

# DIEQUA

Corporation



Planetary

Bevel

Worm

Helical

Hypoid

Cycloidal

## SERVO GEARHEADS

### QUICK SELECT GUIDE

# The DieQua Servo Gearhead Family



Servo gearheads provide mechanical advantage by multiplying motor torque while reducing the driven load's reflected inertia back to the motor.

We offer the widest range of servo gearhead solutions in the industry, meeting and exceeding the needs of your motion application demands.



## Features:

- Wide levels of backlash
- In-line, right-angle, and custom configurations
- Planetary, spiral bevel, hypoid, helical gearing
- Solid shaft, hollow bore, robot flange outputs
- Multiple levels of gearing precision
- Noise levels as low as 56 dB(A)
- NEMA and metric dimensions

## Precision Planetary Gearheads

The Sesame Series provides a variety of precision, performance, configuration, and price levels, to satisfy the full range of motion control application requirements.

### Specifications:

- 3 Precision and performance levels
- Backlash values from 15 to below 1 arc minute
- Frame sizes from 42mm to 235 mm
- Industry-standard mounting dimensions



## Precision Worm Servo Gearheads

The DieQua Drives Series provides superior motion control with backlash as low as 1 arc minute. Precision worms result in high efficiency and quiet operation.

### Specifications:

- 1, 5, or 10 arc minute backlash precision
- Torque capacities from 18-8000 Nm
- 9 standard ratios from 3.125:1 to 90:1
- 5 output shaft configuration options

## Industrial Worm Servo Gearheads

The DieQua Drives Series offers low cost torque multiplication, in a right-angle configuration, for applications with lower dynamic motion control profile requirements.

### Specifications:

- Center distances from 28 mm to 110 mm
- Single-stage ratios from 5:1 to 100:1
- Inch or metric output shafts
- Torque capacities from 8 Nm - 690 Nm



## High Torque Helical Servo Gearheads

The DieQua Drive Series provides economical motion control for high torque applications with four in-line and right-angle helical, helical worm, and helical bevel designs.

### Specifications:

- Torque capacities up to 14,000 Nm
- Backlash down to 5 arc minutes
- Hundreds of ratios
- Inch or Metric output shafts



## Precision Hypoid Gearheads

The ServoFoxx Series offers superior performance and connection versatility for highly dynamic servo-driven applications requiring low to mid-range ratios.

### Specifications:

- Single-stage ratios from 5:1 to 15:1
- Torque capacities from 40 Nm to 850 Nm
- 6 Output shaft configuration options
- Integral flexible bellow input adapter

## Precision Spiral Bevel Gearheads

The ServoFoxx Series offers ground spiral bevel gearing for extreme accuracy in low ratios, or higher ratios when coupled with the optional planetary input stage.

### Specifications:

- Backlash as low as 2-3 arc minutes
- Ratios from 1:1 to 6:1
- 4 Output shaft configuration options
- Torque capacities from 8 Nm to 1250 Nm



## Precision Cycloidal Reducers

The TwinSpin Series offers the ultimate in rotary position control accuracy with torque density, torsional rigidity, and moment capacity second to none.

### Specifications:

- True zero backlash
- 5 Output mounting designs
- Diameters from 50 mm to 300 mm
- Ratios from 33:1 to 191:1



## DieQua engineering is here to help.

FEA analysis is available to help in identifying and resolving your demanding application.

Call us at 630-980-1133 to speak to our trained engineering team.

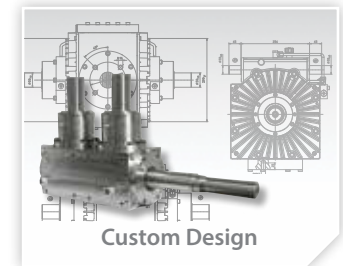
# ABOUT DIEQUA

Founded in 1980 by Dietmar Quaas, and now owned by his sons, DieQua Corporation has expanded from a single product line to become a leading manufacturer and supplier of an extensive line of high-quality power transmission and precision motion control products, including gearboxes, servo gearheads, screw jack systems, speed reducers, cycloidal reducers, and connecting components. The company also offers custom product modifications and complete design solutions for virtually any application. DieQua Corporation serves a wide range

of industries, including medical and health care, marine engineering, renewable energy, mining, transportation, steel, forestry and lumber, water and wastewater, automotive, and factory automation, to name a few.

An experienced and knowledgeable technical sales, customer service, and engineering support staff, as well as local distributors, ensure that DieQua customers in North America, Mexico and South America select the optimum components, systems, and best design solutions for their specific requirements.

## The DieQua family of products



## The DieQua Advantage

### Engineering Support

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

### Warehousing

We pride ourselves for our extensive in-stock inventory. For fast product turnaround, DieQua Corporation stocks many components of various ratios and sizes, ready to ship fast.

### Manufacturing and Assembly

DieQua Corporation now manufactures or assembles most of the products, for on-time delivery of standard orders as well as prototypes. We are ISO 9001 certified and are constantly improving our quality systems to ensure our customers receive the best products.



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