

ABS Wind Pump



- UK Design
- More than 1000 Installed worldwide
- 15 year history of continuous operation
- Proven record of reliability
- Full spares and after sales back up
- Designed for low wind areas
- Strong design for survival in extreme winds

WIND PUMP

ADVANCED BOLTING SOLUTIONS PVT. LTD.

"ABS House", Plot No. W-116 (A), T.T.C. Industrial Area, Khairane, Navi Mumbai - 400 708, INDIA.

Tel: 022-4171 4444 Fax: 022-2761 0167

Water Pump Division www.abswind.com

UK Design : Indian Manufacture

Designed in the UK the ABS Wind Pump has an outstanding reputation based on more than 1000 installations worldwide.

The ABS Wind Pump is proven reliable in all possible environmental conditions including the heat and sand of the Middle East and the strong winds, cold and rains of the Northern Hemisphere.



High Efficiency – More Water Pumped

Low wind speed start up is ensured by the simple but highly effective counter balance mechanism so the ABS wind pump begins pumping at the lowest possible wind speeds to deliver the maximum amount of water

Designed For Long Life – Quality Components

All bearings used in the ABS wind pump are SKF or similar to ensure continuous reliable operation, ease of maintenance and spares availability anywhere in the world

The ABS Wind Pump

Quite simply there is not a better designed more sustainable wind pump on the planet. The ABS Wind Pump has been designed for reliability of operation over many years whilst pumping the maximum possible volume of water

The simplicity of the ABS design ensures the continuous operation of the wind pump and enables routine maintenance to be easily carried out by the customer.

The ABS wind pump avoids the use of a complicated gear mechanism traditionally used by wind pumps with the unique ABS rocker mechanism. In addition to simplifying the design and improving reliability this means that every revolution of the rotor delivers a pump action. This also means that the ABS wind pump can use counter balance weights to ensure start up in the lowest possible winds

The direct advantage of this is that the ABS wind pump delivers approximately 1/3 more water with the same diameter rotor all other things being equal. The design also reduces the stress on the pump rods and other moving components and guarantees a design life in excess of 20 years.

A traditional Gearbox driven wind pump requires more maintenance than the ABS unique reciprocating arm design.

Over 1000 Wind Pumps Installed Worldwide

ABS wind pumps have been installed in more than 20 countries over a period of 20 years – your guarantee that every aspect of the design has been tested in actual installations in different wind conditions over a very long period of time. The British engineers who designed the wind pump and who provide full technical back up are very proud of the claim that even in extreme winds above survival wind speed not a single installed wind pump has ever been damaged to the extent that repairs could not be made quickly and economically and no pump has ever failed below survival wind speed (45m/s , 100 MPH)



Unique ABS Reciprocating arm

Simplicity of Design : Accuracy Of Manufacture

A key feature of the ABS wind pump is the simplicity of the design with every design detail tested and optimised by 2 highly qualified UK engineers over a period of more than 20 years. Every wind pump is manufactured using very accurate jigs which are all produced under the supervision of one of the UK design engineers who check the accuracy of every detail

ABS 5.0m WINDPUMP SPECIFICATIONS

FEATURES :

- WINDPUMP (WATER PUMPING WINDMILL) suitable for wells and boreholes up to a maximum 180 metres head.
- Output (typical) 30,000 to 40,000 litres/day with 15 metres head.
- Life 20 years plus, high reliability, low maintenance, simple installation. Automatic storm protection mechanism.
- Mild steel welded construction, grease lubricated ball bearings.



TECHNICAL SPECIFICATIONS :

- Rotor diameter 5.0 m
- No of blades 18
- Tower height 9 m, with option for 12m
- Maximum rotor speed 70 rpm
- Typical rotor speed 30 - 40 rpm
- Starting windspeed 2.5 -3 m/s (depending on pump selected).
- Operating windspeed 2.5 to 15 m/s
- Survival windspeed 50 m/s
- Automatic storm protection: - in winds of over 15 m/s the rotor turns edge-on to wind, and when the wind drops, it automatically restores to normal operation.
- Maintenance requirements: greasing of all bearings once per year.
- Pump stroke 200 mm
- Pump diameters 40 to 300 mm, depending on pumping head.
- Typical output in litres per day.

ABS 5.0 m - Water Output, Pump sizes

HEAD		LIGHT WIND - 3 m/s			MEDIUM WIND - 4 m/s		
Feet	Metres	Water litres/day	Pump dia	No. springs	Water litres/day	Pump dia	No. springs
15	5	85,000	220mm	0	180,000	280mm	0
30	10	41,000	150mm	0	90,000	200mm	0
50	15	27,000	130mm	0	60,000	160mm	0
80	25	16,000	100mm	0	39,000	125mm	0
100	30	14,000	90mm	0	32,000	110mm	0
150	45	9,000	70mm	0	22,000	90mm	2
200	60	7,000	63mm	2	16,000	85mm	4
250	75	5,500	57mm	3	13,000	75mm	5
300	90	4,500	50mm	4	11,000	70mm	6
400	120	3,400	45mm	6	8,000	60mm	8
500	150	2,700	40mm	8	6,000	53mm	10
600	180	2,200	37mm	10	5,000	50mm	12

ABS 3.5m WINDPUMP SPECIFICATIONS

FEATURES :

- WINDPUMP (WATER PUMPING WINDMILL) suitable for wells and boreholes up to a maximum 90 metres head.
- Output (typical) 15,000 to 20,000 litres/day with 15 metres head.
- Life 20 years plus, high reliability, low maintenance, simple installation. Automatic storm protection mechanism.
- Mild steel welded construction, grease lubricated ball bearings.



TECHNICAL SPECIFICATIONS :

- Rotor diameter 3.5 m
- No of blades 12
- Tower heights 9 m, with options for 6m, 12m
- Maximum rotor speed 100 rpm
- Typical rotor speed- 40 - 50 rpm
- Starting windspeed 2.5 -3 m/s (depending on pump selected).
- Operating windspeed - 2.5 to 15 m/s
- Survival windspeed 50 m/s
- Automatic storm protection: - in winds of over 15 m/s the rotor turns edge-on to wind, and when the wind drops, it automatically restores to normal operation.
- Maintenance requirements: greasing of all bearings once per year.
- Pump stroke 100 mm
- Pump diameters 40 to 250 mm, depending on pumping head.
- Typical output in litres per day.

ABS 3.5 m - Water Output, Pump sizes

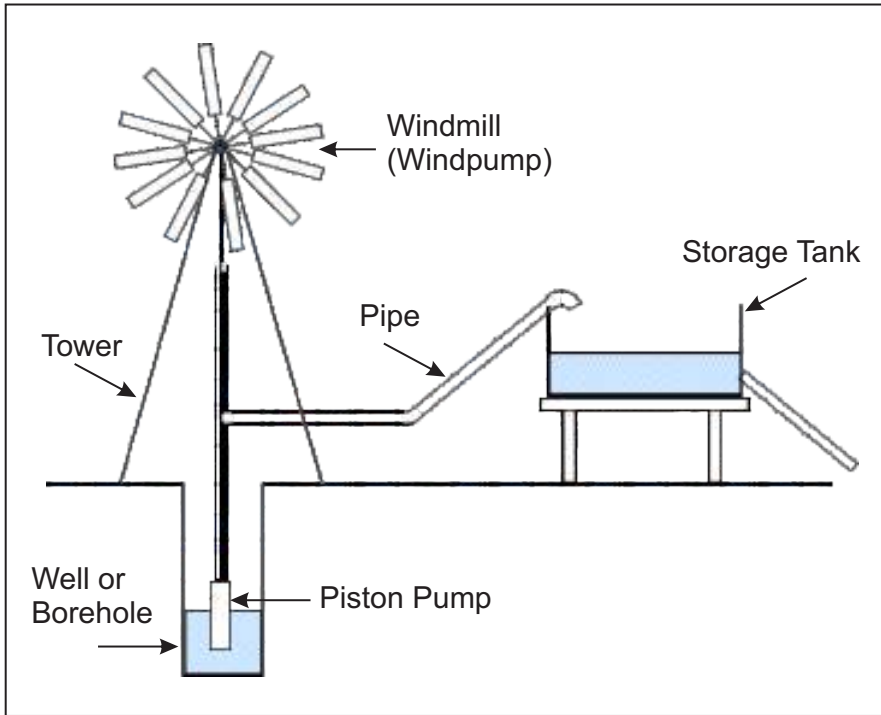
HEAD		LIGHT WIND - 3 m/s		MEDIUM WIND - 4 m/s	
Feet	Metres	Water litres/day	Pump dia	Water litres/day	Pump dia
15	5	45,000	180mm	90,000	230mm
30	10	22,000	130mm	45,000	160mm
50	15	15,000	110mm	29,000	130mm
80	25	9,000	85mm	16,000	100mm
100	30	7,000	75mm	13,000	90mm
150	45	4,700	60mm	8,000	70mm
200	60	3,000	50mm	5,500	60mm
250	75	2,200	40mm	4,000	50mm

For Deeper Well Enquire For Details.

ABS ULTRA DEEP WELL HAND PUMPS : AVAILABLE SOON

Traditional India Mark II hand pump have an absolute maximum pumping depth of 60 m . The ABS hand pump is a unique design of hand pump with a maximum pump depth of 90m. Using an innovative but simple valve arrangement this high quality hand pump is designed for years of reliable operation with simple maintenance when required.

MECHANICAL WIND ENERGY - WATER PUMPING SYSTEM



Windpumps - summary

- Reliable
- Sustainable - long term
- Locally made - avoids imports and contributes to economy
- Improves standard of living, health and prosperity



Where can ABS Windpumps be used?

- Villages
- Nomadic peoples
- Schools
- Nature reserves
- Clinics
- Land drainage
- Farms (irrigation)
- Farms (livestock)



Contact Us:

ADVANCED BOLTING SOLUTIONS PVT. LTD.

"ABS House", Plot No. W-116 (A), T.T.C. Industrial Area, Khairane, Navi Mumbai - 400 708, INDIA.

Tel: 022-4171 4444 Fax: 022-2761 0167

Water Pump Division www.abswind.com

