

Solutions from Ruland: Clamp Style Shaft Collars for Medical Equipment



Shaft collars from Ruland are available in a wide variety of styles, sizes, and materials in bore sizes ranging from 1/8" to 6" and 3mm to 150mm.

Clamp style shaft collars from Ruland are commonly used as guides, spacers, and stops or for component alignment. Medical equipment manufacturers benefit from the tightly controlled face to bore perpendicularity of Ruland shaft collars (TIR of $\leq .002"$ or .05mm) which is critical when the collar is used as a load-bearing face or for aligning components such as bearings or gears. Clamp style shaft collars distribute compressive forces evenly around the shaft for a tight fit and improved holding power when compared to set screw style collars. Two-piece style collars offer increased holding power, in-place installation and disassembly, and are mated throughout the manufacturing process for proper fit and alignment.

Ruland shaft collars utilize fastening hardware that tests beyond industry standards for maximum torque capabilities and holding power. Shaft collars made from 303 or 316 stainless steel have hardware of like material for consistent corrosion resistance and to meet regulatory standards. All stainless steel hardware undergoes an in-house surface treatment process to prevent galling. Ruland uses a proprietary black oxide process on steel shaft collars to provide corrosion protection and ensure a smooth screw installation to increase the transfer of clamping forces from the screw to the collar/shaft interface while preventing stick-slip. The Ruland name and bore size are stamped on every shaft collar for ease of identification.

Clamp style shaft collars from Ruland are available in 1215 lead-free steel with a black oxide or zinc plated finish, 303 and 316 stainless steel, 2024 aluminum with a bright or anodized finish, grade 5 titanium, and engineered plastic. They are machined to a fine burr free finish that complements or enhances the appearance of medical devices. Ruland offers clamp shaft collars with smooth or threaded bores ranging in size from 1/8" (3mm) to 6" (150mm).

www.ruland.com

Ruland clamp style shaft collars are manufactured from select materials with fine finishes, high holding power, and a precise face to bore relationship making them ideal for the demands of medical equipment.



Ruland clamp style shaft collars have high holding power, do not mar the shaft, and can be infinitely adjusted.

Why Ruland Shaft Collars?

- Proprietary processes developed over 75 years to ensure superior fit, finish, and holding power.
- Tightly controlled face to bore perpendicularity for proper alignment of mating components.
- Fastening hardware performs above industry standards for maximum torque capabilities and holding power.
- Materials are sourced from select North American mills to maintain product consistency.
- RoHS2 and REACH compliant.
- Carefully made in our Marlborough, Massachusetts factory and available for immediate delivery.

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

