

MECHANIZED RECEIVER RADII POLISHING (RXI-59)

The top and bottom radii of all "Family" style shotgun and rifle Receivers are rough and finish polished manually with abrasive belts. Mechanized polishing could significantly reduce current labor and supply costs of \$300,000 per year. In addition, reduced reliance upon operator skill and concentration could greatly improve Receiver quality and uniformity.

Feasibility studies are in progress on three improved methods of radii polishing: (1) crush formed grinding, (2) abrasive belt polishing (double-mobius strip) and (3) commercial radius and contour polishing machine from Divine Bros. Company. Enough data will be available within 6 months to know which of these 3 methods should be further developed.

TRIGGER PLATE FORGING

It is proposed to use a GFM die forging machine to die forge component blanks currently purchased as die castings. The initial component to be processed will be the "Family" Trigger Plate and later Model 700 Trigger Guards and Model 700 BDL Floor Plates.

The economic evaluation indicates a gross annual savings of \$128,490 and a return of 32.6% on capital expenditure of \$334,000. A return of 20.9% is anticipated on total expenditure of \$473,000 which includes operations and development charges.

The odds of a successful program are now 90-95% in favor of producing a superior blank to replace a very marginal cast product.

It is expected that blanks will be produced to the transfer machine about February, 1976.