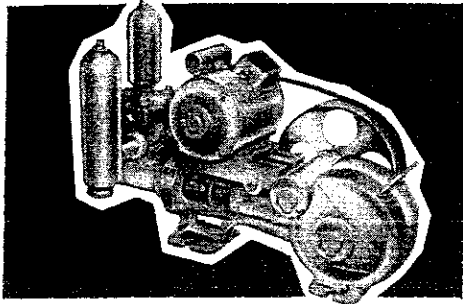
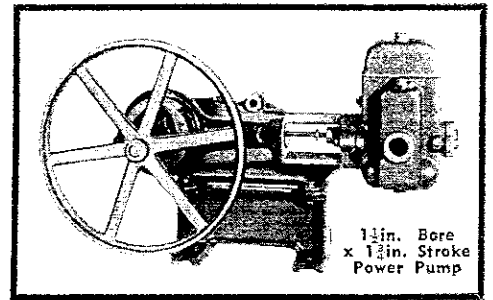


# SOUTHERN CROSS TOTALLY-ENCLOSED SELF-OILING POWER PUMPS . . .

*can pump water for all your needs!*



2 1/2 in. Bore x 3 in. Stroke Power Pump

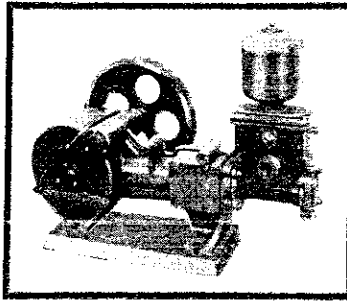
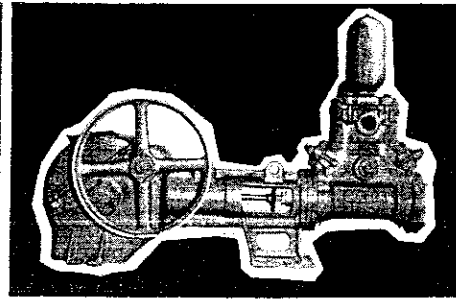


Fig. 3187—5 in. Stroke Power Pump



3 in. Bore x 4 in. Stroke Power Pump



Compact, silent running, self-oiling, totally-enclosed, and quality made, these pumps have all the features to give you every satisfaction.

They will pump from creeks, dams, wells or spear points, or from any surface water, and are ideal for fighting fires, watering gardens and lawns, irrigating crops such as beans, peas, bananas, filling overhead tanks and many other uses. SOUTHERN CROSS Power Pumps are particularly suited for pumping long distances or forcing water against high heads.

Being self-oiling and totally-enclosed, they run with little attention and will give a long life of continuous service.

Used with a SOUTHERN CROSS Automatic Water Pressure Unit, you can forget costly elevated tanks, avoid the stopping and starting of engine pumping units, save the tiresome checking of tank levels — and gain the convenience of constant pressure at all tap points.

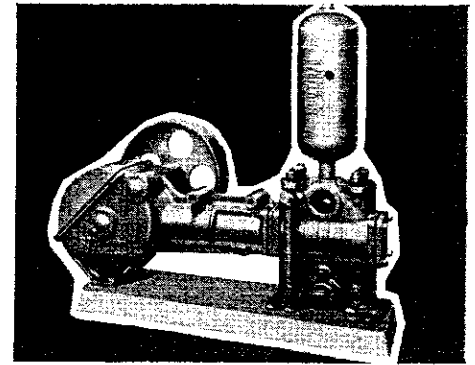


Fig. 2550 — 6 in. Stroke Power Pump

## PUMPING TABLES

Pump Mark	PUMP		SCREWED		Strokes per Minute	Pump Pulley R.P.M.	Gallons per Hour	H.P. REQUIRED AT PUMP PULLEY FOR HEADS OF:				
	Bore	Stroke	Suction	Discharge				50ft.	100ft.	150ft.	200ft.	250ft.
—	1 1/2 in.	1 3/4 in.	1 in.	3/4 in.		230	290	1/3	1/3	1/2	2/3	3/4
Fig. 3215 Unit	2 1/2 in.	3 in.	1 1/2 in.	1 1/2 in.	50 70 90 110	250 350 450 550	304 426 547 668	1/3 1/3 1/3 1/3	1/3 1/2 2/3 1	1/2 2/3 1 1 1/2	2/3 1 1 1/2 1 1/2	3/4 1 1 1/2 1 1/2
—	3 in.	4 in.	1 1/2 in.	1 1/2 in.	50 70 80	250 350 400	597 834 955	1/2 1/2 1/2	1/2 1/2 1/2	3/4 1 1 1/2	1 1 1/2 1 1/2	1 1/2 1 1/2 1 1/2
FIG. 3187 UNITS								150ft.	225ft.	300ft.	400ft.	500ft.
KH-E	2 1/2 in.	5 in.	1 1/2 in.	1 1/2 in.	40 50 60	210 260 315	390 487 585	.6 .7 .8	.8 1.0 1.1	1.0 1.3 1.5	1.3 1.7 2.0	1.7 2.1 2.5
KH-F	3 in.	5 in.	1 1/2 in.	1 1/2 in.	40 50 60	210 260 315	576 720 865	.8 .9 1.1	1.1 1.4 1.7	1.5 1.8 2.2	1.9 2.4 2.9	2.4 3.1 3.7
KH-G	3 1/2 in.	5 in.	2 in.	2 in.	40 50 60	210 260 315	797 996 1195	1.0 1.3 1.5	1.5 1.9 2.3	2.0 2.5 3.1	2.7 3.4 4.0	3.4 4.2 5.1
KH-H	4 in.	5 in.	2 in.	2 in.	40 50 60	210 260 315	1051 1314 1576	1.4 1.7 2.0	2.0 2.5 3.0	2.7 3.4 4.0	3.6 4.5 5.3	— — —
KH-J	5 in.	5 in.	2 1/2 in.	2 1/2 in.	40 50 60	210 260 315	1662 2077 2493	2.1 2.7 3.2	3.2 4.0 4.8	4.2 5.3 6.3	— — —	— — —
FIG. 2550 UNITS								—	—	—	—	—
AN-I	4 in.	6 in.	2 1/2 in.	2 1/2 in.	40 50 60	245 305 365	1238 1548 1857	1.6 2.0 2.4	2.4 3.0 3.6	3.1 3.9 4.7	4.2 5.2 6.3	5.2 6.5 7.8
AN-K	5 in.	6 in.	3 in.	3 in.	40 50 60	245 305 365	1972 2464 2957	2.5 3.2 3.8	3.8 4.7 5.6	5.0 6.3 7.5	6.7 8.4 10.0	— — —
AN-L	6 in.	6 in.	4 in.	4 in.	40 50 60	245 305 365	2866 3583 4300	3.7 4.6 5.5	5.5 6.8 8.2	7.3 9.1 10.9	— — —	— — —

NOTE: Capacity under pressure will be reduced 5% to 10%.

## SPECIFICATIONS FOR TOTALLY-ENCLOSED SELF-OILING POWER PUMPS

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

**PIPE CONNECTIONS :** On 1½" x 1¾" Pump, suction is taken from one side and discharge from the other. On all other sizes both suction and discharge may be taken from either side, or the suction from one side and the discharge from the other.

**LUBRICATION :** Automatic flood lubrication of all moving parts from large reservoir in base of drive gear.

**TOTALLY-ENCLOSED :** All working parts are totally enclosed, assuring protection from dust and weather, and are easily accessible.

**ROTATION :** 1½" x 1¾" and 2½" x 3" — clockwise when looking at the pulley from the pulley side.

Other sizes — may be run in either direction and, if necessary, the pulley can be transferred to the opposite side of the pump.

**PUMP BARREL :** Drawn brass tube.

**VALVES :** Special quality rubber, spring loaded, sealing on bronze seats. Easily accessible.

**PULLEYS :** Pulleys are supplied as standard on 1½" x 1¾", 2½" x 3" and 3" x 4" pumps, but are extra on the other sizes.

**WATER BY-PASS :** The 5" and 6" stroke power pumps are fitted with a water by-pass which enables the engine to be relieved of most of the load when starting. The by-pass is opened before the unit is started up, which allows some of the water to be by-passed from the discharge back into the suction. The by-pass is closed when the engine has attained its correct speed.

**AIR CHAMBER :** All pumps are supplied as standard with an air chamber on the discharge side of the pump, and this evens out the flow of water through the pipe lines and prevents shock loads, particularly when pumping through long discharge lines.

**SUCTION CHAMBER :** 1½" x 1¾", 2½" x 3" and 3" x 4" pumps are fitted as standard with a suction chamber. For other sizes the suction chamber is extra, but it is recommended one be always used. This suction chamber maintains a reservoir of water in the pump when stopped and ensures a positive pumping action when restarted. It also evens out the flow of water on the suction side, preventing water hammer. All suction chambers are of the self-priming type.

**ELECTRIC MOTOR MOUNTING :** All pumps have provision for electric motor mounting, which can be supplied at an extra price. This makes a very compact electric motor unit, saving considerably on installation costs.

### WEIGHTS AND PULLEY SIZES OF TOTALLY ENCLOSED POWER PUMPS

Pump	Flat Pulley	Vee Pulley	Approximate Nett Weights		
			Pump	Flat Pulley	Vee Pulley
			c.qr.lb.		
1½" x 1¾"	13½" x 1"	face	—	0.2.14	Supplied as standard with pump
2½" x 3"	12½" x 2½"	face	—	1.3.9	
3" x 4"	14" x 2½"	face	—	3.0.7	No vee pulley needed — Vee belts can drive straight on to flat pulley
2½" x 5"				4.1.23	
3" x 5"				4.2.0	
3½" x 5"	21½" x 4"	face	21½" x 4A or 21½" x 6B	4.2.0	48 lb.
4" x 5"				4.2.0	61lb.21½" x 4A 95lb.21½" x 6B
5" x 5"				4.1.23	
4" x 6"				8.0.0	
5" x 6"	23" x 6"	face	21½" x 6B or 28¾" x 5C	8.1.0	92 lb.
6" x 6"				8.1.0	95lb.21½" x 6B 269lb.28¾" x 5C

## SOUTHERN CROSS OPEN GEARED POWER PUMPS

Many thousands of these SOUTHERN CROSS Open Geared, double acting power pumps are in operation throughout Australia. Of simpler design and cheaper than the totally-enclosed self-oiling pumps, they have nevertheless proved they can do a man-sized job well. SOUTHERN CROSS totally enclosed power pumps are mostly used today, but there are still many applications where the open geared pumps can be used, particularly where regular supervision is available to check oiling and where a cheaper pump is called for.

### PUMPING TABLE

#### OPEN GEARED POWER PUMPS

Mark	Bore	Str.	Suct.	Disch.	Str. per RPM	Pulley Galls. per Hour	Max. Head in Feet	H.P. Req. for Max. Head	Approximate Nett Weights			
									Pump	Flat Pulley	Vee Pulley	
									c.q.lbs.			
KJ-F	3"	5"	1½"	1½"	50	233	700	230	2	1.3.18	22lb.	40lb.
KJ-H	4"	5"	2"	2"	50	233	1220	140	2	2.0.2	22lb.	40lb.
KJ-J	5"	5"	2½"	2½"	50	233	1920	95	2	1.3.24	22lb.	40lb.

### SPECIFICATIONS

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

**PIPE CONNECTIONS :** Both suction and discharge may be taken from either side, or the suction from one side and the discharge from the other.

**GEAR DRIVE :** Machine cut gears on steel shafts, lubricated by wick feed from large oil reservoir.

**RECIPROCATING MECHANISM :** The drive is transferred from crankpins on the drive gear shaft through two steel connecting rods fitted with replaceable whitemetal bearings, to a crosshead to which a corrosion resisting brass plunger rod is attached.

**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 by removing Air Chamber.

**PACKING GLAND :** Adjustable screwed brass type using graphited rubber packing.

**AIR CHAMBER :** An air chamber is supplied as standard. See remarks for totally enclosed power pumps.

**SUCTION CHAMBER :** A suction chamber can be supplied as an extra. See remarks for totally enclosed power pumps.

**WATER BY-PASS :** A water by-pass is fitted as standard. See remarks for totally enclosed power pumps.

**PULLEYS :** 14¾" dia. x 2⅞" face flat belt pulley or 15⅝" P.C.D. x 4 "A" vee pulley can be supplied at an extra price.

