# "Miniature Steam" Twin Cylinder Slide Valve Vertical Steam Engine "Mildura"

The **Mildura** is the most popular engine in our range of slide valve engines. The crank throws are at 90° giving the engine self starting characteristics at any position of the crankshaft. **Mildura** is available in **five** versions:

**1** -.Fully assembled engine with RC control linkage for reversing and speed control and a low profile stainless steel flywheel that minimises space requirements in the boat

**2** - Fully assembled standard engine with manually controlled linkage for reversing & speed control

3 - Fully assembled engine with no reversing

**4** - Casting kit for standard reversing engine for those with advanced machining skills.

**5** - Casting kit for standard non reversing engine for those with advanced machining skills.

Each option is supported with comprehensive documentation appropriate to the task.

Note: Manual operation of the reversing linkage is standard. .



1. Fully Assembled Reversing Engine with RC Reversing Control for Marine Applications

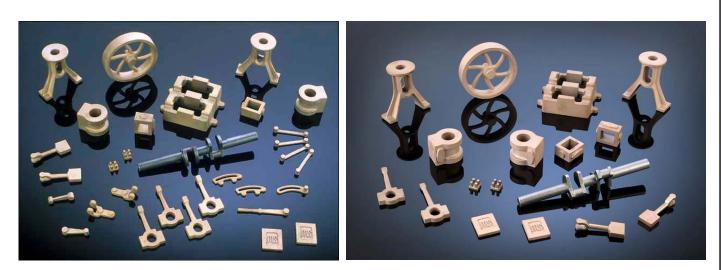


2. Fully Assembled Engine with Manually Operated Reversing



3. Fully Assembled Non Reversing Engine





4. Reversing Casting Kit for Machining

### **Specifications:**

19 mm bore x 19 mm stroke,

80 mm dia x 15 mm wide flywheel-standard

50 mm dia x 16 mm wide **optional** low profile marine flywheel

Maximum length—approx 163 mm

Width without displacement lubricator approx 95 mm Width including displacement lubricator approx 130 mm Height with standard flywheel—approx 153 mm Height with marine flywheel—approx 135 mm Weight

Marine RC Model—1990 gms Reversing Model—2020 gms Non reversing Model—1900 gms

A displacement lubricator is included in each assembled engine package.

Suitable for boats up to 2.1 M (7') long.

Matched to *"Miniature Steam"* 4" Boiler operating at 80psi (see image below and separate facts sheet)

Replacement parts are available for all engine components.

## 5. Non Reversing Casting Kit for Machining

### Materials:

The "*Miniature Steam*" Mildura steam engine is made from highest quality materials. The cast components are made from a combination of bronze and copper based marine grade alloy using the lost wax (investment) casting process. This casting process produces a super fine surface finish in combination with accuracy of detail and dimension. The fully balanced crankshaft is made from Spheroidal Graphite (S G) cast iron to achieve optimum mechanical properties. The remainder of the machined components are made from brass and stainless steel. This combination of alloys provides maximum protection from corrosion and durability during service life of the steam engine.



### Machining, & Operating Manuals Supplied With Casting Kits

#### Manufacturer:

Miniature Steam Pty Ltd PO Box 16 Montrose Victoria 3765 Australia Phone +61 3 9728 6281 Fax +61 3 9728 6285 Email: info@miniaturesteammodels.com Web: www.miniaturesteammodels.com



"Miniature Steam" 4 Inch Horizontal Boiler