

18 December, 1999

x.c. M. Golemboski  
M. Keeney  
J. Zajk

To: Jim Rabbia  
From: Glen Sietsema

**RE: Trip Report - Travel To Welduction Corp. - Novi, MI**

On December 16 - 17, 1999 Joe Zajk and I traveled to Welduction Corp. to evaluate Induction Equipment for hardening the lugs of the M/710 barrel. While at Welduction we set up the equipment and ran a number of sample barrels made from AISI 4140 material. These samples will be used for testing in E-Town. We also finalized the design concept for permanent fixturing and discussed a tentative schedule for delivery of production hardening equipment to Mayfield.

Our primary contacts at Welduction are:  
Dan Williams - President  
Bill Hutchinson - Metallurgical Manager  
Tim G. Boussie - Engineering Director  
Michael Doerr - Sales Manager

**Summary:**

The induction process successfully hardened the M/710 sample barrels made from AISI 4140 Material. A production fixturing concept for the induction equipment was agreed to. Delivery of the equipment will be approximately 16 - 18 weeks from time of PO. The delivery and price will be finalized after Welduction receives a formal RFQ including a machine specification from Remington Mayfield.

**Purpose of Travel:**

The purpose of the trip was to bring Joe Zajk up to date on the status of the M/710 Induction Hardening equipment. Joe will assume responsibility for the equipment now that the M/710 production will be in Mayfield. The trip was also to run AISI 4140 barrel samples. All previous samples were made from Remington Specification 155 Steel.

Both the short samples and full length barrels made of AISI 4140 were hardened. The process is capable of hardening the material.

Joe evaluated equipment that is very similar to that quoted to Remington. The controller, footprint, guarding, and mechanical aspects of the induction system were the same as that quoted to Remington. The power supply for the M/710 application will need to be larger than the system evaluated at Welduction.

We had a summary meeting where the final design concept was agreed to for the production equipment. Welduction indicated delivery would be approximately 16 - 18 weeks. The delivery schedule and price for the production equipment will be finalized after the RFQ and machine specification is received from Remington Mayfield.

A copy of my draft machine specification will be forwarded to Joe with his copy of this report.

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