The Southern Cross 10ft. "Z" Pattern Windmill
The Southern Cross Organisation has applied knowledge gained from over seventy years' experience of windmill manufacture to produce a windmill of excellent value and outstanding quality.

To do this the Southern Cross Factory is equipped with the best possible machinery, which, used in conjunction with accurate jigs and tools, produces a very high quality of windmill parts. These parts are carefully assembled to produce a strong, easy running windmill.

Here are some of the Outstanding Features

STRONG TENSION ARM WINDWHEEL WITH SPRING STEEL FANS.
DOUBLE BALANCED GEARS.
COMPLETELY ENCLOSED, DUST AND WEATHER PROOF.
AUTOMATICALLY OILED.
STRONG, ELECTRICALLY WELDED STUB TOWER.
STRONG, WELL-BRACED TOWER WITH EXTRA HEAVY LEGS.
ALL STEEL PARTS HEAVILY GALVANISED AFTER ALL CUTTING AND PUNCHING IS COMPLETE.
ALL THESE EXCELLENT POINTS PRODUCE A WINDMILL WHICH IS—

OF OUTSTANDING QUALITY.

Warranty

THE COMPANY AGREES with the purchaser of each Southern Cross Windmill that, as part of the purchase consideration, the Company will supply new part or parts which, on return, freight prepaid, prove to be defective in material or workmanship, within THREE YEARS of delivery, provided that the windmill is oiled every twelve months.

The Company makes no reservations regarding storms or tempests, provided the tower anchorages hold; the windmill is built to withstand these.

The Company accepts no further or contingent liability whatever.
Strong Tension
Arm Windwheel
Heavily Galvanised

The TENSION ARM WINDWHEEL is built to combine light weight with great strength. The FANS are made from a special grade SPRING STEEL curved to produce a rigid fan, which is set at the correct angle to give the greatest efficiency. These points combined produce a VERY EASY STARTING WHEEL, and this is in itself one of the most important points in any windmill.

Double Balanced Gears

The GEARWHEELS AND PINIONS ARE MACHINE MOULDED, producing gear teeth which mesh accurately together to form a silent running means of transferring the power from the windwheel to the connecting rods, which lift the pump rods with a direct central lift. MACHINE MOULDED TEETH HAVE A HARD SKIN on the surface which makes them very durable. EACH GEARWHEEL TURNS ON AN INDEPENDENT HUB, one hub fitting closely inside the other so that the load on one gearwheel balances the load on the other. This arrangement may be compared with a pair of horses attached to a swingle-tree. Each horse must pull its load—so also must the connecting rods be equally loaded. The hub which carries the gearwheels turns in a LONG AND LARGE DIAMETER WHITEMETAL BEARING which is CONSTANTLY FLOODED WITH OIL.
WINDMILL

Price . . .

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<thead>
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<td>£21/ 5/-</td>
<td>£32/10/-</td>
<td>£35/ -/-</td>
<td>£39/15/-</td>
<td>£46/12/6</td>
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NETT F.O.R. TOOWOOMBA, ROCKHAMPTON, TOWNSVILLE, SYDNEY, MELBOURNE, ADELAIDE and MAYLANDS.

Capacity

<table>
<thead>
<tr>
<th>SIZE PUMP</th>
<th>MAX. ELEVATION IN FT</th>
<th>AVGE. GALLS PER DAY</th>
<th>SIZE PUMP</th>
<th>MAX. ELEVATION IN FT</th>
<th>AVGE. GALLS PER DAY</th>
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<tr>
<td>1 3/4 in</td>
<td>238</td>
<td>950</td>
<td>3 in.</td>
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<td>182</td>
<td>1240</td>
<td>3 1/4 in</td>
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<td>3260</td>
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<td>145</td>
<td>1560</td>
<td>3 1/2 in</td>
<td>59</td>
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<tr>
<td>2 1/2 in</td>
<td>117</td>
<td>1930</td>
<td>4 in.</td>
<td>46</td>
<td>4940</td>
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<tr>
<td>2 3/4 in</td>
<td>97</td>
<td>2320</td>
<td>5 in.</td>
<td>29</td>
<td>7 730</td>
</tr>
</tbody>
</table>

AUTOMATIC OILING—
EVERY BEARING IN THE WINDMILL IS CONSTANTLY FLOODED WITH OIL; and as long as the gearwheels touch the oil in the gearbox the mill will be properly oiled.
The oil is lifted by the gearwheels and distributed to the various working parts, and the excess oil drains back into the sump. THIS EFFICIENT OILING SYSTEM IS QUITE WEATHER-PROOF, the helmet fitting tightly down on to the tapered ledge on top of the gearbox effectively keeping out any rain or dust.
OIL IT ONCE A YEAR.

GOVERNOR—
Governing is by means of the Southern Cross gravity principle, and employs neither springs nor counter balances, and does not ever require adjustment.

REEFING GEAR—
Everything is outside the mast pipe and is of an extremely simple nature. There is nothing to adjust, and the mill is reefed by merely pulling down the reefing lever as far as it will go.

STUB TOWER—
The stub tower is electrically welded, making a rigid support for the mill on the tower.

GALVANISED—
All exposed mild steel parts are heavily galvanised after cutting and punching, which ensures protection against all weathers.
Towers Of Strength . . .
Like the Pyramids—Stand the Test of Time

SOUTHERN CROSS TOWERS ARE BUILT FOR STRENGTH AND ARE HEAVILY GALVANISED AFTER ALL CUTTING AND PUNCHING IS COMPLETE, the Legs being of Heavy Section Steel Angle in 10ft. and 5ft. lengths, with conveniently spaced angle steel girts, while the BRACING is a carefully designed system of special high tensile steel rod.

3 Post Towers Are Supplied

The rigid triangular section of a 3-Post Tower is very much stronger than a 4-Post Tower.

A 4-Post Tower is like a box without ends. It has no strength in itself, and collapses easily; and this weakness is in the tower when the wind blows on a corner.

It does not matter where the wind blows on a 3-Post Tower, as it is just as strong.

New Windmills on Old Towers

These Windmills can be fitted to any makes of tower, either 3-Post or 4-Post, without extra cost for special parts. There are a considerable number of windmills twenty years or more old which are wearing out, and, generally, it is cheaper to replace the old mill with a new one on the old tower, providing, of course, that the old tower is still in good order, which is often the case, and almost always the case if the old tower is a galvanised structure.

Refer to the price of the mill head only, and you will see that the cost of a few major parts for the old windmill would equal the cost of a new mill.

SPECIFICATION.—The specification and illustrations are not binding in detail.

THE SOUTHERN CROSS ORGANISATION

QUEENSLAND:
TOOWOOMBA FOUNDRY PTY., LTD.,
Box 169, P.O., Toowoomba, Q.
Box 393, P.O., Rockhampton, C.Q.
Box 304, P.O., Townsville, N.Q.
Box 115, P.O., Charleville.

VICTORIA:
SOUTHERN CROSS WINDMILLS & ENGINES PTY., LTD.,
24 Moray Street, South Melbourne, S.C.

NEW SOUTH WALES:
SOUTHERN CROSS ENGINE AND WINDMILL CO. PTY., LTD.,
22 Young Street, Sydney, N.S.W.
32-34 Fitzroy Street, Tamworth, N.S.W.
70 Frome Street, Moree, N.S.W.

SOUTH AUSTRALIA:
ELDER, SMITH & CO., LIMITED,
Box 357A, G.P.O., Adelaide, S.A.

WEST AUSTRALIA:
SOUTHERN CROSS WINDMILL AND ENGINE COMPANY, LIMITED,
282-4 Railway Terrace, Maylands, W.A.

SOUTH AFRICA:
SOUTHERN CROSS WINDMILL & ENGINE CO. (PTY.), LTD.,
50 Henry Street, Bloemfontein,
South Africa.