Solutions from Ruland:
Bellows Couplings for Printing Applications

Bellows couplings are torsionally stiff for a high degree of accuracy and repeatability.

Have a printing application that requires a torsionally rigid coupling that can accommodate misalignment? Ruland bellows couplings have high stiffness and are well suited for large format printers, 3-D printers, offset printers, web converting equipment, and print finishing equipment.

Bellows couplings from Ruland are comprised of two anodized aluminum hubs and a stainless steel bellows creating a lightweight, low inertia coupling that can accommodate all types of misalignment—parallel, angular, axial motion, and complex. The thin walls of the hydro-formed bellows maintain low bearing loads and flexibility while remaining rigid under torsional loads. Ruland bellows couplings have a balanced design for reduced vibration in applications up to 10,000 RPM. Balancing also helps reduce the risk of common printing errors such as banding.

Ruland bellows couplings are zero-backlash and have no moving parts, ensuring a long maintenance free life. They are available in inch, metric, and inch to metric bore combinations ranging from 1/8" (3mm) to 1" (25mm). Hubs are offered in clamp and set screw styles with or without keyways. Couplings are supplied with metric hardware, DIN 12.9 cap screws on clamp couplings for maximum torque capabilities. Stainless steel hubs, inch hardware, and custom designs are available by special request.

Bellows couplings are part of Ruland's complete coupling line which includes: beam, disc, zero-backlash jaw, oldham, and rigid. All Ruland couplings are manufactured in its Marlborough, Massachusetts factory and are RoHS2 and REACH compliant.

Bellows couplings are available in clamp and set screw styles with or without keyways in bore sizes from 1/8" (3mm) to 1" (25mm).

Why Ruland Bellows Couplings?

- Lightweight, low inertia coupling with a long maintenance free life
- Balanced design reduces vibration at higher speeds
- Stainless steel bellows are used for added strength and high torsional rigidity
- Accommodates all types of misalignment
- RoHS2 and REACH compliant
- Carefully made in our Marlborough, Massachusetts factory and available for immediate delivery

RULAND

Carefully Made Shaft Collars and Couplings

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