

# FREEDOM MOTORS



## *Why us?*

- Freedom Motors has a successful history of developing Wankel rotary engine
- Over 100 years of industrial, technical and scientific experience within the executive team.
- Over the past decade we have received numerous letters of intent to manufacture Freedom Motors engines and invest in us.
- Rotapower engines are very efficient and environmentally friendly by running on any fuel of choice.
- In 2018, Freedom Motors is valued at \$66 Million Dollars. Our Intellectual Property is valued over \$2 Billion Dollars.
- In the early days of Freedom Motors, we acquired proven inexpensive technology from Outboard Marine Corporation (OMC) and Infinite Engine Company (IEC).
- Acquired significant rotary engine assets from Curtiss Wright Corporation, Rotary Engine Technologies, Inc., Savkel Ltd (Syvaro) and General Motors (GM).
- Expended about \$40 million in developing new versions of 27cc and 150cc engines and improved versions of 530cc and 650cc engines. We also have design specifications for 50cc and can be developed and optimized in 3 to 6 months.
- The rotary engines have less critical moving parts and hence lead to less cost of operations and maintenance.
- Some of the key attributes of a rotary engine are its perfect radial balance, low torsional vibration, high power for weight and size, and very reliable.
- Freedom Motors have researched and developed several patented improvements into its designs like
  - Parallel cooling for rotors
  - Unique oil injection lubrication system
  - Complimentary cooling towers
  - Cooling approach eliminated end-loading the roller bearing and side-thrust on the rotor
  - Lubrication patent placed lubricating oil precisely where it was needed
  - 20,000+ hour life seals
  - Proprietary rotor housing grind finish that eliminates need to lap housing
  - Lower cost plasma coatings for rotor housing
  - Modular design allowing for simple implementation of multiple engine configurations from 1 to 9 rotors
  - No bearing end loading
  - No rotor side thrust
  - Modular design (530cc series) allows broad range of power alternatives
- Rotapower engines are low cost and highly efficient engines with a wide variety of use cases. They can be configured to be used in a flying car to an unmanned drone and as diverse as a microgrid to support renewables.