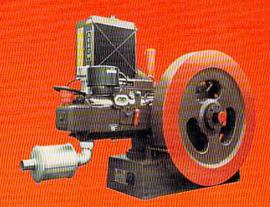
NATURAL GAS FUELED

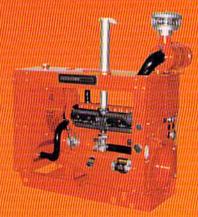
ARROW
Single Cylinder
Engines



"C" Series Gas Engine

Continuous Power for:

- Pumping Jacks
- Cathodic Protection Generators
- Electrical Generators
- · Belt drive high speed centrifugal pumps
- · Direct drive positive displacement pumps



VRG330 *Closed power unit*

Continuous Power for:

- Gas Compressors
- Electrical Generators
- · Pumps of all types
- Mobile equipment power
- Agriculture water irrigation pumps

ARROW
Multi Cylinder
VR Engines
(very reliable)

DISTRIBUTED BY:



2301 E. Independence Tulsa, OK 74110-4900 • (918) 583-5711 • 1-800-331-3662 • Fax (918) 592-1481 • U.S. and Canada Fax 1-800-266-1481

Copyright © July 1997 Arrow Specialty Company www.arrowengines.com



ARROW ENGINES - A WORLD OF QUALITY

Arrow's continuous duty oilfield gas engines are built to excel at one of the toughest, most demanding jobs ever devised. That's why they are the best you can buy...not only to power pumping jacks, but to pump liquids, generate electricity and provide the "muscle" necessary for many other jobs. Arrow engines utilize heavy flywheels to provide high inertial momentum for smooth high torque running at a constant low RPM. The Arrow advantages of low RPM are substantial: less wear, less maintenance, less repair and in the long run less frequent replacement. Compared to high RPM engines, an Arrow engine lasts many times longer and costs less to operate.

Arrow Engine Advantages

· Continuous Duty

Arrow engines are designed for continuous duty 24 hours a day, day after day. Dependable performance when you need it. Arrow's heavy duty design features a heavy flywheel, a governor speed control, and a pressurized full flow lubrication system to assure continuous operation.



"C" SERIES GAS ENGINE

· Oilfield Tough

Over 75,000 Arrow engines are powering pumping jacks in oilfields from the frozen tundras of Canada, to the mountains of South America; from the deserts of the Middle East, to the jungles of Indonesia. Many of the original engines built in the 1940's are still running today. Tough means they work harder, longer.

· Gas Fueled

Arrow engines run on a variety of low BTU gases; natural gas, wellhead gas, methane, butane or propane. Whether in remote jungles or in civilization, locally available gas fuel frequently costs much less than bringing in liquid fuel or electric power. The single cylinder Arrow engines can also be equipped with a fuel lift pump and will operate on gasoline.

Economical Operation

Studies performed in the U.S. have shown that operating costs for Arrow engines can be as low as half the cost for equivalent HP electric motors. Since every area is different, you owe it to yourself to compare the costs in your area.

Easy Maintenance

Arrow engines are designed for easy, quick field maintenance. The oil level can be checked and adjusted while the engine is running. Easy access enables replacing piston rings and wet cylinder sleeves* in the field; and Arrow parts are interchangeable from the first model made.

Ignition

Starfire Solid State Ignition Systems are standard for Single Cylinder engines and optional on Twin Cylinder engines. Also available as options are high tension or solid state magnetos, or Altronic ignition systems.

APPLICABLE TO C-SERIES ONLY

| Product Specifications | "C" Series Four Cycle Engines | | | | |
|--------------------------------------|--|--------------------------------|--------------------|--------------------|--------------------|
| | C-46 (1 cyl) | C-66 (1 cyl) | C-96 (1 cyl) | C-106 (1 cyl) | C-255 (2 cyl) |
| Rated Continuous HP at | 10 HP 7.5 KW | 14 HP 10.4 KW | 20 HP 14.9 KW | 32 HP 23.9 KW | 55 HP 41.5 KW |
| Max Continuous RPM | 800 RPM | 700 RPM | 600 RPM | 800 RPM | 750 RPM |
| Bore & Stroke (MM) | 5"x61/4" | 53/4"x71/2" | 7"x8½" | 7½"x8½" | 7½"x7½" |
| | (127x159) | (146x190.5) | (178x216) | (190.5x216) | (190.5x190.5) |
| Displacement (Liters) | 122.7 C.I.(2) | 195 C.I. (3.3) | 327 C.I.(5.5) | 376 C.I.(6.4) | 660 C.I.(11.2) |
| Compression Ratio | 4.8:1 | 5.2:1 | 4.8:1 | 6.2:1 | 7:1 |
| RPM Range | 400-800 | 350-700 | 300-600 | 300-800 | 400-750 |
| WR ² (Kg-M ²) | 290 LB FT ² (12.18) | 600 LB FT ² (25.20) | 1600 LB FT2(67.20) | 1760 LB FT2(73.92) | 1430 LB FT2(60.06) |
| P.T.O. Shaft Size (MM) | | 21/4" (57.2) | 21/4"(57.2) | 21/4"(57.2) | 21/4" (57.2) |
| Oil Capacity (Liters) | 7 QTS*** (6.6) | 7 QTS*** (6.6) | 11 QTS*** (10.4) | 11 QTS*** (10.4) | 25 QTS*** (23.7) |
| Water Capacity (Liters) | | 16 QTS (15) | 20 QTS (19) | 20 QTS (19) | 9 GAL (34) |
| Spark Plug Size | 18 MM | 18 MM | 18 MM | 18 MM | 18 MM |
| Exhaust Connection | 1½"NPT | 2"NPT | 21/2"NPT | 21/2"NPT | 21/2"NPT |
| Fuel Gas Pipe Size | ½"NPT | ½"NPT | ½"NPT | 3/4"NPT | 3/4"NPT |
| Mtg. Bolts: No./Size | 4-3/4" | 4-3/4" | 4-1" | 4-1" | 4-1" |
| Shipping Wt. (KG) | 1360 LB (617) | 1640 LB (744) | 2580 LB (1220) | 2690 LB (1220) | 4510 LB (2045) |
| Truck Load Qty* | 24 | 22 | 16 | 16 | 10 |
| Safety Controls | STANDARD; Water Level & Oil Pressure** | | | | |
| Ignition | Starfire | | | | Solid State Std |
| | Gaseous | | | | |
| | | Impco Type C | Carburetor | | |
| | | Full Pres | ssure | | |
| Filtration-Oil | Replaceable-Full Flow Filter | | | | |
| Clutch-P.T.O. | C-107-SP-5 | C-110-HP-4 | C-110-HP-3 | SP-111-HP-3 | SP-114-P0 |
| Starting Equipment | 12 volt Ring Gear Starter standard | | | | Air-Gas Optiona |
| * 45 FT. TRAILER BED | ** INCLUDES: OV | ERSPEED ON C-25 | 5 *** FOR OIL FILT | ER CHANGES ADD: | 1 QT. ON C-SERIES |