

# SOLVE DINDUSTRIAL MOTION GROUP

SOLUTIONS FOR
POULTRY PROCESSING
PERFORMANCE





# **Industry Challenges**

Poultry processing environments, from egg hatcheries and slaughter plants to fresh packaging and further processing, present some of the toughest operating conditions in food production. Equipment is continuously exposed to moisture, chemical washdowns, and high sanitation demands. In these applications, uptime is critical and failure is not an option. Solve delivers durable, corrosion-resistant bearings and power transmission components that support reliability, meet USDA requirements, and help ensure continuous operation across every stage of poultry processing.

# **Solutions by Solve**

Solve Industrial Motion Group delivers a full portfolio of bearings, power transmission components, and engineered solutions built to perform in the most demanding food processing environments. Our trusted brands help operators maximize uptime, extend equipment life, and reduce maintenance under extreme conditions.

You need Solutions by Solve.



# OUR TRUSTED BRANDS

## **IPTCI**

IPTCI offers corrosion-resistant bearings for light, standard or medium-duty applications, as well as a full line of standard bearings. Their innovative, reliable and cost-effective solutions combine innovation, quality, and affordability.

## TRITAN

TRITAN has over 25 years of experience producing world-class precision mounted and unmounted bearings, using the latest technologies to increase life expectancy and performance with careful adherence to lubrication requirements.

## **MASTERDRIVE**

MasterDrive is a global leader in power transmission components, providing customers with innovative and quality products designed to meet the highest standards of performance and reliability, from light and heavy duty sheaves to MD Flex couplings.



## **Our Solutions**

#### **Stainless Steel Mounted Ball Bearing Units**



2-Bolt Flange



3-Bolt Flange



3-Bolt Bracketed Flange



4-Bolt Flange



Piloted 4-Bolt Flange



Pillow Block



Tapped Base Pillow Block



Hanger Unit



Take-Up Unit

#### **Nickel Plated Mounted Ball Bearing Units**



2-Bolt Flange



3-Bolt Bracketed Flange



4-Bolt Flange



Piloted 4-Bolt Flange



Pillow Block



Tapped Base Pillow Block



Hanger Unit



Take-Up Unit

#### Stainless Steel Stand-Off Mounted Ball Bearing Units



2-Bolt Flange Stand-Off



3-Bolt Flange Bracket Stand-Off



4-Bolt Flange Stand-Off



Tapped Base Pillow Block Stand-Off

# Thermoplastic Mounted Ball Bearing Units



2-Bolt Flange



3-Bolt Bracketed Flange



4-Bolt Flange



Take-Up Unit



Pillow Block



Tapped Base Pillow Block



#### **Corrosion-Resistant Mounted Ball Bearing Inserts**



Stainless Steel — Setscrew (SUC, SSB)



Stainless Steel — Cylindrical OD (SSER)



Stainless Steel — Eccentric Collar (SHC, SNA)



Hard Chrome Coated (CUC)



Black Oxide (BUC)

#### **Seal Types**



IP69K Seal

- Bearing insert is IP69K rated
- » Can be used in any current housing
- » H1 food grade grease
- » All stainless design
- » Between seal and slinger 100%
- » 60-80% Internal Grease fill
- » 4 contact seals
- » Lubed for life



L3 Seal

- » Heavy duty seal
- » Great in dirty applications
- » Require slower speeds
- Shield and seal are 1 piece
- » Silicone material





**B-Type Seal** 

- » Standard seal
- » Great in most applications
- » Slinger + single lip seal» Silicone material
- illualu seat



K-Type Seal

- » Light duty seal
- » Used in SSB inserts
- » K-type is used on the non locking side of insert
- » Locking collar side typically adds slinger
- » Silicone Material

#### Stainless Steel Deep Groove Ball Bearings

Stainless steel deep groove ball bearings, made primarily of AISI 440C and AISI 301 stainless steel, offer high corrosion resistance, stability, and durability, especially in humid and caustic environments. They share standard dimensions with regular bearings but are specially suited for demanding, corrosive conditions. Pre-lubricated with FDA-approved grease, these bearings are ideal for the food and beverage industry, where hygiene and resistance to frequent wash-downs are critical.



Stainless Steel Single Row Radial Deep Groove Ball Bearings



Miniature Single Row Deep Groove Ball Bearings

#### Solid Lube Deep Groove Ball Bearings & Inserts

Solve Solid Lube deep groove ball bearing use a solid lubricant rather than traditional liquid or grease lubricants. This allows for maintenance-free operation, reduced wear, and longer life as well as making them ideal for the poultry industry where avoiding liquid lubricant contamination is critical.



Solid Lube Ball Bearings



Solid Lube Insert



The IPTCI® IP69K Series is engineered for the demanding conditions of poultry processing, where components face constant washdowns, high temperatures, and caustic sanitizers. Designed to withstand frequent submersion and aggressive cleaning procedures, these bearings deliver exceptional sealing, safety, and long-term reliability — helping maintain uptime and compliance in critical sanitary environments.



#### **PRODUCT RANGE**

**SIZES:** 201 – 210 (1/2" to 2"; 20mm to 50mm). Larger sizes available upon request.

**CONFIGURATIONS:** Available in all major housing configurations (including Stand-Off Series).

**NOMENCLATURE:** SUC205-16 IP69K

#### **IP69K SERIES**

- » Unique quad-lip molded rubber composition provides superior protection against dust and liquid intrusion.
- » Lubed for life" with H-1 food-grade grease to eliminate lube holes, grease zerks, and other potential areas of intrusion.
- » High-quality, corrosion-resistant stainless steel construction extends the life of the bearing.
- » No external seals or covers required.
- » From an industry leader in mounted bearings and mechanical power-transmission components.
- » Specify IPTCI's IP69K Series for your most challenging applications. Dustproof. Waterproof. Hassleproof.



#### The IP69K Standard

**IP:** Ingress Protection rating.

**FIRST DIGIT:** Protection against solids. "6" means dust tight; no ingress of dust.

#### **SECOND DIGIT:**

Protection against liquids. "9K" means protection against close-range, high-pressure, high-temperature washdowns and steam cleaning.

#### **HOUSING OPTIONS**

**Stainless Steel -** IPTCI's Stainless steel housings ideal for highly corrosive applications, offering superior resistance to flaking, cracking, deformation, and discoloration. They feature smooth surfaces, solid bases and backs to minimize contaminants, and are capable of withstanding significant radial loads. Various styles, including options with end caps, are also available.

**Thermoplastic** - IPTCI's thermoplastic housings offer a cost-effective alternative to stainless steel, with strong corrosion resistance and favorable mechanical, thermal, and electrical properties. Made from glass-reinforced PBT resin, these housings are resistant to moisture absorption and have an operating temperature range of -10°F to 210°F. Like stainless steel models, they feature smooth surfaces, solid bases, and backs, with stainless steel sleeves, bushings, and grease fittings.

CUSTOMER **BENEFITS:** 

10x Longer Bearing Life

50% Reduced Maintenance Hours

50% Savings in Annual Bearing Costs



#### **Stainless Steel Chains**



Stainless Steel Roller Chain



Stainless Steel Attachment Chain also available



Marathon Conveyor Chain



Nickel Plated Roller Chain



Marathon Roller Chain



Nickel Plated Connecting Links also available

#### **Sprockets**





#### **Stainless Steel Shaft Collars**



Unsplit



Split

#### **Stainless Steel Rod Ends**



Female & Male Rod Ends

#### **Cam Followers**



Cam Follower



# **Case Study: Custom-Engineered Success**

### Challenge

A multinational food processing plant needed a reliable bearing solution for an industrial washing machine used to clean metal packaging. The system operated in 150°F disinfectant wash cycles, exposing the bearings to constant heat, moisture, and chemical contact. These harsh conditions were causing premature failure and unplanned, high maintenance costs – leading to costly downtime and sanitation concerns.

#### Solution

Solve's engineering team recommended the IPTCI IP69K mounted unit, built specifically for extreme washdown environments. Its quad-lip seals and food-grade lubrication allowed it to withstand full submersion and thermal stress, while maintaining sanitary integrity.



The Result

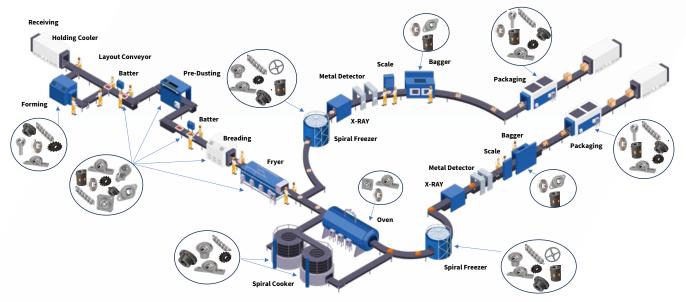
\$157,000 in annual savings, and acheiving

reduced maintenance 50% reduced maintena

delivering long-term reliability and full sanitary compliance in a demanding application.

# **Powering Every Step of Poultry Processing**

From cutting and conveying to packaging, Solve provides the essential motion and power transmission components that keep poultry lines running efficiently. Our hygienic, IP69K-rated bearings, chains, couplings, bushings, and sheaves are engineered to perform in the industry's harshest washdown environments.





# Your Source for Power Transmission Components



**Mounted Ball Bearings** 



Corrosion-Resistant Mounted Ball Bearings



**Split Block Roller Bearings** 



Unitized Mounted Roller Bearings



Spherical & Cylindrical Roller Bearings



**Tapered Roller Bearings** 



Deep Groove & Angular Contact Bearings



**Needle Roller Bearings** 



Cam Followers & Yoke Rollers



Spherical Plain Bearings & Rod Ends



**Sheaves** 



**Timing Pulleys** 



QD, DST & Tapered Shaft Bushings



Weld-On Hubs



**MD Flex Couplings** 



**Jaw Couplings** 



**Sprockets** 



**Precision Roller Chains** 



Corrosion-Resistant Roller Chain



V-Belts & Timing Belts

Solve Industrial Motion Group is an industry-leading manufacturer and supplier

of industrial-grade bearings and power transmission components. 24/7 Sales: 704-588-1091 Toll-Free: 800-763-4434

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