

Supercharger relies on Wankel-style rotors

The Roots-style superchargers (or air pumps) from **Ogura Industrial Corp.**, Somerset, N.J. (www.ogura-clutch.com), use a pair of rotors that borrow their shape and function from the Wankel-engine design to move and pressurize air. Both rotors are hollow, which reduces their inertia and

makes them easier to start and stop. The rotors are also coated with a material that adapts to changing temperatures, letting the air pockets being defined by the rotors stay sealed from one another. The coating also traps particles, preventing them from scoring the metal housing and extending the life and efficiency of the device.

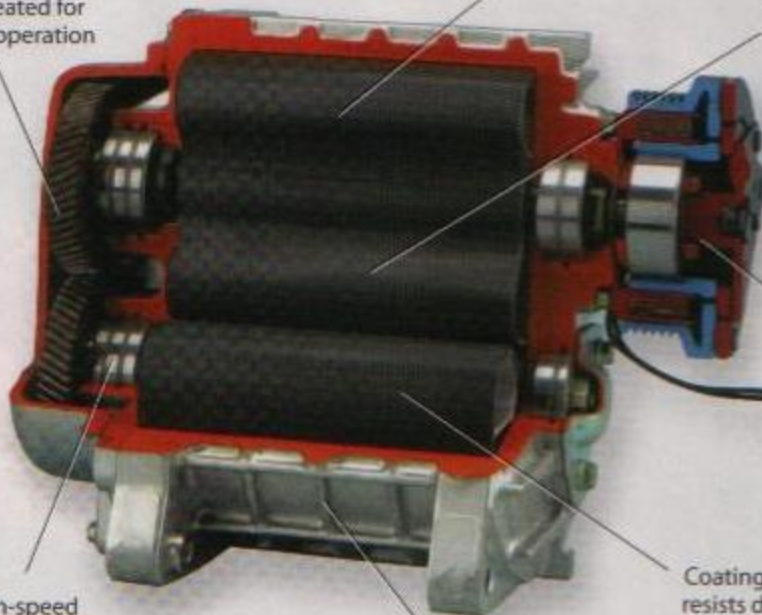
The company makes a series of nine superchargers, with outputs ranging from 2.2 to 126 in./rev. Maximum continuous rpm ranges from about 15,000 to 13,000. The company also supplies optional electromagnetic clutches to ensure the blower only operates when an air boost is needed. This minimizes parasitic loads.

RS# 402

Helical gears are heat treated for quieter operation

Wankel-style rotors for tight seals between rotors

Hollow rotors reduce inertia



High-speed ball bearings

Electric clutch (optional) provides rotation only when needed

Coating on rotors resists damage by contaminants

Finned aluminum housing for cooling and reduced weight



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