

Yellowtail

Windmill

...Outstanding in the Field

Perfectly balanced, strong, durable & efficient.



"STORMPROOF"
Automatic Governing



Turntable Ladder that moves with the Windmill



Head cover converts to Convenient Toolbox



Line bored Main Casting with 2 Self-aligning Gearwheels



Guide Loop, Twin Pinions + Automatic Crosshead Oiling



Built-in Sails designed for max. power + easy starting

NATURALLY! PUMPING WATERNATURALLY! PUMPING WATERNATURALLY! PUMPING

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Providing solutions since 1862

 **W.D. Moore & CO.**

Outstanding
Performance...

Outstanding
Durability...

Outstanding
Safety...

1. "Storm Proof" Automatic Governing

The simple governing system automatically protects the Windmill and Tower in high winds. The Governing system uses the minimum of moving parts - it contains no springs or counterweights and never requires adjustment. The Vane Hinge is inclined at an angle that makes the Vane rise when governing. At a windspeed around 25 metres per second the Vane assembly will cause the Windwheel to turn away from the wind - the Vane will begin to rise as it turns. As the windspeed increases this turn becomes greater and the angle becomes steeper. In this way the speed of the windmill is kept constant through a wide range of wind speeds.

2. Safety Ladder

Fitted to the 10ft, 12ft, and 14ft models is a safety inspection Ladder that rotates with the Windmill as it turns about the Turntable (Pivot Tube).

3. Rugged Windwheel

The Yellowtail Windwheel is a tension windwheel. The wheel turns in the lightest breeze, yet is rugged enough to withstand gale force winds.

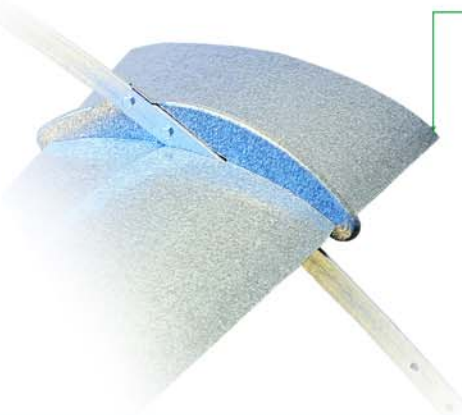
4. "A" Frame Wheel Arms

Strong one piece "A" Frame Wheel Arms are easier to assemble, hold more securely to the Hub, and hold the Windwheel sections rigidly in place.

5. Sails built into the Wheel

The galvanised steel Sails are laced into the tension Windwheel and they are spaced, shaped, and curved to give maximum pumping efficiency and easy starting over a wide range of wind speeds. The Sails are neither too small to lose power nor too large to "choke" the Windwheel.

...Outsta



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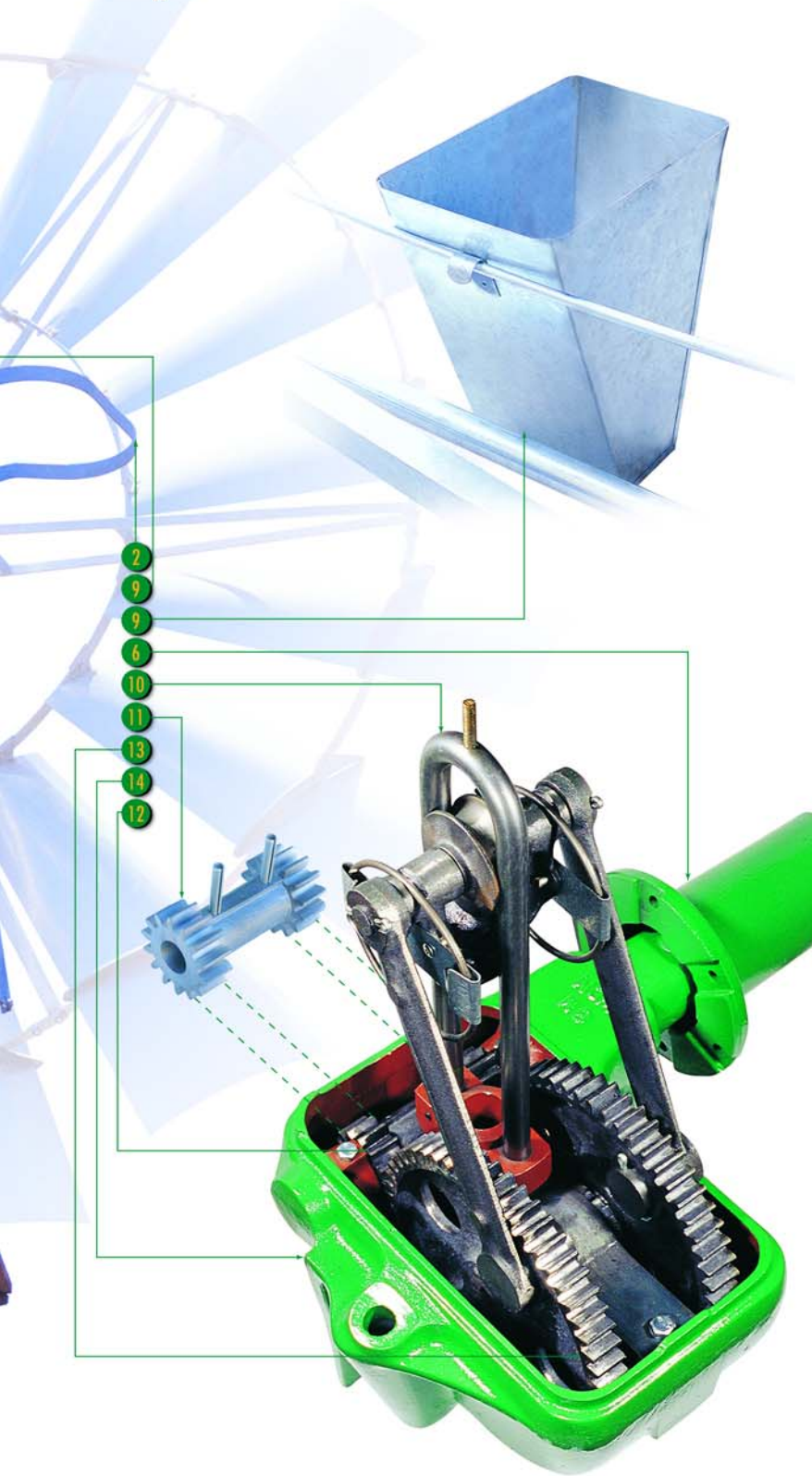
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Investing for future generations.

Working in the Field

Compare these Features



6. Hub

Using special techniques, the hub spindle is pressed into the cast Hub and keyed, to achieve a positive bond. Special care is taken to ensure that the "right" fit is achieved between the Hub and the Shaft.

7. Turntable

The Windmill rotates 360° around a precision ground Pivot Tube on top of the welded Stub Tower. Steel Thrust Washers carry the weight of the head and allow it to move smoothly with the slightest change in wind direction. Adequate lubrication is provided during operation.

8. Stub Tower

The welded Stub Tower forms the apex to the Windmill Tower. The Stub Tower is provided with the Head, Wheel, and Tail which means that a new Windmill can be fitted to an existing Tower. The Stub is available in either 3-Post or 4-Post.

9. Head Cover

The Head Cover protects the gear mechanism from rain and dust. It also doubles as a handy tool box when clipped onto the Tail Hanger.

10. Guide Loop

The round section Guide Loop is used for greater strength and stability. The Guide Roller has greater surface contact with the Guide Loop to prevent side movement, and reduce wear.

11. Twin Pinions

Cast as one piece and secured to the Main Shaft using high tensile roll pins. The gear teeth are always in line and equally transfer the load to the self-aligning large Gearwheels. Gear teeth are cast to guarantee a hard (carbide) layer on the surface of the gear - this means very long life for the Pinions.

12. Automatic Self-oiling System

This simple but effective system begins with the large Gearwheels running in Oil. Oil is then picked up by the two Crosshead Oil Rings and distributed to upper parts of the Guide Loop and Crosshead. An Oil Sleeve carries oil to the Long Hub Shaft Bearing ensuring that all moving parts are completely lubricated.

13. Double Self-Aligning Gearwheels

Cast teeth to match the hardness of the Twin Pinion, and the unique independent interlocking (Male/Female) gearwheels ensure the Connecting Rods share an equal load.

14. Main Casting

Line bored for accuracy and fitted with high quality Replaceable Bearings, the Gearbox is a perfect balance with the Wheel and the Tail. The Pinion Bearing is placed as far as possible from the Main Bearing to ensure the load on the bearings is distributed evenly along the Hub Shaft.

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 **W.D. Moore & CO.**

ENQUIRIES AUSTRALIA WIDE

1800 654 766

VISIT OUR WEBSITE

www.wdmoore.com.au



HOT DIPPED GALVANISED COMPONENTS

- ✓ Long life
- ✓ Low maintenance
- ✓ Clean

SIMPLE DESIGN

- ✓ Easy to assemble & erect
- ✓ Foolproof self-oiling
- ✓ Utilises industry common parts
- ✓ Maximum efficiency

PERFECTLY BALANCED

- ✓ Still pumps in low (3.5 M/s) wind speeds
- ✓ Responsive to changes in wind direction
- ✓ Pumps more water
- ✓ Ensures long bearing life
- ✓ Maximum Strength for Weight ratio

MANY OPTIONS

- ✓ 5 Windwheel sizes
- ✓ 3-Post & 4-Post Towers
- ✓ Two Stroke Lengths
- ✓ Fits most existing Towers
- ✓ Adapts to most pumping applications

AUTOMATIC GOVERNING

- ✓ Withstands high Wind speeds
- ✓ No need to secure during storms
- ✓ Regulates pumping flow

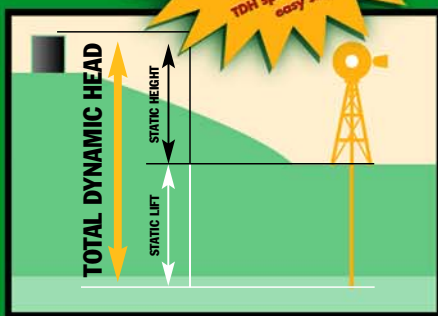
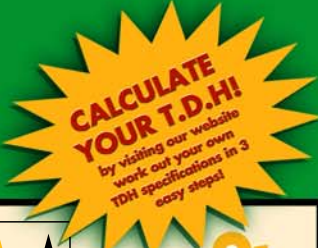
50 YEARS FIELD TESTED

- ✓ Quality guaranteed
- ✓ Proven success
- ✓ Outstanding Performance
- ✓ The low-cost way to pump water

PUMPING CAPACITIES

For all factors involved in the calculation capacities it should be noted that the Yellowtail windmill shows a decided superiority.

YELLOWTAIL PERFORMANCE RESULTS (Based on actual tests)								
Pump Size	Inches millimetres	2	2 ^{1/4}	2 ^{1/2}	2 ^{3/4}	3	3 ^{1/2}	4
		50.8	56.3	63.5	69.8	76.2	88.9	101.6
6 FOOT (1.8 MTR)	Feet	71	61	49	40	34	28	25
	Metres	22	19	15	12	10	9	8
	Av. Galls (per day)	1,100	1,530	1,750	2,110	2,475	3,410	4,400
	Av. Litres (per day)	5001	6995	7956	9592	11251	15502	20002
8 FOOT (2.4 MTR)	Feet	127	102	86	72	62	44	35
	Metres	39	31	26	22	19	13	11
	Av. Galls (per day)	1,320	1,860	2,090	2,540	2,970	4,125	5,280
	Av. Litres (per day)	6001	8456	9501	11547	13502	18752	24003
10 FOOT (3.0 MTR)	Feet	265	233	206	161	139	99	73
	Metres	81	71	63	49	42	30	22
	Av. Galls (per day)	1,540	2,145	2,420	2,970	3,465	4,785	6,160
	Av. Litres (per day)	7001	9751	11001	13502	15752	21753	28003
12 FOOT (3.6 MTR)	Feet	292	255	233	199	169	139	112
	Metres	89	78	71	61	52	42	34
	Av. Galls (per day)	1,650	2,287	2,585	3,180	3,700	5,115	6,500
	Av. Litres (per day)	7501	10397	11751	14456	16820	23253	29549
14 FOOT (4.2 MTR)	Feet	385	314	282	245	201	169	134
	Metres	117	96	86	75	61	52	41
	Av. Galls (per day)	1,705	2,385	2,668	3,285	3,823	5,280	6,820
	Av. Litres (per day)	7751	10842	12129	14934	17379	24003	31004



To choose the right windmill you will need to calculate your TDH (website) and determine your water needs. If you have an existing pump and/or pumphods already on the job, or there are any wind obstructions (eg buildings/trees) in the pumping area then you will need speak to one of our helpful staff.

YELLOWTAIL SPECIFICATIONS

WHEEL SIZES:	6', 8', 10', 12' and 14ft diameter.
GEARBOX:	One piece casting.
CONNECTING RODS:	Specially cast for extra strength.
OILING:	Double ring to crosshead; oil sleeve to hub shaft.
GEARS:	Double gears, self aligning
BEARINGS:	White metal, replaceable.
HUB:	Pressed and Keyed to shaft.
3&4 POST TOWERS:	20ft, 30ft and 40ft.
STROKE:	6': 4" or 5" /102 or 127mm 8': 5" or 6 ^{1/4} " /127 or 159mm 10': 6" or 7 ^{3/8} " /152 or 187mm 12': 6" or 7 ^{3/8} " /152 or 187mm 14': 7 ^{1/4} " /184mm
GEAR RATIOS:	6') 3.6:1, 8') 3.8:1, 10') 3.25:1 12') 3.25:1, 14') 3.25:1

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