

SOUTHERN CROSS GEARED SELF-OILING HIGH HEAD POWER PUMPS

2½", 3", 3½", 4" and 5" Bore x 5" Stroke
4", 5" and 6" Bore x 6" Stroke

These are double acting Power Pumps assembled to a totally-enclosed self-oiling drive gear. SOUTHERN CROSS manufactures two models — one of five inch stroke (illustrated as Fig. 3187) and one of six inch stroke (illustrated as Fig. 2550).

They are high efficiency pumps meant for the bigger jobs and are particularly suited for pumping comparatively large quantities of water against high heads, and for pumping over long distances.

All the working parts of SOUTHERN CROSS Geared Self Oiling Power Pumps are fully enclosed for protection against weather and dirt; lubrication to all working parts is automatic, so the pumps can be run for long periods and can be depended on to give years of trouble-free service.

Fig. 3187
5 inch Stroke
Power Pump

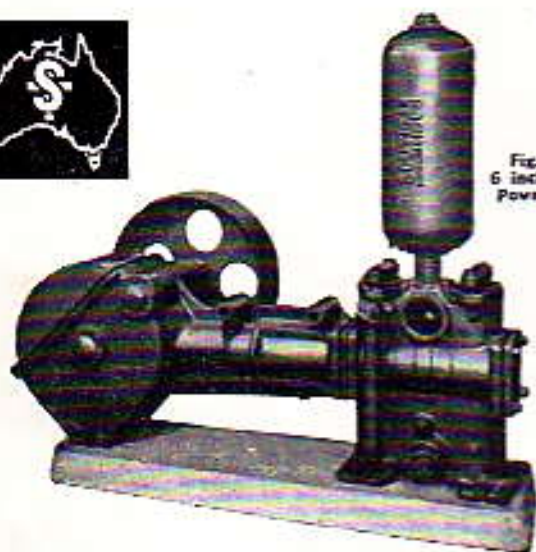
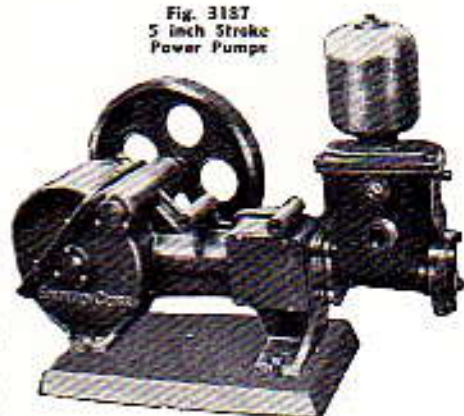


Fig. 2550
6 inch Stroke
Power Pump

SPECIFICATIONS Fig. 3187 and 2550

TYPE : Single cylinder, double acting, pumping on both the forward and backward strokes.

PIPE CONNECTIONS : On the Fig. 3187 and Fig. 2550 Pumps, the suction and discharge may be taken from either side of the Pump, or the suction from one side and the discharge from the other.

LUBRICATION : Automatic flood lubrication of all moving parts from channels kept full by rotation of main gear.

GEAR DRIVE : Machine cut gears on steel shafts supported between wide replaceable bearings.

GEAR RATIOS : The gear ratios are—
5.114 to 1 for the 5 in. stroke Pumps
6.07 to 1 for the 6 in. stroke Pumps

GEARBOX COVER : A removable top cover is fitted to the gearbox to facilitate inspection.

ROTATION : The pump may be run in either direction and, if necessary for any particular installation, the pulley may be transferred to the opposite side of the pump from that illustrated.

RECIPROCATING MECHANISM : Reciprocating motion by eccentric integral with driven gear operating through connecting rod and cross-head on to corrosion resisting brass plunger rod. Splash guard on plunger rod prevents water getting into pump drive gear.

PLUNGER ASSEMBLY : Fitted with two opposed leather buckets and removable through pump end plate.

PUMP BARREL : Replaceable heavy drawn brass tubing.

VALVES : Special quality rubber, spring loaded, with gunmetal seats. Easily accessible through port covers.

PACKING GLAND : Adjustable flanged brass type, using graphited rubber packing.

WATER BY-PASS : A Water By-pass is fitted to enable the engine to be relieved of most of the load when starting. This by-pass is opened before the unit is started so that some of the water is by-passed from the discharge back into the suction.

Then, when the engine has attained its correct speed, the by-pass is closed and all the water is pumped along the discharge line.

AIR CHAMBER : An Air Chamber is fitted as standard on the discharge side of the pump to even out the flow of water through the pipe lines and prevent shock loads which could cause damage, particularly when pumping through long discharge pipes.

SELF PRIMING SUCTION CHAMBER : A Suction Chamber can be supplied as an extra and it is recommended one be used in every case. It maintains a reservoir of water in the pump when stopped and ensures a positive pumping action when restarted, and also evens out flow of water on suction side, preventing water hammer.

ELECTRIC MOTOR MOUNTING : Electric Motor Mounting Rails can be supplied for fitting on top of the Drive Gear at a small extra charge. This makes a very compact electric motor driven pumping unit and saves considerably on installation costs.

PRICES AND WEIGHTS

Pump Mark	Bore	Stroke	Suct.	Disch.	PRICE	Approx. Nett Weight
KH-E	2½ in.	5 in.	1½ in.	1½ in.	£96 2 0	4½ cwt.
KH-F	3 in.	5 in.	1½ in.	1½ in.	£106 0 0	4½ cwt.
KH-G	3½ in.	5 in.	2 in.	2 in.	£138 12 0	4½ cwt.
KH-H	4 in.	5 in.	2 in.	2 in.	£142 16 0	4½ cwt.
KH-J	5 in.	5 in.	2½ in.	2½ in.	£154 7 0	4½ cwt.
AN-I	4 in.	6 in.	2½ in.	2½ in.	£245 14 0	9½ cwt.
AN-K	5 in.	6 in.	3 in.	3 in.	£259 7 0	9½ cwt.
AN-L	6 in.	6 in.	4 in.	4 in.	£278 5 0	9½ cwt.
(Not including pulley)						
21½ in.	dia. x 4 in.	Face Flat Belt Pulley for Fig. 3187 Pump	—	—	£6 8 0	18 lbs.
25 in.	dia. x 6 in.	Face Flat Belt Pulley for Fig. 2550 Pump	—	—	£12 4 0	92 lbs.
21½ in.	P.C.D. 4 "A"	Groove Vee Belt Pulley for Fig. 3187 Pump	—	—	£10 5 0	61 lbs.
21½ in.	P.C.D. 6 "B"	Groove Vee Belt Pulley for Fig. 3187 Pump	—	—	£16 2 0	95 lbs.
21½ in.	P.C.D. 6 "B"	Groove Vee Belt Pulley for Fig. 2550 Pump	—	—	£16 2 0	95 lbs.
28½ in.	P.C.D. 5 "C"	Groove Vee Belt Pulley for Fig. 2550 Pump	—	—	£23 16 0	269 lbs.

Prices are Nett F.O.R. Toowoomba, Brisbane, Maryborough, Rockhampton, Townsville, Cairns, Sydney, Melbourne, Adelaide, Perth, or delivered Fremantle, F.O.B. Tasmanian ports.

PRICES OF SOUTHERN CROSS POWER PUMPS — Figs. 2549 and 2550

Mark	Bore	Stroke	Suct.	Disc.	Price
AN-E	2½ in.	5 in.	1½ in.	1½ in.	£75
AN-F	3 in.	5 in.	1½ in.	1½ in.	£83
AN-G	3½ in.	5 in.	2 in.	1½ in.	£108
AN-H	4 in.	5 in.	2 in.	1½ in.	£111
AN-J	5 in.	5 in.	2½ in.	2 in.	£121
AN-I	4 in.	6 in.	2½ in.	2½ in.	£192
AN-K	5 in.	6 in.	3 in.	3 in.	£203
AN-L	6 in.	6 in.	4 in.	4 in.	£218

2½ in. dia. x 4 in. Face Belt Pulley for Fig. 2549 Pump	£5 15 0
2½ in. dia. x 6 in. Face Flat Belt Pulley for Fig. 2550 Pump	£11 0 0
2½ in. P.C.D. 4 "A" Groove Vee Belt Pulley for Fig. 2549 Pump	£9 5 0
2½ in. P.C.D. 6 "B" Groove Vee Belt Pulley for Fig. 2549 Pump	£14 10 0
2½ in. P.C.D. 6 "B" Groove Vee Belt Pulley for Fig. 2550 Pump	£14 10 0
2½ in. P.C.D. 5 "C" Groove Vee Belt Pulley for Fig. 2550 Pump	£21 10 0

The selection table on Page 74 shows the Pulleys to be used when these pumps are incorporated in Diesel or Electric Motor Units.

Prices are F.O.R. Toowoomba, Brisbane, Rockhampton, Townsville, Sydney, Melbourne, Adelaide, Perth or delivered Fremantle

Warranty

The Company agrees with the original purchaser of each Southern Cross Pump that, at any time within twelve months from the date of despatch of such Pump, the Company will supply new part or parts without charge at the original point of despatch to replace any part or parts which, on return freight prepaid, prove to the satisfaction of the Company to be defective in material or workmanship.



Fig. 2550
6" Stroke
Power Pump

PUMPING TABLE

Mark	Bore	Stroke	Suction	Screwed Discharge	Stks. per Minute	Pump Pulley R.P.M.	Gal per Hour after allowing 10% reduction under pressure	MINIMUM H.P. REQUIRED AT PUMP PULLEY FOR HEADS OF:				
								150 ft.	225 ft.	300 ft.	400 ft.	500 ft.
AN-E	2½ in.	5 in.	1½ in.	1½ in.	40	210	355	1.2	1.6	2.0	2.5	3.0
					50	260	440	1.3	1.8	2.3	3.0	3.7
					60	315	530	1.5	2.1	2.8	3.6	4.4
AN-F	3 in.	5 in.	1½ in.	1½ in.	40	210	520	1.3	1.7	2.2	2.8	3.4
					50	260	650	1.5	2.1	2.7	3.5	4.3
					60	315	780	1.8	2.4	3.0	3.8	4.6
AN-G	3½ in.	5 in.	2 in.	1½ in.	40	210	720	1.5	2.1	2.7	3.5	4.3
					50	260	900	1.8	2.5	3.2	4.2	5.1
					60	315	1080	2.0	2.9	3.8	5.0	6.2
AN-H	4 in.	5 in.	2 in.	1½ in.	40	210	950	2.2	2.9	3.6	4.5	—
					50	260	1185	2.7	3.4	4.2	5.2	—
					60	315	1425	3.0	3.9	4.8	6.0	—
AN-J	5 in.	5 in.	2½ in.	2 in.	40	210	1500	2.8	3.6	4.4	—	—
					50	260	1875	3.4	4.4	5.4	—	—
					60	315	2250	4.0	5.2	6.4	—	—
AN-I	4 in.	6 in.	2½ in.	2½ in.	40	245	1125	2.4	3.3	4.1	5.3	6.4
					50	305	1400	2.7	3.8	4.9	6.4	7.8
					60	365	1675	3.1	4.4	5.7	7.4	9.2
AN-K	5 in.	6 in.	3 in.	3 in.	40	245	1775	3.2	4.5	5.8	7.5	—
					50	305	2225	3.8	5.5	7.2	9.4	—
					60	365	2675	4.5	6.5	8.5	11.2	—
AN-L	6 in.	6 in.	4 in.	4 in.	40	245	2600	4.2	6.2	8.2	—	—
					50	305	3250	5.2	7.7	10.2	—	—
					60	365	3900	6.2	9.2	12.2	—	—

POWER PUMPS

PUMP NO.	TYPE	SIZE	YEAR	PUMP NO.	TYPE	SIZE	YEAR
21458-21462	KH-J	5" x 5"	62	29792-29801	KH-E	2 1/2" x 5"	65
21659-21663	KH-F	3" x 5"	62	29802-29819	KH-F	3" x 5"	65
21664-21665	KH-J	5" x 5"	62	29820-29829	KH-G	3 1/2" x 5"	65
22322-22331	AN-L	6" x 6"	63	30481-30565	KH-C	2 1/2" x 3"	66
22433-22439	KH-E	2 1/2" x 5"	63	31205-31279	KH-C	2 1/2" x 3"	66
22440-22457	KH-F	3" x 5"	63	31280-31294	KH-E	2 1/2" x 5"	66
22458-22465	KH-G	3 1/2" x 5"	63	31467-31486	KH-F	3" x 5"	66
22466-22467	KH-H	4" x 5"	63	31487-31490	KH-F	4" x 5"	66
22468-22472	KH-J	5" x 5"	63	31491-31493	KH-J	5" x 5"	66
22473	KH-G	3 1/2" x 5"	63	31987-31989	AN-K	5" x 6"	66
22474-22476	KH-J	5" x 5"	63	31990-31996	AN-L	6" x 6"	66
22477	KH-G	3 1/2" x 5"	63	32572	AN-I	4" x 6"	66
22679-22753	KH-C	2 1/2" x 3"	63	33273-33290	KH-E	2 1/2" x 5"	67
22956-22965	KH-E	2 1/2" x 5"	63	33291-33312	KH-F	3" x 5"	67
22966-22980	KH-F	3" x 5"	63	33313-33333	KH-G	3 1/2" x 5"	67
22981-22995	KH-G	3 1/2" x 5"	63	33334-33353	KH-H	4" x 5"	67
22996-23005	KH-J	5" x 5"	63	33354-33362	KH-J	5" x 5"	67
23496-23570	KH-C	2 1/2" x 3"	63	33388-33389	AN-I	4" x 6"	67
23571-23575	KH-H	4" x 5"	63	33416-33540	KH-C	2 1/2" x 3"	67
24051-24056	KH-E	2 1/2" x 5"	63	33765-33772	AN-L	6" x 6"	67
24057-24066	KH-F	3" x 5"	63	33773-33776	AN-K	5" x 6"	67
24067-24068	KH-G	3 1/2" x 5"	63	33777-33779	AN-I	4" x 6"	67
24087-24096	KH-H	4" x 5"	63	33960-33974	KH-E	2 1/2" x 5"	67
24099-24100	KH-J	5" x 5"	63	33975-33995	KH-F	3" x 5"	67
24301-24310	AN-L	6" x 6"	63	33996-34002	KH-C	3 1/2" x 5"	67
25113-25187	KH-C	2 1/2" x 3"	64	34003-34006	KH-H	4" x 5"	67
25404	AN-I	4" x 6"	64	34007-34009	KH-J	5" x 5"	67
26231-26245	KH-E	2 1/2" x 5"	64	34011-34012	AN-L	6" x 6"	67
26246-26260	KH-F	3" x 5"	64	34393-	AN-L	6" x 6"	67
26261-26270	KH-G	3 1/2" x 5"	64	34414-34538	KH-C	2 1/2" x 3"	67
26271-26285	KH-H	4" x 5"	64	34939-34956	KH-E	2 1/2" x 5"	68
26286-26295	KH-J	5" x 5"	64	34959-34968	KH-F	3" x 5"	68
26804-26878	KH-C	2 1/2" x 3"	64	34989-35003	KH-H	4" x 5"	68
27029-27031	AN-I	4" x 6"	64	35489-35496	KH-E	2 1/2" x 5"	68
27032-27036	AN-K	5" x 6"	64	35497-35511	KH-G	3 1/2" x 5"	68
27037-27048	AN-L	6" x 6"	64	35512-35527	KH-J	5" x 5"	68
27566-27575	KH-E	2 1/2" x 5"	65	35578-36002	KH-C	2 1/2" x 3"	68
27576-27590	KH-F	3" x 5"	65	36502-36503	AN-I	4" x 6"	68
27576-27750	KH-C	2 1/2" x 3"	65	36504-36505	AN-K	5" x 6"	68
27751-27765	KH-G	3 1/2" x 5"	65	36506-36516	AN-L	6" x 6"	68
27766-27780	KH-H	4" x 5"	65	37094-37106	KH-J	5" x 5"	68
27781-27790	KH-J	5" x 5"	65	37109-37136	KH-E	2 1/2" x 5"	68
28060-28104	KH-C	2 1/2" x 3"	65	37139-37178	KH-F	3" x 5"	68
29036	KH-C	2 1/2" x 3"	65	37179-37198	KH-G	3 1/2" x 5"	68
				37199-37213	KH-H	4" x 5"	68