

30 Sept., 1993

x.c. F.E. Schmidt

To: R.J. Orf

From: G.D. Sietsema 

RE: MONTHLY REPORT - SEPTEMBER 1993

This months efforts were devoted primarily to optimizing newer processes for the Peerless and M/700 SS. Time was also devoted this month to development of new processes for the M/700 DM and the Custom Shop Black M/700 SS. The remainder of my time was devoted to the standard processing support offered through the MET-CHEM Dept.

Following is a more detailed description of some of the projects I have been working on.

- o Peerless Processes - Optimizing the Heat Treat process is on going. Re-evaluated Flame Hardening of Fore End Irons. Studied chemistry, hardness, and microstructure of locking bolts as related to machinability. Completed magnetic particle inspection on I.D. of O/U barrels using magnetic rubber. The guns will be returned for re-inspect and pack.
- o M/700 SS Process - The racking and atmosphere of M/700 SS Bolt Body Assy. was modified to improve hardenability of the bolt body and control excess braze in Harper Brazing Furnace. A NDE method of ensuring proper copper braze of bolt heads is being investigated. This would replace the pull test.
- o M/700 DM Process - Develop Heat treat process for the M/700 DM Mag. Spring. Results were superior to vended heat treat. A process has been developed and is up on the VAX system.
- o Worked with Jack Kast in Arm Service to repair M/3200 Top Locks through a plasma welding process. Experimental parts have been run and positively evaluated. F.E Schmidt and Jack Kast visited the weld shop in Utica. Everything is ready for a purchase order to be placed.
- o Worked with Bob Joy and Planing to ensure the Heat Treat Inspection Box is printed on ALL appropriate routers. This was done by adding a box in the VAX routers by use of a Bob Joy "@file".

NOTE: Robert Raux was out on medical leave for a ruptured disk from 7-12-93 to 9-7-93. He and his doctors have determined Bob will need surgery. The surgery is scheduled for October 11. Bob will be working on limited duty until that time.