

To: T.C. Douglas

January 12, 1992

From: A.R. Baszczuk



**JANUARY PROGRESS REPORT**

**SHOT CHARGER DEVELOPMENT**

Improved feed tube shrouds and an emptying chute, designed to reduce down-time clearing pellet jams, are ready for testing on the Simplex prototype shotcharger. These will be tested during the next steel shot production run tentatively scheduled for January 15th.

Adaption of a similar shot charger to the Remington designed Duplex loaders will require extensive rearrangement of the operating stations. Because of the complexity and numerous drawings involved, and design manpower constraints, this design effort is being done on CAD at home. A preliminary rearrangement drawing has been completed and will be reviewed with plant personnel week of 1/13/92.

**ROTARY CAM BODY FORMER - 410 & 28GA.**

A sample lot of 410 R/C bodies with thinner bridge height were assembled at AH&P during plant shutdown. The current heading pin was used but only a slight increase in body volume was obtained. Twenty shells were machine loaded and cold tested (-20F) using a oversized chamber/maximum head space M/1100 with no evidence of gas leaks. Heads will now be pulled to check for body cracks.

New temporary experimental R/C extrusion, pre-heading and sizing pins with less nose taper (for increased body volume) were made from existing tooling and will be tested week of 1/13/92.

**COPPER BULLETS**

Several attempts to obtain L-20 machine acceptance, based on ability to produce 17 Cal. bullets within specification consistently for one hour at a maximum 17.2 second cycle (approx. 210 parts), have been unsuccessful. All criteria has been met except for .0005 TIR of .0625 diameter X .35 deep hole. Best results to date produced 85% good parts and 15% ranging up to .0012 TIR. Marubeni-Citizen has spent approximately three weeks at our plant attempting to resolve the problem. Alignments were made and various feed/speed combinations tested in-addition to correcting a poorly mounted drill unit. The problem now appears to be tool oriented and several types of drills are being evaluated. Also, the live guide bushing unit is being re-checked at

(1)

their New Jersey facility. Machine acceptance is now expected the week of 1/20/92.

**PILGER COLD FORMED SHOTGUN BARRELS**

Updated information, including a proposed process description and new material, equipment and installation cost estimates, was forwarded to Dan Shumway (I.E.-Ilion) 1/5/92 with a request to prepare new budgetary project economics.

(2)