



## Fixed Waterjet Cell

- Single ABB IRB 2400 Robot
- Reach: 1550mm
- Payload: 20kg
- Ceiling Mounted Gantry Layout
- 8'x5' operating table with collection pan
- Main control panel and Operator HMI
- Allen Bradley PLC
- Cyclone unit with fan assembly

- High pressure intensifier pump can be included as an option
- Abrasive garnet can be included as an option
- Ductwork can be included as an option
- Manufactured date mid 2017

### WATERJET Cutting

High pressure waterjet is a powerful cutting tool able to cut through a wide range of materials used for automotive soft interior trims such as carpets, headliners, trunk liners, NVH insulations, door and instrument panels, bumpers, as well as thin composite parts.

The energy required for cutting the material is obtained by pressurizing water up to 60,000 psi and forming a fine water stream accelerating up to 1,700 MPH when it passes through the nozzle made of sapphire or diamond. The 6-axis robot guides the waterjet cutting head along the part achieving typical cutting speeds up to 20 inches per second for headliners and carpets. The material remains dry due to the small water quantity used (<0.5 GPM) and high travel speeds.

### Benefits

- Waterjet can easily cut many different materials, as well as multi-layers material
- Rapid, cost efficient engineering changes
- Flexible production: the same system can be used for multiple parts
- Clean process: only pressurized water is used, no additives or dust
- Cold process: no heat affected zone in the part, no smoke or fumes
- Omni-directional cutting of contours with very fine cutting kerf
- Limited cutting force: low tooling costs vs. 3D die cutting
- Fast, accurate and repeatable: high quality parts with short cycle times

Applications include soft automotive interior trim materials such as carpets, headliners, trunk liners and various insulators. Waterjet can also trim advanced materials such as fiberglass, carbon fiber and other modern composites.



Please contact us today for more information.

**\*This system has been used for light duty demonstration only and is guaranteed to arrive in like new condition.**