

Advanced Manufacturing Panel

Maurice Mechanical Services Ltd.



Who Are We?

- Builder / Integrator / Innovator
- Conceptualize, design & build automated machines, production lines, and test equipment
- Primarily automotive based
- Some non-automotive
- Canada, USA, Mexico, India, China
- We employ 18 people consisting of Tool Makers, Machinists, Mill Wrights, Welders, Electricians, Electrical Technicians & Designers
- We use a “Team” structure to foster “Self Driven” employees
- Family owned and operated for 27 years

Why Maurice Mechanical?

- Aggressive innovators
- Always looking for the next best step
- Specializing in automation
- Automation experience
- Focus on reduced processing cost , improved cycle time and equipment life

Maurice Mechanical Advantage

- Stay on the leading edge of automation
- We seek employees who shine in their field
- We breed loyalty and commitment (both ways)

Driving Innovation

Winding springs with robotics

- 1.5sec cycle time
- Reduced processing cost
- Improved integration into an assembly line
- Improved operator safety & ergonomics



Driving Innovation

Robotic screw retrieval and driving

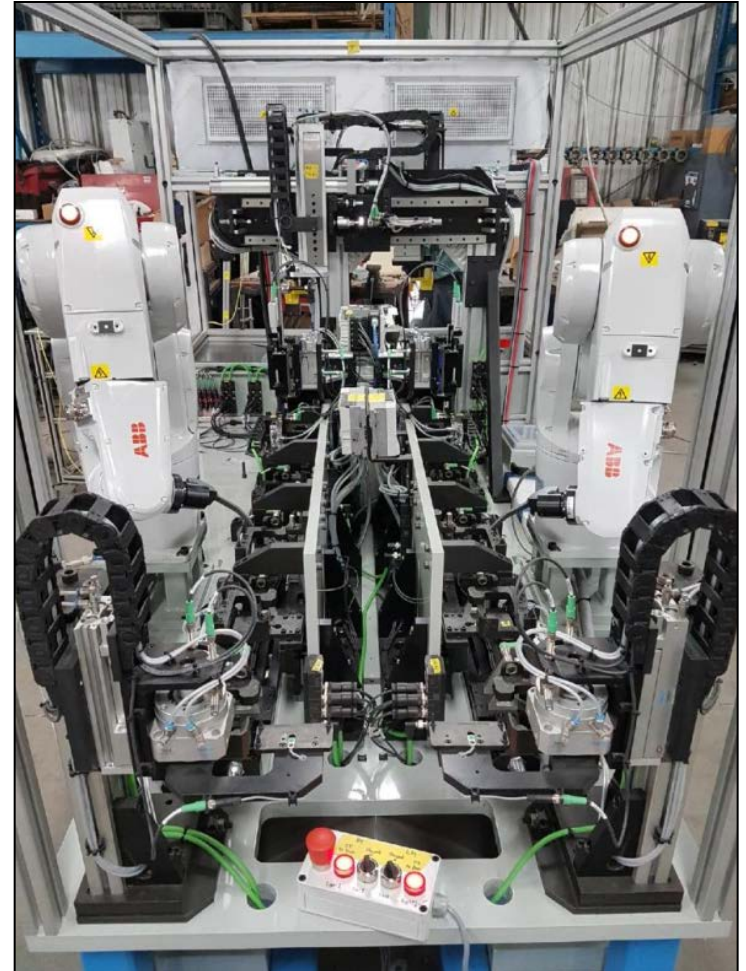
- Autofeed the screw
- Position the screw & install
- Improved cycle time
- Improved flexibility



Driving Innovation

Precision Part Greasing

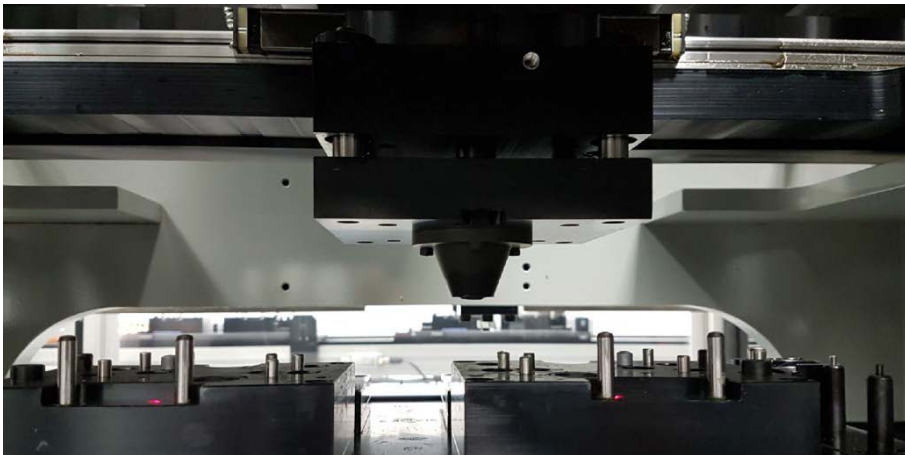
- Using precision grease dispensing valve to “shoot” precise grease quantities at extreme speed
- Addition of laser sensing to confirm each grease application
- Significant cycle time reduction
- Significant improvement in flexibility



Driving Innovation

CNC riveter using 3 axes instead of 2

- Measure and provide data process on Z-axis
- Increase precision & flexibility
- Reduce cycle time
- Reduce capital



Driving Innovation

Next Steps: Flexible Automation

- Run multiple products on one line
- Allow for evolving part specifications
- Reduce cycle time
- Reduce capital

Future Growth Challenges

- In terms of innovation, we are only limited by our imagination
- In terms of practicality, we are limited by a lack of strong and experienced tradespeople in Ontario