Who we are:

• Manufacturer of Handmade, Decorative Lighting Fixtures

• One of the premier brands and a design leader in the lighting industry.

• “Modern American Blacksmith”
What we are:

• Growing, small to midsize manufacturer.
• High-Mix / Low Volume Business Model
  – 1000 different base products
  – 40,000 different configurations for ordering + customizations
  – 99% of SKU’s are Made to Order
• Have a global supply chain for over 7000 active components.
  – 25% are sourced overseas
• In the past few years we have begun to understand the importance of TCO.
Roughly 400 new components developed for new product each year.

Realized that sourcing decisions for these components were too focused on unit price - not total cost.

Needed more information in front of us in order to make good, objective decisions.
  – Lacked a simple, easy to use process or tool.
The Solution: TCO Calculator

- Connected with the Reshoring Initiative and Harry Moser.
- TCO Estimator helps identify all the elements that make up total cost.
- HF has worked through the tool to create a customized version that fits our business.
- Resulting in an easy to use desktop tool.
The Solution: TCO Calculator

- How It Is Used:
  - Mostly, fixed input variables – only updated once a year.
  - 8 user inputs that need to be filled for each analysis.
  - Results in a calculated total cost for both sources.

- When It is Used:
  - New product development & during evaluation of existing components.
# The Solution: TCO Calculator

<table>
<thead>
<tr>
<th>Part Number</th>
<th>#23576</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part Description</td>
<td>Aluminum Casting</td>
</tr>
<tr>
<td>Name</td>
<td>Steve Wiegens</td>
</tr>
<tr>
<td>Date</td>
<td>Tuesday, August 21, 2012</td>
</tr>
<tr>
<td>Domestic Vendor Name</td>
<td>Syca Industries</td>
</tr>
<tr>
<td>Offshore Vendor Name</td>
<td>Calixta - Extra Light</td>
</tr>
<tr>
<td>Additional Comments</td>
<td>Syca Industries will be producing a sand casting.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>User Inputs</th>
<th>U.S.</th>
<th>Offshore</th>
<th>Common</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country of origin</td>
<td></td>
<td>China</td>
<td></td>
</tr>
<tr>
<td>Unit Cost, $</td>
<td>$9.51</td>
<td>$7.72</td>
<td></td>
</tr>
<tr>
<td>Minimum Order Quantity</td>
<td>100</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>Annual Forecast Quantity</td>
<td></td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Product category</td>
<td></td>
<td>Non Glass</td>
<td></td>
</tr>
<tr>
<td>Unit Weight, pounds</td>
<td></td>
<td>0.50</td>
<td></td>
</tr>
<tr>
<td>Quality, rework, warranty, % of cost</td>
<td>0%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Tooling cost</td>
<td>$1,850</td>
<td>$4,690</td>
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</tr>
</tbody>
</table>

TCO analysis background information – for file.

8 user inputs filled in each time.
Key Variables to HF:

- MOQ (Minimum Order Qty)
- Supplier Lead-times
- Landed Cost – Including expedited freight costs
- Annual Forecast Qty. – for the component
- Product Life
The Results:

- We are making decisions on a component by component basis.
- Have seen components that would have been sourced overseas now sourced domestically.
- Trends:
  - Components that have had a unit price difference of 50% or less have been good candidates for keeping domestic.
  - Size/Weight of component and tooling costs make a big difference.
  - Beginning to see some trends among component types/commodities.
What we have learned:

- Not just a Supply Chain decision making process.
- Need to train Engineering and Product Development teams.
- Make the right decision when a component is first sourced.
- It is more difficult and costly to re-source.
  - Potentially reinvest in tooling and training.
Challenges:

- Need to change the mindset of the entire business.
- Product Costing
- Develop or find new domestic suppliers who compete well in the total cost model.
- Domestic suppliers to OEM’s need to be educated.
- Difficulty locating domestic sources for some part types.
- New way of thinking!
Wrap Up