Notes

The process operators h**a**ve taken quality seriously on their own. They make sure that the tools and work stations are setup correctly. They also check the quality of parts periodically as they are produced. But they do not follow any specific quality methods or techniques. This approach to quality is the same in all of the various production departments.

The majority of the production quality issues seems to be scrapping bad plastic inserts during the assembly process. A lot of 10 cu. ft. tubs accumulate in assembly. But no one seems to be concerned since these parts are very low cost and the plastic scrap is re-processed. Plastic scrap goes to a re-grind operation, where it is ground up into fine pieces. It is then added to the virgin raw material in a 1 to 9 ratio in the Plastic Injection Molding Department.

Overall Excellent Manufacturing does not have many big issues from customer complaints. There are occasional returns of various products, mostly because of plating and finishing problems. In terms of products, complaints are about the plastic insert falling out and about sharp edges on the brackets. Last year there were 56 complaints complaints. They seem to be on the rise as there are 49 complaints this year during the first four months.

NOTES ON INVENTORIES AND MATERIAL MOVEMENT

EMC does not account for inventories on a an individual product line basis. But data is available for the Construction Hdwe Product Group - see below. Brack is about 85% of this group, so using this info would be representative of the inventories for Bracks.

Plasic Injection Molding process: Plastic resin is moved to the molding machines where it is dumped into feeding hoppers for each machine. As the hopper empties, additional resin is dumped in.

The plastic parts come out of the molding machines and are trimmed where they are collected in 10 cu. ft. tubs. These tubs are moved to the Brack assembly area.

Metal Bracket Process: The plain brackets are stamped out by the progressive dies in the Brack press machine group. They are also collected in 10 cu. ft. tubs and then moved to the Brack assembly area.

Assembly Process: In the assembly process, the operator will do a quick visual check of the plastic insert and the plain bracket before assembly. Bad parts are discarded into tubs. The plastic is recycled via a regrind process. The steel parts cannot be used again and sold for scrap with the rest of the scrap metal.

Bulk Pack Process: The assembled Brack items are collected in 10 cu. ft. tubs and are eventually moved to the Bulk Pack area. Once they are packed, they move into the Finished Goods Warehouse where they wait to be picked and packed in large shipping containers to the customers.