



Robotic welding requires specialized fixtures to accurately hold the work piece during the welding operation. Fixture design reduces cycle time and operator labor while increasing functionality; and allows complex welding operations.

While robotic welding can vastly improve productivity over semiautomatic welding; the level of efficiency of automation depends upon the thoughtful design of the fixturing for maximum productivity.

Robotic welding is economical when properly applied, but it can be terribly inefficient and cost-prohibitive when simple fixture design considerations are overlooked. Many productivity gains are realized, or lost, at the design stage and while parts fixturing performs a role that is simple, good fixture design is critical to the success of a robotic welding system.

## **Fixture Design for cylindrical product and process parameter optimization for robotic MIG welding**