

## Project list

### Unit and Multiple Spindle Head Application:

Used a model 2447 with a 2 spindle head on a slide for chamfering copper tubing. Special square spindles were used to accept a specially designed chamfer tool provided by the customer.

### Unit and Multiple Spindle Head Application:

A model 8604 unit with a 2 spindle head was used for a vertical drilling application. Material was drilled in a specific location to a metered depth for a balancing operation.

### 965-H - 8 Station Dial Machine with Robot load/unload

Hopper fed to vibratory bowl with escapement. Robot loaded and unloaded out of the machine

### Operations Performed:

- Drilling (multi-spindle)
- Tapping (multi-spindle)
- Threading
- Back Spotfacing
- Reaming

Machine outfitted with Ballscrew units, precision chucks and indexer.

Cycle time of part: 4.4 seconds

Part: Brass/Bronze castings