



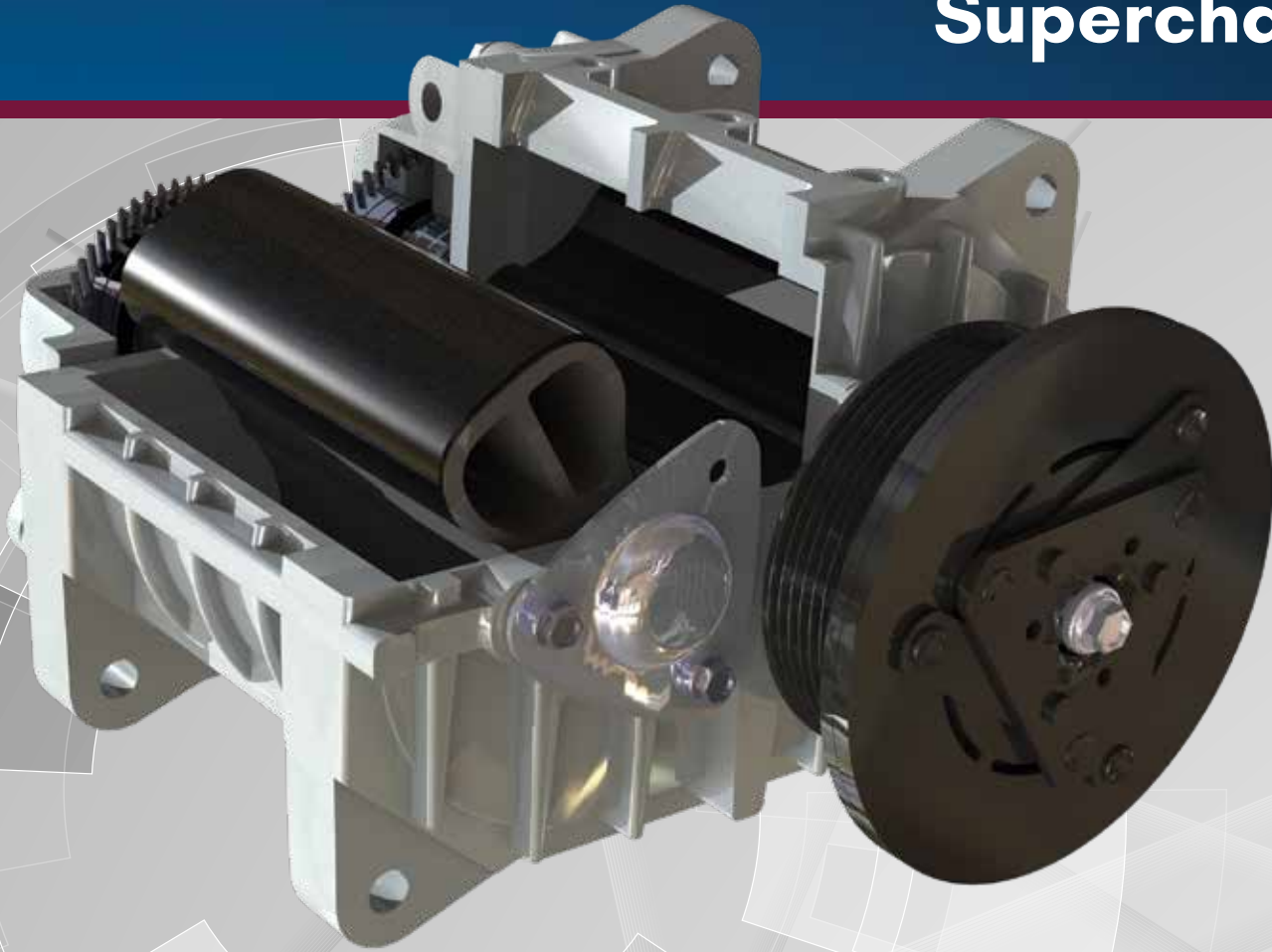
# Air Pumps for Commercial Applications & Hydrogen Pumps for Fuel Cells



**OGURA**  
INDUSTRIAL CORP.

"What You Need in a Clutch®"

# Super-High Efficiency, Positive Displacement Superchargers



## Optimization through customization

Ogura blowers provide robust long life and dependable operation in the most challenging applications. Ogura purchased the unique supercharger design from Wankel in Germany in 1973, but it has been improved to meet the demanding, high efficiency requirements of many of today's applications. Ranging in size from just under 6 m<sup>3</sup>/hr (TX002) to over 1212 m<sup>3</sup>/hr (TX28), Ogura's positive displacement blower can handle applications from air to the universe's lightest gas: Hydrogen.

When efficiency counts, Ogura delivers. Ogura's design is one of the most efficient positive displacement pumps in the industry. These pumps can help make your next generation machine smaller, lighter and more powerful.

Hollow, aircraft grade aluminum rotors are coated with a special lightweight sealing material. This unique low inertia design helps provide the fastest response time for this type of blower.



*Blowoff Equipment*



*Fuel Cells*



*Agricultural Sprayers*



*Automobile Engines*

For detailed specifications for the entire Super

Robust, reliable performance in demanding applications



Put the  
**Ogura Design Advantage**  
to Work for You

**Supercharger options:**

- Direct drive to couple electric motors or drive shafts
- Poly V belt with (on/off) electromagnetic clutch
- Other standard pulley options available

**Pumps can be configured to handle:**

- Nitrogen (Air)
- Hydrogen (H2)
- Ionized water (100% RH)

**Hollow core, low inertia aluminum rotors**

**Special rotor coating to absorb wear particles and avoid scoring**

**Components are made to withstand corrosive gases**

**Modified long life seal for hydrogen**

**Unique pressure cavity construction to prevent hydrogen contamination**

**Multiple sizes available to match application requirements**

**Wide Temperature Range**

**Applications include:**

- Fuel cells (for air and H2)
- Automotive supercharging
- DPF, emissions burn control
- Agriculture
- Inflation devices
- Blowoff equipment

**General Specifications:**

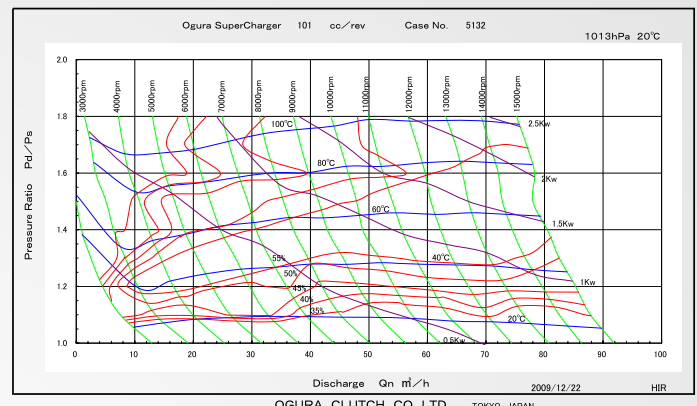
- Speeds to 15,000 RPM
- Air Flows from 3 to 714 CFM
- Efficiencies to 67% in most applications.



Large TX28 supercharger for up to 462 HP engines



Custom TX002 hydrogen pump: 2" x 3" x 2"





# Other solutions available from Ogura



1

**1 Power off brakes**  
to hold or stop in the  
absence of electrical  
power



3

**3 Industrial  
clutches / brakes**  
single face  
quick response,  
high cycle



2

**2 Multiple disc  
and tooth  
clutches**  
high torque,  
can run either  
dry or in oil



4

**4 Mobile equipment clutches**  
for use with gas and diesel  
engines on outdoor power  
equipment and engine driven  
components



5

**5 Superchargers**  
for increased  
engine  
performance  
and reduced fuel  
consumption



6

**6 Tension control**  
hysteresis and magnetic  
particle for precise torque  
control

## Ogura has over 7,000 Standard and Custom Electromagnetic Clutch and Brake Designs.

Founded in 1938, Ogura has over 80 years' experience in the manufacture and design of clutches and brakes. Ogura is currently the world's largest manufacturer of electromagnetic clutches and brakes producing around 30 million units per year with over 7,000 standard and custom designs available from 14 manufacturing ISO certified facilities throughout the world.

Visit [www.ogura-clutch.com](http://www.ogura-clutch.com) to learn more.

Visit our YouTube channel for an extensive library of installation, maintenance, and how-they-work animated videos



<https://www.youtube.com/user/oguraindustrial>



"What You Need in a Clutch®"

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