

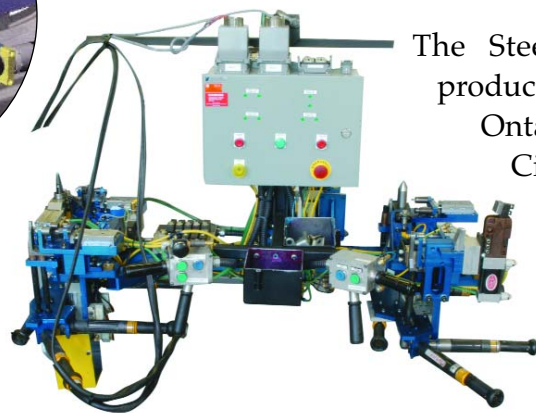
AUTOMATIC HINGE JIG



Installing door hinges in an automotive manufacturing facility generally is accomplished with a hinge set fixture and hand held nutrunners. Securing each screw individually becomes time consuming and often places the operator in a less-than-ergonomic position. Our product combines these processes into one ergonomic, efficient workstation.

Hinge Jigs designed and built by Steelworks Design have been recognized by Honda Canada as leading edge technology. Steelworks received international recognition for this product when the Alliston plant presented our Hinge Jigs at the 2004 North American Technology Fair.

The Steelworks Hinge Jigs have been in production at the Honda Plant in Alliston, Ontario for the 2004 and 2005 model year Civic. We have also provided new Hinge Jigs for the 2006 model year Honda Civic.



Steelworks has quickly become recognized as an industry leader for fastening hinges, with several other automakers now approaching

Steelworks to develop similar products.

The Automatic Hinge Jig solves several manufacturing problems:

- Efficiency gained in securing all screws at once
- Improved ergonomics for the fastening process (less fatigue of arms and hands, and more ergonomic body position for operator)
- Improved quality and consistency of door gap and flushness (up to 85% over manual fixtures)
- Consistent fastener torque quality
- Torque feedback to the operator for each screw

Steelworks Design can customize Hinge Jigs to your needs:

- Quick disconnects to swap jigs from model to model-batch builds
- Fasten the hinges from the inside or outside
- Secure different types of fasteners (hex head is preferred)
- Utilize your preferred vendors for common components
- PLC interface to other equipment, i.e. conveyor system or torque monitoring

Steelworks uses the best materials and the most up to date design and manufacturing techniques, ensuring our products exceed our customers' expectations. Every manufacturing problem is unique; we can work with you to find the best solution to fit your needs.

