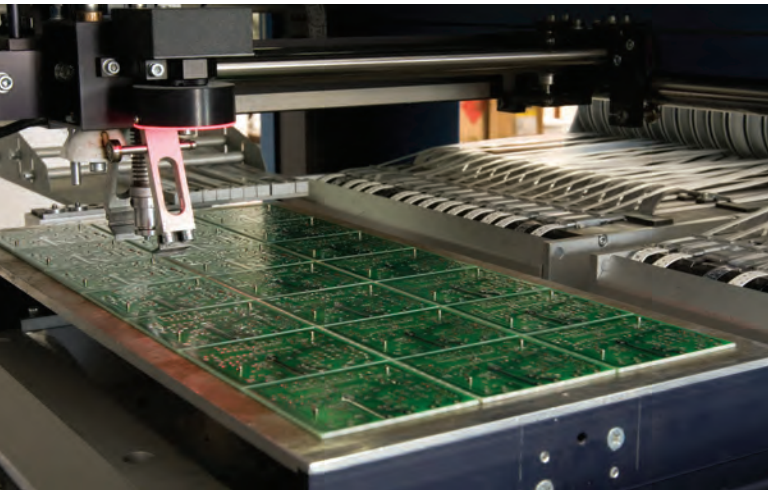
Solutions from Ruland:
Oldham Couplings for Semiconductor Applications



Semiconductor equipment manufacturers benefit from the low inertia, accuracy, and balanced design of the oldham coupling.

Oldham couplings from Ruland are a three-piece assembly comprised of two anodized aluminum hubs and a torque transmitting center disc. This design results in a highly customizable shaft coupling which can easily combine clamp and set screw style hubs with inch, metric, keyed, and un-keyed bores. The replaceable center disc is available in acetal plastic for high torsional stiffness and zero-backlash or nylon for shock absorption and noise reduction. Ruland oldham couplings have a balanced design for reduced vibration at higher speeds.

Oldham couplings transmit torque by mating the slots on the center disc to the drive tenons on the hubs. Ruland utilizes a proprietary hub machining process that leaves a smoother surface for interaction between the hub and disc leading to increased lifespan and performance. Oldham couplings accommodate high amounts of parallel misalignment with light bearing loads reducing overall system wear. They are also electrically isolating and can be used for blind assembly.

Oldham couplings are available with bores from 1/8" to 1-1/8" and 3mm to 30mm. Hubs are also available in stainless steel for added corrosion resistance. The complete Ruland product line includes shaft collars, rigid couplings with precision honed bores, and five types of motion control couplings: beam, bellows, disc, zero-backlash jaw, and oldham. 2D and 3D CAD files, full product specifications, and additional technical information are available at www.ruland.com.

Need a zero-backlash coupling that can accommodate high amounts of parallel misalignment while maintaining the accuracy needed for semiconductor equipment? Ruland manufactures oldham couplings for semiconductor applications including test, measurement, wafer handling, etching, grinding, and pick and place equipment.

Oldham couplings are highly customizable allowing users to easily combine clamp and set screw style hubs with inch, metric, keyed, and un-keyed bores.

Why Ruland Oldham Couplings?

- Accommodate high amounts of parallel misalignment
- Easy to customize
- Long zero-backlash life
- Aluminum hubs for low inertia
- Balanced design for higher RPM
- RoHS2 and REACH compliant
- Carefully made in our Marlborough, MA factory and available for immediate delivery

www.ruland.com

RULAND
Carefully Made Shaft Collars and Couplings

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Shaft Collar

Superior fit, finish, and holding power
Precise face/bore perpendicularity for proper alignment
Steel, aluminum, plastic, 303 & 316 stainless steel

Quick Clamping Shaft Collar

Designed for quick set up and easy repositioning
Innovative clamp design requires no tools
Light weight anodized aluminum

Rigid Coupling

Nypatch® anti-vibration hardware
Precision honed bores for proper fit and alignment
1 and 2 piece styles with or without keyway

Bellows Coupling

Zero-backlash, aluminum hubs for low inertia
Stainless steel bellows for high torsional stiffness
Balanced design for speeds up to 10,000 RPM

Beam Coupling

Zero-backlash, suitable for all types of misalignment
Multiple beams for improved torsional rigidity and torque
Available in aluminum and stainless steel

Oldham Coupling

Zero-backlash, low bearing loads, low inertia
Good overall performance, electrically isolating
High parallel misalignment capability

Jaw Coupling

Zero-backlash, dampens impulse loads
Elastomer element in choice of 3 durometers
Easily combine inch to metric and keyed to keyless

Disc Coupling

Zero-backlash, high torsional stiffness
Single disc style for compact installations
Double disc style for high misalignment