VALVES PVT. LTD.
G-1310/B, Metoda G.I.D.C,
Near Kadwani Forge, Kishan Road,
Kalawad Road, Rajkot-360 021, Gujarat, India.
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Dealers & Distributors

- Ahmedabad
- Allahabad
- Bangalore
- Baroda
- Belgaum
- Bhopal
- Bhubneshwar
- Chennai
- Coimbtore
- Hyderabad
- Indore
- Kochi
- Madurai
- Mumbai
- Nashik
- Pune
- Surat
- Vijaywada
- Visakhapatanam

Years of Establishment: Incorporated as **ESSEL VALVE PVT. LTD.** in 2007

Total Capital Investment: Rs. 270 LACS (US \$ 4,15,000)

Total area of works: 27000 Sq. Ft.

Registration Number:

CORPORATE IDENTITY NUMBER	: U 29100GJ2010PTC060344
E.C.C. NO.	: AACCE3664MEM001
S.S.I. REGISTRATION NO.	: 240091105419 Dtate 13.9.2010
N.S.I.C. REGISTRATION NO.	: NSIC-GP-RS-PMT-GUJ-E073
TIN REGISTRATION NO.	: 24092401101 Date 7.5.2010
CENTRAL SALES TAX REG. NO.	: 24592401101 Date 7.5.2010
INCOME TAX NO.	: AACCE3664M

ESSEL VALVE PVT. LTD. Manufactures a vast range of products. There is more to this statement than meets the eye. True, we have evolved as a manufacturer of repute over the years and have constantly added new products to our range, which has resulted in a vast range. But our basic intention was never to be a ' Jack of all and master of none'. We have always kept our design & development on their toes, even when a product has been positively accepted in the market, we have made changes for the better instead of resting on our laurels.

All the time of inception, our aim is in the field of Landing Valves, Hose Coupling, Hose pipe etc. (Iron such as and Valves) Every effort was made to adhere to the relevant National and International Standards.

The company emphasize on Quality Assurance and Design Parameter. It is proud of the company to set up a Computer Aided Design (CAD) System. The Company has on its rolls well experienced and Qualified Engineers heading the Departments of Design, Quality Assurance & Production with dedicated team of Technical Staff working under them.

Foundry Unit

ESSEL VALVE PVT. LTD. has its own foundries. A brief details for the various units are as under;

Materials (ASTM GRADES)

- Gunmetal**
LTB2
- Aluminum**
LM6
- Stainless Steel**
(High and Low temp. service)
CF8, CF8M, CF3, CF3M, CF8C.

Production Capacity:

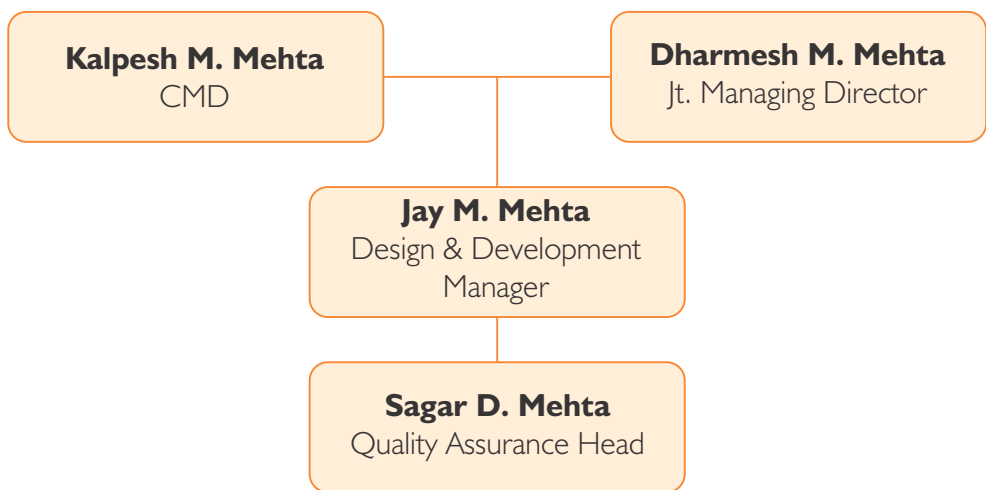
- Sand Cast Foundry:**
270 Tons per annum
- Steel Foundry:**
180 Tons per annum

Quality assurance is ensured by a written assurance program that include the following testing and inspection procedure:

- Chemicals** - by a spectra meter
- Mechanical** - by UTM

Materials - Gunmetal, Brass, Stainless Steel, Aluminum, Cast Iron

- a) Foundry for non farours materials such as Gun Metal, 85:5:5:5, NAB - II, AB-II, LTB-II, etc.
- b) Cupola furnace in 15" & 18" size for cast iron with capacity of tons per annum.
- c) Stainless Steel Material Such as CF8, CF8M
- d) Aluminum Such as LM6 with pressure die cast.



Brief Bio-Data of Directors:

- Person: **Mr. Kalpesh M. Mehta**
Position: CMD
Age: 45 years

After the graduation Mr. Kalpesh M. Mehta started company and has taken responsibility of the new product development, design and expansion of production facilities. He is the principal guiding force of the technical side of the company. He became Managing Director of the company.

- Person: **Mr. Dharmesh M. Mehta**
Position: Jt. Managing Director
Age: 47 years

Mr. Dharmesh M. Mehta is mainly responsible for our Production Activity, Simultaneously he gained the experience of production management and financial control. He is responsible for the growth of the company through his management and strategies.

Brief Bio-Data of Key Persons:

- Person: **Mr. Jay M. Mehta**
Position: Design & Development Manager
Age: 26 years
Qualification: B.E. in Chemical Engineer

Since 2007 Mr. Jay M. Mehta has been working in Design Department of industrial valve in various reputed organisations. With his ability and caliber he has executed several import substitutes designs of products. Through his experience he has achieved a higher level in the organisation and heads a well equipped modern design office with AutoCAD program and electronic plotter facilities.

- Person: **Mr. Sagar D. Mehta**
Position: Position Quality Assurance Head
Age: 25 years
Qualification: B.E. in Chemical Engineer

Since the completion of education Mr. Sagar D. Mehta has been working in valve industries and has an experience of 9 years in production, planning, inventory and inspection department. With his strict Quality Assurance measure adherence the Quality Assurance Department has gained and maintained the quality.

Oblige Type Landing Valve



Product Code	Description	Inlet Sizes	Outlets	Material of Construction
EV-09	1 1/2" (38mm) Size	Flanged inlet as per ANSI Flanged inlet as per PNI6	2 1/2" Female Instantaneous	Gun Metal and Stainless Steel
	2 1/2" (63mm) Size	BSP Male Threaded inlet NPT Male Threaded inlet	2 1/2" NH (M) 2 1/2" NST (M)	



Double Controlled with Double Outlet Landing Valve

Product Code	Description	Material of Construction
EV-18	2 1/2" (63mm) Size	Gun Metal and Stainless Steel



Product Code	Description	Material of Construction
EV-27	1 1/2" (38mm) Size	Gun Metal, Stainless Steel Brass & Aluminum Alloy
	2 1/2" (63mm) Size	
	3" (70mm) Size	

Manufacturing Range



ESSEL RRL Hose

Hose:	Essel RRL Hose (Reinforced Rubber Lined Hose) Conforming to IS : 636/1988 Type-A, ISI Marked
Application:	This RRL Hose is used for water delivery Purpose in Fire-Fighting & Civil Engineering Applications etc.
Construction:	
Jacket:	Circular woven jacket made from a special blend of cotton & synthetic yarn with high abrasion and heat resistance. Jacket is also treated with suitable rot proofing agent.
Reinforcement:	A thin fabric reinforcement bonded by a special adhesive.
Rubber Lining:	A rubber inner lining with suitable rubber compound which gives flexibility, durability & better resistance.
Standard Length:	7.5 Mtrs, 15 Mtrs, 22.5 Mtrs & 30 Mtrs.
End Connection:	As per customer requirements
FEATURES:	Compact, Flexible & Light weight. Abrasion resistance Ability to withstand high operating & back pressure. Reinforced Rubber Lined (RRL) Unaffected with mild dew



ESSEL CP Hose

Hose:	Essel CP Hose, Conforming to IS : 8423/1994, ISI Marked.
Application:	This hose is used for water delivery purpose in Fire-Fighting.
Construction:	
Jacket:	Circular woven jacket made from a special synthetic yarn.
Rubber Lining:	An ultra thin layer of rubber lining with suitable rubber compound which ensure controlled percolation.
Standard Length:	7.5 Mtrs, 15 Mtrs, 22.5 Mtrs & 30 Mtrs.
End Connection:	As per customer requirements
FEATURES:	Compact, Flexible & Light weight. Low friction loss Abrasion resistance Ability to withstand high operating & back pressure.



Manufacturing Range



Two way Inlet Breeching

Tow Way Fire Brigade Inlet With, 2 Nos. Spring Loaded Nrv And Rubeer Cap With Chain.

- 1) Body: Cast iron to IS: 210 Gr. FG200.
- 2) Non return valve: Gunmetal LTB-2 or Stainless steel.
- 3) Inlet: 100 mm NB Flanged inlet.
- 4) Flange size: # PCD-180 mm, OD-220 mm, ID--100 mm.
- 5) No. of hole: # 04 Nos. Dia of hole: # 19 mm.



Three way Inlet Breeching

Three way fire brigade inlet with, 3 nos. Spring loaded NRV and rubber cap with chain.

- 1) Body: Cast iron to IS: 210 Gr. FG200.
- 2) Non return valve: Gunmetal LTB-2 or Stainless steel.
- 3) Inlet: 100 mm NB Flanged inlet.
- 4) Flange size: # PCD-180 mm, OD-220 mm, ID--100 mm.
- 5) No. of hole: # 04 Nos. Dia of hole: # 19 mm.



Four way Inlet Breeching

Four Way Fire Brigade Inlet With, 4 Nos. Spring Loaded Nrv And Rubeer Cap With Chain.

- 1) Body: Cast iron to IS: 210 Gr. FG200.
- 2) Non return valve: Gunmetal LTB-2 or Stainless steel.
- 3) Inlet: 150 mm NB Flanged inlet.
- 4) Flange size: # PCD-242 mm, OD-280 mm, ID--150 mm.
- 5) No. of hole: # 08 Nos. Dia of hole: # 19 mm.



ESSEL Heavy Duty Hose Reel Drum

Hose Reels for firefighting purpose, of excellent quality and performance are manufactured in general as per IS: 884. Swinging vertical.

Material of construction: M.S. Sheet 18 SWG and non-corrosive working parts.

Hose: Rubber Water Hose As per IS: 12585

Shut off Nozzles: ABS/Gunmetal/SS304

Vertical item Description: Fire Hose Reel Swinging type as per IS:884 to accommodate 30mtrs 19mm/25mm, Rubber / PVC Braided Hose with Hose & GM/SS/PVC Shut off Nozzle.

Stored Pressure ABC Dry Powder Fire Extinguisher



Dry Powder Multipurpose Fire Extinguisher

Suitable for classes 'A' 'B' 'C' Fire the use of Multi Purpose dry powder fire extinguisher “ESSEL” Brand provides an ideal multi purpose unit for virtually all common fire risks and especially suited to **paper, cloth any electrical fire** and **LPG Gas, Liquid fires** such as **chemicals, petroleum, oils** and **paints**. Dry powder provides a swift fire fighting action and prevents the re-ignition of flames. Dry Powder Fire Extinguishers are supplied in both cartridge and stored pressure types in **1Kg., 2Kg., 4Kg., 6Kg. & 9Kg.** capacity.

Technical Specification

MODEL	MI-1/ABC SP	MI-2/ABC SP	MI-4/ABC SP	MI-6/ABC SP	MI-9/ABC SP
Capacity (Kg)	1 Kg	2 Kg	4 Kg	6 Kg	9 Kg
IS Specification		15683	15683	15683	15683
Type of Extinguishing Media	MAP 50% Dry Powder IS 14609	MAP 50% Dry Powder IS 14609	MAP 50% Dry Powder IS 14609	MAP 50% Dry Powder IS 14609	MAP 50% Dry Powder IS 14609
Propellant	Pressurised with N2 gas	Pressurised with N2 gas	Pressurised with N2 gas	Pressurised with N2 gas	Pressurised with N2 gas
Minimum Effective Discharge (%)	85%	85%	85%	85%	85%
Minimum Jet Length (mtrs.)	More than 2 mtr.	More than 2 mtr.	More than 2 mtr.	More than 2 mtr.	More than 2 mtr.
Discharge Time (Sec.)	More than 8 Sec.	More than 8 Sec.	More than 13 Sec.	More than 13 Sec.	More than 13 Sec.
Hydraulic Test Pressure (Kgf/Cm2)	35 Kg	35 Kg	35 Kg	35 Kg	35 Kg
Operating Position	Upright	Upright	Upright	Upright	Upright
Charged Pressure (Kgf/Cm2)	14	14	14	14	14
Operating Temperature Range (°C)	-20 to + 55	-20 to + 55	-20 to + 55	-20 to + 55	-20 to + 55
Operating Valve	Squeeze Grip Type With Nozzle	Squeeze Grip Type With Nozzle	Squeeze Grip Type With Dischsrg Hose & Nozzle	Squeeze Grip Type With Dischsrg Hose & Nozzle	Squeeze Grip Type With Dischsrg Hose & Nozzle
Fire Rating	1A-8B	1A-8B	2A-21B	3A-34B	3A-34B

Total fire protection against all fire risks:

A Wood, Paper,Cloth **B** Oil, Kerosene, Petrol Paints etc. **C** LPG Gas etc. **⚡** Electrically, Started Fires

Easy to use: The “ESSEL” ABC stored pressure type fire extinguisher has Squeeze grip operating head which is fully comfortable & easy to use

Mobile Foam Units



The ESSEL HI-COMBAT MFU 100 Mobile Foam Unit is a self-contained cart designed for rapid deployment of foam concentrate to flammable liquid fires or chemical spills. Ease of handling and mobility, combined with exceptional fire fighting capability, make the ESSEL MFU 100 ideal for protection of oil storage and loading terminals, process areas, paint and solvent stores, engine rooms and similar high risk areas.

Requiring only connection to a pressurized water supply, the MFU 100 provides a compact and highly efficient firefighting unit for rapid response with minimum manpower requirements.

With numerous equipment configurations available, the MFU 100 is highly flexible in use and allows the firefighter to select the most appropriate combination for the specific risk.

The ESSEL HI-COMBAT MFU 100 unit is suitable for use with all types of foam concentrate and is particularly effective when used with 3% aqueous film forming foams.

- 100 liter MS / SS / fiberglass tank, mounted on steel chassis with solid rubber wheels and Castor wheel. ESSEL 225 foam Inductor.
- Foam nozzle FB 5X or FB 2X.
- Provision to keep Two 30 meter x 2 ½” diameter fire hoses (optional).
- Instantaneous British Male Female couplings of Light Alloy or Gunmetal (Chrome plated).
- Steel foam pick-up tube and reinforced PVC hose with quick acting end connection

Inductor	Nozzle	Foam Produced
ESSEL 225	FB 5X FB 2X MED EXP 225	Low expansion Foam Expansion ratio 10: 1 Low expansion Foam Expansion ratio 10: 1 (Longer Jet) Medium expansion Foam Expansion ratio 45: 1 ideal for vapour suppression
ESSEL 450	FB 10X MED EXP 450	Low expansion Foam Expansion ratio 10: 1 Medium expansion Foam Expansion ratio 45: 1 ideal for vapour suppression

Also available in different sizes like 120, 150, 200, 250 etc. and configurations like SS 304, SS 316, FRP etc. Please contact for specific requirements.

➤ Portable 2 Inlet Monitor



Portable Water Monitor:	1000-2000LPM @ 7 kg/cm ² .
Capacity:	1000-2000 LPM @ 7 kg/cm ² .
Inlet Connection:	2 x 63 mm male instantaneous coupling with NRV confirming BSS/IS dimensions.
Nozzle:	Hollow Jet / Stream Cum Fog / Spray Rattern.
H. / Vertical Rotation:	Manual for horizontal & Enclosed hand wheel driven worm gear for vertical rotation.
Horizontal Rotation:	180 deg.
Vertical Rotation:	From 30 to 90 deg. above horizontal.
Stand:	Fold way ground base with hardened steel ground spikes.
Nozzle Flow:	1000 - 2000 LPM @ 7 kg/ cm ² pressure.
Horizontal Throw:	45 m @ 7 kg./ cm ² .
Vertical Throw:	25 m @ 7 kg./ cm ² , Spray angle: 120 deg.
Weight:	Approx 20 kg. for Monitor & 5 kg. for Nozzle.

Special Features:

- a) Provision to dismantle in two parts for ease of carrying / Deck mounting.
- b) Automatically adjust to change in pressure and maintain throw.

Material of Construction:

Swivel joints:	Hard anodized aluminum alloy.
Elbow:	Hard anodized aluminum alloy.
Water way corrosion protection:	Powder coat inside & outside.
Nozzle:	Hard anodized aluminum alloy.
Barrel pipe:	Hard anodized aluminum alloy.
Painting:	Fire red enamel paint is-5 (1978), Shed 536 (two coats), Powder coating (Int. Ext.)

➤ Portable Ground Water Monitor
with 02 inlets
63mm coupling with NRV



Specification:

- Portable lightweight Ground monitor suitable for ground operation.
- Monitor will be made of Aluminum Alloy (anodized), turbulence free waterways S.S. ball bearing type swivel joint.
- Monitor will have arrangement for two inlets of 63mm male instantaneous coupling.
- Monitor will be fitted with Non-AIR Aspirating type jet and spray nozzle having flow capacity of 3500 LPM.
- Flow rate will be of Minimum 2400 LPM at 7kg/cm² pressure when used as a portable monitor.
- The water nozzle shall have jet, spray and fog delivery capability. The complete monitor assembly shall be light in weight and capable of operation by 1 fireman
- Monitor generally as per IS: 8442.
- Each monitor shall be clearly and permanently marked with manufacturer's name or trade mark, year of manufacture, capacity/flow rate etc.
- The entire assembly shall be hydraulically tested to a pressure of 21 Kg/cm² for 5 minutes without any leakage. Certificate of hydro testing shall be provided along with the delivery of material.
- Monitor will be mounted on folding stainless steel legs having carbide tipped spikes to provide better stability on hard surfaces such as concrete and asphalt.
- Monitors shall be painted with fire red colour confirming to IS: 5 shade no. 536 and the paint Shall confirm to IS: 2932

Manufacturing Range



Water Monitor
as per
IS:8442



Water Foam Monitor
as per
IS:8442



Trolley Mounted Water Monitor
with 02 Inlet
63mm Coupling



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Manufacturing Range



Fog Nozzle (G.M.) having arrangement of jet, high pressure fog and complete shut off with 63mm male inst. Inlet, duly chrome plated as per IS: 952.



Triple Purpose Nozzle (G.M.) (Universal branch pipe) having arrangement of jet, fine spray and shutoff with 63mm male inst. Inlet, duly chrome plated as per IS: 2871



London Pattern (Hand Controlled) Nozzle (G.M.) having arrangement of Jet, Spray, Adjustable water curtain and shutoff with 63mm male inst. Inlet, duly chrome plated.



Revolving Nozzle (G.M.) with 63mm male inst. Inlet duly chrome plated as per IS:906 (Flange Connection also available)



Multi Purpose Spray Nozzle (G.M) for Water / Foam Spray having arrangement of Jet, fine spray, fog, complete shutoff with adjustable flow output with 63mm male inst. Inlet duly chrome plated. (ELKHART DESIGN)



Jumbo / Mayura Curtain Nozzle capable of giving 180 deg. Curtain spray to 20' to 25' feet height with 63mm G.M. male inst. Inlet.

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Manufacturing Range



Diffuser Nozzle (G.M.) Navy Type Nozzle with 63mm Male or Female inlets having arrangement of Jet, spray and shutoff.



Collecting Breech (GM) having 1 no. 63mm Female Inst. Inlet and 2 nos. 63mm Male Inst. outlet. As per IS:905



Dividing Breech (G.M.) having 1 no. of 63mm Male Inst. Inlet & 2 nos. 63mm Female Inst. Outlet as per IS:905



Controlled Dividing Breech (G.M) with Control Valve having 1 no. 63mm Male Inst. Inlet & 2 nos. 63mm Female Inst. Outlet with control.



Double Male Adaptor (G.M) Inst. of 63mm as per IS



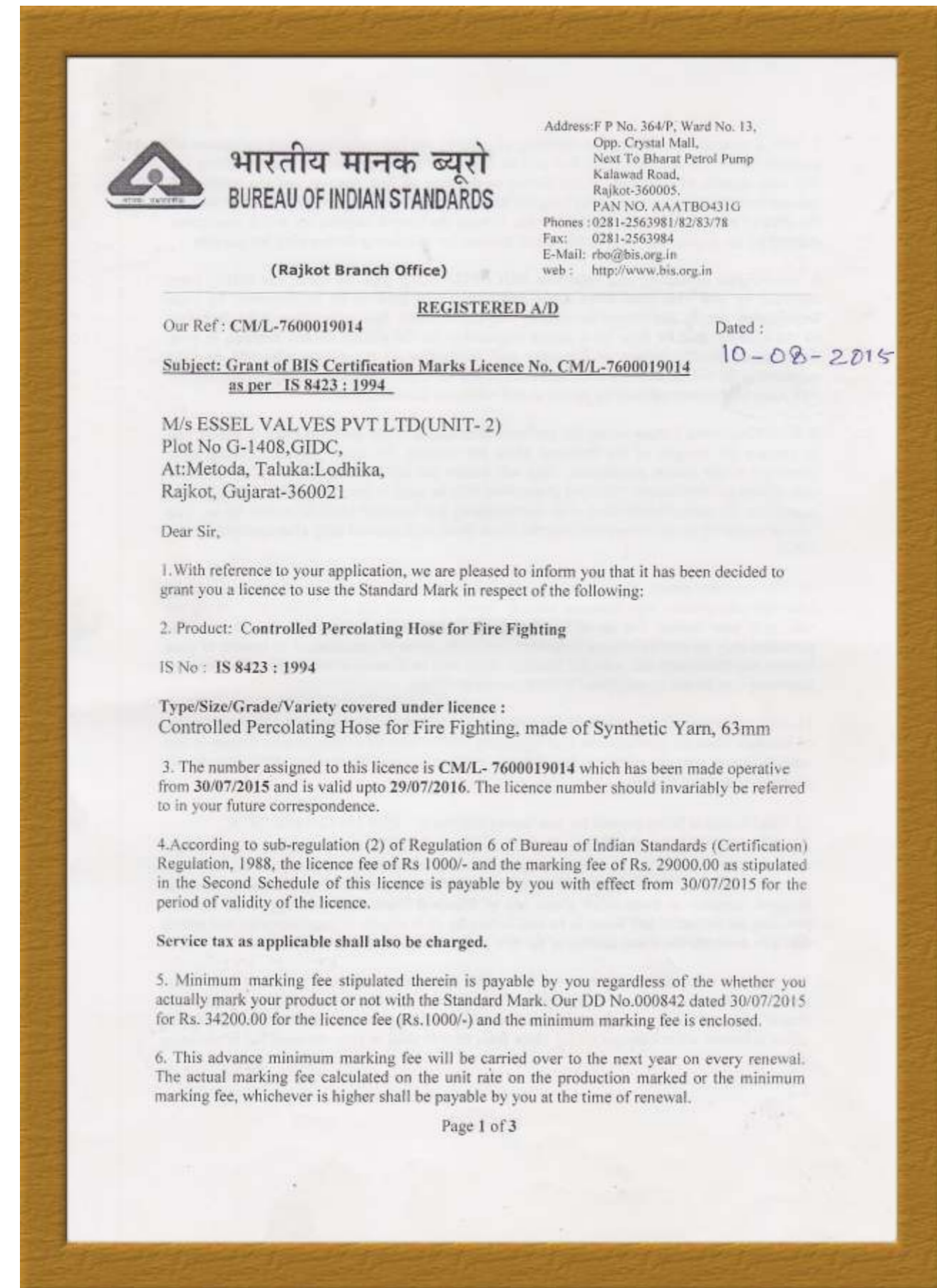
Double Female Adaptor (G.M) Inst. of 63mm as per IS




Foam Making Branch Pipe FB5X – Made from Aluminium Alloy with 63mm G.M. Male Inst. Inlet with Pickup tube – 225 LPM



Certification





भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS

Address: 1st floor 'NSIC Administrative Building,
NSIC Campus, Aji Industrial Area,
Bhavnagar Road, Rajkot -360003
PAN NO. AAATBO431G

Phones: 0281-2385157, 2385159, 2385160

Fax: 0281-2387469
E-mail: rbo@bis.org.in
Web: http://www.bis.org.in

(Rajkot Branch Office)


ATTACHMENT TO LICENCE NO. CM/L- 7552175

CML NO	NAME OF THE LICENSEE WITH ADDRESS	PRODUCT	IS NO
7552175	ESSEL VALVES PVT LTD, G-726, AT METODA GIDC, KALAWAD ROAD, DISTRICT RAJKOT GUJARAT-360005	Fire hose delivery couplings, branch pipe, nozzles and nozzle spanner	IS 903: 1993

ENDORSEMENT NO. 14 Dated 02-04-2015

Renewed for a further period of one year from First April Two Thousand and Fifteen to Thirty First March Two Thousand and Sixteen

Other terms and conditions of Licence remain the same.


 (S.CHATURVEDI)
 SCIENTIST F & HEAD

Certificate of Registration



PROGRESSIVE

*The Governing Board of
Progressive International Certifications Limited
hereby grant to:*

ESSEL VALVES PRIVATE LIMITED

Address to which this Certificate refers:

**G - 1310/B, METODA GIDC, NEAR ELSA POWER, KISHAN ROAD,
KALAWAD ROAD, RAJKOT - 360021, GUJARAT - INDIA.**

(Here in after called the Registered firm) the right to be listed in the Directory of Registered firm in respect of the services listed below. These services shall be offered by the Registered firm at or from only the address given above in accordance and compliance with

**QUALITY MANAGEMENT SYSTEM
ISO 9001:2008**

Approved Scope to which this Certificate refers

**MANUFACTURER, EXPORTER OF LANDING VALVE, HOSE COUPLING,
HOSE PIPE AND ALL TYPES OF FIRE FIGHTING EQUIPMENTS.**

Registration No.: PICL/QMS/0316/7506
 Certificate Issue Date: 28.03.2016
 1st Surveillance: 03.2017

Certificate Expire Date: 27.03.2019
 2nd Surveillance: 03.2018


 Head of Certificate



PROGRESSIVE

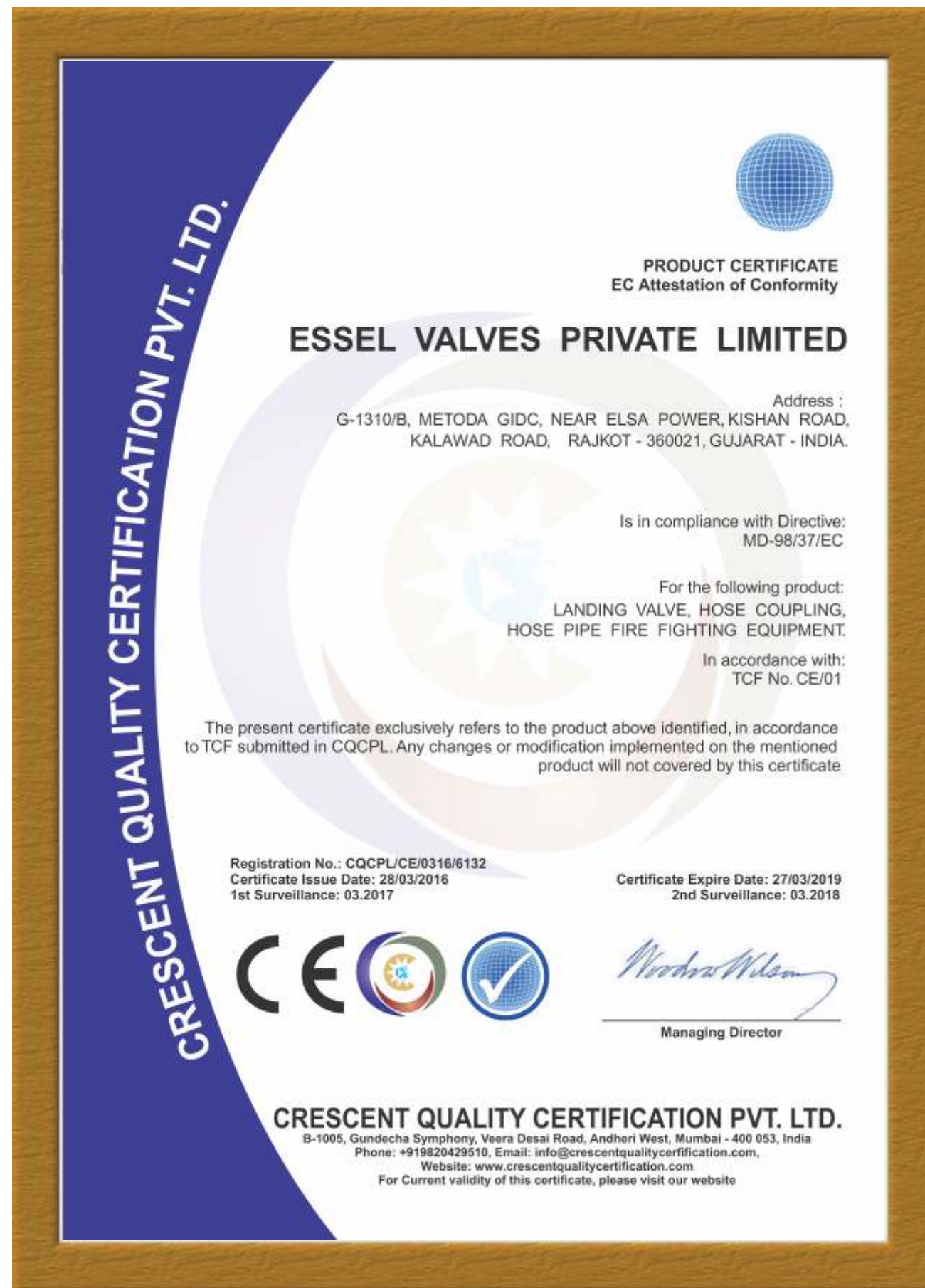


QM 005



This Certificate of Registration is granted subject to the Regulations approved by the Board.
PROGRESSIVE INTERNATIONAL CERTIFICATIONS LTD.
 Prakruti, Plot No. 03, Sector 21 Kharghar, Navi Mumbai - 410210, India.
 Ph. +91 8080091139, E-mail: info@progressiveindia.com, Website: www.progressiveindia.com
 For current validity of this certificate. Please visit our website

USE OF ACCREDITATION MARK INDICATES ACCREDITATION IN RESPECT OF THE ACTIVITIES COVERED BY
ACCREDITATION INSTITUTE ASSESMENT BODY (EUROPE) CERTIFICATION NUMBER 005



ESSEL VALVE PVT. LTD. is the manufacturer of Fire Fighting Equipments, Our range includes a wide range of products, mainly for application in **Hydrant Systems**.

STANDARDIZATION

All Products are manufactured in accordance with the guidelines set by Indian standards and International Standards.

PROCUREMENT OF RAW MATERIALS

In the manufacturing process we require gun metal and brass ingots, steel casting of various grades, stainless steel round bars, forging, hardware (nuts & bolts), gaskets, paints and also packing materials. We purchase all the raw materials from the approved suppliers.

QUALITY ASSURANCE

All raw materials are checked by our Internal Quality Assurance Department prior to infusion into the manufacturing process. For example, when we receive steel castings and rods, it is checked and then poised on to stores with an "INWARD PASSED" sign and stamp, if it is rejected it is sent back to the supplier with a G.I.R. note.

MACHINING

The raw materials is issued to the machine shop for machining through material requisition slips. valve body, bonnet, valve seat, spindles etc. are machined on CNC machine after which all the components are checked by vernier callipers or micrometers.

IN-PROCESS TESTING

If it is found to be OK dimensionally and visually, the valve body and bonnet are sent for hydrostatic Testing to the testing yard and other components are sent to the fitting / assembling department. All the bodies and bonnets are tested on Motorised Hydrostatic Pumps or on Hand Operated Pumps. A pressure test is carried out as per relevant world standards. The theory being, when the body or bonnet is under pressure there should not be any leakage or drops of the testing and fluid from any portion of the bodies and bonnets. If there is any leakage observed, it is rejected and sent back to the foundries.

ASSEMBLY

The body and bonnet which are hydrostatically OK are sent to the fitting shop for assembly, duly handled with care so that there are no scratches on the machine surfaces. In the fitting shop, body and bonnets are drilled on drill machine with the help of jigs and fixtures for uniformity and interchangeability by Quality Assurance Department and passed, or sent back.



TESTING

After assembly the new complete valve, is sent for hydrostatic testing again. If no leakage is observed, as per the relevant standards, it is sent to the finishing department.

FINISHING/PAINTING

Here the valve body surface is debarred and finished by sanders and flexible shaft grinders for better appearance and smooth finishing. One coat of corrosion resistant primer (Red Oxide) is sprayed, and if any uneven surface is observed a high temperature putty is used, after that valves are sprayed pored in colour.

They are offered for inspection by the concerned inspectors without Paint, but in a completely assembled stage. After inspection and punched painting is done.

FINAL INSPECTION

After painting, final inspection is done by our Quality Assurance Department / Third Party Inspection Agency, whose responsibility now is to co-relate and check all records relating to the valve concerned. Special attention is paid to co-relate all the serial numbers and in-process quality checks, a valve serial number and then passed on to the packing department.

PACKING

In the packing department all the valves are covered with polythene bags and placed into corrugated box with a bed of grass for non-damage of valves. It is then covered and nailed with a packing note.

Quality Assurance Plan & System / Manual

ACTIVITIES

- Incoming materials-inspection of casting, forging, raw materials, hardware, bars etc.
- Quality Assurance and Inspection of components and sub-assemblies supplied by approved vendors.
- Line inspection of components, sub-assemblies manufactured on the shop floor.
- Final Inspection and Performance Test.
- Inspection of packing and despatch.
- Tools and instruments calibration and maintenance of test standards.
- Maintaining test records and inspection results.

PRODUCT NAME: LANDING VALVE, HOSE COUPLING & BRANCH PIPE

Sr. No.	DESCRIPTION	CHARACTERISTIC	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENTS	ACCEPTANCE CRITERIA
1.0	Incoming Material	-	-	-	-	-
1.1	Body, Bonnet & Coupling	Visual	Surface finishing & marking Logo, Mat, code, Size, Heat No.	100%	PO. & W.I. for receiving inspection	IS 5290, IS 903 Punched on costing
1.2	Round Bars, Castings, Spindle	Visual	Surface finishing Dimensional checkup by Vernier Caliper, measure tape	100%	PO. & W.I. for receiving inspection	IS Standard
1.3	Operator (Hand Wheel)	Chemical Composition	Chemical Analysis	100%	Chemical analysis report of laboratory	Relevant Technical Catalogue
1.4	Fastener	Visual Dimensional	Surface finishing & Square hole	100%	Drawing, PO. & W.I.	Dimensional Drawing
1.4	Fastener	Visual	Dimensional checkup by	Random Stamping	PO. & W.I. for receiving inspection	IS Standard
1.5	Gasket	Fitness Size	Dimensional check up by	Random sampling	PO. Dimensional drawing & W.I.	IS Standard
2.0	In Process Inspection					
2.1	Body, Bonnet, Handwheel all machined parts	Machining Dimensions	Measurement by Vernier Caliper after machining	Random Sampling	Drawing	Drawing
3.0	Inspection & Testing					
3.1	Hydrostatic test of assembled valve	Shell test seat Leakage & gland Leakage	Pressure test by Hydraulic test pump	100%	W.I. for pressure testing	Relevant standard
4.0	Final Inspection					
4.1	Overall dimensions	Dimensions	Measurement by foot rule & measure tape	100%	Dimensional drawing	Drawing
4.2	Surface finishing	Painting finishing	Visual	100%	W.I. for Painting	Illustrated sample
5.0	Packing	Proper packing	Visual	100%	Work instruction for packing	Prevent from Deterioration



Most advanced Manufacturing & Quality Control Systems

List of Machinery Installed

Sr. No.	DESCRIPTION	SIZE Centre x Bed Width x Length	Qty Nos.
1	CNC Machine - GT - 100	Medium Duty	1 No.
2	CNC Machine - XL - 200	Heavy Duty	1 No.
3	Heavy Duty Lathe Machine	15" x 15" x 51/2 ft.	5 Nos.
		10" x 13" x 7 ft.	1 No.
		15" x 13" x 7 ft.	1 No.
		8" x 9" x 6 ft.	2 Nos.
		81/2" x 11" x 51/4 ft.	3Nos.
4	"Makwana" Pillar Drill Machine	25 mm (Drilling Capacity)	3 Nos.
5	"Vipul" Bench Grinder	200 mm	4 Nos.
6	"Neutron" Pencil Hemry Grinder	1 HP	2 Nos.
7	"Wolf" HS-7 Hand Grinder	7"	4 Nos.
8	"Wolf" Bosch Angle Grinder	5"	8 Nos.
9	"Test-Well" HYD. Testing Pump	70 Kg Pressure	5 Nos.
10	"BTH" Copper Rectifier Welding Machine	600 Amp.	3 Nos.
11	Hydraulic Trolley	1 TONE	1 Set
12	Hand Operated Trolley	500 Kg	4 Set