

**IWAKI** AIR



## Air-Operated Double Diaphragm Pumps



## FIRST IN QUALITY

Total Quality Management is ingrained in the Iwaki Air brand of Air-Operated Double Diaphragm (AODD) pumps, which are manufactured under stringent ISO 9001 Ver. 2008 standards. Quality is paramount in every aspect of the design, engineering and manufacture of Iwaki Air AODD pumps. An industry-leading and innovative spool valve design and superior non-lubricated air valve technology are key to the Iwaki Air AODD pump's renowned reliability. These pumps are designed and built using patented technology, with no mechanical seals or couplings, to provide years of leak-free operation. Quality is evident from the start, in the sourcing of raw materials, which come from well known and reputable global suppliers. Careful selection of high quality materials ensures exceptional chemical resistance compared to pumps made from inferior materials. Every pump is operation- and leak-tested to ensure years of reliable service.

## HIGH-PERFORMANCE FLUID TRANSFER

Iwaki Air AODD pumps are engineered for maximum utility. They are portable and easy to install, operate and maintain. Infinitely variable flow rates and variable discharge pressures can handle a large range of fluids, including corrosive chemicals and flammable liquids. The AODD pumps can run dry, self-prime and dead-head without damaging the pump. Other design elements that distinguish Iwaki Air AODD pumps include body stabilization features to ensure heat resistance, and sound suppression construction to reduce both mechanical noise and compressed air noise. Most important, the lube-free air valve features a non-centering spring specially designed not to stall and is accessible for easy maintenance.

These pumps are built for power. A higher power output means the pump can operate with less applied air pressure compared with many competitor's pumps – often outperforming pumps that may have a higher listed flow rate.

Multiple material options are available and can be configured to meet application requirements. Visit [www.iwaki-air.com](http://www.iwaki-air.com) for complete listing.

# QUALITY BUILT-IN, BUILT TO LAST

## Looped C® Spool/Sleeve Air Valve (Patent Pending)

Revolutionary new spring design uses stronger, light-weight materials for a smoother stroke with less wear and tear of all spool components (fully interchangeable with C-Spool model pumps).

## Rugged, Bolted Construction

Eliminate alignment and leaking issues associated with band clamp-style pumps.

## Lube-free Operation

Clean, environmentally friendly design is engineered without the need for lubrication. Lube-free operation extends the life of all air motor parts.

## Outside-Accessible Air Motor

Easy external access allows servicing the air motor in place.

## Independent and Modular Pilot Valve

Industry-leading pilot valve design is fully independent and virtually non-wearing. Static seals are dirt and moisture resistant. Pilot valve and springs are made from high tensile stainless steel that will not bend or rust. Faster cycles with shorter strokes will extend diaphragm life.

## Large-Diameter Ports

Oversized ports allow contamination to pass through the pump eliminating blockages.

## Reduced Pump Stalling

The patent pending new Looped C-Spool design greatly reduces pump stalling.

## Resists Freezing

Compressed air expands gradually through our innovative staged air chamber exhaust system to reduce freezing.

## Modular Check Valve Construction

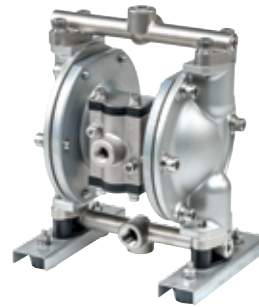
High-wear components are available individually or in pre-packaged kits for easy replacement, low-cost maintenance, and lower cost of ownership.

## Air EcoRing (Patent Pending)

All 3/4" and 1" pumps now come with the EcoRing technology that allows for 20-25% improved air consumption with no effect on flow rates.

## 1/4" TC-X 030/050 Series

- Max operating pressure: 100 PSI (0.7 MPa)
- Max flow rate: TC-X 030 – 2.1 GPM (8.0 LPM)  
TC-X 050 – 3.0 GPM (11.5 LPM)
- Connection: 1/4" threaded NPT
- Materials: TC-X 030 – Kynar® only  
TC-X 050 – Stainless, Aluminum, Pure Polypropylene, Glass-filled Polypropylene, Acetal, Kynar®



## 3/8" TC-X 100/101 Series

- Max operating pressure: 100 PSI (0.7 MPa)
- Max flow rate: 6.1 GPM (23 LPM)
- Connection: 3/8" threaded NPT
- Materials: Stainless, Aluminum, Pure Polypropylene, Glass-filled Polypropylene



## 1/2" TC-X 152 Series

- Max operating pressure: 100 PSI (0.7 MPa)
- Max flow rate: 15.8 GPM (60 LPM)
- Connection: 1/2" threaded NPT
- Materials: Stainless, Aluminum, Pure Polypropylene, Kynar®

## INDUSTRY APPLICATIONS

Iwaki Air AODD pumps are an ideal choice for the safe transfer of a limitless variety of liquids across many industries: corrosive chemicals, liquid slurries, abrasive particle slurries, viscous liquids, fuel, oils, glues, inks, and flammable liquids, just to name a few.

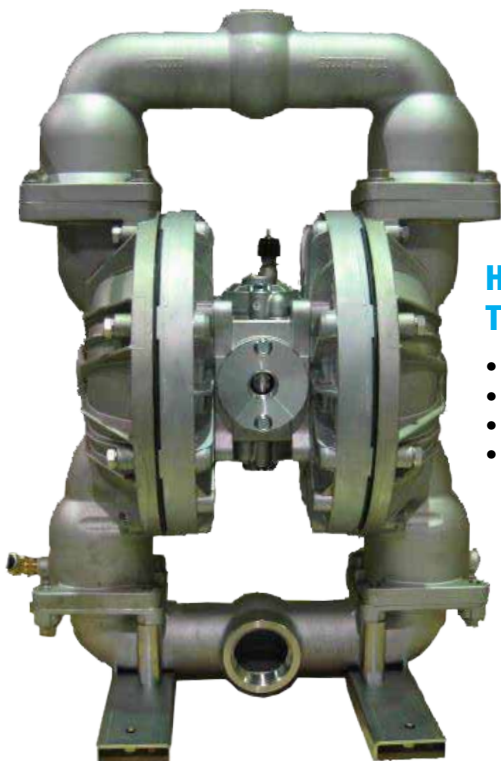
- Food and Beverage
- Concrete Additives
- Water Treatment
- Oil and Gas
- Chemical
- Metal Finishing
- Battery Manufacturing
- Semiconductor
- Pulp Paper and Packaging
- Textiles and Carpet
- Paints and coatings
- And many, many more



## 2" TC-X 500 Series Available in two configurations

### Standard Configuration TC-X 500 Series

- Max operating pressure: 125 PSI (0.85 MPa)
- Max flow rate: 190.2 GPM (720 LPM)
- Connection: Metal – 2" NPT and ANSI flange  
Plastic – ANSI flanges only
- Materials: Stainless, Aluminum, Glass-filled Polypropylene, Kynar®, Cast Iron



### High Pressure Configuration TC-X 500ST-HP Series

- Max operating pressure: 250 PSI (1.7 MPa)
- Max flow rate: 95.1 GPM (360 LPM)
- Connection: Metal – 2" NPT and ANSI flange
- Materials: Stainless, Aluminum, Cast Iron



### 3" TC-X 800 Series

- Max operating pressure: 125 PSI (0.85 MPa)
- Max flow rate: 210 GPM (790 LPM)
- Connection: Metal – 3" NPT and ANSI flange  
Plastic – ANSI flanges only
- Materials: Stainless, Aluminum, Glass-filled Polypropylene, Cast Iron



# Superior performance and reliability under the most demanding conditions



## 3/4" TC-X 202/1" 252 Series

- Max operating pressure: 100 PSI (0.7 MPa)
- Max flow rate: TC-X 202 – 31.7 (120 LPM)  
TC-X 252 – 43.6 GPM (165 LPM)
- Connection: TC-X 202 – 3/4" threaded NPT/flange  
TC-X 252 – 1" threaded NPT/flange
- Materials: Glass-filled Polypropylene, Kynar®,  
Aluminum, Stainless Steel

## 1½" TC-X 400 Series

- Max operating pressure: 100 PSI (0.7 MPa)
- Max flow rate: 100.4 GPM (380 LPM)
- Connection: Plastic: ANSI flanges only
- Materials: Glass-filled Polypropylene, Kynar®



## 1" TC-X 253 Series

- Max operating pressure: 100 PSI (0.7 MPa)
- Max flow rate: 58.1 GPM (220 LPM)
- Connection: 1" threaded NPT
- Materials: Stainless, Aluminum, Cast iron



# LOW MAINTENANCE COST + HIGH VALUE = LOW TOTAL COST OF OWNERSHIP

The fundamental design of Iwaki Air AODD pumps has remained constant through the years. Our commitment to quality means pumps will provide a long service life and won't become obsolete.

**Standardized parts** – Standardized parts and components are used across various models and sizes. Pumps manufactured from different materials often use many common parts so they can be interchangeable. **Benefit - Reduced inventory cost.**

**Easy access** – Pumps can be broken down to completely separate and individual components. Easy accessibility allows fast replacement of individual parts. **Benefit - Faster maintenance repair time.**

**No special tools required** – Maintenance can be easily done by a single person using standard tools. **Benefit - Ease of maintenance and repair.**

**Modular components** – Pre-packaged kits allow cost-effective and fast replacement of only the worn parts rather than entire assemblies. **Benefit - Cost Savings.**

**No need to stock extra parts** – A few essential parts and kits in inventory can keep existing pumps running over a long period. **Benefit - Less downtime for your process.**

