Tools for Planning By Kathi McMaster, Planner/Scheduler

From initial quote thru product shipment, DTR is the tool that Plastic Design uses to manage our customers' requirements. DTR is an ERP (Enterprise Resource Planning) software package custom designed for the plastic processing industry. Since the software's inception at PDI in1994, we have relied on DTR for Job Costing, Sales, Inventory Control, Manufacturing, Customer Relationship Management, Finance, and Business Analytics. It is designed to manage single and multi-cavity molds, family molds, and is invaluable for inter-level and inter-branch scheduling challenges.

DTR has many elements which play a role in scheduling and material planning. An accurate bill of manufacture, which includes all materials, part weights, and cycle time; sales order and purchase order entry; timely shift reporting and shipping transactions; and up to date inventory levels of finished goods and raw materials.

In DTR's forecasting module, forecasts can be created on any item code including a new item with no sales orders. Sales history can be scanned in to automate the task of collecting large amounts of data quickly to provide statistical information and indicate sales trends. Based on history, a statistical forecast can be created to smooth the highs and lows. Forecasts can also be manually entered. The forecasts are used in addition to or in lieu of sales release dates to create a schedule using min/max and reorder levels.

Our customers' order methods vary; some place orders with firm delivery dates but many place blanket PO's and rely on PDI to carry stock and release quantities as needed. Using DTR scheduling utilities, different scenarios can be addressed on a per customer or per item code basis to efficiently determine production needs. In the case of multi-level jobs such as assemblies using many components, jobs can be consolidated to maximize machine utilization and reduce setup; while assigned lead times or wait states (ensuring the completion of previous steps) help to insure a smooth flow in the process.

The Material Requirements Planning (MRP) utility allows us to project the requirements and suggest purchase reorder for all materials based on scheduled production, vendor lead times and inventory levels. MRP helps us to reduce the cost of on-hand inventory while ensuring critical materials are in stock to meet production schedules. It also allows us to see "the big picture" so we can plan purchases more wisely; consolidating deliveries in order to achieve the best price breaks, which, in turn help reduce the final cost to the customer.