

DATE: May 24, 2006TO: Jim RabbiaFROM: Mike Santillo

RE: M/710 Rev 2 High Spot Estimate Review meeting -

8/26/98

CC: J. Mead, D. Diaz, M. Keeney, J. Swanson, W. Zarrioch, M. LeMay, J.

Parkhurst

The Process Engineering group met today to begin the high spot estimating process for the revised M/710. The following is a synopsis of the foreseeable issues regarding manufacture and manufacturing cost of the proposed design changes. The premise of the meeting was to review the original high-spot estimate done by Ilion on 6/9/98, review the proposed design concept, identify potential manufacturing issues and assign components to engineers for estimation. Below are the issues discussed with significant points pertaining to each.

Barrel - Summary

- Blank Size -
 - Requires a new 3-pass upset blank.
 - · New blank can be upset on manual machine only
 - New blank requires new tooling
 - Increased cycle time
 - Capacity
- Drilling DEHOFFs
 - · Regerres all new cups
 - Capacity
- Turning Monarchs
 - · Requires all new lieads
 - Capacity
- GFM
 - Requires new collets
- Chamber & Hub -
 - Requires a new CNC Chucker Tight internal machining tolerances
 - Requires new depth gages