Bicycle Manufacturing in the U.S.
Past, Present and Future

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Bicycle Manufacturing in the U.S.

• Preface
  – I have never worked in the manufacturing side of the business
  – Information in this presentation is taken from articles collected over the years
  – Some of this is my opinion!
Bicycle Manufacturing in the U.S.

• Outline
  – Production/Sales Numbers
  – The Past
  – Today
  – The Future?
Bicycle Manufacturing in the U.S.

- A look at production/sales numbers:
  - 1899: 1.2 million units
  - 1905: 250,000 units
  - 1900-1930: 330,000 units average
    - Schwinn – 45,000 units average
  - 1931: 250,000 units
    - 1935: Schwinn – 100,000 units
  - 1940: 1.3 million units
    - 1941: Schwinn – 346,000 units
Bicycle Manufacturing in the U.S.

• A look at production/sales numbers (cont’d)
  • 1950’s: Schwinn – 400,000 units/year average
  • 1963-1968: Schwinn – 2 million Stingrays
  • 1968: Schwinn – 1 million units
  – 1970: 6.9 million units
    • Early 70’s: Schwinn – 400,000 Varsities/year
    • 1972: Schwinn: First imported bikes
  – 1973: 15.2 million units
    • 1974: Schwinn – 1.55 million units
Bicycle Manufacturing in the U.S.

• A look at production/sales numbers:
  – 1975: 7.3 million units
    • 1975: Schwinn – 200,000 units imported
  – Chart on following page will show numbers through 1982
Bicycle Manufacturing in the U.S.

• A look at production/sales numbers:
  – 1983: 9 million units
  – 1984-2013: 11.9 million average
    • 1988: 9.9 million
    • 2005: 14 million
  • 2007: 130 million world-wide
Bicycle Manufacturing in the U.S.  
The Past

- Some other company examples
  - Roadmaster
    - 1936: Founded
    - 1999: All US production ceased
  - Ross Bicycles
    - 1946: Founded
    - Late 60’s: 1 million units/year
    - 1986: Moved production to Taiwan
Bicycle Manufacturing in the U.S.
The Past

- Some other company examples
  - Huffy
    - 1892: First bicycle production
    - 1981: Largest manufacturer in the world, surpassing Raleigh
    - 1988: Still 25% market share
    - 1998: All US production halted
  - Murray
    - 1919: Founded
    - 1982: Second largest US bikemaker, 25% of all American-made bicycles
    - 1999: All US production halted
Bicycle Manufacturing in the U.S.
The Past

• Some other company examples
  – Pope/Columbia
    • 1878: Founded
    • 1991: Forced into bankruptcy
Bicycle Manufacturing in the U.S.  
The Past  

• 1982: “The (US) bicycle industry’s strategy has been to modernize its plants to mass produce bicycles to sell for about $100. While European and Japanese builders make the lightweight, premium-alloy bicycles priced at about $200....
Bicycle Manufacturing in the U.S.
The Past

• American firms have become “the Ford, Chevrolet, and Plymouth” of the bicycle world, says Huffy’s Mr. Northrup. “We and the other builders virtually drove imports out of our markets with large, efficient plants and a constant push to improve productivity.””
Innovative engineering with traditional Schwinn quality and value.

What makes a quality product?
The same precision craftsmanship that produces quality Schwinn bicycles is available to handle custom assignments.
Schwinn has produced millions of precision parts. We have successfully applied robotics to welding processes resulting in consistent reliability. Our finished and plated parts have withstood generations of weathering and abuse.
You know our quality - Put the same quality in your product.
Schwinn Manufacturing Services offers the following capabilities:
- Robotic Welding – Computer controlled welding with 5 heat settings, variable bead width and versatile enough to handle any configuration.
- Punch Press capacities from 5 to 600 tons – automatic and manual.
- Tube processing – bending, cutting, and swaging up to 1-1/2" tube O.D.
- Automatic Screw Machines to handle tapping, threading, recessing, and knurling.
- Welding – a complete Sigma line as well as brazing, spot welding, resistance, inertial, and high frequency welding.
- Other services include finishing, plating, tool room support, metallurgical testing, heat treating, Quality Control and laboratory services.

This wide range of services provides a start-to-finish versatility that translates into lowered costs and increased competitive advantage in your product.

SCHWINN® Schwinn Manufacturing Services
Division of Schwinn Bicycle Co.
1856 N. Kostner, Chicago, 60639  292-3307
Bicycle Manufacturing in the U.S. Recent Past

– Raleigh Cycle Company of America

– Cannondale
  • US Bicycle Production: 1983-2010

– Sapa
  • 20 years of frame manufacturing, stopped in 2014
    – Frames for Titus, Turner and others
    – 2000/2001: 75,000 to 90,000 frames/year

– Kinesis USA
  • Raleigh

– Omnium Cycle Works
  • GT, Schwinn
Bicycle Manufacturing in the U.S. Today

• Presently Manufacturing (See map)
  – Trek
  – Worksman
  – Kent/BCA

• “Medium” Production/Custom Builders
  – Waterford
  – Independent Fabrications
  – Zen Bicycle Fabrication

• Small Builders
  – So many!
  – Many serve a regional customer base
2012
Factory And Suppliers Guide

Each year Bicycle Retailer & Industry News compiles a listing of major U.S. and Canadian suppliers and the factories that build and assemble their bikes. This map is by no means a complete listing of all suppliers; some brands choose not to participate and due to space constraints, many smaller frame makers aren’t included here.

Suppliers fall into three basic categories: those that build all bicycles domestically—represented by red factory icons, those that rely on others to manufacture bikes, or that assemble imported frames in-house—depicted by the gray warehouse icon; and those that manufacture domestically and import from overseas—in which case the red factory icon is accompanied by a listing of their import sources.

Flogicons represent domestic and foreign companies delivering bicycles to suppliers. They are color-coded according to country of origin.

We would like to thank the suppliers that voluntarily provide the information contained here. Please refer to the key on the right for more information.

*2011 information. 3rd update as of 2013.

International Supply

<table>
<thead>
<tr>
<th>China</th>
<th>Taiwan</th>
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</thead>
<tbody>
<tr>
<td>Italy</td>
<td>U.S.A.</td>
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<tr>
<td>Indonesia</td>
<td>Germany</td>
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<td>Spain</td>
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<td>Netherlands</td>
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<tr>
<td>Canada</td>
<td>Portugal</td>
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</tbody>
</table>
Bicycle Manufacturing in the U.S. Today

- Trek
  - 1976: Founded
    - 805 frames the first year
  - Now sells about 1.5 million bikes worldwide/year
    - About 10,000 made in the U.S.
Bicycle Manufacturing in the U.S.
Today

• Worksman
  – 1898: Founded
  – Located in Queens
  – 50 bikes/day average
  – Heavy duty bikes, factory trikes
  – Besides frames they make some other components
Bicycle Manufacturing in the U.S. Today

- Kent/BCA
  - 1909: Opened bike shop
  - 1947: Bike and parts distributor
  - 2014: Opened facility in South Carolina - assembly
  - 2015: Start frame production
  - End of 2016: Hope to be producing 500,000 bikes/year
Bicycle Manufacturing in the U.S. Today

• Part and Accessories Manufacturing
• A partial list
  – Wald
  – Chris King
  – Cane Creek
  – Princeton Tec
  – Wheels Manufacturing
  – Park Tool
  – Paul Components
  – Zipp
Bicycle Manufacturing in the U.S.
The Future

• China and manufacturing (2011)
  – Wages and benefits increasing 15% to 20%/year
    • Savings gained will drop to single digit
  – Transportation costs, duties, supply chain risks, industrial real estate and other costs
    • Cost savings in next 5 years will be minimal
  – Automation and other measures to improve productivity in China won’t be enough to preserve cost advantage
Bicycle Manufacturing in the U.S. The Future

• China and manufacturing (2011) cont’d.
  – Demand for goods in Asia is increasing rapidly. Production capacity in China will be required to serve the domestic and regional market
  – Some manufacturing is shifting to even lower labor cost regions but there are many issues
Bicycle Manufacturing in the U.S.
The Future?

• The Rough Numbers (2007)
  – $60: Raw frame and fork. Manufactured in China by a Taiwan firm, then shipped in batches of 200.
  – $65: Paint, decals, bolts and various finishing touches applied in North America.
  – = $125

  – Pricing:
    • $250: Dealer cost
    • $450: Direct to consumer cost
Bicycle Manufacturing in the U.S.
The Future?

• Can automation as described earlier by Garrett allow mass production in the U.S.?
  – Reliability of automation is orders of magnitude better than the 80’s

• Shared facility

• Industry problem is the need to grow the customer base!
  – Can a focus be on City Bike, Electric Bike and Bike-Share Bike production?
Bicycle Manufacturing in the U.S.
The Future?

• Need to do frame AND component manufacturing in the U.S.
• Maybe a model similar to the auto industry
• Can’t be subject to the whims of Asian suppliers
  – Maybe SRAM should step up and become a “Real” American manufacturer!
Bicycle Manufacturing in the U.S. The Future?

• Discussion?
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