Demand Driven Material Requirements Planning (DDMRP)
In the 1950s, a planning method was conceived called Material Requirements Planning (or MRP). MRP changed the world of manufacturing forever. But times have changed; customer tolerance times are much shorter, product variety and complexity have increased, and supply chains have spread around the world. MRP is dramatically failing in this New Normal. Demand Driven Material Requirements Planning (DDMRP) is a practical, proven, and emerging method for supply chain planning and execution that effectively brings the 1950s concept into the modern era. The foundation of DDMRP is based upon the connection between the creation, protection, and acceleration of the flow of relevant materials and information to drive returns on asset performance. Using an innovative multi-echelon Position, Protect, and Pull methodology, DDMRP helps plan and manage inventories and materials in today's more complex supply scenarios, with attention being paid to ownership, the market, engineering, sales, and the supply base. This method enables a company to decouple forecast error from supply order generation and build in line to actual market requirements, and promotes better and quicker decisions and actions at the planning and execution level. DDMRP is already in use by MAJOR Global 1000 companies. Demand Driven Material Requirements Planning is THE definitive work on DDMRP, and will be required as courseware for all those taking the Certified Demand Driven Planner (CDDP) Program. Features THE authoritative work on the emerging DDMRP methodology. Provides a clear, concise, and compelling explanation of the breakdown of conventional planning systems. Includes immersive and extensive examples that bring DDMRP to life across multiple industries, including vertically integrated supply chains, fast-moving consumer goods (FMCG), heavy fabrication and assembly, and retail and wholesale distribution. Features over 300 graphical figures. Ptak and Smith are world renowned leaders in the fields of MRP, Theory of Contraints (TOC), Quality Improvement, and Supply Chain Management.
Customer Reviews

This is what the Material and Production planners were waiting for! Demand Driven MRP is not just another book about old concepts; it is a study book to become a Certified Demand Driven Planner (CDDP). The book shows the long journey of Chad Smith and Carol Ptak in dealing with problems of traditional Material Requirements Planning (MRP). I was caught by the message of DDMRP during the APICS conferences in the US. Although I have read white papers and other materials about DDMRP, this book gives a comprehensive view of managing the flow of materials and products inside the company as well as between nodes in supply chains. The authors start with a brief reflection on traditional MRP as it currently is still part of numerous Enterprise Resource Planning (ERP) systems to control the production processes aimed at delivering the right products on time to the customers. The main problem with MRP in traditional environments is that it is not compatible anymore with increasingly dynamic environments (such as shorter product life cycles, more severe competition, longer transportation lines, more demanding customers, more diverse customer segmentation). The problem with traditional MRP is that it makes all items below the master scheduled end items dependent on variations in demand for individual products. This means that on the different levels of the structure of a product, demand becomes dependent on the volatility of demand for end items. When companies have many individual products, each with their own variability, the complexity may explode to lower levels of the bill of material. The effect of volatility is that it changes from speeding up deliveries of lower level components to delaying production or purchasing because of shifting priorities.

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