

Introduction :

AOV International is one of the world's leading manufacturer of community Deep/ Shallow well water hand pumps. Our pumps conform to the required relevant National and International standards. We are an ISO9001:2000 certified company by International Certifications Services Accredited by Joint Accreditation System of Australia and New Zealand for the manufacture of Hand pumps and spares thereof.

We are manufacturing a wide range of deep well and shallow well hand pumps, which includes the most popular India Mark II, India Mark III, India Mark II extra deep well hand pumps, as per relevant Bureau of Indian Standards and the Afridev and U3 modified deep well hand pumps as per relevant SKAT HTN Switzerland specifications.

The hand pumps are positive displacement lift pumps with zero suction head as the cylinder is submerged under water level of bore holes/ open well as the case may be.

We can offer hand pumps for lifting water from upto 90 meters of depth. The pumps can also be installed on open wells. Adequate well sealing at the time of installation of the pumps, ensure against borehole water contamination.

With minor modifications, the pumps can be motorized and also modified to force lift water upto heights of 15 meters to overhead tanks as measured from the ground level.

The pumps are steel fabricated hot dip galvanized and are easy to install and with low maintenance costs.

Our hand pumps are being exported world wide to over 35 countries of Asia, Africa, Australia, Americas and Europe.

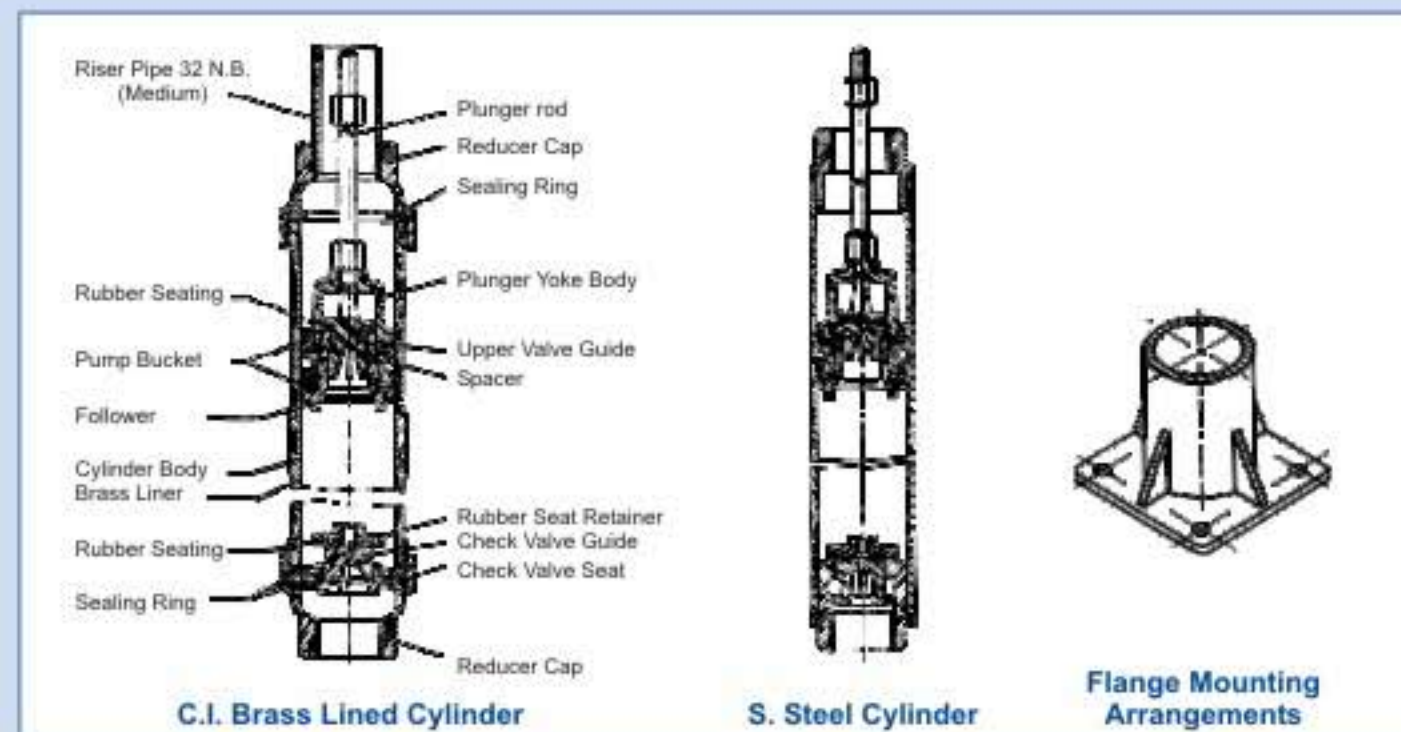
We are committed to quality and total customer satisfaction.



India Mark-II Deep Well Handpump

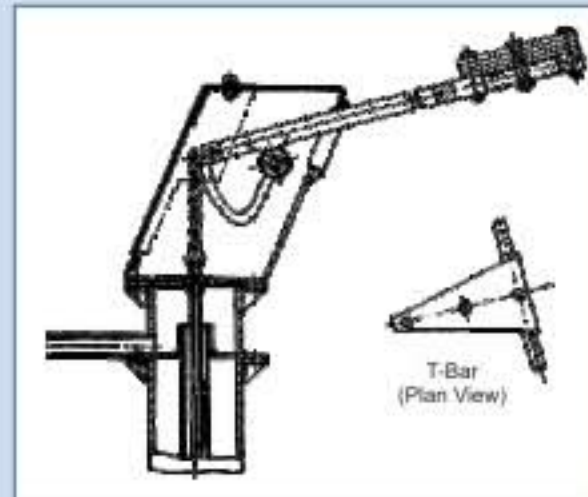
(as per Bureau of Indian Standard specifications)

- PUMP HEAD (ABOVE GROUND MECHANISM)** fully fabricated steel construction duly hot dip galvanised. Available with different mounting arrangement.
- CYLINDER ASSEMBLY** Consisting of cast iron body lined from inside with seamless brass liner of 63.5 mm ID, gun metal valve components and nitrile rubber cup seals. Capable of giving discharge of 0.37 liters per stroke.
- CONNECTING ROD** of 12mm dia mild steel electrogalvanised, in three meter lengths with hexagonal couplings.
- RISER PIPE (DROP PIPE)** of 32mm N.B.G.I. medium in three meter lengths with socket at one end.



Extra Deepwell Handpump for 45-90 meter's setting Depth

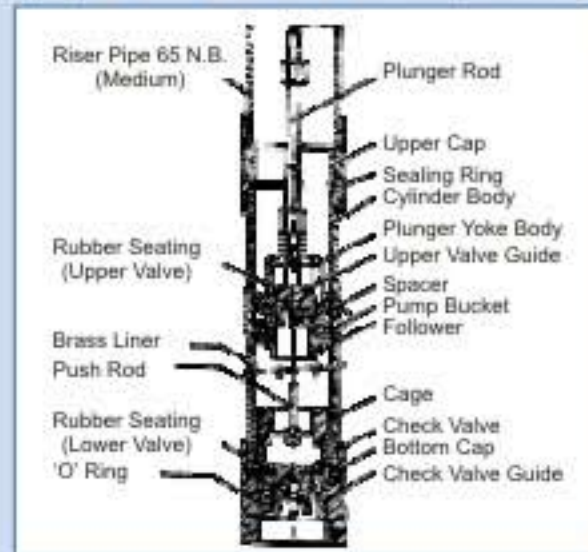
(as per Bureau of Indian Standard specifications)



- Heavier handle with T-bar and additional weights ensure reduced pumping effort.
- Cylinder assembly modified to have 3 pump buckets

VLOM India Mark-III Handpump

(as per Bureau of Indian Standard specifications)



- 63.5 mm I.D. cylinder assembly modified to have open top with cap to take 65 N.B.G.I. medium riser pipe.
- Plunger and foot valves extractable without removing riser pipe and cylinder body.
- Suitable for setting depth upto 45 meters.

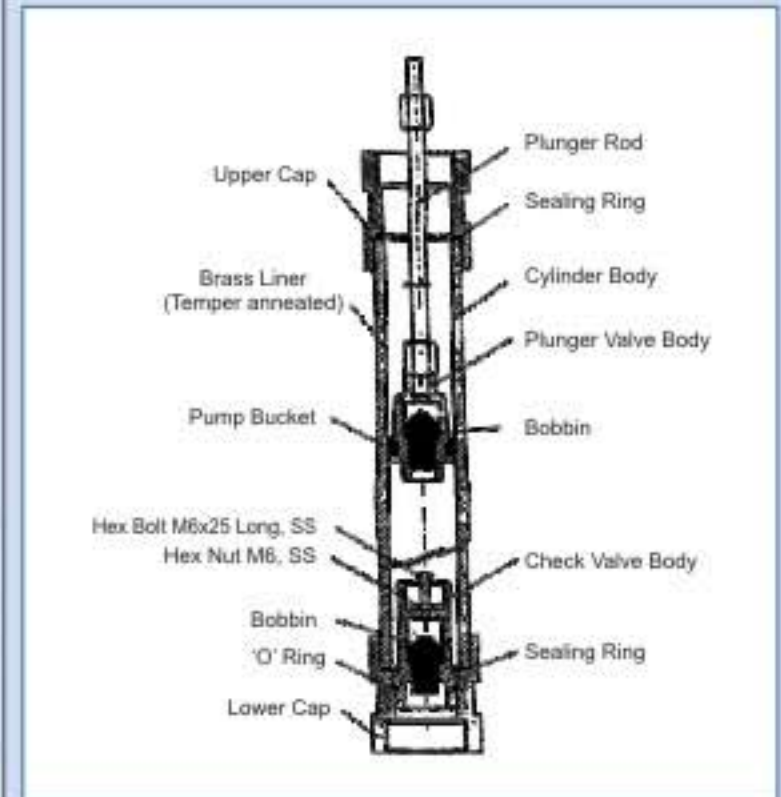
FORCE LIFT HANDPUMP

- Capable of force lifting water to overhead tanks at heights upto 12 meters above ground levels.
- Solid link mechanism working through a stuffing box fitted to water tank provides proper sealing.
- Air Chamber and a non-return valve provide positive flow of water upwards.

VLOM India Mark-III Handpump

Open Top 50 mm Cylinder Inner Assembly

(as per Bureau of Indian Standard specifications)



- Modified IM III with 50 mm cylinder and 50 mm NB Riser Pipe, Interchangeable Bobbin Valves, Single Cup Washer.

U3 Modified Deepwell Handpump

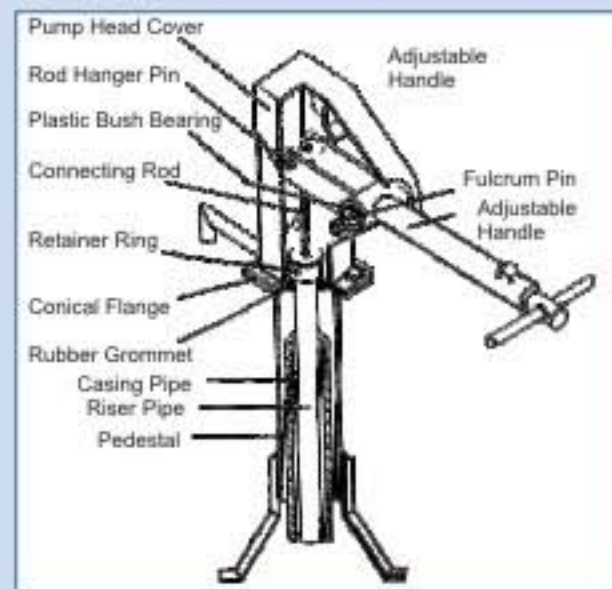
(as per SKAT-HTN, Switzerland specifications)

The U3 modified deep well hand pump is broadly a combination of IM-III and the Afridev deep well hand pump and is recommended for aggressive water conditions, where G.I. Pipes cannot be used. The above ground pumping mechanism is essentially of IM-III pumps, whereas the below ground pumping mechanism is similar to Afridev Handpump i.e. uPVC Riser Pipes (63 mm OD – spigot socketed joints) and Cylinder Assembly with uPVC Brass Liner (50 mm dia, open top VLOM). The standard connecting rods are of India Mark-II, India Mark-III type and option of Fibre Reinforced Plastic (FRP) connecting rods is also available.

OPTION FOR CORROSIVE WATERS

- Non corrosive under ground parts to handle corrosive waters
- Brass or stainless steel cylinder assembly with flush end caps. Available in 3 sizes of inner diameter 63.5 mm and 50 mm to suit discharge requirements of 0.32 and 0.2 liters/ stroke respectively.
- Stainless steel connective rods in 12 mm dia and 3 meters length with couplings.
- Stainless steel or uPVC riser pipes.

Afridev Deepwell Handpump (as per SKAT-HTN, Switzerland specifications)

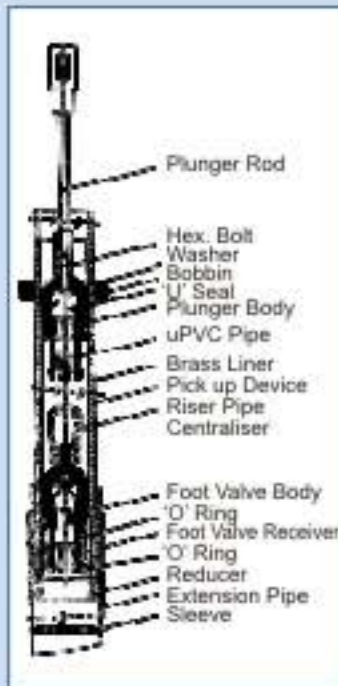


PUMP HEAD (The above Ground Mechanism)

- Fully fabricated steel structure duly hot dip galvanised with conical flange and rubber grommet.
- Plastic bush bearings add to ease of operation and maintenance.
- Different handle settings provided for varying installation depths.
- Essential maintenance tools and spares are supplied with pump, if required.

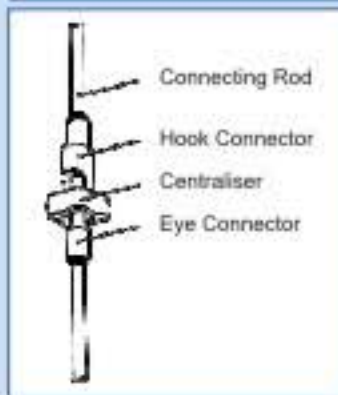
RISING MAIN

- 63 mm O.D. x 4.7 mm thickness x 3.0 mtrs. long uPVC pipe with Spigot-Socket cemented joints along with rubber centraliser.



CYLINDER ASSEMBLY

- 63 mm O.D. x 4.7 mm thick uPVC pipe lined from inside with 700 mm long extruded seamless brass tube with 50 mm ID.
- Interchangeable plunger and foot valve bodies made out of injection moulded delrin with stainless steel provided on the top of foot valve for easy extraction of valves without taking out rising main and cylinder. The Plunger/ FV assembly are also available in Brass.
- Nitrile rubber 'U' seal, bobbin and 'O' rings.
- Discharge** : 0.42 ltrs. per stroke.



CONNECTING ROD

- 10 mm dia M.S. hot dip galvanised in 3 meters length with forged M.S. tool-less eye & hook connectors with rubber centraliser.
- For corrosive waters rods and connectors are available in stainless steel.
- FRP connecting rods with brass connectors can also be supplied.

AOV HAND PUMPS – SELECTION GUIDE

| S1. No. | PUMP TYPE | recommended for water level setting depths(mtr.) | Minimum ID of bore (mm) | Approx. Discharge (Ltrs/hr.) |
|---------|---|--|-------------------------|------------------------------|
| 01. | India Mark-II Deep well Handpump as per BIS* specifications with 63.5mm dia cast iron brass sleeved cylinder assembly. | 20 – 45 | 100 | 900 |
| 02. | India Mark-II Extra Deep well Handpump as per BIS* specifications with 63.5 dia cast iron brass sleeved cylinder assembly. | 45 – 90 | 100 | 720 |
| 03. | Indian Mark-III Deep well Handpump as per BIS* specifications with 65 mm dia cast iron brass sleeved open top cylinder assembly with extractable plunger and foot valves assemblies. | 20 – 45 | 100 | 900 |
| 04. | India Mark-III Deep well Handpump as per BIS* specifications, with 50 mm dia cast iron brass sleeved open top cylinder assembly with extractable plunger and foot valves assemblies. | 20 – 45 | 100 | 600 |
| 05. | U3 modified Deep well Handpump as per SKAT-HTN, Switzerland specifications with 50 mm dia open top, uPVC brass lined cylinder assembly with extractable plunger and foot valves assemblies. | 20 – 45 | 100 | 600 |
| 06. | Afridev Deep well Handpump as per SKAT-HTN, Switzerland specifications with 50mm dia open top, uPVC brass lined cylinder assembly with extractable plunger and foot valves assemblies. | 20 – 45 | 100 | 990 |
| 07. | Shallow Well India Mark-II/ India Mark-III modified Pump | upto 21 | 100 | 900 |

We may consider modifications in designs to suit specific customer requirements.

Designs and Specifications subjects to change without prior notice.
*BIS – Bureau of India Standard

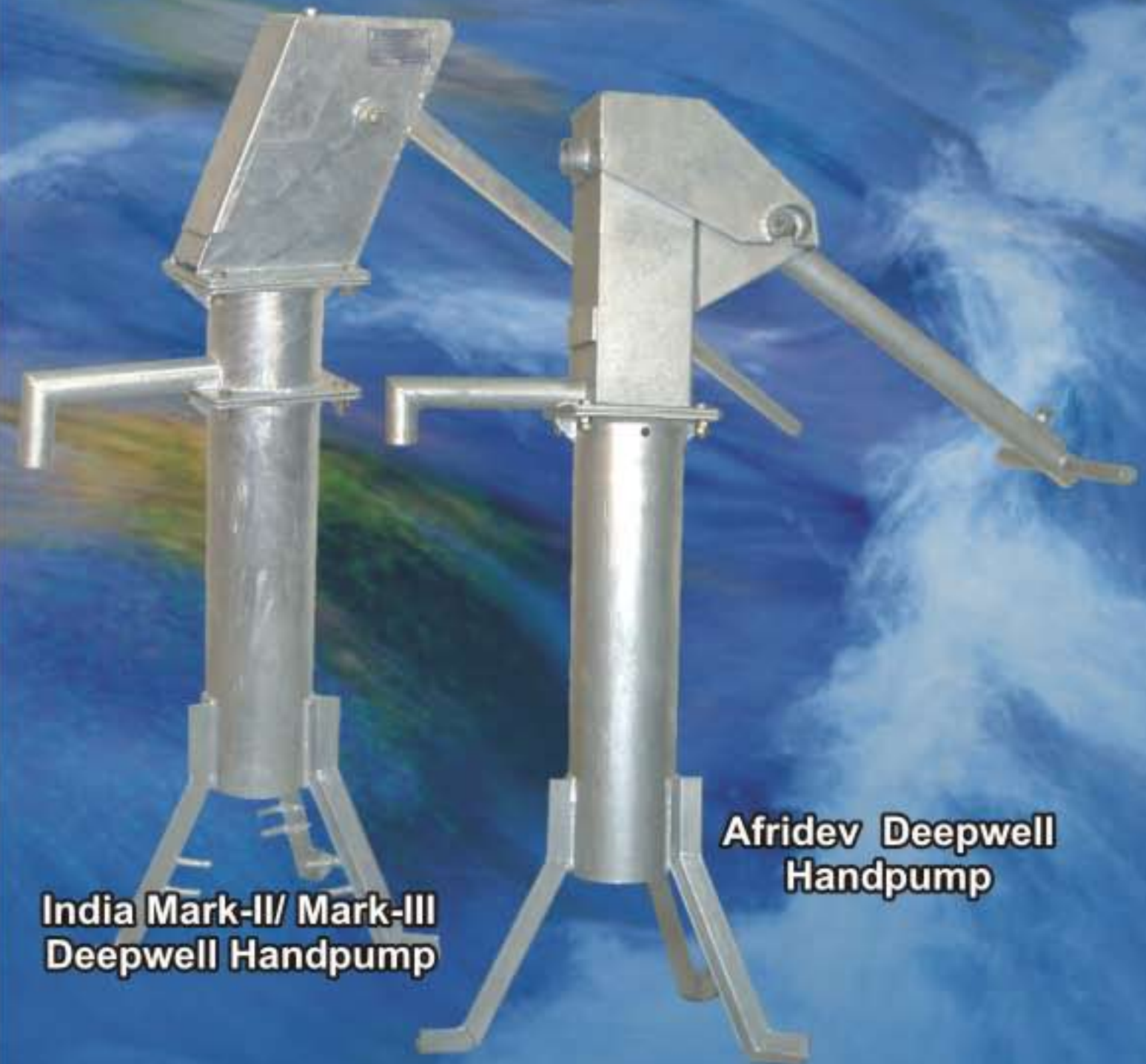


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Hand Pumps for Community Drinking Water



**India Mark-II/ Mark-III
Deepwell Handpump**

**Afridev Deepwell
Handpump**

Safe Drinking Water for One & All