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

CBW  
2/22/84

FLEXIBLE RECEIVER MANUFACTURING SYSTEM

Development of Basic Data for the Commercial Project is expected to be completed on schedule.

Efforts to have cutters necessary for the upcoming tests at Snyder ground in tool holders have been unsuccessful. Tests may have to be run using cutters that have been CNC ground independent of tool holders.

Three different types of coated T Cutters have been tested under production conditions. Preliminary results indicate improved tool life ranging between 2 and 4 times that of uncoated tools. Drilling tests using coated tools are being run at EDL.

SMALL PARTS FMS

Preliminary machine specifications are complete and have been sent to EDL for review. System control and process compatability with Receiver FMS is also being reviewed.

SERIAL NUMBER RECORDING SYSTEM - PHASE II

A Project team consisting of Research and Production personnel is being formed to coordinate and complete the installation and start up of the shipping and inventory control system. Full operation is expected in August.

GFM AUTOMATION

The system is now capable of producing parts at a cycle time of one minute 47 seconds versus a goal of one minute 30 seconds.

Total capital expenditures to date are \$292M, 103% of the amount allocated for the first system. Both capital and operations are expected to finish within 5% of forecast.

ROTARY BELL ATOMIZERS

System debugging is continuing as permitted by production schedules. The new anti sway device has been tested and is working well.

CNC SECONDARY WOOD MACHINING

The Heian machine went down on 2/16 due to arcing between brushes and pick-up bands on the rotating turret. A Heian technician is accompanying the spare parts, due to arrive February 27, in order to fully diagnose the problem. The machine will be placed back in service immediately but some redesign may be necessary to prevent recurrence.

AUTOMATED FORE END SANDING

Representatives of Foster Miller Associates were on plant 1/20/84 to discuss concepts for a fore end sanding machine. Phase One of their proposal has been approved. A test at the 3M development center is scheduled for March 8 and 9. This will provide information on wood removal rates and abrasive machining concepts.

PRESS-FORM ROBOT LOAD/UNLOAD

Consultation with EDL revealed that development costs for a press robot system could range from \$0.5 MM - \$1 MM, which includes extensive software. This would lower the IRR on this potential project to 16%. No further investigation will be done at this time.

BIRCH FINISHING

Automation alternatives for finishing birch stocks and fore-ends are being examined. The current lacquer process is being studied to find the necessary operating parameters. Economics are being developed to determine the feasibility of a separate birch finishing line.

CUT CHECKERING - FORE ENDS

The six spindle CO.RE.MA. has been received and hooked up to electric and air service in 72-1. A CO.RE.MA. representative and a General Electric controller technician will be on plant the week of February 27 to start up the machine and insure function of all components.

FIREARMS PROCESS RESEARCH

Personnel As Of 2/22/84

<u>Exempt</u>	<u>10</u>	<u>Non-Exempt</u>	<u>1</u>	<u>Wage Roll</u>	<u>1</u>
Baszczuk, Andrew R.		Perry, Celia M.		Zaffarano, Frank	
Czelusniak, James J.					
Owens, Edwin R.					
Poarch, Calvin A.					
Ritchie, C. Evan					
Shumway, Dan W.					
Soucy, Kenneth W.					
Thorsland, Craig R.					
Workman, Clark B.					
Young, Edgar J.					

Du Pont Engineering

Finfrock, Debbie J.  
Narotsky, Samuel G.