

# Why NOT to use MRP to Schedule Receipts

# Why NOT to use MRP to Schedule Receipts

## WELCOME

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- Assoc. Level CPIM/CSCP Instructor #1168
- Past-President SoNH Chapter #253

# Why NOT to use MRP to Schedule Receipts

## Introductions :

- 30 plus years in Manufacturing, Operations Management, Supply Chain/Logistics in a variety of operations roles including Procurement, Planning, Scheduling, ERP System Implementations, Spare Parts (FRU's), Warehousing, Shipping/Receiving, and Import/Export activities.
- Professional credentials include APICS certified in CPIM & CSCP & APICS Assoc. Level CPIM/CSCP Instructor.
- ERP Systems: Copics, Infimacs II, Libra, E Peachtree, Point Man, Baan, JBA, Vis.Net & PeopleSoft/Oracle, SAP

# Why NOT to use MRP to Schedule Receipts

## **APICS, The Association for Operations Management**

- 2010 Certificate, APICS Learning Dynamics for Instructors
- 2010 APICS Associate Level CSCP Instructor #1168
- 2010 APICS Associate Level CPIM Instructor #1168
- 2009 CSCP, Certified Supply Chain Professional
- 2005 Certificate, APICS Leadership Institute
- 2002 Certificate Basics of Supply Chain Management
- 2000 Certificate, Negotiating for Success, ISM program #SPC-01-0591
- 1998 Certificate, APICS Train the Trainer

## **NEW HAMPSHIRE COLLEGE, NASHUA, NH. (now, Southern New Hampshire Univ.)**

- 1997 Certified Production & Inventory Management
- 1995 B.S. degree in Business Administration, Cum Laude
- 1992 A.S. degree in Business Administration, National Honor Society, Delta Mu Delta.

# Why NOT to use MRP to Schedule Receipts

Cell Phones

Introductions

Let's Go Around The Room

# Why NOT to use MRP to Schedule Receipts

- The need for a flexible supply chain process is required to match the ever changing manufacturing plans/schedules.
- Placing PO's per MRP messages months ago, Just does not cut it anymore.

# Why NOT to use MRP to Schedule Receipts

| Category                                        | Metric                 | Goal | 29-Jan       | 5-Feb        |
|-------------------------------------------------|------------------------|------|--------------|--------------|
| TL Forecast Change %<br>(forecast = build plan) | 4 Weeks                | 0%   | 11%          | 9%           |
|                                                 | 8 Weeks                | 0%   | 45%          | 20%          |
| PID Maintenance                                 | Total PIDs 13 weeks    | N/A  | 117          | 90           |
|                                                 | # at 8-wk Fence        | N/A  | 117          |              |
|                                                 | # not Firmed <8 weeks  | 0    | 117          |              |
|                                                 | # not Released on Time | 0    | ?            |              |
| Inventory On Hand                               | Total for 660 Parts    |      | \$ 4,090,791 | \$ 3,644,620 |
|                                                 | AAG - Buy              |      | \$ 1,599,686 | \$ 1,285,927 |
|                                                 | AAG - Make             |      | \$ 112,071   | \$ 70,404    |
|                                                 | AAG - WIP              |      | \$ 959,486   | \$ 569,557   |
|                                                 | MED - BUY              |      | \$ 1,419,638 | \$ 1,718,862 |
|                                                 | MED - MAKE             |      | \$ -         | \$ -         |
|                                                 | MED - WIP              |      | \$ (90)      | \$ (130)     |
|                                                 | SS Total               |      | \$ 1,201,920 | \$ 1,214,705 |
|                                                 | AAG - BUY - SS         |      | \$ 407,958   | \$ 407,958   |
|                                                 | AAG - MAKE - SS        |      | \$ 1,492     | \$ 1,492     |
|                                                 | MED - BUY - SS         |      | \$ 132,407   | \$ 145,192   |
|                                                 | MED - MAKE - SS        |      | \$ 660,063   | \$ 660,063   |

# Why NOT to use MRP to Schedule Receipts

| Category          | Metric                   | Goal     | 29-Jan    | 5-Feb       |
|-------------------|--------------------------|----------|-----------|-------------|
| Purchased Part LT | Weighted Avg LT Days     | <3 weeks | 52        | 52          |
| Past Due POs      | PO Maintenance           |          | 3         | 4           |
| Shortages         | Projected Shortages      |          | 30        | 15          |
|                   | Priority Material Shorts |          | 16        | 9           |
| Gatekeeper        | 30 Day                   |          | \$251,070 | \$1,011,547 |
|                   | 60 Day                   |          | \$377,216 | \$1,512,733 |
|                   | Entire Horizon           |          | \$9,845   | \$79,763    |

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|---------------------|---------------------------|--------|------|-----------|-------------|
| Gatekeeper          | 30 Day                    |        |      | \$251,070 | \$1,011,547 |
|                     | 60 Day                    |        |      | \$377,216 | \$1,512,733 |
|                     | Entire Horizon            |        |      | \$9,845   | \$79,763    |
| Past Due PIDs       | TOTAL                     |        |      | 23        | 24          |
|                     | < 95% Complete            | 0      |      | 5         | 8           |
|                     | Avg Days Late             | 0      |      | 40        | 28          |
|                     | Rework (> = 95% Complete) |        |      | 18        | 16          |
|                     | Avg Days Late             |        |      | 46        | 53          |
| Schedule Compliance | Boards (AAG)              |        |      |           | 67%         |
|                     | Box (MED)                 |        |      |           | 55%         |
|                     | TL OTD                    | 96%    |      |           | 59%         |

# Why NOT to use MRP to Schedule Receipts

Based on the last 3 slides  
what do you see ?

# Why NOT to use MRP to Schedule Receipts

- What is the Impact On:
- DOS    Days of Supply
- Inventory Turns
- Cash to Cash
- ABC
- Lead Times

# Why NOT to use MRP to Schedule Receipts

| Metric              | Goal         | 28-May       | 4-Jun        | 11-Jun       | 18-Jun       |
|---------------------|--------------|--------------|--------------|--------------|--------------|
| 4 Weeks             | 0%           | 0%           | 3%           | 9%           | 55%          |
| 8 Weeks             | 0%           | 0%           | 7%           | 5%           | 60%          |
| Total PIDs 13 weeks | N/A          | 83           | 83           | 79           | 77           |
| Total for 660 Parts | \$ 3,626,770 | \$ 5,292,255 | \$ 4,607,543 | \$ 4,790,107 | \$ 4,996,193 |
| AAG - Buy           | \$ 800,000   | \$ 1,518,038 | \$ 1,256,678 | \$ 1,260,834 | \$ 1,404,208 |
| AAG - Make          | N/A          | \$ 31,706    | \$ 33,550    | \$ 33,550    | \$ 35,410    |
| AAG - WIP           | \$ 800,000   | \$ 653,744   | \$ 963,241   | \$ 728,444   | \$ 470,392   |
| MED - BUY           | N/A          | \$ 740,320   | \$ 592,626   | \$ 781,533   | \$ 834,366   |
| MED - MAKE          | N/A          | \$ 1,046,053 | \$ 316,766   | \$ 546,534   | \$ 885,554   |
| MED - WIP           | \$ 836,156   | \$ 1,302,394 | \$ 1,444,682 | \$ 1,439,212 | \$ 1,366,263 |
| SS Total            | \$ 1,190,614 | \$ 1,105,709 | \$ 1,078,721 | \$ 989,685   | \$ 989,685   |
| AAG - BUY - SS      | N/A          | \$353,965    | \$353,965    | \$353,965    | \$353,965    |
| AAG - MAKE - SS     | N/A          | \$ 2,983     | \$ 2,983     | \$ 2,983     | \$ 2,983     |
| MED - BUY - SS      | N/A          | \$ 255,476   | \$ 255,476   | \$ 255,476   | \$ 255,476   |
| MED - MAKE - SS     | \$ 660,064   | \$ 493,285   | \$ 466,297   | \$ 377,261   | \$ 377,261   |

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| Metric                   | Goal     | 28-May    | 4-Jun     | 11-Jun    | 18-Jun    |
|--------------------------|----------|-----------|-----------|-----------|-----------|
| Weighted Avg LT Days     | <21 days | 28        | 28        | 27        | 28        |
| PO Maintenance           | 0        | 8         | 9         | 9         | 5         |
| Projected Shortages      | 0        | 21        | 25        | 18        | 19        |
| Priority Material Shorts | 0        | 4         | 4         | 5         | 7         |
| 30 Day                   | \$0      | \$106,771 | \$144,368 | \$251,005 | \$235,974 |
| 60 Day                   | \$0      | \$136,347 | \$130,087 | \$289,920 | \$279,338 |
| Entire Horizon           | \$0      | \$135,354 | \$118,780 | \$192,891 | \$181,493 |

# Why NOT to use MRP to Schedule Receipts

| Metric                    | Goal | 28-May | 4-Jun | 11-Jun | 18-Jun |
|---------------------------|------|--------|-------|--------|--------|
| TOTAL                     | 0    | 19     | 25    | 27     | 27     |
| < 95% Complete            | 0    | 16     | 21    | 25     | 27     |
| Avg Days Late             | 0    | 12     | 15    | 14     | 29     |
| Rework (> = 95% Complete) | 5%   | 3      | 4     | 2      | 0      |
| Avg Days Late             | 14   | 38     | 28    | 55     | 0      |
| Boards (AAG)              | 96%  | 53%    | 84%   | 80%    | 100%   |
| Box (MED)                 | 96%  | 9%     | 15%   | 9%     | 0%     |
| TL OTD                    | 96%  | 52%    | 83%   | 78%    | 95%    |

# Why NOT to use MRP to Schedule Receipts

| Item        | Where used | Value     | Planned   | Owner    | 4/2/2013 |                | DOS Goal | Glide time to reach target | \$ inv. reduction Target | 4/8/2013 | 4/16/2013 | 22-Apr | I |
|-------------|------------|-----------|-----------|----------|----------|----------------|----------|----------------------------|--------------------------|----------|-----------|--------|---|
|             |            |           |           |          | DOS OH   |                |          |                            |                          | DOS OH   | DOS OH    | DOS OH |   |
|             |            |           |           |          | OH       | Implementation |          |                            |                          |          |           |        |   |
|             |            |           |           |          |          |                |          |                            |                          | ↓        | ↓         | ↓      |   |
| 201-000795  | AJ DAS     | \$660,000 | April 5th | Larry G. | 45       |                | 10       | 5 weeks                    | \$540,000                | 38       | 37        | 22     |   |
| 49-722676   | G & KT Das | \$340,000 | April 5th | Laurie L | 36       |                | 10       | 4 weeks                    | \$240,000                | 26       | 24        | 37     |   |
| 49-722729   | S Das      | \$285,000 | April 5th | laurie L | 49       |                | 10       | 5 weeks                    | \$225,000                | 47       | 41        | 51     |   |
| 21-03543-01 | G & KT DAS | \$106,000 | April 5th | Larry G  | 65       |                | 10       | 8 weeks                    | \$80,000                 | 53       | 42        | 41     |   |

# Why NOT to use MRP to Schedule Receipts

Relationship with your Supplier

Pull or Push

# Why NOT to use MRP to Schedule Receipts

## SAP Schedule Agreements

### Purpose:

Working with scheduling agreements can shorten processing times and reduce the amount of paperwork you are faced with. One delivery schedule can replace a large number of discrete purchase orders or contract release orders.

Inventories can be reduced to a minimum. Delivery scheduling enables vendors to plan and allocate their resources more efficiently.

# Why NOT to use MRP to Schedule Receipts

- When you procure an article using a scheduling agreement, the vendor receives a conventional delivery schedule or a scheduling agreement release (comprising a header and a rolling delivery schedule made up of individual schedule lines) rather than discrete purchase or release orders. The delivery schedule specifies:
- Quantities to be delivered, Delivery dates

# Why NOT to use MRP to Schedule Receipts

- FSA Full Schedule Agreement Running L/T less than Cold L/T
- 
- SSA Semi Schedule Agreement Running L/T = Cold L/T
- 
- FSA, Delivery schedule contains Authorized, Planned, & Forecast delivery dates
- Authorized period: is the normal transit time
- Supplier needs from the time they receive the request to the time it is on your dock
- Planned Period = Cold L/T less Running L/T, supplier is expected to have material available as the periods move
- SSA, Delivery schedule contains Authorized & Forecast delivery dates
- Authorized period = Cold L/T

# Why NOT to use MRP to Schedule Receipts

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Item 00001 Transmission no. 0003 created on 09/05/2013 at 16:48:56  
Material CC13-00130-000 COLDPLATE, ROHS, PWR SUPPLY,C78X  
Price : 385.55 Per 1 USD  
Revision level : E  
Total Cumulative qty. : 294 each  
Total Delivered qty. : 0 each  
Last goods receipt : 0 each  
Authorized : 09/12/2013  
Planned : 01/09/2014

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| Week | Deliv. date | Qty. | Cumulative Qty | A/P/F      |
|------|-------------|------|----------------|------------|
| 00   |             | 21   | 21             | Authorized |
| 37   | 09/09/2013  | 21   | 42             | Authorized |
| 38   | 09/16/2013  | 21   | 63             | Planned    |
| 38   | 09/19/2013  | 0    | 63             | Planned    |
| 39   | 09/26/2013  | 0    | 63             | Planned    |
| 40   | 09/30/2013  | 21   | 84             | Planned    |
| 43   | 10/24/2013  | 0    | 84             | Planned    |
| 47   | 11/19/2013  | 21   | 105            | Planned    |
| 51   | 12/17/2013  | 21   | 126            | Planned    |
| 03   | 01/15/2014  | 21   | 147            | Forecast   |

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# Why NOT to use MRP to Schedule Receipts

PeopleSoft/Oracle

Replenish ,

Target Qty set , once this is breached, system  
sends out request for bin to be filled , Running  
lead time 7 days

# Why NOT to use MRP to Schedule Receipts

- **Replenishment**
- Pull system set up per predetermined attributes (lot size, safety Stock, response time, etc). Pull request based on hand qty, based on daily back flushing. System nightly reviews on hand quantities and dispatches a purchase order automatically based on a contract that is in place before hand. Contracts will be set up based on Analogic program called "Flow".
- 
- Blanket Contracts established. Releases appear as new lines against a single PO #.
- Supplier Forecast Report sent to all suppliers on the Replenishment program.
- Reports/queries available to monitor/manage the process.
- 
- Attributes of parts that “qualify” for Replenishment:
- Timely/accurate inventory balances.
- Established pricing
- Short lead-times
- Consistent usage. Minimal demand spikes.

# Why NOT to use MRP to Schedule Receipts

| Line # | Item/Description/Rev       | Unit Price | Total Contract | UOM |
|--------|----------------------------|------------|----------------|-----|
|        |                            | USD        | <u>Qty Amt</u> |     |
| 1      | CC43-00411-000             | 0.376      | 2,500          | EA  |
|        | INSULATOR, ROHS, FERRITE   |            |                |     |
|        | Rev: A                     |            |                |     |
|        | Ref quote QT42491 6-4-2013 |            |                |     |

## Comments:

The item(s) referred to on this purchase order are being consumed as part of an Analogic program called "Flow". The importance to adhere to the following agreed upon guidelines is critical to the planning and commitments that Analogic has made to our customer(s).

Estimated annual usage: 2500

Package size: 500

Kanban size: 500

Signal method: EMAIL

Estimated start date: Jun 2013 – Jan 2014

Replenishment time (time from signal-to-delivery): 7 DAYS

Minimum quantity requirements at supplier's location:

Analogic's quantity liability will only be for those items approved as non-cancelable/non returnable.

The PO quantity stated is for yearly anticipated usage only.

Should any part(s) be in jeopardy of not supporting pending or actual releases you are immediately required to contact the buyer.

It is your responsibility to make sure that in your absence adequate coverage is provided.

Any changes to this agreement will be with written mutual consent of both parties.

# Why NOT to use MRP to Schedule Receipts

**ARROW.**  
ARROW CARES.

powered by **one** Network

Workspace

Create Part Master X Search/Update Stock Master X

\* Part: CC13-00130-000

\* Cell: 78X Rack

|  |   | Part           | Cell     | Single Bin Quantity | Order Classification |
|--|---|----------------|----------|---------------------|----------------------|
|  | X | CC13-00130-000 | 78X Rack | 15                  | Regular              |

# Why NOT to use MRP to Schedule Receipts

Workspace 02:57

Create Part Master ☒ Search/Update Stock Master ☒

\* Part: CC13-00130-000

\* Cell: 78X Rack  + require

| Order Up-to Qty | Reorder Target | Unit Cost | Currency                             | Expected Delivery Days |
|-----------------|----------------|-----------|--------------------------------------|------------------------|
| 30              | 30             | 397.47    | USD <input type="button" value="v"/> | 7                      |

# Why NOT to use MRP to Schedule Receipts

**Workspace**

Supplier Maintenance 

\* **Supplier:** Riverside Machine

**Contact:** RICH GERASOLI

**Email:** rceasoli@acielectronics.com

**Phone:** 781-935-7230

**EDI GS ID:**

**Order Email Format:** RTF

**Report Delivery Schedule**

**Reports:**

- ☐ Transaction Report
- ☐ No Activity Report
- ☐ Stock Analysis
- ☐ Part/Stock Maintenance
- ☐ Open Order Review
- ☐ Stock Status Report
- ☐ Part Master Report
- ☐ Supplier Performance
- ☐ Discrepancy Report

\* **Schedule:** Daily

\* **Time:** 7:00 AM 

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| 2013-05-09T08:00:12-04:00 |          |            |             |           |           |                   |                 |           |
|---------------------------|----------|------------|-------------|-----------|-----------|-------------------|-----------------|-----------|
| Arrow CARES               |          |            |             |           |           |                   |                 |           |
| #Customer Part Number     | Cell     | On Order ( | Blanket PO  | Unit Cost | PO Number | Supplier          | Trans.Date/Time | Days Open |
| CC13-00130-000            | 78X Rack | 15         | '0300002584 | 397.47    | 235010    | Riverside Machine | 5/6/2013 11:53  | 2         |
| CC13-00131-000            | 78X Rack | 70         | '0300002804 | 360.75    | 235382    | Riverside Machine | 5/8/2013 13:12  | 0         |

# Why NOT to use MRP to Schedule Receipts

Questions

# Why NOT to use MRP to Schedule Receipts

Thank You !!!!!!!

Brian H. Doane CPIM, CSCP