



CUSTOMER FIXTURE SPECIFICATION

*Quote number: _____

*Job number: _____

Customer: _____ Telephone: _____

Contact Name: _____ Fax: _____

Contact Title: _____ E-mail: _____

End User: _____ Telephone: _____

Contact Name: _____ Fax: _____

Contact Title: _____ E-mail: _____

*For T&T use only.

Customer Equipment Information

Welding system, make and model _____

- Not applicable
- Mounting configuration and hole pattern attached (required)
- Manual
- CAD Model
- Pictures

Torch, make and model (if applicable) _____

Robot arm, make and model (if applicable) _____

Power supply existence, make and model (if applicable)

- Electric _____
- Hydraulic _____
- Pneumatic _____

Power supplied through:

- Tailstock
- Headstock
- Other _____

Information about the existing process:

- Not applicable
- Pictures
- Reference drawings
- Description attached (required)

Operator position (facing equipment): _____

- Head stock on left hand side
- Head stock on right hand side

Production

Expected parts/hour: _____
 Estimated annual production: _____
 Life expectancy of product: _____

Fixture Capabilities

- Tack weld
- Finish weld
 - Subweldments required
(List of subs and parts attached)
 - All individual parts
- Tack and finish weld
 - Subweldments required
(List of subs and parts attached)
 - All individual parts
- Machining
- Weld and machining
- Checking

Fixture Style

- Trunion
 - Backbone
 - Window frame
Weight limit _____ lbs
Swing diameter _____ in
Length _____ in
- Rotary table
Weight limit _____ lbs
Height limits _____ in
Diameter _____ in
- Bench
Length _____ in
Width _____ in
Height _____ in
- Table top
Length _____ in
Width _____ in
- Slap-ons required

Trunion Stand

- Manual pin indexing
- Air brake
- Motorized
- On casters
- Fixed (no casters)
- Not required

Load/Unload

- Manual
- Automated

Clamping

- Manual
 - Des-ta-co
 - Wolverine
 - Other _____
 - T & T Tool's discretion
- Pneumatic
 - Des-ta-co
 - Bimba
 - SMC
 - Parker
 - Other _____
 - T & T Tool's discretion
- Hydraulic
 - Vektek
 - Hytec
 - Des-ta-co
 - Parker
 - Other _____
 - T & T Tool's discretion
- Spares _____

Actuation/Manual Controls

- Manual valves. Brand _____
 - Button Operated
 - Lever Operated
 - Foot Operated
- Two hand safety valve required
- Solenoid valves. Brand _____
Voltage _____
- Controls mounting specification attached

Actuation/Automatic

- Robot I/O's. Available _____
- Programmable Relay
- PLC

Tooling Adjustability

- Shim pack (0.120")
 - Standard adjustment (4 x 0.030")
 - Fine adjustment (3 x 0.030" + 2 x 0.015")
 - T & T Tool's discretion
- Spares _____
- Other _____

Tooling Material

- 4140 Pre-hard (28-32 Rc)
- 4140 Heat treated (45-50 Rc)
- A2 Heat treated (50-55 Rc)
- Carburized cold rolled steel (55-60 Rc)
- Fortal® Aluminum
- 6061 Aluminum
- Other _____
- T & T Tool's discretion

Tooling Finish

- Black oxide
- Black zinc
- Airborne Coatings anti-weld spatter coating
- Anodize
 - Hard coat
 - Color _____

Fixture Finish

- T & T Tools standard (black paint)
- Paint _____
- Color _____

Pneumatic Plumbing

- Weld spatter resistant flexible tubing (pneumatic, black-extend/blue-retract) - Standard
- Copper tubing
- Nickel-plated brass "push-lock" fittings – Standard
- Other _____

Hydraulic Plumbing

- Carbon steel hydraulic tubing – Standard
- Hydraulic hose with 37° J.I.C. female crimped fittings – Standard
- Parker "ferrule lock, bite type" fittings – Standard
- Flare fittings. Brand _____
- Other _____

Plumbing Protection

- Weatherhead insulation, spatter protective – Standard
- Sheet metal
- Leather
- Other _____

Special Features

- Sensing
 - Part presence
 - Part clamping
 - Part position
- Pressure switch
- Delay valves (save on robot I/O's)
- Part ejection
- Quick-change tooling. Specify _____
- Metric fasteners
- Metric components
- Other _____

Engineering

- Customer supplied material
 - Hard copies
 - AutoCAD files
 - SolidWorks files
 - Pro-E files
 - Other _____
 - Finished part for reference
 - Components for try-out. Sets _____
- Proposal drawing required
- Approval documentation
 - Hard copies
 - AutoCAD files. Version _____
 - SolidWorks files. Version _____
 - Pro-E files. Version _____
 - Other _____

- Fixture documentation (on paper, standard)
 - Fixture picture
 - Fixture assembly drawings
 - Hydraulic or pneumatic schematic (if applicable)
 - Electrical wiring (if applicable)
- Special requirements
 - Metric or dual dimensioning
 - Separate B.O.M.
 - Spare parts list
 - Electronic simulation
 - Operating manual

Inspection

- Parts try-out at T & T Tool location
- Parts try-out at customer's site
- Critical dimensions inspection report
- Certified inspection report
- Other _____

Lifting

- Overhead crane (eyebolts)
- Forklift (tubular contraption)
- Other _____

Additional Customer Specifications

(Be as descriptive as possible)

- Attached
- See below