Oil Free Rotary Air Compressors

Variable Speed & Fixed Speed

HITACHI
Inspire the Next

Hitachi Industrial Equipment Systems Co., Ltd.

History of HITACHI Air Technology

1910 1930 1950 1970 1980

●1911: 75kW Reciprocating
First Compressor in Japan

●1977: Smallest 5.5kW
Oil Injected Rotary Screw

●1976: Oil Injected Packaged
Rotary Screw Series

●1968: First Oil Free Rotary Screw DS series

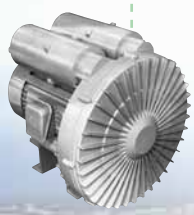
●1954: Oil Free 22kW
Reciprocating

●1982: World's Smallest
Single Stage
Oil Free Rotary

●1980: First DSP Series Oil Free
Rotary Screw

●1946: First Bebicon*1

●1967: Oil Free Bebicon*1



●1969: First Vortex Blower

●1981: Vortex Blower E Series

1990 2000

●1986: World's Smallest Air Cooled Oil Free Rotary

●1984: World's Smallest Single Stage Oil Free Rotary

●1985: World's First Oil Injected Scroll Bebicon*1

●1995: Oil Free Scroll SRL Series

●1992: Vortex Blower G Series

●2002: New Generation Oil Injected HISCREW2000*2Series

●1999: New Generation Oil Free Rotary Screw DSP Series

●2000: World's First Variable Speed Drive Oil Free Rotary

●2001: Package Scroll Bebicon*1

●2005: New Oil Free Scroll SRL Series

∗1: Brand Name of Small Compressors
∗2: Series Name of Oil Injected Rotary Screw Compressors

Establishment in 1910 as a machine repair shop, HITACHI has evolved in providing a variety of Innovative, Technologically Superior, and Value Oriented products for our customers. Founded in Harmony, Sincerity and a Pioneering Spirit, our ongoing mission is to “Contribute to Society through Technology”. The Past, Present, and Future of Hitachi Air Technology Group Products represent our passion for continuing this mission.

Innovation Through Technology

Purity of Air Compression

HITACHI is the only manufacturer in the world to custom match stainless steel for the 1st and 2nd stage rotors, which provides superb performance and longevity. HITACHI Standard PTFE-Free coatings are also an industry first, ensuring the highest quality air is provided to manufacturing processes.

Hi-Precooler

To provide efficient cooling and thermal protection, HITACHI Patented Hi-Precooler(s) are applied prior to the after/inter coolers.
The cooling air path for this Hi-Precooler is down stream of the after/inter cooler to maximize thermal efficiency of the cooling system.

Environmentally Friendly

Oil Mist Remover (OMR)

Gearcase oil mists are not vented to atmosphere, but recaptured, using Hitachi's patented oil mist remover. Oil mists are recycled, saving maintenance oil, eliminating possibility of emissions into the environment, and ensuring purity of air compression.

Low Sound and Vibration

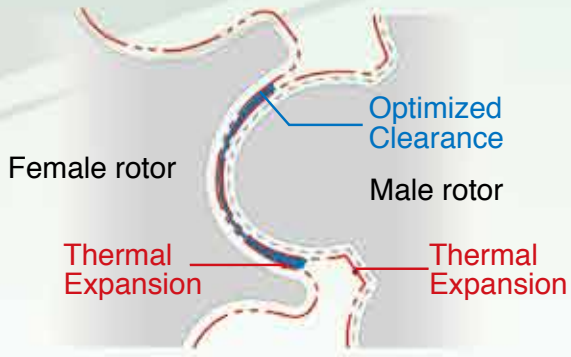
HITACHI Oil Free Rotary Screw Compressors are designed for industry leading sound by providing:

- Full Enclosure as Standard
- Mechanical and Electrical Vibration Isolation
- Design for the Minimization of Leak Paths

Energy Efficiency

HITACHI Control Methodology

HITACHI Standard Microprocessor based variable frequency control keeps the pressure stable in a narrow operation band. This allows significant energy savings over conventional control methods.



HITACHI Innovative Design

To build the World's First Oil-Free Single Stage Rotary Screw Compressor, it was necessary to optimize rotor clearances. Greater efficiency and high reliability are based on Hitachi's proprietary rotor profile and coatings formulation.
This innovation is also incorporated into the design of HITACHI Oil Free Two Stage.

Matched HITACHI VFD & High Efficiency Motors

Precise selection and application of electrical components enables HITACHI Variable Speed Drive compressors to maintain high efficiency throughout the operational range.

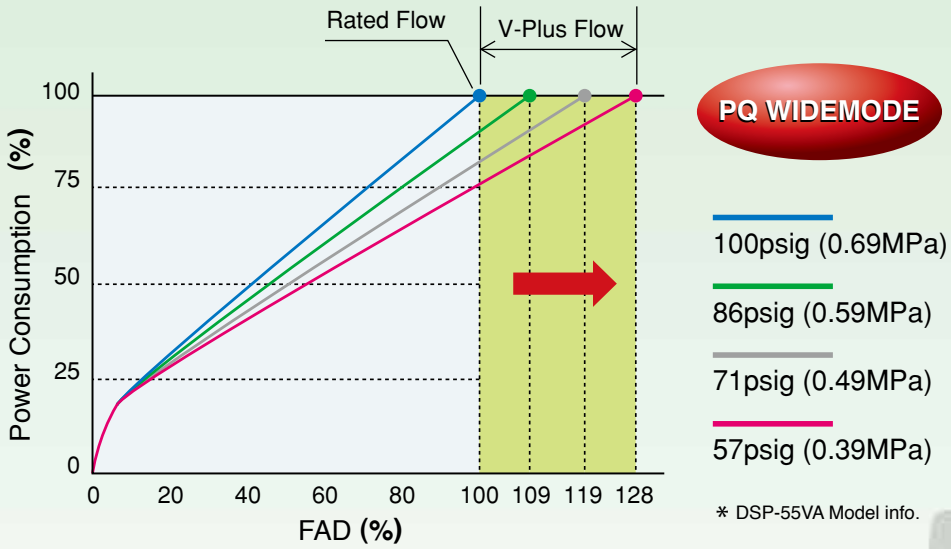
Versatility of Design

PQ WIDE MODE (V-Plus)

(Patent Japan P3516108)

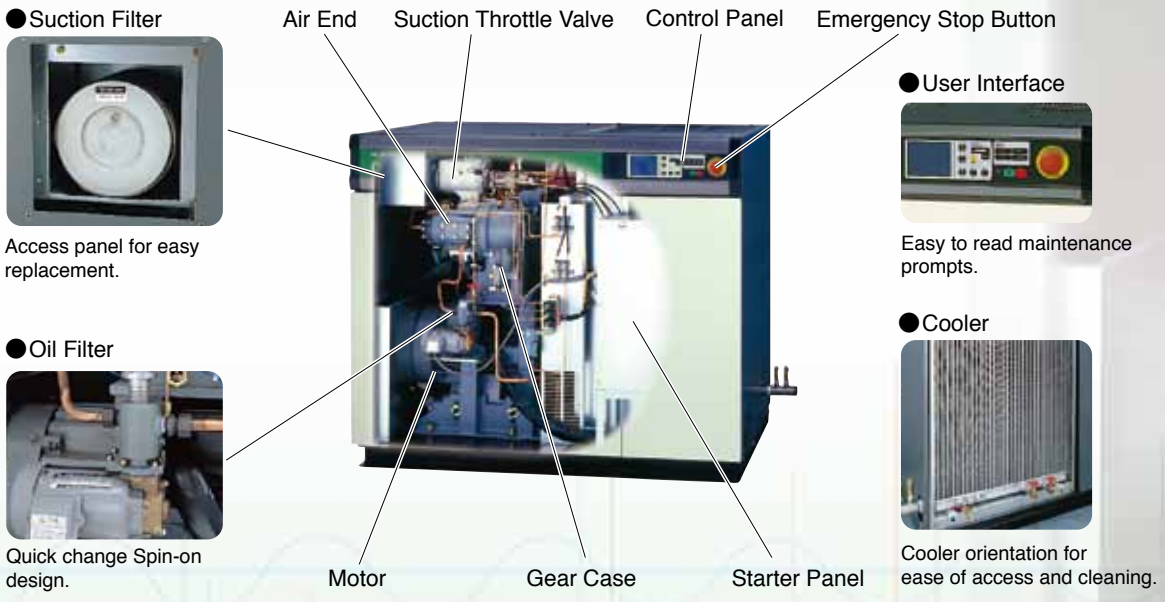
Free air delivery is increased by maximizing the power available.

HITACHI is able to adjust the speed of operation to provide greater air output with lower pressure settings. (PQ WIDE MODE is available for only limited models.)



Maintenance Friendly

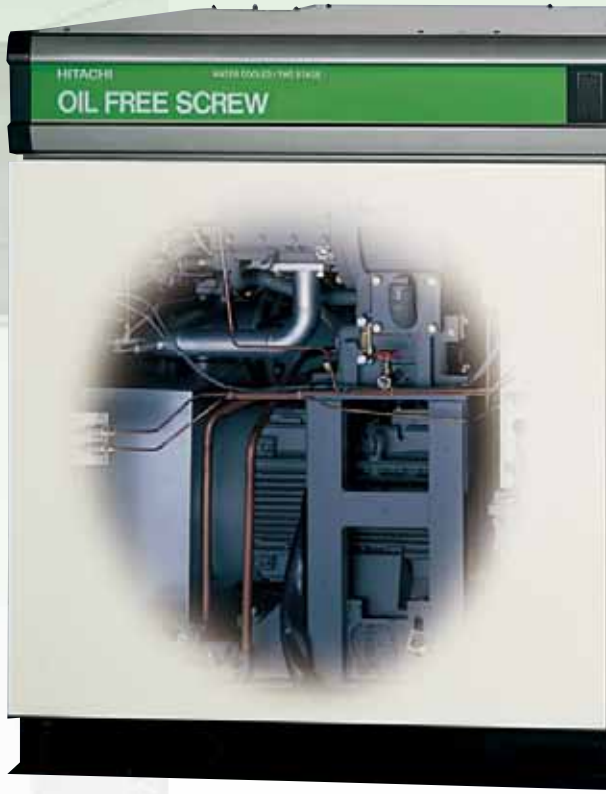
HITACHI Oil Free Rotary Screw Compressors are constructed to enable easy accessibility for inspection and maintenance. Incorporation of leading technologies allows the final product to consume less space, enabling more area for end user accessibility.



HITACHI Innovative Technologies enable Reliable, Environmentally Friendly

Manufacturing Excellence

- Hitachi Compressors (since 1911)
- Hitachi Motors (since 1910)
- Hitachi Variable Speed Drives (since 1979)



Matched VFD & High Efficiency Motor

- Stable Pressure Control
- Low Power Consumption

Industry Leading Sound

- Quiet Enclosure Standard
- Design for the Minimization of Leak Paths

Control Design

- Hitachi provides narrow operation band.
- VSD can quickly adapt to variation in demand.
- Lead/Lag (2 Units) is standard.
- Instantaneous Power Interruption (IPI) restart is standard.

the DSP Compressor Series to provide Compressed Air at the Lowest Energy Cost.

Hi-Precooler

- After/Inter Cooler Thermal Protection
- Maximizes Cooling Efficiency

Oil Mist Remover

- Eliminates Environmental Emissions
- Promotes Purity of Air Compression
- Recaptures Oil Mists (No waste)

Stainless Steel 1st & 2nd Stage Rotors

- Maintains close tolerances for increased efficiency
- Eliminates Possibility of Corrosion

PTFE-Free Coatings

- Ensures Highest Quality Air for Manufacturing
- Contaminant Free (No contribution to airstream)

Space Saving

- Unit is compact in overall dimension.
- Panel accessibility promotes space conservation.

Wide Application in Industries

Pharmaceutical

Food & Beverage

Utility / Power Generation

Chemical

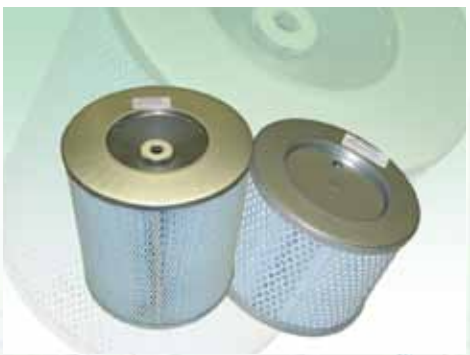
Aftermarket Services

HITACHI factory authorized service and maintenance available.

Electronic

Diversified Industrial

We supply high value-added products and solution systems which meet our **customers' needs**, applying our comprehensive abilities to the development, manufacturing, sales, service and engineering.
We believe we can contribute to customers' business by creating and providing beneficial value-added solutions with our total competencies.



⚠ Safety Precautions

■ **Application**

● The compressor described in this catalog utilizes only air as a gas. Never use any gases other than air.
This could result in a fire hazard or damage to the equipment.

● Hitachi Compressors are not designed, intended or approved for Breathing Air Applications.
Hitachi assumes no responsibility or liability for compressors used in breathing air applications.

■ **Installation**

● Install these compressors indoor. Environments susceptible to moisture such as precipitation or vapors should be avoided — this could result in fire hazard, electric shock, rusting, or shortened life of parts.

● There should be no explosives, flammable gas（acetylene, propane, etc.）, organic solvent, explosive powder, or flame used near the compressor — it may cause fire hazard.

● Avoid using the compressor at a place where there is corrosive gas such as ammonia, acid, salt sulfurous acid gas, etc. — this could result in rusting, shortened life, or damage to the equipment.

■ **Usage**

● Before use, be sure to read the instruction manual thoroughly for correct use of the compressor.

● Do not modify the compressor or its components—this could result in damage or malfunction.

Specifications in this catalog are subject to change with or without notice, as Hitachi continues to develop the latest technologies and products for its customers.

Hitachi Industrial Equipment Systems Co., Ltd.

Hitachi America Ltd.
www.hitachi-america.us/airtech

ISO14001
EC97J1107

ISO9001
JQA-QM3443

Hitachi Screw Compressor is manufactured at a factory approved by Environmental Standard (ISO 14001) and Quality Standard (ISO9001) of International Organization for Standardization.

Printed in Japan(H) 0212
Form **HC-E115P**