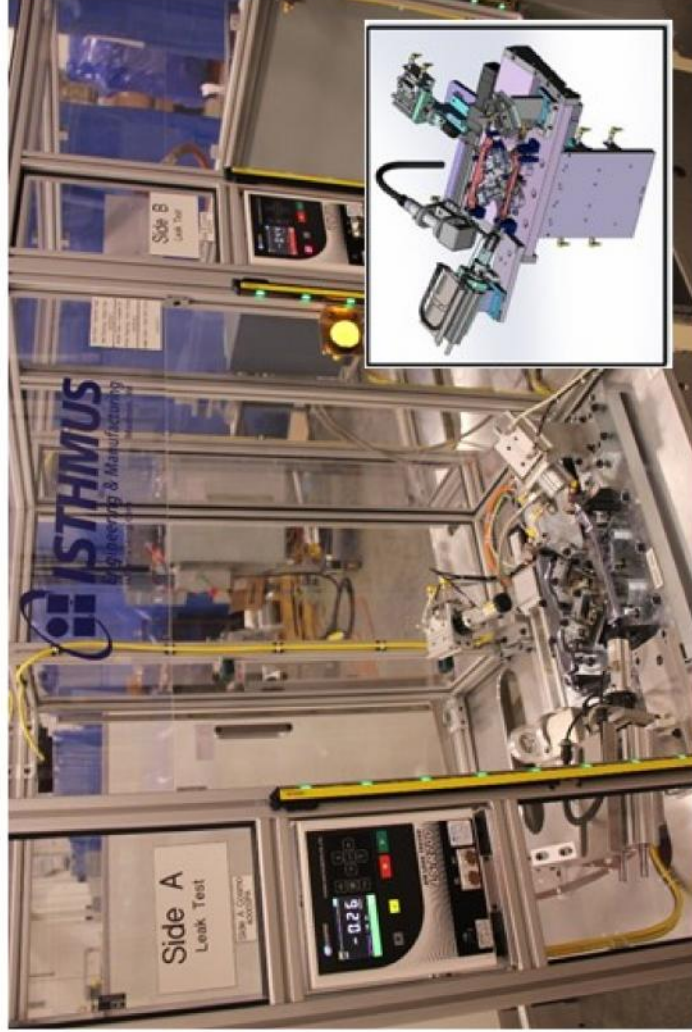




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## Product Assembly and Leak Testing



This semi-automated system assembles automotive fuel rails, and performs leak testing and final marking on the finished assemblies.

The system consists of two stations. The first station includes tooling to locate three components of the fuel rail, which are placed manually. Pneumatically actuated link clamps on each fixture close, ensuring proper part location and rigidity.

A vibratory feed system supplies o-rings to a six-axis robot, which installs them in the required locations. Once correct o-ring placement is verified, the parts are pressed together for final assembly. Poka-Yoke details and dedicated sensors ensure that the correct versions of each part are loaded into the fixtures in the correct orientation.

At station two, the now-complete assembly is leak tested. An operator positions the assembly into a custom fixture, and the part is clamped and sealed before leak testing. After leak testing, an inkjet unit completes final marking before the finished assembly is manually removed from the system.

*Semi-Automated Assembly*

*Leak Testing*

*Discrete Part Marking*

### **FEATURES**

- Safe and friendly user interfaces
- Designed with maximum ergonomic considerations in mind
- Lift-off access panels

### **TECHNOLOGIES**

- Six axis robotic pick and place
- Custom fixturing
- Leak Testing
- Twin-locked safety door switches
- Twin head inkjet printing