ILION PLANT QUALITY PROGRAM

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

WOOD FINISHES - Contd.

Sanded wood components include all long Stocks, (Exhibit 6-7), all Fore-ends, (Exhibit 6-8) and about 10% of our short Stock production (Exhibit 6-9). Quality Control of these parts is more difficult than for pressed components due to dependence on manual skills. A program is underway to improve and maintain sanding quality through continual reviews of sanding techniques, and provision of production samples for each operation. Samples displayed in cabinets (Exhibit 6-10) are now available for everyday reference. In addition, five new sanding machines, (Exhibit 6-11) were installed on the 7400 project to improve Fore-end sanding quality. These machines provide a significantly improved finish to the finger grooves and to a radius at the rear of the fore-end. They also reduce the time required to obtain the desired finish.

After the components are pressed or sanded, finishing can begin. This involves filling open grain, sealing, staining and applying finish coats of urethane, lacquer, or vinyl. Each of these operations is essential to the appearance of the finished component.

To gain control of part drying times regardless of weather conditions, a new high speed Turbulator oven (Exhibit 6-12) is now being used to force-dry the fill and pad base coats. This has resulted in a significant quality improvement at this critical finishing stage. Also an improved area layout, (Exhibit 6-13) with individually exhausted benches, relieves floor congestion and promotes good work habits.

In the area of wood staining, a new process was developed to seat and stain the M/788 Birch Stock (Exhibit 6-14). The new process produces a more walnut-like color, increasing the perceived value of the Rifle.

Finish coats of urethane, lacquer or vinyl are applied either on the electrostatic spray line or by hand. Improvements to the electrostatic spray system include a new hydraulic reciprocator (Exhibit 6-15); a new improved flow coat material (Exhibit 6-16); the use of material inspection procedures; new recording humidity temperature controller (Exhibit 6-17) for an optimum spraying atmosphere; and improved machine maintenance. Outside consultants were used in installing the new reciprocators, and developing the new flow coat material.