

70 C. *Kin*
METHODS AND STANDARDS PROGRESS REPORT - FEBRUARY 1975

Suggestion Plan

Suggestion Plan data for the month of February 1975 are as follows:

	<u>Current Month</u>	<u>Total Year to Date</u>	<u>Total Last Year to Date</u>
Suggestions received	28	62	49
" in effect	10	17	15
" withdrawn	22	41	36
" pending	146	146	106
Cash awards	\$ 540	\$ 833	\$ 718
Estimated gross savings	\$ 5,745	\$ 8,373	\$ 14,920
Average award per suggestion	\$ 54	\$ 49	\$ 48

Methods Studies

The following layouts were completed this month:

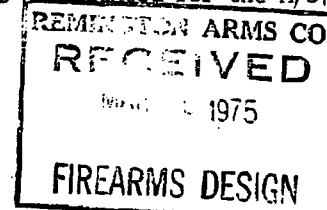
1. Provided a layout for the new 30-ton Receiver Broach in Bldg. 60.
2. Rearranged the 8th GFM Layout in Bldg. 60 to provide aisle space for better access to the new proposed chip handling facilities.
3. Completed a layout to provide space in Bldg. 86-2 for (2) Richardson Fore End Shapers.
4. Rearranged Bldg. 76-2, Dept. 62, to provide 4-1/2 bays for Powder Metal Expansion. (Temporary move).
5. Completed a layout of the garage area to provide space for the Trigger Plate Forging machine and related equipment.
6. Rearranged Bldg. 50-3-SW to provide space for the 3200 Burgomaster drilling machine.
7. Rearranged Bldg. 48-4-SE to provide space for the 3200 N/C Burgomaster machine.
8. A layout was provided for relocation of the Credit Union and Foreman's offices in Bldg. 46-1.

Method Reviews have been completed on the M/700 Receiver Op. #80 Burr File and Op. #166 Finish File, resulting in a substantial labor savings.

Assistance was given Production and Process Engineering with the development of machine groupings to meet 1976 Production schedules with the minimum of additional equipment and still provide full operator assignments.

A program has been established to determine layout priorities to facilitate and coordinate the future Plant moves with Plant Engineering.

Economics were completed on a new 25-cavity mold for recoil pads for a new vendor as a second source of supply. A gross annual savings of \$37,190 is anticipated for the M/870 Recoil Pads from the new vendor.



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A Methods review has been completed on the assembly operations for the M/742 and M/760 Magazine Assembly, resulting in a substantial labor savings.

The 5-Year capacity on the Presses and Copy Lathes for Press Form Stocks has been revised to reflect a change in the mix which increased the Press Form daily requirements. This moved up the need for additional Presses and a copy Lathe from 1977 to 1975.

Operating Cost Improvements

Gross Annual Savings

M/700 Bdl. Stock - Change from (1) to (3) spindle N/C checkering.	\$ 65,200
Program to improve N/C machine maintenance costs - Dept. #53.	45,700
Improved machine setting assignments - Dept. #14.	15,800
Program to improve GFM Shotgun Barrel mandrel life.	11,700
*Negotiated new price for vendor checkering M/700 stocks.	10,500
Methods Reviews by M&S during the month.	9,900
Program to improve yield of M/3200 stocks.	8,800
Program to improve yield of M/3200 barrels.	8,700
M/742-760 Receiver, Oper. #89. Redesign Tool #B-54924. Improved life.	6,900
Program to improve yield of M/3200 major steel components.	5,800
M/3200 Stock - Additional sanding benches. Reduced shift differential.	4,000
M/742-760 Receiver, Oper. #78. Change tool #A-42211 to standard end mill.	2,500
*Reclaim (120) obsolete bore reamers for use on M/3200 barrel.	1,900
Miscellaneous smaller process improvements this month.	1,200
Total this month	\$ 198,600
* One-time savings.	
Total year to date	\$ 300,900

Operating Cost Increases

Gross Annual Increases

Price increase on steel for certain components.	\$ 86,500
Temporary or extra operations.	12,100
Total this month	\$ 98,600
Total year to date	\$ 1,192,100

Summary - Year to Date

Cost Improvements	\$ 300,900
" Increases	(1,192,100)
Net Reduction or (Increase)	(\$ 891,200)

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Cost Improvement Program

	<u>Current Month</u>	<u>Year to Date</u>
New items added	20	42
Anticipated savings	\$ 123,400	\$ 309,700
Items closed out	22	38
Anticipated savings	\$ 186,400	\$ 364,400
Actual reported savings	\$ 124,900	\$ 157,600
Active items being followed	202	
Total anticipated savings (All items on Agenda)	\$ 2,709,500	
Last year's total	\$ 2,373,400	

Cost Improvement Items Anticipated

(This is a partial listing of items being worked on and scheduled for completion).

<u>Code No.</u>		<u>Est. Gross Savings</u>	<u>Estimated Completion Date</u>	<u>% Return c Investme</u>
PB-294	Chemical etch matting on Vent Rib Barrels	\$ 14,300	Mar.'75	39%
PB-251	Adhesive bonded Vent Rib Shotgun Barrel Ass'y.	74,300	Mar.'76	24
WE-61	Provide additional plant well water. (Bal.)	5,900	Mar.'75	21
HD-7	Purchase new Multipress for powder metal parts.	6,600	Mar.'75	C
PBB-116	M/3200 Frame-build special machine, Oper. #83 & 87.	4,900	Mar.'75	16
PBB-121	M/3200 Frame-build special machine, Oper. #290 & #300, & Oper. #30 - Frame Sear Block Assembly.	3,800	May '75	11
PL-22	Warehouse re-arrangement in Bldg. 52.	5,200	Apr.'75	**
PA-125	New Center Fire, Rim Fire Rifle carton with molded inserts.	105,500	Mar.'75	Inf.
PBM-90	M/742-760 Firing Pin - purchase vs. manufacture.	7,300	Mar.'75	**
PBM-109	Install auxiliary filter at Barnes Drills. Reclaim additional oil.	4,200	Mar.'75	C
PBB-146	M/3200-make (5) components from formed bar stock.	19,400	June '75	71
PBB-178	M/3200 Ejector-proposed cold headed construction.	10,600	Mar.'75	**
PL-21	Use of storage racks and stock pickers in Warehouse.	16,100	Apr.'75	67
WE-105	Install new windows in Hldg. 50, 82, 84 and 86. Reduce fuel oil usage.	25,500	Mar.'75	M
PEM-127	M/600-700 Bolt Body - replace special machine.	22,000	Mar.'75	99
PW-260	M/3200 Fore End - Combine Oper. #40 & #50 on N/C Router.	4,900	Mar.'75	**
PBB-181	New type coolant to improve tool life. (Bal.)	5,700	Mar.'75	**
PBB-124	M/3200 Firing Pin Housing-purchase N/C drilling machine for Oper. #80, 90 & 100 and Tang Connecting Block, Oper. #105.	6,700	Apr.'75	15

Cost Improvement Items Anticipated (cont'd)

Code No.		Est. Gross Savings	Estimated Completion Date	% Return c Investmen
PL-21	M/1100 design improvements - reduce custom repair costs.	\$ 52,200	Dec.'75	**
WE-103	Change from ammonia to nitrogen gas - Bldg. 76 & 80.	5,600	Mar.'75	21
PBB-355	Shotgun Vent Rib Barrels - improve type grinding wheels.	7,600	May '75	**
PE-36	In-plant forging - family Trigger Plates, M/700 Trigger Guard & Floor Plates.	138,200	Mar.'76	32
HD-10	Powder metal - Purchase grinder vs. vendor grind, Part #12819.	62,800	Mar.'75	62
PBM-110	Center Fire Front Sight Ramp - Replace (2) Special machines with (1) Kingsbury machine.	6,600	Dec.'75	12
GA-12	System to separate water from soluble oil before burning. Reduced fuel oil usage. (Bal.)	8,500	Nov.'75	23
PBM-134	M/870 Slide Assembly - Build special machine, Oper. #15 & #20.	20,500	Sept.'75	102
PBM-129	M/1100 Action Bar Sleeve - Build special machine, Oper. #25.	2,800	Aug.'75	12
Total		\$647,700		

- * - New items added this month.
- ** - No capital investment.
- R - Machine Replacement.
- C - Increased plant capacity.
- M - Plant modernization.

Incentive Wage Plan

"Off Standard" time under the Measured Performance Plan averages 5.2% for the month of February as compared to 5.2% for the month of January and 7.0% for the month of December.

The Measured Performance Plan variance averaged 2.4% for the month of February, as compared to 3.0% for the month of January and 3.6% for the month of December.