

ILION PLANT QUALITY PROGRAM

J.P. Linde - Review of Ilion Plant Quality Program - Contd.

OTHER QUALITY IMPROVEMENTS - Contd.

4. Packaging improvements in two specific areas are currently being evaluated: A new part-order Barrel package to improve the appearance of the product; and a new six corner box, (Exhibit 6-34) for improved protection during shipping. The six corner box is being used to package the M/1100 Limited Edition. This will provide a test of the container on a small, controlled scale.
5. A new 12-cavity Rotary Molding Press, (Exhibit 6-35) is now being installed, with a startup expected in October. The new press will produce Grip Caps, Fore-end Tips, Butt Plates and Spacers for the New Generation Rifles. Parts molded with the new machine have no gate marks (Exhibit 6-36) or voids; will be stronger, due to better compression; and will be less prone to warpage than current parts because of reduced internal stress.

QUALITY CONTROL INDEXES

The Quality Control Department audits the parts, assemblies and finished product. The part audits are taken in the manufacturing areas during all three shifts.

After the guns are assembled they are tested in the Gallery to insure the standards of strength, performance and safety are met. They are tested with a proof round and function tested with standard ammunition.

The overall Gallery testing, (Exhibit 6-37) exhibited a slight downward trend for 1980. Part of this was caused by an increased number of M/1100 rejects due to Don't Lock Open, Don't Lock Up and Shell Stems Carrier malfunctions. These were caused by a number of problems including fast bolt velocity and Barrel alignment. Corrective measures have been taken and the performance is back to normal.

After testing, rifles are targeted to insure that they meet our accuracy specifications. Exhibit 6-38 shows continued improvement in this area. This is attributed to changes made in the Barrel-Receiver straightening operation and the GFM Barrel forming operation.