A Course Material on

LOGISTICS AND SUPPLY CHAIN MANAGEMENT

Subject : LOGISTICS AND SUPPLY CHAIN MANAGEMENT

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LECTURE -16

Reorder Point Formula and Safety Stock Formula Combined

Let's put the reorder point formula to the test and use it in a scenario so you can get a better understanding.

Firstly, just for the recap, the reorder point formula is:

Reorder Point = (Average Daily Usage x Average Lead Time in Days) + Safety Stock

So, let's say you're a manufacturer that:

— Uses 10 units of a specific raw material per day;

— Has a resupply or delivery of this raw material that takes 7 days to arrive; and

— Keeps a safety stock level of the raw material at 50 units.

Using this information, your reorder point formula is going to look like this:

(10 x 7) + 50 = 120

Using the reorder point formula, you can calculate that your reorder point is 120 units. The moment your inventory levels fall below this number, you're going to need to place a new order.

Reorder Quantity Formula

Now you know how and when to order new materials to avoid stockouts. However, the real question is how much material do you have to order to keep your productions running smoothly.

This is where the reorder quantity formula comes into play to determine the best amount to order.

The reorder quantity formula is:

Reorder Quantity for Raw Materials = Average Daily Units Used x Average Lead Time

Using the example above, a manufacturer who uses 10 units of raw material a day and has a delivery time of 7 days for a resupply would mean the reorder quantity formula would look like this:

10 x 7 = 50

The reorder quantity formula is going to help you calculate your reorder point formula.

The difference between the two is:

Reorder point - A trigger that notifies a manufacturer or manager that they need to order more inventory.

Reorder quantity – The amount of a particular item that needs to be reordered.

Perfect Your Order Fulfillment with Your Accurate Reorder Point Policy

When calculating reorder point levels, pay attention to changes in the underlying metrics. Daily usage and lead-time are not carved in stone. Like everything else, they are subject to change, which means your reorder points are too.

So, although having an effective reorder point policy means you have freed up more time in your week, you still need to stay on top things by making new reorder point calculations.

Reorder point levels may increase as your business grows and they may fluctuate depending on whether you are approaching high or low season.

Thus, you should recalculate reorder point levels from time to time. A good tip to follow would be to revisit these calculations in every 3-4 months.

However, using inefficient spreadsheets can be tedious, time-consuming, and lead to business damaging errors. This is why many manufacturers and managers turn to Smart Manufacturing Solutions, like Katana, to help them automate their reorder points.