

Mack's sheet metal fabrication center offers design for manufacturability services, a wide range of in-stock materials, laser-cutting and CNC-punching capabilities, a host of secondary equipment and finishing processes, and stringent quality and cosmetic inspection standards.

CAD Software Capabilities

- Full SolidWorks and Pro/E capabilities to most current release.

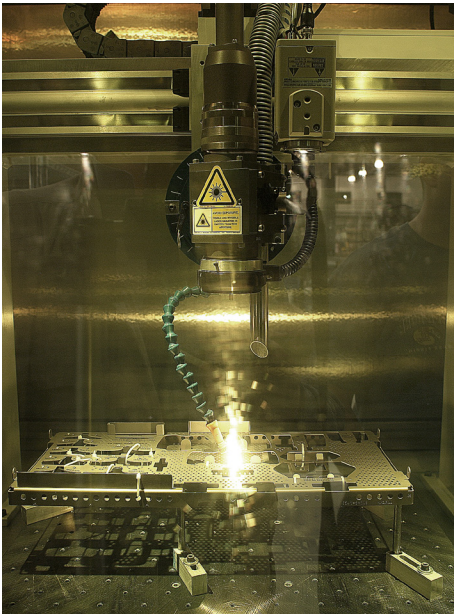
General Fabrication Equipment

- TRUMPF TruLaser 2030 thin-sheet automated laser. X, Y, Z travel: 118" x 49" x 4.5". Maximum thickness, 0.47".
- Finn-Power FPL-6 high-speed standalone laser. 5' x 10' sheet size. 3500 watt. Maximum part size, 58" x 120". Shuttle table, high-speed linear drives.
- TRUMPF laser/punch combination equipment. Tonnage range, 20-25 tons. Part size range, 0.2" x 0.2" to 42" x 96". Maximum thickness, 0.25".
- TRUMPF CNC punch equipment. Tonnage range, 20-25 tons. Part size range, 0.2" x 0.2" to 42" x 96". Maximum thickness, 0.25".
- TRUMPF CNC press brakes, 6-axis. 80-130 tons.
- Bystronic CNC press brake, 6 axis. 270 ton.
- Aluminum extrusion cutting. Elumatec brand, used to cut extrusions to customer specifications.

Secondary Equipment

Joining Processes

- Spot welding equipment. 80 KVA press style.
- TIG welding equipment. Miller Syncrowave 250 DX.
- MIG welding equipment. Power MIG 300.
- Robotic plasma welding equipment. Robotic setup for medium- to high-volume welding applications.
- Weld platens. Bluco tables and fixtures. Table sizes range from 40" x 40" to 40" x 80". Modular tooling allows for quick setup of fixtures to weld complex assemblies.
- Laser welding. Litron/TRUMPF brand of Class I workstation. Robotic setup to weld high precision and cosmetic applications.



Secondary Equipment (continued)

Riveting Processes

- Manual pop rivet stations. Rivet capabilities from 1/8" to 3/16" rivets.
- Avdel Cherry Textron briv rivet fastening machines. Briv rivet capabilities from 1/8" to 3/16" rivets.

Mechanical Processes

- Hardware insertion equipment for installing studs, standoffs, pins, panel fasteners and nuts.
- Tapping manual and automated equipment for installing various taps after punching or laser process.

Finishing Equipment

Silk-screening

- Automated and manual silk-screen equipment.
- Pad print equipment.

Cleaning Processes

- In-line washline. One-stage parts washer with dryer.

Wet Paint Capabilities

- 1500 feet of conveyor providing three-coat paint system (prime, smooth and texture) with oven bake between each operation.
- Four (4) stand-alone booths supported by a 12' x 16' batch oven for force curing.
- Ability to spray both water- and solvent-base paint systems. Mechanical and hand masking capabilities when required.

Vibratory Deburr

- Tub finisher capable of deburring wide range of parts, from 1" x 1" to 20" x 48". 8mm porcelain ceramic media to support multiple material types.
- Corn Cob deburr equipment for preplate material.

Timesaver

- Timesaver Model 3121 equipment. Deburrs and gives parts a brushed/grained finish.

Bead Blasting

- Glass bead blast capabilities. Used primarily to remove tool marks and give parts a higher degree of finish before additional painting or plating processes.