



# 3-jaw welding chucks

### Customizable welding chucks for quality welds

PrestonEastin 3-jaw welding chucks are designed to safely secure workpieces with three points of contact. They help operators deliver quality welds in the most demanding manufacturing environments.

By providing clamping ranges from 1 in (3 cm) to 60 in (152 cm) and completely customizable jaws, PrestonEastin can manufacture the right welding chuck for your operation. All 3-jaw welding chucks are conveniently centered and mounted for free when they're purchased with a <u>welding positioners</u>.

We categorize our 3-jaw welding chucks into three classes: standard self-centering chucks, premium spin lock chucks and in-house customizable grippers.

### Common considerations

When purchasing a 3-jaw welding chuck, consider:

- How the thickness of your chuck, when mounted to the faceplate of your positioner, will
  extend the center of gravity of the workpiece and impact the capacity of the positioner.
- If a standard or serrated jaw will work best for your application standard jaws have a smooth interface whereas serrated jaws have hardened teeth.
- How the smallest and largest diameters of your workpieces will correlate with the chuck's gripping range.

### Self-centering chucks

Self-centering chucks have three levels of engagement on each of their three jaws, which can all be repositioned for a full range of motion. However, a manual "T" handle is needed to adjust them.

Although self-centering chucks are ideal for cylindrical workpieces, they can be adapted for a variety of shapes and applications. Common customizations include:

- Clamping range inner diameter (ID) from 2 in (5 cm) to 18 in (46 cm)
- Clamping range outer diameter (OD) from 0.5 in (1.3 cm) to 24 in (58 cm)
- Serrated or standard jaws for gripping strength

#### Features:

- Easy jaw adjustment to minimize down time between workpieces
- Heavy duty construction to withstand harsh manufacturing environments and industrial applications



Self-centering chucks

## Spin lock chucks

Spin lock chucks are a precise type of self-centering chuck with built-in levers that allow operators to quickly mount and remount workpieces. The levers decrease changeover time by engaging the full gripping power of the chuck, from the smallest diameter to largest diameter.

Although their price range is higher, spin lock chucks have lower profiles, which limits the capacity's impact on the positioner. Spin lock chucks also increase productivity since they help decrease the changeover time between workpieces. They are infinitely adjustable and constantly remain centered during operation.

#### Common customizations include:

- Clamping range OD of 7 in (18 cm) to 12 in (30 cm)
- Lower profile setting to maintain the center of gravity and capacity
- Serrated or standard jaws for gripping strength

#### Features:

- Heavy duty construction designed to work in an industrial environment
- Quickly and easily mounted on any positioner
- Replaceable jaws made of SAE 1018 steel can be welded or machined to suit your clamping needs

NOTICE: We do not recommend using these in applications faster than 50 RPM



### Grippers

Our fully customizable A-frame grippers are manufactured in-house at an economical price. Although the changeover time between workpieces can be higher with grippers than for spin lock chucks, they still provide the most clamping ranges of all our 3-jaw chucks.

PrestonEastin grippers have hardened ball nuts for increased durability since they generally experience wear and tear on their internal components due to their jaws being constantly tightened and released.

#### Common customizations include:

- Capacity of 1,000 lbs (454 kg) to 7,500 lbs (3,402 kg)
- Clamping range ID of 6 in (15 cm) to 68 in (173 cm)
- Clamping range OD of 1 in (3 cm) to 60 in (152 cm)
- Extended, serrated or standard jaws for gripping strength

### Features:

- Enclosed steel frame to protect the gripper adjustment
- Hardened components for durability
- Quick release and replacing of the jaw adjustment
- Single point jaw adjustment



# Grippers

If you're interested in integrating a positioner into your welding process, you can <u>request a quote</u>. No matter what your needs are, PrestonEastin can customize any product to your exact specifications.