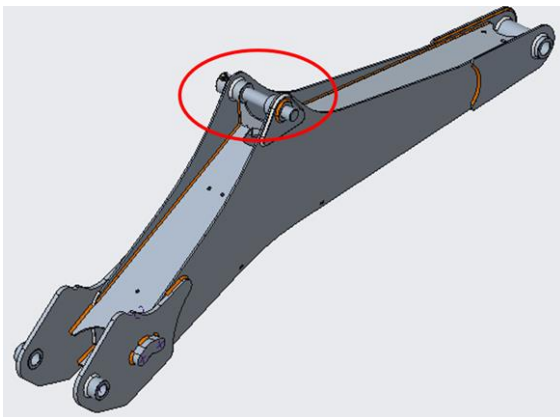


Eliminate Deflection in Welded Bushing Alignment

When welding bushings into bosses or lugs, deflection often leads to misalignment. This makes it difficult to slide pins through the holes in the final assembly process. The main issue happens as the welds cool, the bushings can deflect, causing the two holes to be out of alignment. This is where hammers are often swung, and undersized pins are used to keep these holes from getting too far out of alignment. In addition to creating a risk for a repetitive motive injury, this method simply is not that effective but has been the best practice for many decades.

EXPANDER's solution eliminates the hammers and replaces it with a collet system that expands into the ID of the bushing and holds it in place during the weld process. Once the weld has cooled enough to set up, you simply remove the pin assembly by using turn torque, because the Bushing was held in place during the cooling process, there is no concern of deflection. In addition to being a quality improvement, this fixturing is portable making it easier to set up the parts for welding and reduces the number of times the part is handled during the welding process.

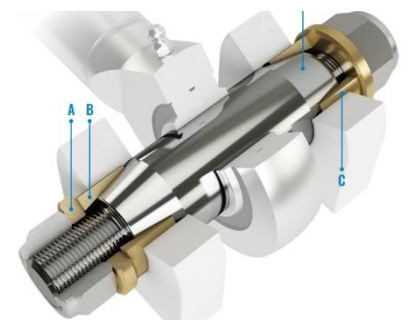
How does EXPANDER hold the bushings in true alignment?



EXPANDER SYSTEM
FORCE ON LUG



TRADITIONAL STRAIGHT
PIN FORCE ON LUG



How it works

A

Upon tightening the fasteners, the washer presses the slotted expansion sleeve up the tapered ends of the pin.

B

The sleeves expand, conform to the lugs and lock the system in place.

These items are custom designed to your application, so contact us today and learn how can help in your application!