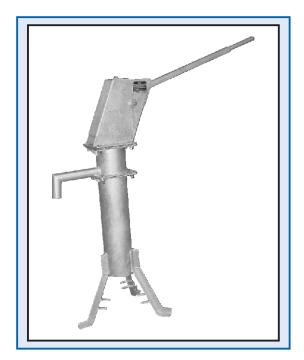
## **Hand Pumps**



The 'India' range of positive displacement reciprocating cylinder type hand pumps are long established, robust products for general borehole and well applications. Designed to international standards, reliability has been extensively proved in a huge number of installations throughout the world, their heavy-duty construction being suitable for continuous operation over long periods. 'India' hand pumps are also simple to install and maintain at the village level using basic tools and cheap spare parts and they fulfill all aspects of UNDP/World bank hand pump specifications. Basic models are offered as follows:-

**India MKII** - Standard pump head with  $1\frac{1}{4}$  GI drop pipes and  $2\frac{1}{2}$  standard cylinder. Output is approx 15 litres/min at up to 40m depth.

**India MKIII** - Standard pump head with alternative of 2" GI or PVC drop pipes and 2" VLOM open top cap cast iron or 'Afridev'cylinder. Output is approximately 12 litres/min at up to 40m depth.

**India Extra Depth** - Heavy-duty pump head with extended counterbalanced handle,  $1\frac{1}{4}$ "Gl drop pipe and  $2\frac{1}{2}$ " high pressure cylinder. Output is approximately 10litres/min at up to 90m depth.

**India Forcelift** - Modified head with sealed water chamber to accommodate a 10m surface lift to an adjacent tank or water point with 2" GI or PVC drop pipes and 2" VLOM cast iron or 'Afridev' cylinder. Output is approximately 10 litres/min at up to 40m depths.

## **Specifications**

**Pump Head:** Fabricated throughout from hot dipped galvanized mild steel components for corrosion protection with tri-leg pedestal design. Pre-greased ball bearings are provided at the handle for long life and ease of operation. Pump stroke is 125mm.

**Cylinders:** The following options are available:

- 21/2" (65mm) diameter Standard cylinder with brass liner, cast iron closed end caps and double nitrile rubber plunger seals. Capacity per stroke is 400cc.
- 21/2" (65mm) diameter Extra Deepwell cylinder as above with triple nitrile rubber plunger rod seals. Capacity per stroke is 400cc.
- 2" (50mm) diameter VLOM cylinder with brass liner, cast iron open top end caps and double nitrile rubber plunger rod seals. Capacity is 250cc per stroke.
- 2" (50mm) diameter VLOM UPVC 'Afridev' cylinder with brass liner, plastic plunger and foot valve. Capacity is 250cc per stroke.

**Rising Main:** Option of 11/4" GI for closed cap cylinders and 2" GI or PVC for VLOM 2" open top cap cylinders supplied in 3m lengths. PVC drop pipes require rod and pipe centralisers to prevent wear damage. Note that rising mains need removal for servicing of closed cap cylinders, though remain in place in VLOM installations.

**Pump Rods:** Option of 10mm electro galvanized mild steel or stainless steel rods in standard 3m lengths with screwed couplings

