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REMINGTON ARMS COMPANY, INC.  
FIREARMS PROCESS RESEARCH DIVISION  
MONTHLY REPORT  
JULY 1984

CBW  
7/23/84

*CBW*

RECEIVER FLEXIBLE MANUFACTURING SYSTEM

A preliminary economic analysis of the Basic Data indicated that the proposed system investment and software costs were well above an acceptable level. A new reduced scope basic data describing a less automated commercial system is now being developed by the Engineering Department and Remington. Also, a visit to Cincinnati Milacron Company by Remington, EDL, and Engineering Department was made to obtain a proposal and quote for a "turnkey" FMS. Current plans are to finalize the commercial project strategy by October 1st, obtain a CAC from BM&I in 1Q-85 and commercial project authorization in 2Q'85.

The Snyder four spindle machine runoff/acceptance tests in Detroit have been delayed approximately 6 additional weeks and are now expected to be complete by August 20th. A problem with alignment of the headstock and tailstock at the workstation has been identified and is now being corrected.

SMALL PARTS FMS

More horizontal machining center quotations have been received. Some of them are offering the GE 2000 CNC controller with the machine. A decision on which machine to purchase is contingent on Cincinnati's quotation on the Receiver FMS to EDL.

Vendor thermal deburring tests have been completed and several parts have been returned. All parts tested looked very good. They will be examined by Quality Control to determine if this process will provide consistent quality.

## SERIAL NUMBER RECORDING SYSTEM - PHASE II

System development and software coding are continuing at Computer Identics. Most of the system is complete and several system tests have been run. Software is expected to be complete by July 30. System test and run-off will be conducted August 6-10 with installation at Remington expected in late August.

## GFM AUTOMATION

Problems with the GFM counterholder have delayed additional operator training. Training will resume the week of 7/23 with a day shift operator.

## FLEXIBLE ASSEMBLY SYSTEM

Minor gun design changes which will make automatic assembly more practical continue to be evaluated at Ilion. A second test of the "new design" extractor plunger and extractor plunger spring is underway.

## BIRCH FINISHING

Birch short stocks were stained using the Rotary Bell Atomizers with good results. Only one bell was needed to coat the entire stock evenly. An additional conductive flow coat will be needed between stain and seal coats.

Lacquer tests have continued to be successful. Birch fore-ends that had been stained and sealed in previous tests were topcoated using the rotary atomizers. Lacquer sprayed over the stained short stocks also sealed the stocks well in preparation for a final topcoat.

Curable varnish was tested as an alternative to lacquer for birch topcoats. The results were poor, due to the low viscosity of the finish. Higher viscosity samples will be tested before rejecting this type of finish.

CUT CHECKERING DEVELOPMENT

Trial & Pilot was completed on June 22 for both stocks and fore ends. However, both types of machinery still require development work on their exhaust systems and possibly their mechanical following devices.

WOOD FINISHING AUTOMATION

A successful trial and pilot of the Rotary Bell Atomizers was run on 7/17/84. Approximately 1400 fore ends were base coated with RKW, and a finish savings of 40-50% was obtained. Additional trial and pilot runs will be made as soon as parts are available.

Top coat testing with MIII will begin 7/24.

AUTOMATED FORE END SANDING

Hau Welco will visit the plant to review proposed plans for experimental testing to be conducted at Gebruder Hau in Germany. No firm date has been set yet.