

# *Dynamic Energy Systems*

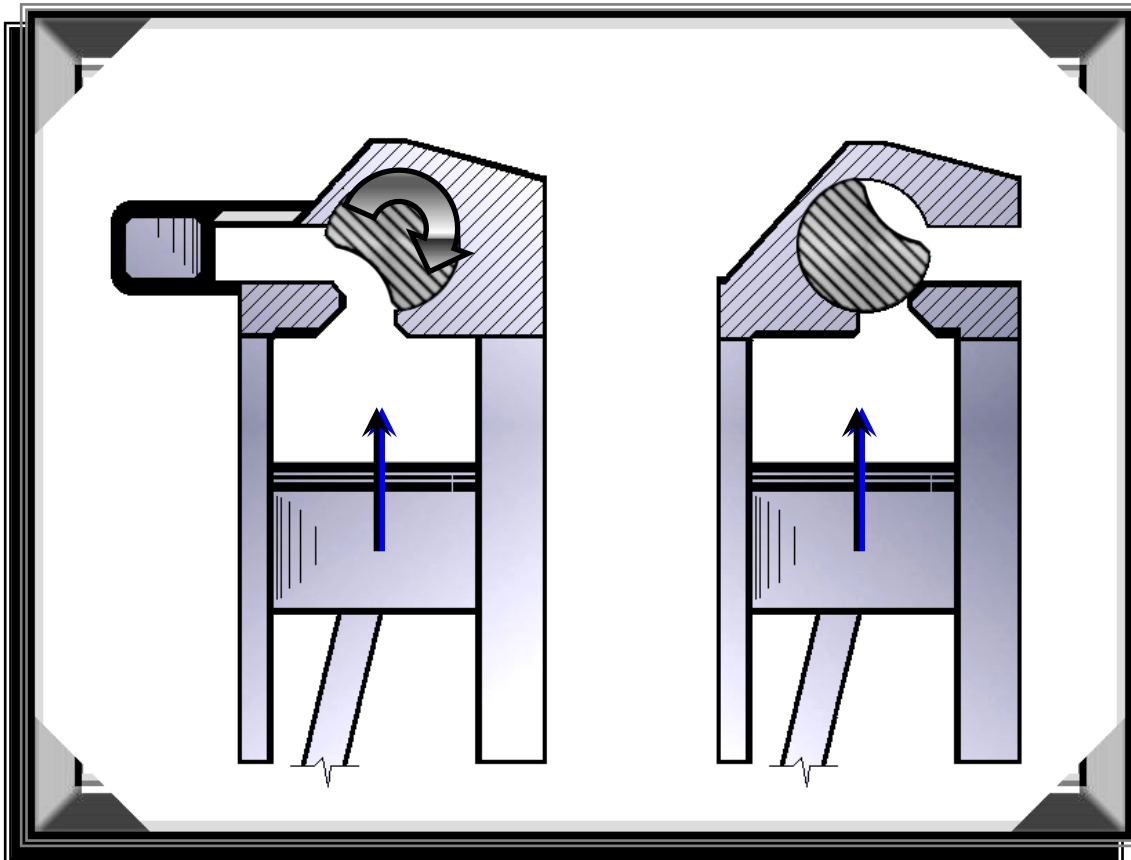
## **Combustion Engine Valve System**

*David Ostling – Patent # 7,089,893 – # 7,287,496*

The design of a superior valve system for allowing intake and exhaust of combustion gasses for internal combustion engines. More particularly, to an axial shaft valve system that rotates along an axis to allow both the intake and exhaust of gasses from a combustion chamber.

The use of ceramic composites for a “Rotational Shaft Valve” (R.S.V. system) can reduce emissions; deliver considerably better M.P.G., and increased horsepower. In addition, there is no power subtracting valve springs. The drive mechanism for the R.S.V. System is the same used in overhead cam engines.

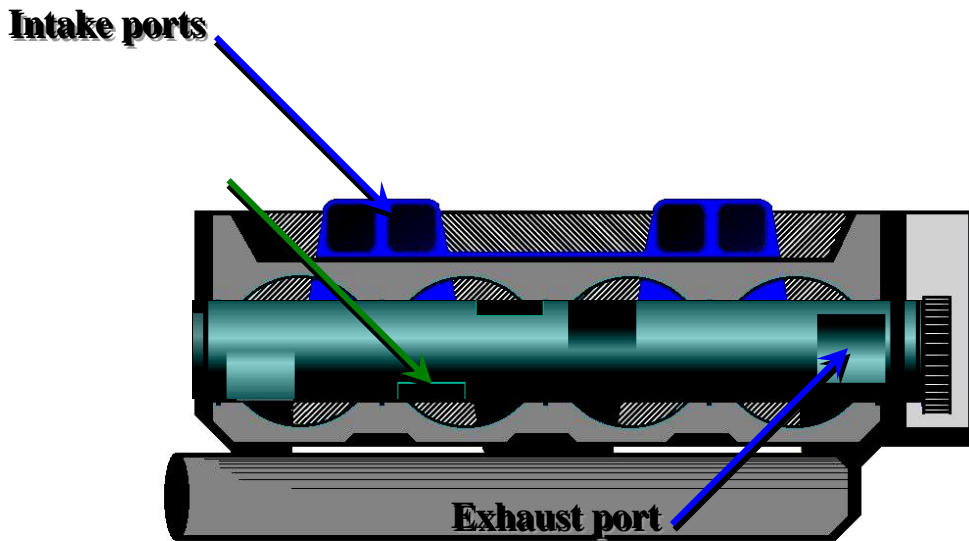
**The short-term target is a major efficiency gain for cars, trucks, SUV’s, and light aircraft.**



# *Advanced High Speed Rotating Shaft Valve System*

Research and development will take a cooperative effort between an engine manufacturing and a multi-purpose ceramic company.

A solid ceramic alloy cylinder head and rotary shaft that is more cost effective than today's valve trains.



The R.S.V. System captures a percentage of the “energy” from the exhaust cycle because, the exhaust gases are at higher pressures and at faster speeds than the rotating shaft. This action will cause the R.S.V. to utilize a significant amount of exhaust energy.

The R.S.V. System design is to increase horsepower throughout the entire R.P.M. range of a given engine. By utilizing exhaust energy and with no horsepower-subtracting valve train drag, the R.S.V. System increases overall efficiency and power.

Sincerely,

David Ostling

President  
Dynamic Energy Systems  
[www. DynamicEnergySystemsLLC.com](http://www.DynamicEnergySystemsLLC.com)

E-mail: [djostling@DynamicEnergySystemsLLC.com](mailto:djostling@DynamicEnergySystemsLLC.com)

