An Internet Broker Service for Low Quantity Custom Machined Parts

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Connecting Buyers and Sellers

Buyers
- Designers
- CAD Software

Sellers
- Fabricators
- CAM Software

Internet
- HTML
- VRML
- DWF
- IGES
- STEP
- DPIF
- ???
The Data Exchange Problem
How do I get data from my CAD system to your CAM system?

- IGES - Initial Graphics Exchange Specification
- Solid Modeling Formats - SAT, XMT, STEP
- STEP AP224 - Machining Features
- DPIF - UNH Machining Feature Language
Today’s Job Shop*

- $25 Billion annual revenues
- Critical to country’s economic health - create tooling, dies, molds, precision machined parts
- 14,000 individual companies with an average of 25-30 employees
- 670,000 skilled machinists
- Widespread use of CNC machines
- Use a wide variety of machine tools to cut or form material, usually metal to precise shapes and dimensions
- Usually geographically close to customers

*Source: National Tooling and Machining Association (www.ntma.org)
The Questions

• What is the best method for electronic communication of design information from the buyer to the seller?
  – DWF, native CAD, native CAM, IGES

• What is the best method for providing feedback from the seller to the buyer?
  – Markup, VRML

• What is the mechanism for connecting buyers and sellers?
  – bid process, payment, secrecy