

The importance of accurate Bills of Material for effective purchasing and on-time production scheduling.

Inaccurate Bills of Material (BOM) can lead to purchasing errors, materials shortages and inventory discrepancies. This in turn can cause production delays that lead to missed delivery dates. Late placement of purchase orders can have the same impact.

Correcting these problems with rush purchase orders tends to result in increased costs of materials: last minute sourcing from the first available vendor with materials in stock, and costly, expedited freight arrangements.

The disruption of production schedules due to materials shortages, or incorrect materials, can have other negative results – underutilization of labour resources when the required materials are unavailable, the subsequent need for overtime work to try to compensate for the delays, and the increased possibility of reduced quality standards due to rushed work or the need for rework to replace an incorrect component. And, if the delays cannot be totally recovered, production milestone dates may be missed, causing a corresponding delay in the receipt of progress payments from customers.

Finally, all of this can lead to unhappy customers, and slippage in delivery dates can impact the start date of subsequent manufacturing orders.

This may seem like an overstatement of the consequences of BOM errors and late purchase orders, but too many manufacturers have experienced the ripple effect of inaccurate materials requirements and delayed delivery of materials, especially given the trend towards just-in-time purchasing to reduce inventory levels.

There are system solutions to address several of these problems, and **BW&A** can provide you with recommendations on which systems are best suited to your operations, including:

- Purchasing and materials management systems through to full MRP/ERP systems
- Production tracking and scheduling systems that provide the data needed for scheduling materials requirements
- Plant floor data collection systems to support the scheduling systems and track materials movement and usage.

But none of these can compensate for the effects of inaccuracies or missing BOM data. Available, accurate BOMs are the building blocks and central sources of information that support effective purchasing and inventory management, and also product costing.

There is no shortcut to establishing accurate bills of materials. We have had a lot of experience in dealing with these situations and we can work with you to organize the most effective and cost efficient ways of achieving that objective, including how best to structure the BOMs to provide the most effective results.

With acceptably accurate BOMs, and the right systems in place, the combined effect of effective production scheduling and your new materials management capabilities will have a dramatic impact on the efficiency and productivity of your manufacturing operations, and on your profitability.