

API MAKE INDIA MARK-II DEEP WELL HAND PUMP

SALIENT FEATURES:

- The above-ground mechanism is fabricated from welded steel plates and sections for strength, and hot-dip galvanized for corrosion resistance.
- A chain and quadrant mechanism of the pump handle provides easy and accurate alignment of the connecting rod.
- A unique pivot assembly (sealed ball bearings for the handle on a stainless steel axle) adds to the ease of operation and lower maintenance needs.
- The water tank assembly has an appropriate coupler to suit 32 mm NB medium class galvanized iron (GI) riser pipes or μ PVC pipes.
- Riser pipes are comprised of locally available standard 32 mm NB GI pipes. Other options such as μ PVC, HDPE & FGP are also available.
- Connecting rods are of cold drawn bright steel bar with threaded and couplers and are electro-galvanized against corrosion. Alternatively stainless steel rods or FGP rods are also available for better performance.
- The cylinder is made from a cast iron casing with a polished brass liner and gun metal plunger and check valve components. Seals (pump buckets, valve seals and cap seals) are available in environmentally safe nitrile rubber. Other options include stainless steel, brass and μ PVC. The cylinder is adaptable for use with Universal Cylinder components.

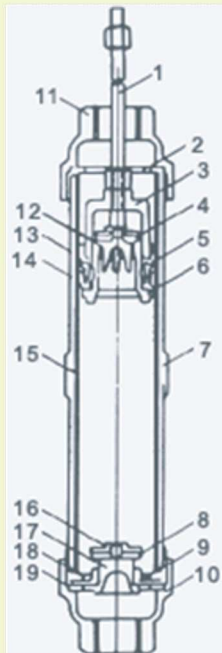


TECHNICAL DETAILS:

CYLINDER	:	Direct action reciprocating
IDEAL SPEED	:	40 strokes per minute
OUT PUT	:	900 liters per hour @ 40 strokes per minute
SPACE REQUIREMENT	:	Circular, 2 meter diameter
OPERATING DEPTH	:	25 to 90 m depth
OPERATING MECHANISM	:	Manually operated handle
CONNECTING RODS	:	12 mm diameter electro-plated & welded couplers

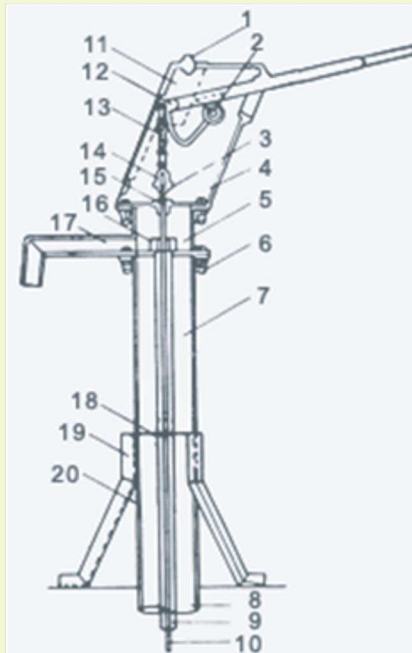
CONSTRUCTION

- A. **HEAD ASSEMBLY:** side plate, back plate, front end top and bottom end plates are made from 4 mm thick MS plates. The bottom flange is made from 6 mm thick MS plate.
- B. **HANDLE:** Made from 32 mm square MS bar. Length of handle is 1170 mm.
- C. **CHAIN ASSEMBLY:** 7 Pitch Chain Assembly welded with M-12 Internal Threaded Coupler.
- D. **COVER:** Made from 3.15 mm CR Sheet.
- E. **WATER CHAMBER:** Top and bottom flanges are made from 6 mm thick MS plates. Pipe used is 150 mm NB medium class pipe. The riser pipe holder is made from solid bars to hold 32 mm riser pipes.
- F. **STAND:** The stand flange is made from 6 mm thick MS plate. The pipe used is 150 mm medium 'B' class pipe. The angles are 40 X 40 X 6 mm.
- G. **CONNECTING ROD:** 12 mm dia. MS bright rod / FGR rod in 3 meter length welded with coupler and half coupler electro-galvanized.
- H. **CYLINDER:** 63.5 MM ID. Cast Iron cylinder with brass liner and cast iron caps of 32 mm thread with two nitride rubber cup washer (leather) and plunger rod. Option for PVC Cylinder.



**Sectional
Details of
Cylinder
Assembly**

Sl. No.	PART DESCRIPTION
1.	PLUNGER ROD
2.	SEALING RING
3.	PLUNGER YOKE BODY
4.	RUBBER SEATING
5.	SPACER
6.	FOLLOWER
7.	CYLINDER BODY
8.	RUBBER SEATING
9.	CHECK VALVE SEAT
10.	REDUCER CAP
11.	REDUCER CAP
12.	UPPER VALVE GUIDE
13.	PUMP BUCKET
14.	PUMP BUCKET
15.	BRASS LINER
16.	RUBBER SEAT RETAINER
17.	CHECK VALVE GUIDE
18.	SEALING RING
19.	SEALING RING



**Sectional
Details of
Pump head
Assembly**

Sl. No.	PART DESCRIPTION
1.	COVER BOLT
2.	AXEL WASHER NUT & CHECKNUT
3.	CONNECTING ROD CHECK NUT
4.	HEAD ASSEMBLY
5.	WATER TANK ASSEMBLY
6.	BOLT NUT WASHER & CHECK NUT
7.	STAND ASSEMBLY
8.	CASING PIPE
9.	RISER PIPE
10.	CONNECTING ROD
11.	INSPECTION OVER
12.	CHAIN BOLT & NUT
13.	CHAIN
14.	CHAIN COUPLING
15.	GUIDE BUSH
16.	RISER PIPE HOLDER
17.	SPOUT
18.	INSTALLATION MARK
19.	LEG
20.	SHROUD FOR USE UPTO 6" CASING PIPE