

Low Cost and Agile Manufacturing Of Firearms

A Proposal to Remington Arms Company

September 20, 1997

Proposal No. IAMS - 1027

PURPOSE

The proposed phases in this program will give Remington Arms Company the information they need to select a low cost metal making and metalworking process for agile manufacturing of firearm components.

BACKGROUND

During my recent discussions with you, I learned that Remington Arms Company was interested in a program to investigate and assess new and existing metalworking technologies and assembly processes for production of metal alloys for components of new firearms. The technologies and processes must lend themselves to:

- agile manufacturing for a "build to order" production system for volumes of 25,000 to 250,000 units annually
- low cost, near shape or near shape parts
- reasonable capital equipment costs (total investment of less than \$2 million)
- process that are already in operation in other industries
- robust processes

Suggested areas of investigation will include, but not be limited to the following;

- investment casting
- powder metal
- metal injection molding
- forging and forming
- conventional machining
- electrochemical machining
- electrical discharge machining
- assembly technologies

Developing cost-effective manufacturing of quality components (similar to your interest) is a common activity of IAMS' engineers. In addition, IAMS' engineers regularly interact with members and customers such as Remington Arms Company to help them implement cost-effective methods of manufacturing.

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