

KS90 product details

The Kontax KS90 engine has been endorsed by the Glasgow Science Centre in Scotland, the home of the Stirling engine.

The Kontax Low Temperature Differential Stirling Engine is an excellent demonstration of a heat engine, showing with one spin of the flywheel a clean and simple way of converting thermal energy into motion. This engine will operate from many heat sources, including hot water, computer monitor, TV and the human hand. As long as there is a small difference in temperature between the upper and lower plates this engine will run.

Every one of these engines has been tested to run off the heat of a hand.

This engine has been meticulously engineered. As any Stirling Engine enthusiast knows, friction is your enemy in LTD models. With this in mind, all potential sources of friction in this engine have been eliminated. Another common problem with LTD Stirlings is heat transfer between the plates. Again, all possible routes for heat to transfer directly between the plates have been eliminated.

Based on the pioneering work done by Dr Senft at the University of Wisconsin, this model has been engineered in England, manufactured in England using hi-tech CNC equipment, and is sold from England.

A large number of schools and universities have bought our engines for educational use, the transparent chamber and cylinder make it very easy to explain the Stirling cycle to students. Many of our engines have been kept running for years on top of coffee machines, computers, fax machines, etc. in shops, kitchens and offices all over the world. Many customers take great delight in running our engines on a bowl of ice or snow, where the engine happily runs, but backwards.

Superior engine features:

- Low-profile heat insulating chamber pillars, giving good surface contact with heat source
- 82mm (3.25") diameter rounded solid brass flywheel rim.
- 90mm (3.5") diameter aluminium plates
- Aluminium main pillar, hub & spokes
- Overall height 120mm (5")
- All airtight seals are made with high strength precision screw threads and nitrile O rings
- Stainless steel screws throughout
- Both connecting rods are positively located using low friction PET and stainless screws
- Micron precision Borosilicate glass cylinder and Graphite power piston, the best combination
- Ultra low friction demagnetised and degreased bearings, NO lubrication required
- Fully CNC machined, ensuring crisp, clean tidy edges all over
- Engine parts ultrasonically cleaned before hand assembly
- Precision engineered and hand built in England
- Great Executive toy / gift, ideal retirement present / gift for the Engineer
- Fascinating scientific instrument, demonstrates several scientific facts and phenomena
- We are proud enough of our engine to engrave it with the KONTAX name
- Every one of these engines has been tested to run off the heat of a hand.

Major dimensions:-

- Base plates - 90mm diameter, 2mm thick
- Flywheel - 89mm diameter, 3.5mm thick
- Power cylinder - 12.5mm tube outside diameter, 1.5mm wall thickness
- Displacer - 70mm diameter, 7mm thick
- Overall height - 120mm