



Case Study: Just-In-Time and Right-sizing Production

The Customer

The customer is a large OEM office furniture manufacturer. They produce a variety of office furniture for many of the common brands offered in big name stores today.

The Challenge

With an increasingly varied product line, they began to experience capacity issues. Some parts fell below the threshold needed to maintain continuous production. They had two choices:

1. Continue to manufacture the parts themselves, but only part of the year: Maintain the same number of parts per week, but produce the part for fewer weeks per year. However, there were four specific problems with this path:
 - a. Manufacturing equipment is underutilized. Machine tools required to produce the parts may be idle with the lower production quantities.
 - b. More fixturing setups for machine tools to change between products require time and could introduce variability into the parts.
 - c. Warehouse space is used to store the parts until they are needed. Parts made during the production weeks are stored to be used during the weeks when the part are not produced.
 - d. Old, stored parts may need to be scrapped after there are product changes.
2. Outsource the parts, which is what they ultimately chose to do.

The Solution

We took over manufacturing the parts. The customer was pleased with our precision fabrication with other parts and thought we could step in. We gave them a fair price for their proposal. Tooling and fixtures required to perform the fabrication was transferred to us. Infrastructure was added to our facility: Electrical and pneumatic lines were run and pre-fabricated 20' x 20' (6m x 6m) second story structure was built to accommodate lighting, compressors, and welding machines.

Parts are now sent to them in weekly shipments. This allows them to operate under the concepts of "Just-In-Time" manufacturing and "Right-Sizing", thereby reducing warehousing needs and obsolete part inventories. This solution solves the primary problems they would have encountered if they continued to manufacture the parts themselves. They continue to provide top-quality products to their customers on a timely basis.