



## Demand Driven MRP: **Abundantly Lean**

Is it possible to simultaneously have too much and too little inventory? YES!

While you may have a great deal of working capital tied up in your entire inventory, within that inventory you can have too few of some items and too many of other items with very few items in the “just right” zone.

Within this state, you often experience oscillation. An item for which you have too much inventory may soon be in a shortage state. You may soon have too much inventory of items that you do not have enough of today. The combination of these effects leads to familiar symptoms of unacceptable inventory and due date performance and high expedite-related wastes.

### Demand Driven MRP is the solution

DDMRP combines elements of Lean and MRP. It aligns efforts and resources as close as possible with actual demand while providing visibility to the total requirements and status across your enterprise.

DDMRP’s replenishment logic allows you to define the limits of “enough” between “too few” and “too many” for each stocked item. It keeps supply plentiful but not wasteful, making it abundantly lean.

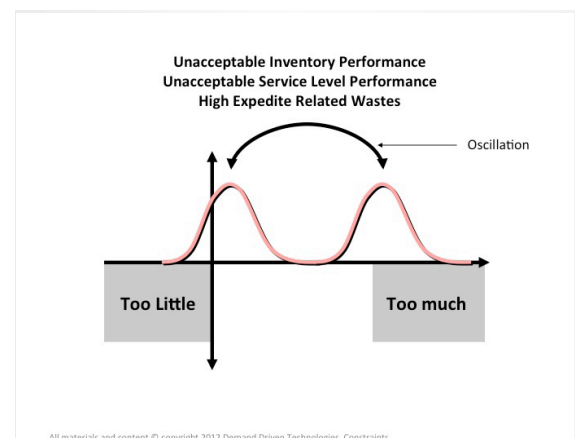
### Protect and improve flow throughout your company!

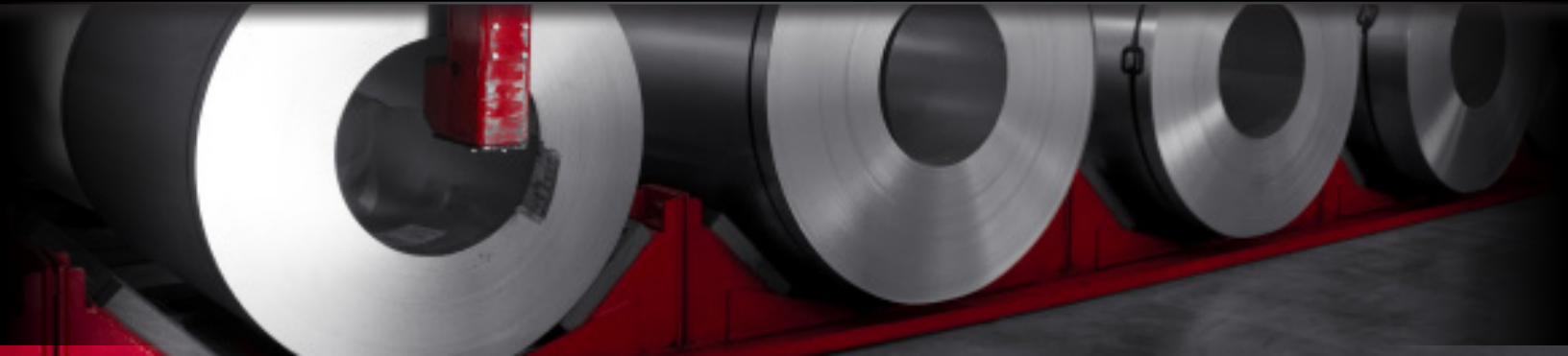
DDMRP’s use of strategic inventory buffers provides constant availability without being wasteful. Buffering raw materials and purchased components protects production from delays and reduces manufacturing lead times.

Buffering key manufactured components and subassemblies further protects production from delays and further reduces manufacturing lead times. Buffering saleable items prevents loss of sales and provides the shortest possible lead time to your customers. Buffering distributed items protects from loss of sales while reducing the amount of on hand inventory needed to meet demand.

Most companies that implement this demand driven approach experience overall reductions of 30-45% of working capital tied up in the inventory of items replenished using Demand Driven MRP.

Figure 1: Bi-modal nature of inventory position under MRP





## The DDMRP Difference

DDMRP has you budget an amount of supply that is ample to meet the future demand that will occur during the time it takes a new order to arrive. DDMRP makes it simple to define levels of supply for each item that equate to: "too much", "ample", "need to add more supply" and "too few". DDMRP adjusts these levels based on recent usage and predicted changes in usage in the future due to seasonality, marketing events and new product introductions. DDMRP makes certain that you never run out and that you never have too much.

## See Results Immediately!

- 30-45% less working capital tied up in inventory
- Increased Return on Average Capital Employed (RACE)
- Decreased expedite-related expenses
- Minimal shortages and back orders
- Increased sales
- Better responsiveness to customers
- Shortened lead times

## Further Examination

### I. Synergy Resources DDMRP Simulator

Follow the sizing of buffers for a sample part. Manage this part on a daily basis using the principles of Demand Driven MRP.

### II. Custom DDMRP Simulation

Provide us with data relevant to an item stocked at your company. Follow recommendations based on the buffer statuses and compare these to the historic actions actually taken. Witness the difference DDMRP would have made on this part in your own company.

### III. Purchased Parts Inventory Reduction Estimate and Replenishment +<sup>®</sup> Custom Demonstration

Provide us with a snapshot of your current inventory situation for all of your purchased parts. We will take this data and determine which items to replenish under DDMRP principles using the Replenishment +<sup>®</sup> software from Demand Driven Technology. An estimate of total reduction in inventory will be shown and a demonstration of the software capabilities will be given using your own data.

For more information, contact [strategic.planning@synergyresources.net](mailto:strategic.planning@synergyresources.net)

Figure 2: "In the just right" zone.  
The nature of inventory position under DDMRP

