SOUTHERN CROSS

Southern Cross® Water
‘IZ’ Double Geared Windmills

southerncrosswindmills.com.au

‘IZ’ DOUBLE GEARED WINDMILLS

WATER SUPPLY SYSTEMS

APPLICATIONS

- Stock Watering
- Domestic Water Supplies
- Tank and Dam Filling
- Pumping from Deep Bores, Dams and over Long Distances

FEATURES

- Automatic oiling and governing.
- Powerful windwheels for easy starting and excellent pumping ability.
- Designed to pump from deep bores and over long distances.
- Simple to install and maintain.
- All working parts run in oil and are sealed against weather.
- All exposed steel parts are hot dip galvanised.
- High standard of manufacture.
- Simple reefing gear.
- Southern Cross® Windmills operate using Renewable Energy which is Reliable, Clean and Non-polluting
- No Fuel or Power Bills
- All Weather Operation... The only requirement is a light breeze for operation, day or night, in all weather conditions
- Ideal for Remote Areas... Windmills eliminate the need of transport fuel or install power lines
- Very Low Maintenance... Time proven reliability
- Range of Sizes... 1.8 to 4.3 m (6 to 14 ft.) windwheels

NO FUEL OR POWER BILLS

Use wind energy to pump vital water supplies.

LOW MAINTENANCE

Southern Cross® Windmills are self-sufficient, require little attention and offer proven operating reliability for safety of water supply. Many of the Southern Cross® Windmills you see are over 30 years old and are still operating reliably and in most cases spare parts are available.

IDEAL FOR REMOTE AREAS

Windmills eliminate the need to transport fuel or install expensive power lines into remote areas.

ALL WEATHER OPERATION

The only requirement is a light breeze for operation, day or night, in all weather conditions.

POLLUTION FREE

Southern Cross® Windmills operate without noise or atmospheric pollution.

BRASS BORE PUMPS

- Leather Pump Buckets
- 300mm (12") Stroke
- Pump Sizes... 50mm (2"), 65mm (2 1/2"), 75mm (3") and 100mm (4")
- The barrel is made from 3.3mm thick brass tubing and the cast components are made of Gunmetal Bronze.

SIZES AVAILABLE

WINDWHEEL DIAMETERS: 1.8, 2.4, 3, 3.6 and 4.3 m (6, 8, 10, 12 and 14 ft.)

TOWER HEIGHTS: 6, 7.6, 9, 12, 15 and 18 m (20, 25, 30, 40, 50 and 60 ft.)

3 YEAR WINDMILL CONDITIONAL WARRANTY

RENEWABLE ENERGY

PUMPING CAPACITIES OF SOUTHERN CROSS® WINDMILLS

The correct combination of windmill and pump is that which allows the mill to work easily in light winds. The pumping table below shows the average daily supply which can be expected from each combination of windmill and pump, up to the depths given, in most areas of Australia, provided that the windmill is erected on a sufficiently high tower in a good open site where the wind can reach the windwheel freely. There are, however some areas in which the wind is not so strong, and in these areas customers should specify a larger size of windmill and pump than would normally be used. Also in districts where the wind does not blow for as many hours per day as the average, customers should specify a larger size of windmill and pump. Greater satisfaction will always be achieved with a lightly loaded windmill.

MILL MODEL	WHEEL DIAMETER		STROKE			DIAMETER OF PUMP CYLINDER							
	m	feet	mm	inches		mm	inches	mm	inches	mm	inches	mm	inches
						51	2	64	2.5	76	3	102	4
6-IZ	1.8	6	133	5.25	Total Lift metres (feet)	18	(60)	13	(43)	10	(32)	6	(19)
					Average Daily Output kilolitres (gallons)	4.7	(1040)	7.4	(1630)	10.7	(2345)	18.9	(4165)
8-IZ	2.4	8	146	5.75	Total Lift metres (feet)	33	(109)	23	(77)	17	(57)	10	(34)
					Average Daily Output kilolitres (gallons)	5.2	(1145)	8.1	(1790)	11.7	(2575)	20.8	(4580)
10-IZ	3.0	10	165	6.50	Total Lift metres (feet)	60	(197)	43	(141)	32	(105)	20	(64)
					Average Daily Output kilolitres (gallons)	5.1	(1115)	7.9	(1745)	11.4	(2515)	20.3	(4465)
12-IZ	3.6	12	184	7.25	Total Lift metres (feet)	80	(263)	58	(189)	43	(140)	26	(85)
					Average Daily Output kilolitres (gallons)	5.5	(1205)	8.6	(1885)	12.4	(2720)	22	(4830)
14-IZ	4.3	14	184	7.25	Total Lift metres (feet)	113	(370)	81	(265)	60	(197)	36	(119)
					Average Daily Output kilolitres (gallons)	4.7	(1035)	7.4	(1620)	10.5	(2315)	18.8	(4135)

DATA REQUIRED FOR SELECTING AND QUOTING SOUTHERN CROSS® WINDMILLS

Pumping underground water from bores or wells:

1 Depth of the bore or well ..... (m)

2 Bore casing size (inside diameter) or size of well ..... (mm)

3 Distance from ground level to water level ..... (m)

4 Maximum hourly supply available for pumping ..... (litres)

5 If water is pumped at the maximum rate of supply, how far will water level be below ground level ..... (m)

6 Height above ground level at the pumping site to top of tank or reservoir ..... (m)

7 Distance from tank or reservoir to pumping site..... ..... (m)

8 Maximum height of obstructions, if any, in the vicinity of the pumping site and how far away. If there is any doubt about the prevailing winds easily reaching the site, describe the site as fully as possible..... ....

9 Quantity of water required daily.....(kilolitres)

10 What the water is to be used for..... .....

11 Size and type of other equipment available, if any , you wish to use on the job if possible ....

Pumping surface water - creeks, dams, drains, earth tanks:

12 Source of supply ....

13 Distance along the ground from the water to the point at which it is proposed to install the pump ..... (m)

14 Vertical height from the lowest water level to the point at which the pump will be installed ..... (m)

15 Plus the information asked for at 6, 7,8,9,10 and 11.

If new windmill head only is required:

16 Size and make of the old mill ....

17 Height of existing tower above ground level .... (m)

18 Is tower 3 or 4 post.....

19 Size of pump installed..... (mm)

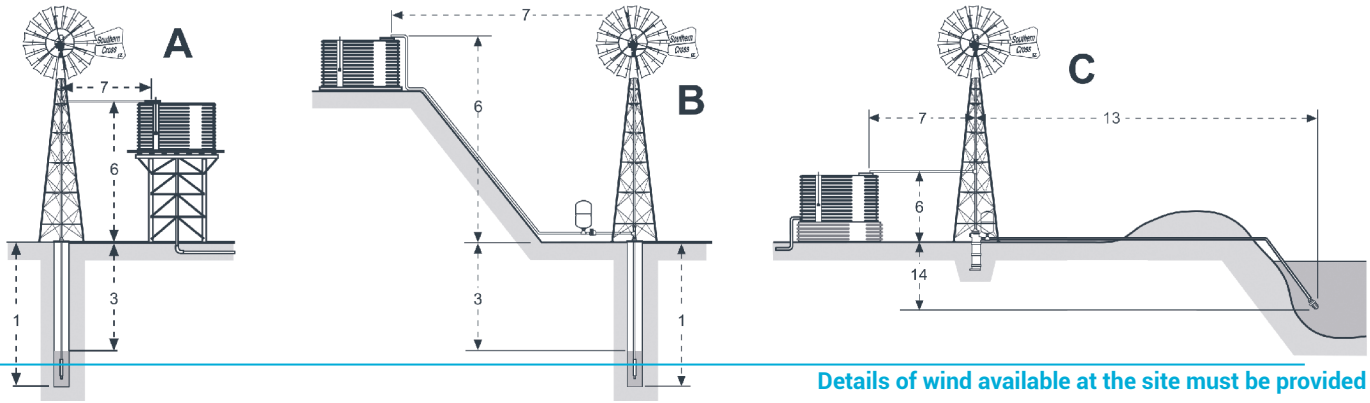
20 Distance from ground level to pump .... (m)

21 Size of pump delivery piping or casing ..... (mm)

22 Size and type of pump rods..... (mm)

23 Is connection required between new mill and existing pump rods? .....

24 Plus the information in questions 1 to 10 if pumping bore or well, and questions 6 to 10 and 12 to 14 if pumping surface water.



Details of wind available at the site must be provided

SOUTHERN CROSS

Southern Cross Water Pty Ltd ABN 18 630 205 702
Telephone +61 7 4612 7202 • Email sales@southerncrosswindmills.com.au
southerncrosswindmills.com.au