

# Benefits of Accu-Clamp™

## Precision Products

## An Overview of Shaft Collars

Shaft collars play a critical role in virtually every complex mechanical device or system. By serving as mechanical stops, positioners, or fasteners within the assembly, they ensure everything is positioned properly and operating correctly.

While these simple machine components have since undergone many design modifications, they originally consisted of a collar with a set-screw that would impinge on the shaft, creating an indent. These set-screw shaft collars worked for simpler equipment assemblies, but they were not suitable for use in more complex systems. Industry professionals eventually developed other shaft collar variations to accommodate more complicated assemblies as well as circumvent some of the disadvantages of the original design. For example, clamp-style shaft collars are available in a one-piece split style for when there is access to the end of the shaft or a two-piece split or hinge-style which enables the installation of a clamp collar around a component. Clamp collars are not damaging to a shaft since they use compressive force—rather than a protruding screw—to hold their place.



## Stafford Manufacturing's Accu-Clamp™ Precision Products

At Stafford Manufacturing, our patented Accu-Clamp™ products further improve on the clamping collar design. Compared to standard clamping collars, they offer a number of functional advantages due to their unique construction that make them a perfect option for many different applications. In the following eBook, we highlight some of the key features and advantages that set our shaft collar and coupling components apart from the competition.

### Key Features and Advantages of Accu-Clamp™ Products

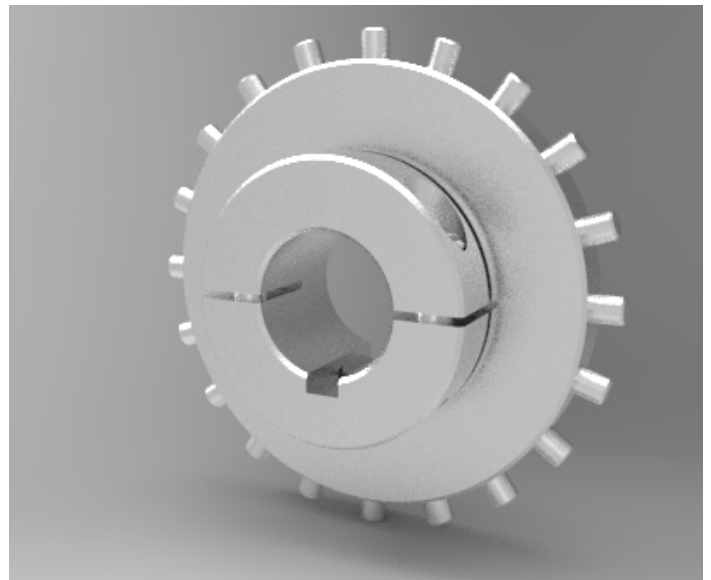
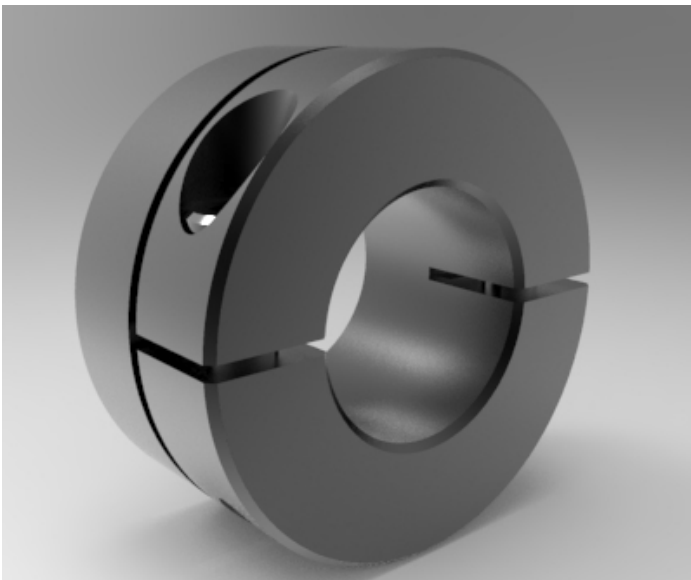
Accu-Clamp™ products have a unique combination of design elements that allows users to experience added functionality that is not possible with standard clamping collar products. Some of the key features include:

- **A clamping section.** The clamping section has a cantilevered design that provides flexible, evenly distributed, and non-marring holding power.
- **A non-clamping section.** The non-clamping section has a solid and rigid design that does not flex or distort during use. It is precision machined for a close-tolerance fit with the shaft; the face can be square and flat to the shaft to 0.001 TIR.
- **A slotless design.** The slotless design provides a continuous outside and inside diameter surface that can be machined, profiled, knurled, or otherwise worked to meet various application requirements and restrictions. For example, it can be machined as a pulley or gear or knurled to provide a driving surface. The uninterrupted face can also be worked to suit different mounting and/or tolerance needs or outfitted with a variety of features, including, but not limited to, dowel pins, face cams, mounting holes, sensor holes, O-ring grooves, and springs.

## Design and Configuration Options for Accu-Clamp™ Products

All Accu-Clamp™ products—collars, flange-collars, and flange-couplings—are available in two variations: solid sections with included mounting holes or solid sections with no included mounting holes. These choices allow customers to use them as-is or modify them to accommodate particular needs. Customization options include machining, hardening, and grinding. By offering both standard and customizable clamping collars, we ensure that all customers can find a product that meets their requirements and restrictions.

In addition to offering both our standard and customized line of Accu-Clamp™ products, the Stafford experts also offer fully custom product solutions according to your needs.



## Typical Applications of Accu-Clamp™ Products

Our Accu-Clamp™ product line combines strong, reliable, and non-damaging holding power with durable construction, customizable design, and precision fit. Together, these qualities make our clamping collars a suitable mechanical stop, positioner, or fastener solution for a wide range of industries and industrial applications.

Some examples of applications for our Accu-Clamp™ products include:

- **Cams**
- **Gears, pulleys, and sheaves**
- **Oil rings**
- **Position and speed sensors**
- **Precision component mounts**
- **Seal components**



## Superior Shaft Collars at Stafford Manufacturing

At Stafford Manufacturing, we are a leading manufacturer and distributor of quality rigid shaft couplings, shaft collars, and other specialty components for motion control, transmission, and automation systems. Throughout our years in business, our focus on innovation has led us to develop solutions to the challenges faced by customers in the industrial and automation markets. One of the product families that arose from this innovation was our Accu-Clamp™ Precision Product Line.

Our patented Accu-Clamp™ collars take the standard clamping collar design to the next level. Featuring a unique design that brings together precision, durability, flexibility, and customizability, they offer unparalleled performance. They can be used in a wide range of applications including aerospace, conveying equipment, industrial automation systems, pharmaceutical and others. Whether you need a standard product, a modified component, or a fully customized solution, we've got you covered. Armed with over four decades of experience and modern manufacturing equipment, our team has what it takes to ensure you receive the perfect shaft collar for your needs.

Contact one of our experts today for additional information about our Accu-Clamp™ products and how they can benefit your application or to request a quote for a standard, modified, or fully custom component.





## About Stafford

Stafford Manufacturing is a leading manufacturer of standard and custom shaft collars, rigid couplings, and more. We have a catalog of over 4,000 standard parts and our manufacturing team can also create modified parts, special parts, and completely customized parts. Through our prototype through full production services, you can quickly see your print or description turned into fully finished products. Stafford Manufacturing can be your “in-house” machine shop for all of your custom part needs.

[Contact us](#) today or [request a quote](#) to start the production of your new custom part. We respond to RFQs within 24 hours or less.

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