





Screwjack
Lifting and
Positioning
Systems



Overview and Applications



www.diequa.com



## Screwjack Lifting and Positioning Systems

DieQua Corporation is a manufacturer and supplier of premium quality power transmission and motion control components, satisfying demanding requirements for over 20 years. Along with our manufacturing partner, Zimm Maschinenelemente GmbH, we offer one of the most extensive ranges of screw jack systems available. With Zimm's building block concept, featuring a wide variety of sizes, configurations, connection, safety, and motion control options, we have the solution to meet your unique lifting and positioning needs.

## Program Benefits:

- Precision Machine and Ball Screws
- Standing and Rotating Versions
- Multiple Spindle End Connections
- Multiple Driving Nut Designs

- Modular Housing for Mounting Versatility
- Multiple Safety and Protection Options
- Motion Control Options
- Complete System Designs

#### Series S - Standing Version



Machine Screw



Aluminum Housing



with Safety Nut



with Anti-Backlash



**Ball Screw** 

#### Series R - Rotating Version



Machine Screw



**Aluminum Housing** 



with Safety Nut



**Ball Screw** 

#### Series S - Standing Version

The standing version has the spindle traveling through the gearbox to provide lifting and positioning from above or below the load.

#### Specifications:

Load Capacities: 1/2 ton to 75 ton
Lift Rates: 15 to 120 inches per minute

• Product Range: 11 sizes

• Spindle Design: Machine screw or ball screw

The standing version offers a wide range of load connection options, control features, and system components to assure precise, reliable performance and maximum design versatility.



#### Series R - Rotating Version

The rotating version has a nut that travels up and down a rotating spindle, to provide lifting and positioning within a smaller envelope.

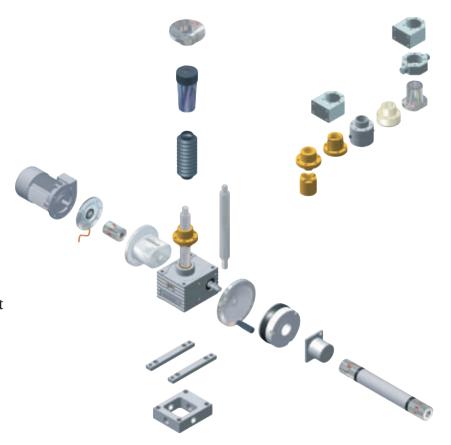
#### Specifications:

Load Capacities: 1/2 ton to 75 ton
Lift Rates: 15 to 120 inches per minute

• Product Range: 11 sizes

• Spindle Design: Machine screw or ball screw

The rotating version offers a variety of nut designs along with a wide range of control, safety, and drive components to satisfy demanding lifting and positioning system components.



# **System Components** - The Building Blocks

## **Load Connection Options:**

#### **Series S - Standing Version**



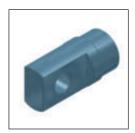
Fixing Flange



Forked Head



Rod Fnd



**Pivot Bearing** 

#### **Series R - Rotating Version**



Flange Nut



**Duplex Nut** 



Self-Aligning



Greaseless Nut

## Screw Jack Connecting Options:



Lineshafts



Universal Joints



Standard Couplings



Clamp Couplings

## **Motion Control Options:**



Limit Switches



**Rotary Encoders** 



Linear Encoders



Brakes

Zimm's building block concept offers the widest range of system components, options, and special designs available in a screw jack program. Whether a simple jack or a complete automated lifting or positioning system is required, Zimm has the solution for your unique application.

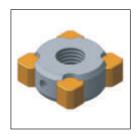
## **Protection Options:**



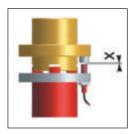




Bellows



Anti-Rotation



Safety Nuts

## **Drive Options:**



Motors



Motor Flanges



Hand Wheels



**Bevel Boxes** 

## **Mounting Options:**



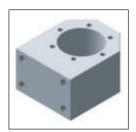
**Bearing Plates** 



Support Tubes

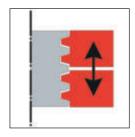


Mounting Feet



**Driving Flanges** 

## Other Available Options:



Anti-Backlash



Bearing Flanges



**Automatic Lubricator** 



**Lubricating Strips** 

## **Application Examples**

Screw jacks and screw jack systems are incorporated into more applications and industries than perhaps any other gear drive device. Wherever lifting or positioning is necessary, Zimm has a screw jack to meet the needs of your unique design requirements.







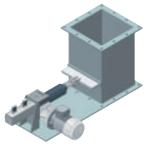
Pallet Transfer Table

Ring Height Adjustment

Antenna Positioning







Concrete Beam Production

**Compact Press** 

Feed Slide Positioning







**Bottling Systems** 

Scissor Table

Mobile Lifting Platform







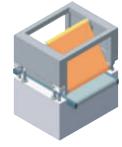
Destacking Unit

Oven Hood Adjustment

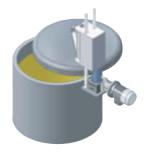
Conveyor Adjustment



# Screwjack Lifting and Positioning Systems



Grinder Belt Adjustment



Tank Lid Adjustment



Feeder Cart Adjustment



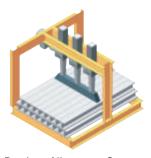
Saw Blade Adjustment



Stage Adjustment



Centering Mechanism



**Product Alignment System** 



Product Gripper Mechanism



Roller Gap Adjustment

### Design Assistance

DieQua offers complete system design assistance, taking the guess work out of product selection. Our years of application experience assures that all elements of the design process are considered. We also offer full assembly drawings, which provides time-saving value and guarantees that the correct system components are integrated. Contact DieQua with your next screw jack challenge!

## Other Products & Services



Helical Gearmotors and Speed Reducers



Servo Gearheads



Servo Worms



Spiral Bevel Gearboxes



Variable Speed Drives



Zero Backlash Couplings



**Torque Limiters** 

#### **Engineering Support**

DieQua Corporation has several decades of combined experience specifying power transmission and motion control components. This assures the proper selection of components and systems for your unique requirements.



#### **Manufacturing**

DieQua Corporation's manufacturing capabilities allow production of many of the components used in the drives we provide. Mounting components and design modifications are also available from our full service machine shop.



#### **Assembly**

DieQua Corporation has a team of factory trained technicians that assemble the majority of the drives we provide. This allows prompt delivery of your production requirements or service repairs.



#### **Warehousing**

DieQua Corporation maintains an extensive inventory of common speed reducer and motor components for quick delivery of small orders, prototypes, and spare parts.



#### Manufacturing Partners















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