

R & D

WMT research and development is focused on energy efficiency.

The design of our gearboxes and motors dramatically reduces energy consumption on the farm. The WMT 900 series helical-bevel gear unit was developed with a gear efficiency of 97%. Typical right angle Asian made worm gearboxes are <70% efficient; depending upon size, ratio and output speed. WMT's Helical - Bevel gearmotors are built to last years not months!

BENEFITS

Reduced energy consumption
Lower operating costs
Longer life

RESULTS

WMT's 2 Hp. Helical-Bevel Drive produces an annual costs savings of:
\$396.18 USD at 4 cents per kilowatt-hour energy cost
\$693.31 USD at 7 cents per kilowatt-hour energy cost.
\$990.45 USD at 10 cents per kilowatt-hour energy cost.

The savings are even greater at higher energy costs.

These calculations are based on a 12 hour / day operating cycle.

2 HP Electrical Cost Comparison

		WMT:		Asian:	
Gear Type:		Helical Bevel		Worm	
Gear Efficiency:		97%		70%	
Power Formula: Kw = Volts x Amp x power factor** x 1.732 / 1000					
		Running Amps		Operating Kilowatts	
		230V	480V	230V	480V
WMT 2HP 3Ø Aerator:		6.3	3.1	2.0	2.1
Asian 2HP 3Ø Aerator*:		13	6.5	4.1	4.3
Operational Costs: Electrical					
230 V - 3Ø					
		WMT Running Costs		Asian Running Costs	
		day	yr	day	yr
Power Cost (¢/Kw)		\$		\$	
0.04		0.96	\$ 351.76	1.99	\$ 725.84
0.07		1.69	\$ 615.57	3.48	\$ 1,270.23
0.10		2.41	\$ 879.39	4.97	\$ 1,814.61
480 V - 3Ø					
		WMT Running Costs		Asian Running Costs	
		day	yr	day	yr
Power Cost (¢/Kw)		\$		\$	
0.04		0.99	\$ 361.22	2.08	\$ 757.40
0.07		1.73	\$ 632.14	3.63	\$ 1,325.45
0.10		2.47	\$ 903.06	5.19	\$ 1,893.51
Yearly Savings:					
		230 V - 3Ø	480 V - 3Ø		
Power Cost (¢/Kw)		\$	\$		
0.04		\$ 374.09	\$ 396.18		
0.07		\$ 654.66	\$ 693.31		
0.10		\$ 935.22	\$ 990.45		

48% savings per year on Electrical operating costs • Running Costs are based on a 12 hour operational cycle per day

* Asian running amps based on published values in catalogues ** WMT motor power factor = .8

** Asian motor power factor = .8 (not published, assumed equal for calculation)



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Premium WaterTek High Efficiency Drives for Asian 2 Hp. Paddlewheels



REPLACEMENT DRIVES



Upgrade your Asian Aerator with a WMT replacement Drive Kit.
No holes to drill • No additional parts required.

Reduces: Labor / Maintenance costs, Lost production, Energy consumption.

Power	Running Amps	Input Speed	Output Speed	Output Torque	Service Factor	Red. Ratio	Weight
2 Hp.	460 V 3Ph = 3.1 230 V 3 Ph = 6.2 230 V 1 Ph = 8.3	1750 rpm	103 rpm	1221 inch lbs.	2.7	16.08	103 lbs.

Gear Facts

1. Helical gearing is more efficient than worm gearing. By replacing worm drives with WMT's premium helical drives you'll need **48% less electricity** to perform the same job!
2. **Worm gears are designed to wear.** That's why one gear is made of a softer metal like brass. This wearing creates friction, heat and consumes energy.
3. **Helical gears are built to last longer** and require less electricity than Worm gears... a two-fold value!
4. Calculate energy savings, longer life, less maintenance, less lost production and **Helical gearing is clearly a better investment.**

WMT's Helical-Bevel Gear motors are a better long-term value because they are more efficient and last longer.

WMT Helical Bevel Drive	Lot 1-9 Units	Lot 10+
2 Hp. Drive 230/460V/3 PH/50 or 60 HZ	\$645.00 USD ea.	\$595.00 USD ea.

Add \$149.00 for 230V single phase

REDUCES OPERATING

COSTS 48%

Cost Comparison on Back



WMT 2 HP DRIVE
with UHMW adapter
Accepts original
motor cover
MADE IN THE USA



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