

# ROTARY UNIONS SLIP RINGS COMBINED SYSTEMS

for chemical mechanical polishing (CMP) and grinding,  
wafer handling and applications in vacuum environment

Setting ideas in motion.



**GAT**<sup>®</sup>  
Gesellschaft für  
Antriebstechnik mbH

# ROTARY UNIONS



ROTODISK S

## Reliable single channel solution

ROTODISK S unions are fitted with extremely wear-resistant hydrostatically relieved silicon carbide mechanical seals to ensure low frictional torque and minimal wear, accordingly. An automatic self-alignment system ensures that the axial face seals always have full surface contact.

Media: DI water, air, low vacuum



ROTOPACK

## Leakage-free and wear-resistant

The elastic sealing systems developed in-house and the special coatings of the shaft ensure minimal wear and smooth operation without leakage of the ROTOPACK rotary unions – despite the contacting seal.

Media: Air, water, gas, low and fine vacuum



ROTOSTAT E

## For high pressures and speeds

The tried-and-tested ROTOSTAT E sealing system uses a hydrostatically controlled radial gap seal, ensuring reliable operation even under the most demanding operating conditions. The contactless sealing system has very low friction, reducing wear to the minimum.

Media: Water, air, gas



ROTOVAC

## Particle-free vacuum-process – purity assured

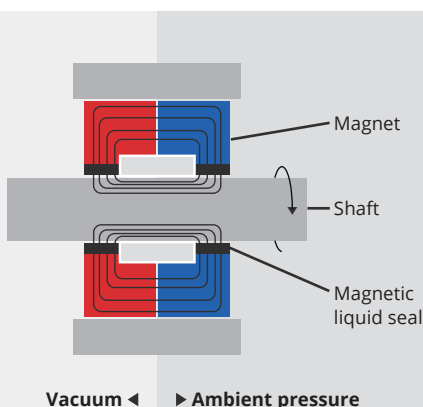
ROTOVAC rotary unions are used for transmitting rotary motion and media from the atmosphere into vacuum environment or transferring vacuum from fixed into rotating components.

The unions are ideal for processes demanding a high degree of cleanliness and ultra-high vacuum applications.

The sealing element of the ROTOVAC consists of fluid magnetic o-rings held in position by a ring-shaped magnetic field. ROTOVAC rotary unions are wear-free and can transfer gaseous media at pressures of up to 1 bar or vacuums up to  $10^{-8}$  mbar.

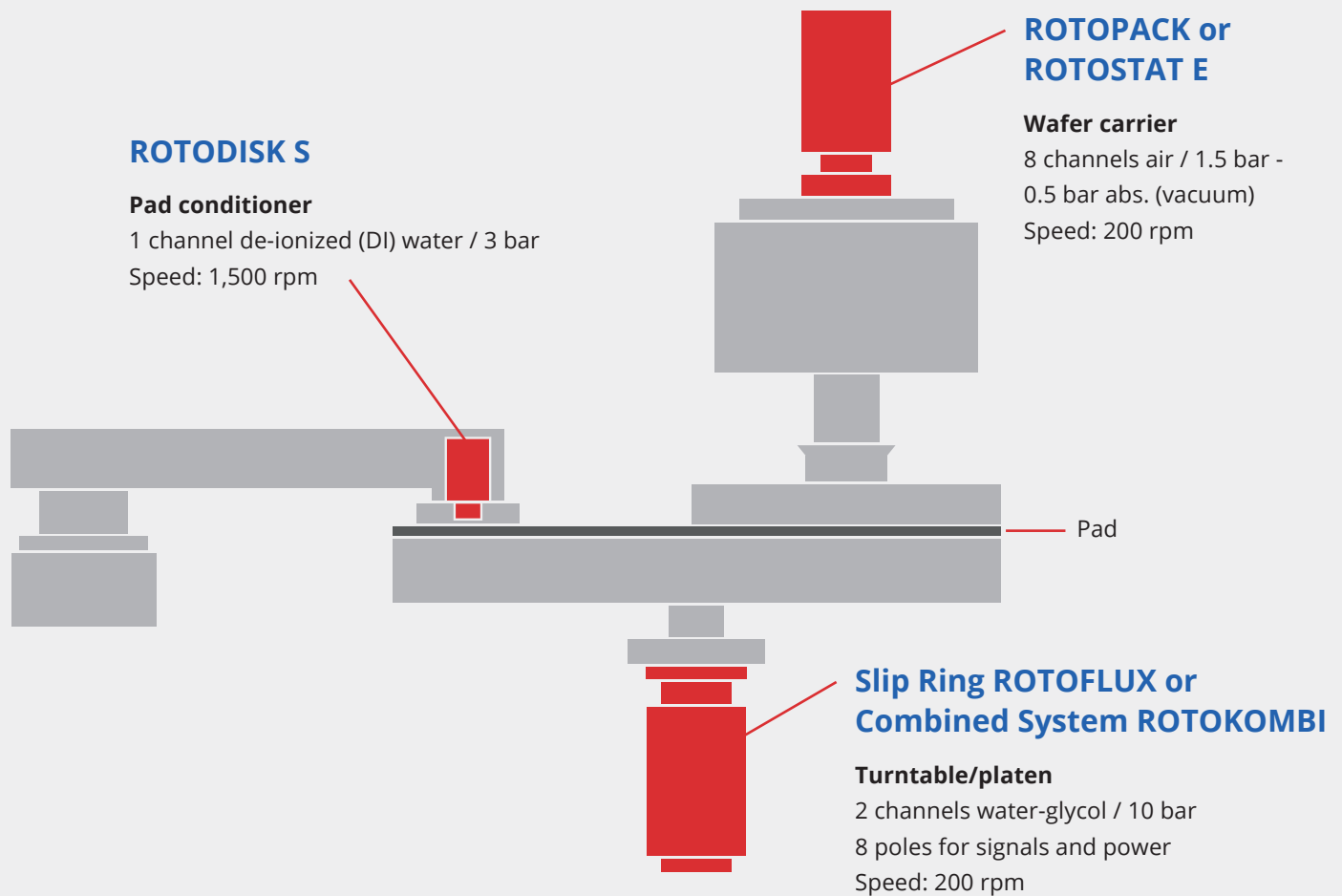
Media: Gas, cooling water

Optional: Power, signals and data





# Example for Chemical Mechanical Polishing Machines



## COMBINED SYSTEMS ROTOKOMBI

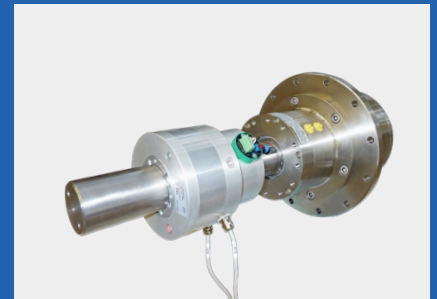
GAT is the technology leader in the design and production of media rotary unions and electrical slip rings. We are a single-source supplier for standard solutions as well as custom-made products, all developed in-house.



**ROTOSTAT E +  
ROTOFLUX**



**ROTOPACK +  
ROTOFLUX**



**ROTODISK + ROTOVAC  
+ ROTOFLEX**

# SLIP RINGS



## For power, signals and data

The proven gold/gold technology of our ROTOFLUX slip rings provides a reliable transmission of power, signals and data, such as Ethernet. This combination of gold spring wires and gold-plated slip tracks ensures maximum contact quality.



## Optical communication

Our slip rings can be optionally equipped with our fiber optical rotary union ROTORAY.



**MADE IN**   
**GERMANY**



## Do you have any questions?

Please contact our team of qualified engineers and product specialists. We are looking forward to developing solutions together with you that will meet all current and future requirements.



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