

# Making Things Fit



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## Part I: Overview of Workplace

With more than 30 years experience in the design and build of custom equipment, TDS Automation designs and builds one-of-a-kind, open architecture systems for manufacturing plants worldwide. TDS also offers expertise in self-propelled transporters and AGVs, multi-part dies, progressive die applications, white goods applications, rugged fixtures for welding, machining and assembly applications.

## Part II: Workplace Focus

TDS also offers expertise in self-propelled transporters and AGVs, multi-part dies, progressive die applications, white goods applications, rugged fixtures for welding, machining and assembly applications.

## Part III: Introduce the Problem

A Manufacturer has approached you to design and build a set of fixturers, that can be retro fitted, to a current machining centers. The fixtures need to be easy to operate, maintain, and install. One last thing, the Manufacturer needs the fixtures in 30 days.

## Part IV: Background

What content knowledge or skills does a student need to solve the problem or create the project ?

- Print Reading
- Machine Tool Operation
- CNC Coding
- Welding
- Tooling
- Precision Measuring
- Assembly Techniques
- Manufacturing Process
- Quality Control

## Part V: Workplace Solution

Using a team based approach you need to:

- Clearly State the Problem
- Come up with possible solutions.
- Test Solutions
- Reevaluate Solutions
- Run Parts
- Evaluate Product Run

## Part VI: Educational Pathways

- CNC Programing
- Engineering Tech
- Mechanical Engineer
- Tool & Die
- Industrial Management
- Quality
- *A Strong Desire to Learn and Improve*