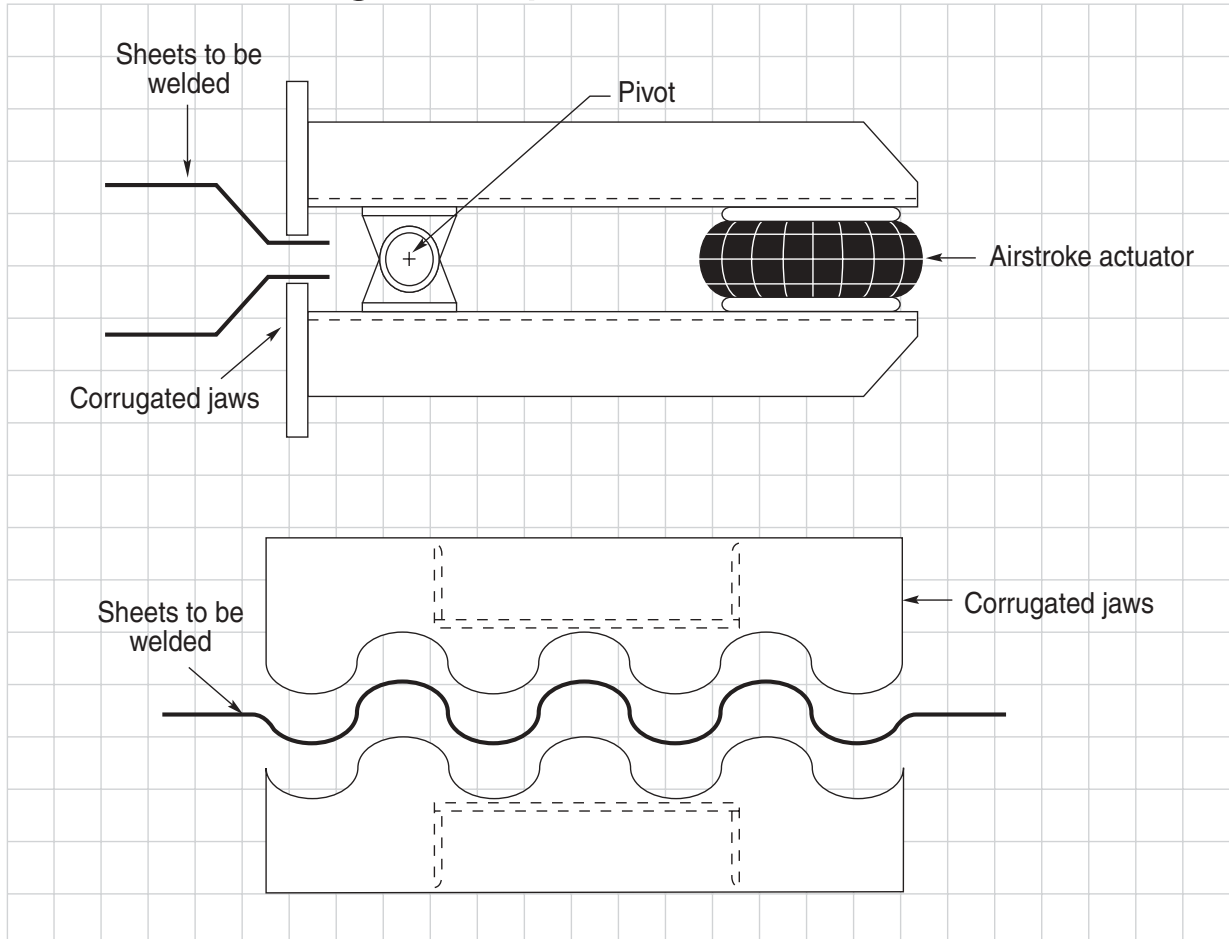


Sheet Welding Clamp



Problem

To manufacture large heat exchangers, sheets of corrugated steel must be welded and fit together with very close tolerances. A C-clamp method was being used to hold the sheets together for welding, however, the method was cumbersome and time-consuming.

Solution

To replace the C-clamp method, a pneumatic clamp was designed utilizing an Airstroke actuator and corrugated jaws. When activated, the actuator closes and opens the jaws to hold and release the steel sheets as needed during the welding process.

Benefit

The actuator-based clamp is so simple to use that the manpower to assemble the heat exchangers has been reduced by 50%. After two years of use, the clamp has operated flawlessly and has never needed repair. Angular capability allows for direct action without a clevis and low profile allows for a compact design.