

## Hollow Rod Actuator Machine

### Spot Welding and Clip Driver System

This pad welding and metal clip driver automated system is designed to spot weld, using ultrasonic horns at six locations and to drive on eight metal clips. The machine is operated by one person, who loads the part and associated clips. Before welding and clips being pressed onto the part, the machine checks for a foam pad and metal bracket on the part. This machine uses six 40 kHz horns with one power supply and a six position sequencer.



Proximity switches and laser are used to verify locations of metal clips and the mat material. The machine is guarded with expanded metal and use of a full frontal light curtain. Parts bins are integrated into the table top and there is a LED indicator panel showing welder picked and parts present.

