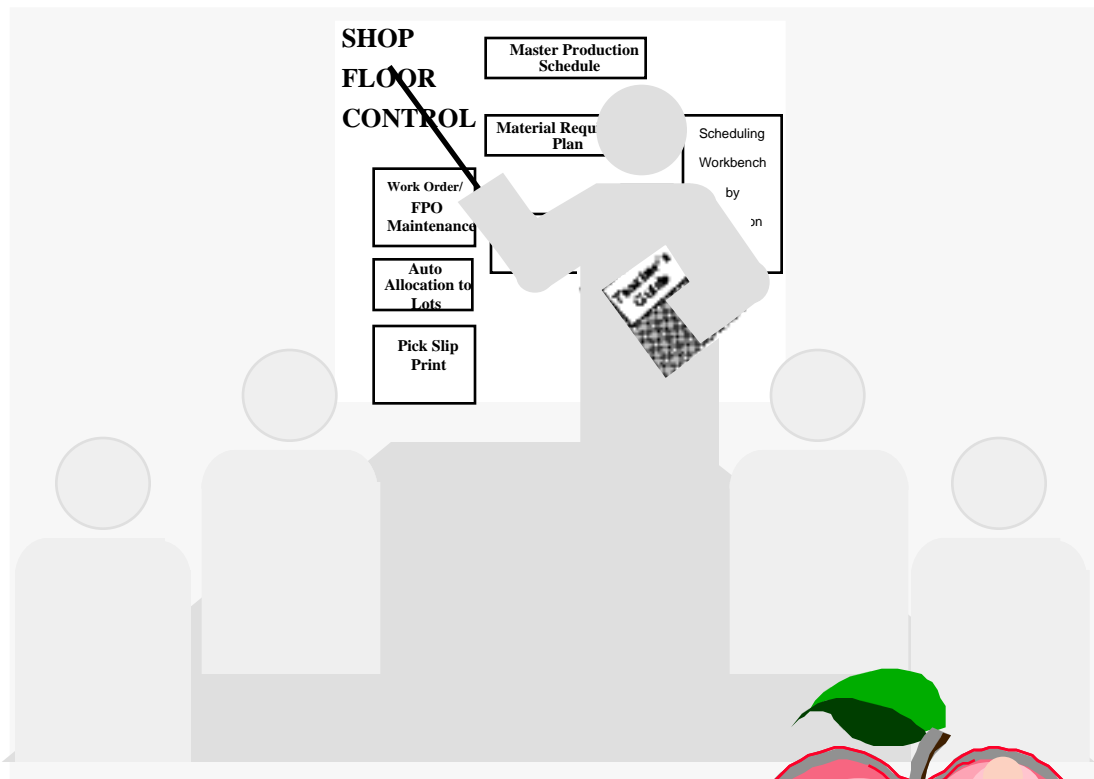
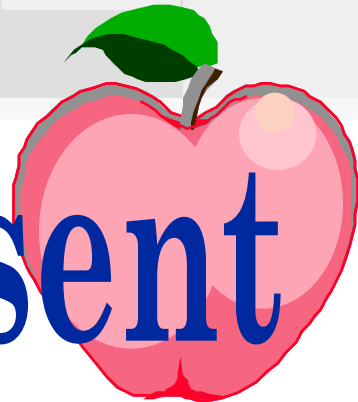


Shop Floor Control in PRMS™



RMS/Present



Version 2.4
A Product of
MXB - Managing the Business
100 N. Freeman Road
Tucson, AZ 85748
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Sample Agenda

Day 1

Morning

Shop Floor Control Overview
Shop Floor Setup

Afternoon

Shop Floor Setup
Shop Data Maintenance Workshop
Product Master/Structure/Shop Data
Maintenance

Day 2

Morning

Shop Floor Control - Discrete Processing

Afternoon

Shop Floor Control - Discrete Processing
Shop Floor Control Workshop
Shop Floor Control Discrete Processing

Day 3

Morning

Shop Floor Control - Repetitive Processing

Afternoon

Shop Floor Control - Repetitive Processing
Shop Floor Control Workshop
Shop Floor Control Repetitive Processing
Performance Reporting

Day 4

Morning

Capacity Requirements Planning
CRP Workshop

Afternoon

Rough Cut Capacity Planning

Introduction to PRMS Manufacturing



RMS/Present

PRMS™ Planning

Forecasting Workbench

VMI
Fest.
Maint.

VMI
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9.0

Dist.
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Dist.
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VMI Gen.
Planned CO's

Distribution Requirements
Planning *Suggested WRO's*

Posting
Warehouse

Forecast
Maintenance

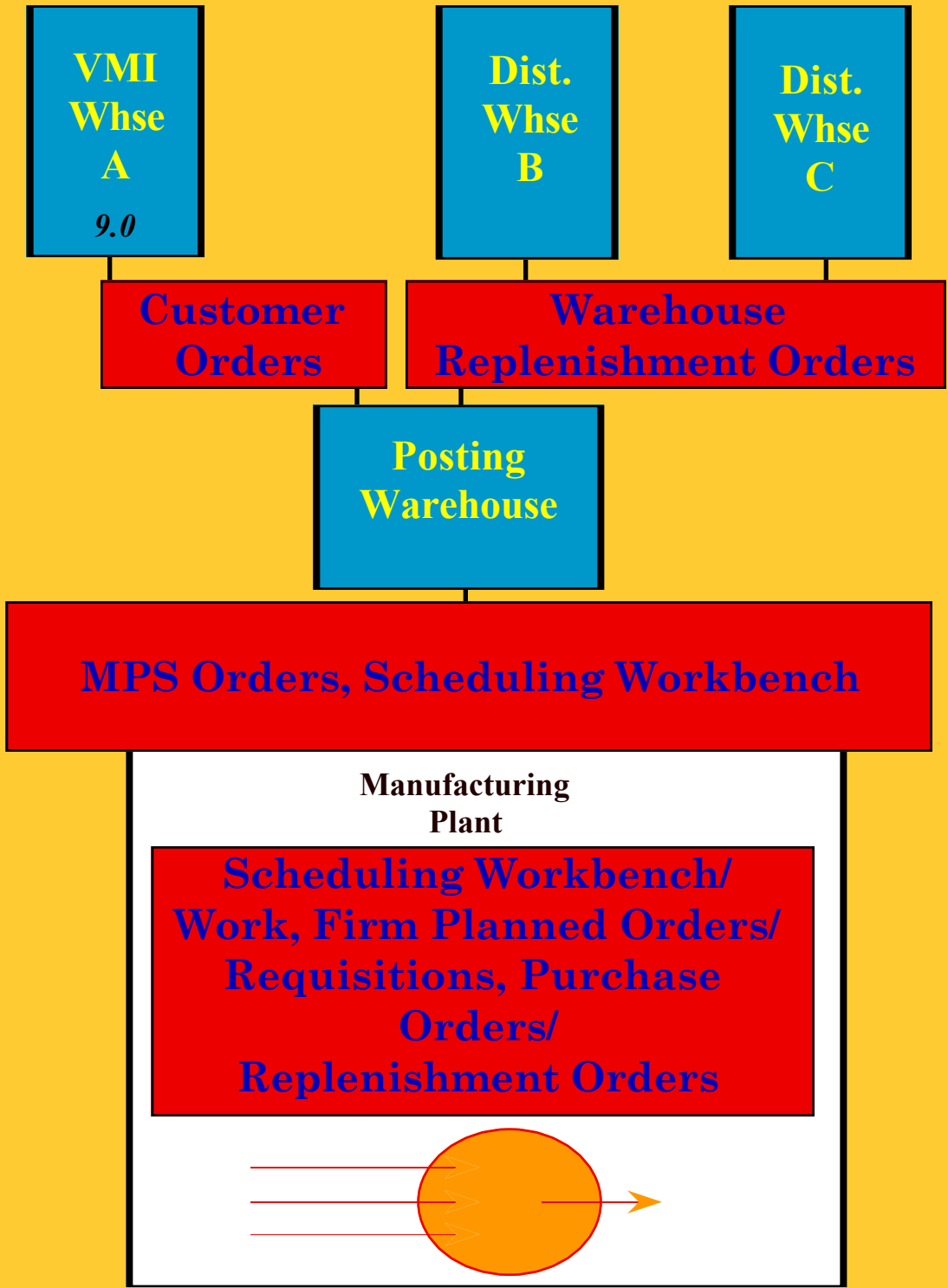
Master Production *Suggested*
Scheduling *MPS Orders*

Manufacturing
Plant

Material
Requirements
Planning
Planned Order Releases

Capacity
Requirements
Planning

PRMS™ Execution Functions



PRMS™

 Planning
 Execution

**Distribution
Requirements
Planning**

**Forecasting
Workbench**

**Vendor
Managed
Inventory^{9.0}**

**Warehouse
Replenishment
Orders**

**Customer
Order
Processing**

**Accounts
Receivable**

Master Production Scheduling

**Shop
Data**

**Product
Structure**

**Rough
Cut
Capacity
Planning**

Material Requirements Planning

**Capacity
Requirements
Planning**

**Shop Floor
Control**

**Purchasing/
Receiving**

**Inventory
Control**

**Accounts
Payable**

**Payroll/
Human
Resources**

**Physical Inv./
Cycle Count**

**Quality
Control**

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Environments and Order Types

Three Manufacturing Environments (Manufacturing Methods)

DISCRETE

REPETITIVE/PROCESS

PULL *8.3*

Four Types of Manufacturing Execution (Schedule Types)

FIRM/RELEASED WORK ORDERS

FIRM/RELEASED FLOW ORDERS

ORDERLESS PRODUCTION SCHEDULE (OPS) *8.3*

NO ORDER OR SCHEDULE (NOS) *8.3*

Environments

Discrete

WORK CENTER BASED

OPERATION BY OPERATION SCHEDULING

**DRIVEN BY ROUTERS AND LAUNCHING WORK ORDERS
ACROSS WORK CENTERS**

Repetitive/Process

PRODUCTION LINE BASED

**SINGLE THREADED SCHEDULING THROUGH
PRODUCTION LINE AT DETERMINED PRODUCTION
RATES PER HOUR**

**USES WORK CENTERS AND ROUTINGS FOR
STANDARD COST DETERMINATION ONLY**

Pull System

**REQUIREMENTS DETERMINED BY REPLENISHMENT
OF STOCKING LEVELS**

NO SCHEDULE

**MANUFACTURING EXECUTION IS RECOGNITION OF
ACTIVITIES AFTER THE FACT, NOT ACTIVITY DRIVEN**

Types of Orders

Firm Planned/Released Work Orders (FPO, WO)

EACH ORDER COPIES IN ITS OWN BILL OF MATERIALS AND ROUTING STEPS

May be modified per order/release

AN ORDER MAY CONSIST OF SEVERAL RELEASES

Each with its own bill of materials, routing steps, and start and due dates

SCHEDULING OCCURS VIA A DISPATCH LIST (SF0100) OR WORK CENTER INQUIRY (SF0070)

Released operations by work center

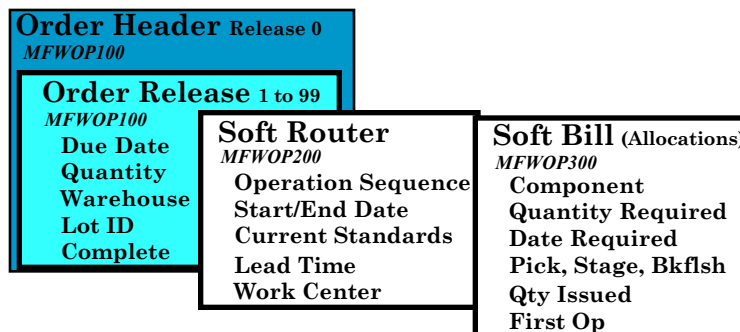
COMPONENT MATERIAL IS CONTROLLED BY

Pick lists for each order/release, pick warehouse

Backflushing

OUTSIDE OPERATIONS ARE SUPPORTED

UNPLANNED PRODUCTION RECEIPTS MAY BE USED



Types of Orders (cont.)

Firm Planned/Released Flow Orders (FFO, RFO)

REPRESENT A SCHEDULED QUANTITY OVER A PERIOD OF SHIFTS OR DAYS

SCHEDULED WITH PRODUCTION SCHEDULING WORKBENCH (SF0310)

Production Line Calendar and Production Rates to determine capacity per shift/day

When a quantity scheduled spans more than one day, one order and a release per day is created

Quantity to produce is divided by capacity to determine start and end shift/date

Capacity in line may only be consumed by one product at a time

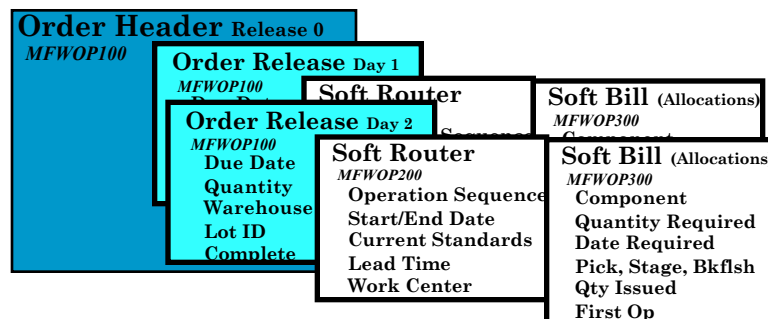
COMPONENT MATERIAL IS CONTROLLED BY

Pick lists, consolidated pick, and/or backflushing

PRODUCTION MUST BE REPORTED AGAINST A SPECIFIC ORDER/RELEASE

Unless the date of production is the same as the scheduled date and there are no other conflicts

UNPLANNED PRODUCTION RECEIPTS MAY BE USED



Types of Orders (cont.)

Orderless Production Schedule (OPS) ^{8.3}

LIMITED VERSION OF FLOW ORDER

Header, no release

SCHEDULED WITH PRODUCTION SCHEDULING
WORKBENCH (SF0310)

Same capacity calculations and similar functionality of Flow Orders

ALL COMPONENT MATERIAL IS BACKFLUSHED

PRODUCTION IS APPLIED ON A OLDEST DUE DATE
BASIS TO SCHEDULE

OUTSIDE OPERATIONS ARE NOT SUPPORTED

DOES NOT SUPPORT LOTS

FLOW ORDERS MAY BE CREATED ON DEMAND FOR
THESE PRODUCTS

COMPONENTS MAY BE INCLUDED WITH STAGE
REQUEST/CONSOLIDATED PICK ^{8.4}

Order Header Release 0
MFWOP100

**Production
Reporting**
(SF0320)

Order Release 1 to 99
MFWOP100
Due Date
Quantity
Warehouse
Lot ID
Complete

Soft Router
MFWOP200
Operation Sequence
Start/End Date
Current Standards
Lead Time
Work Center

Soft Bill (Allocations)
MFWOP300
Component
Quantity Required
Date Required
Pick, Stage, Bkflsh
Qty Issued
First Op

Types of Orders (cont.)

No Order or Schedule (NOS) ^{8.3}

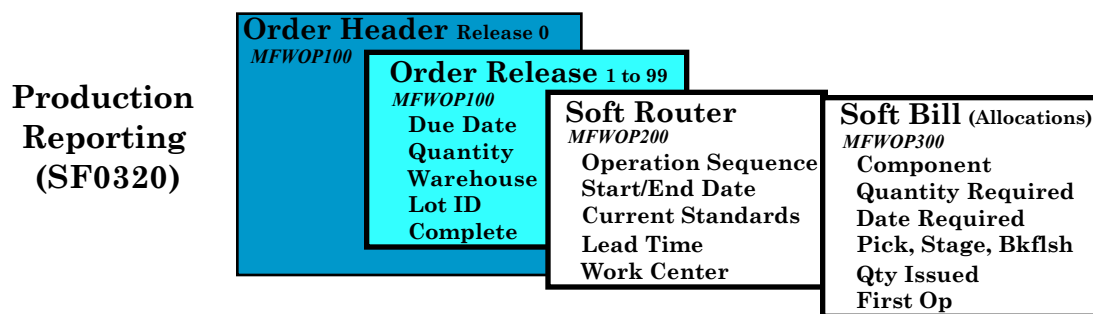
AS NAME IMPLIES, THERE IS NO ORDER OR SCHEDULE

UPON REPORTING PRODUCTION, (UPR) ALL MATERIALS AND PRIOR NON-PAYPOINT OPERATIONS WILL BE BACKFLUSHED

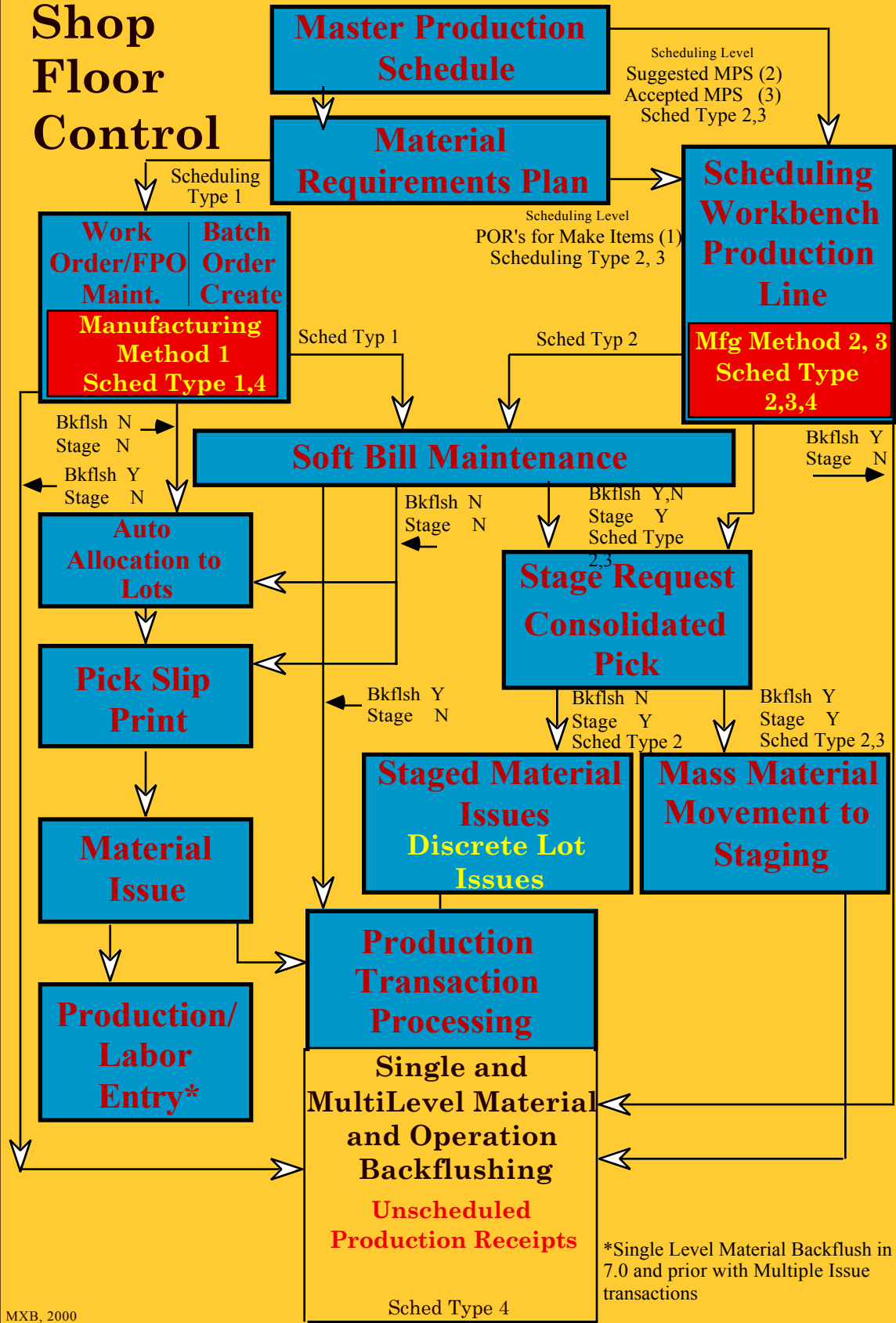
DOES NOT SUPPORT LOTS

IS RECOGNITION AFTER THE FACT THAT PRODUCTION AND RECEIPT TO STOCK HAS OCCURRED

USE OF NOS ASSUMES THAT YOU HAVE A TWO BIN REPLENISHMENT, KANBAN, OR SOME OTHER FORM OF PULL SYSTEM IN PLACE, THERE IS NO SHOP PAPER FROM PRMS TO SUPPORT



Shop Floor Control



MXB, 2000

*Single Level Material Backflush in 7.0 and prior with Multiple Issue transactions

Functional Process

SUGGESTED WORK ORDER REPORT (MR0100)

**WORK ORDER/FIRM PLANNED ORDER
MAINTENANCE/BATCH ORDER CREATE 8.3
(SF0010/SF0019)**

LOWER LEVEL MATERIAL AVAILABILITY (IN0210)

SOFT BILL MAINTENANCE (SF0260)

AUTO ALLOCATION TO LOTS (SF0030)

**LOT/BIN LEVEL ALLOCATION MAINTENANCE 8.3
(SF0265)**

SHORTAGE REPORT (SF0360)

SHOP PACKET PRINT (PICK SLIP) (SF0090)

MATERIAL TRANSACTION MAINTENANCE (SF0050)

**DISPATCH LIST/WORK CENTER INQUIRY
(SF0100/SF0070)**

ANTICIPATED DELAY MAINTENANCE (SF0060)

LABOR ENTRY MAINTENANCE (SF0020)

Functional Process

SCHEDULING WORKBENCH (SF0310)

SOFT BILL MAINTENANCE (SF0260)

SHORTAGE REPORTING (SF0360)

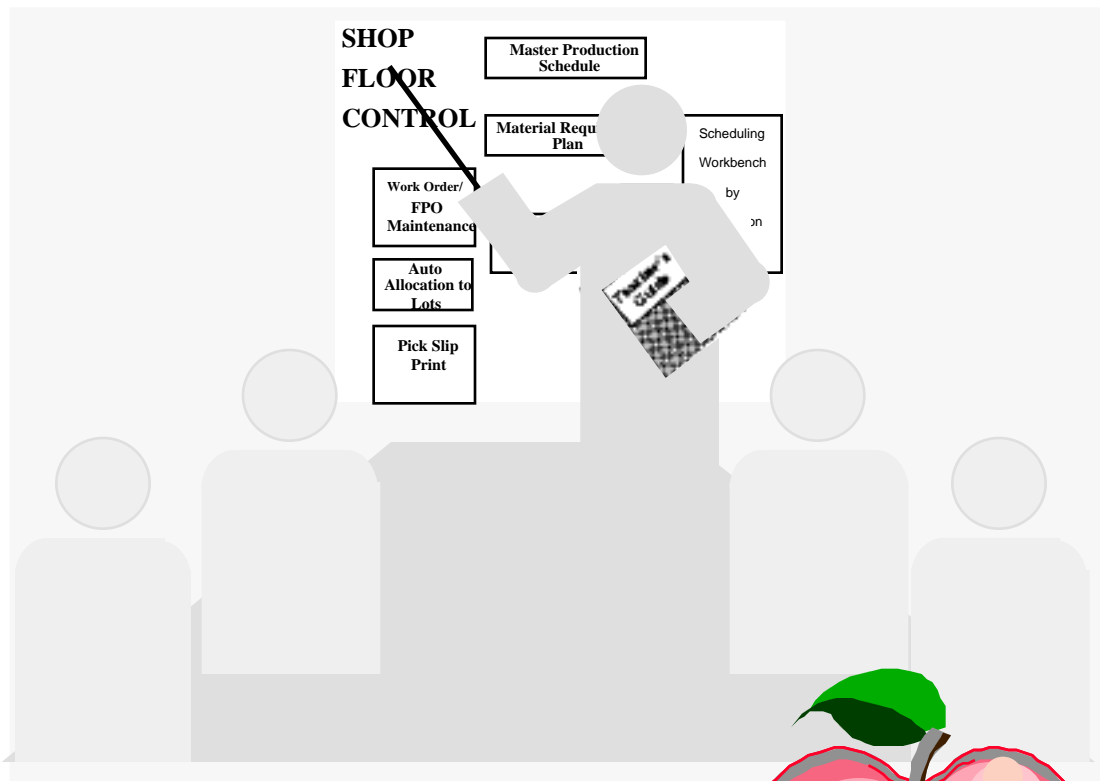
STAGING REQUEST/CONSOLIDATE PICK (SF0510)

MATERIAL MOVEMENT TO STAGING (SF0530)

PRODUCTION REPORTING (SF0320)

**SINGLE AND MULTI-LEVEL
OPERATION
AND
MATERIAL BACKFLUSH**

A Selected Review of Product Master



RMS/Present



Related Fields to Shop Floor Control

GENERAL PRODUCT INFORMATION

Item Type

Make (M), Buy (B), Phantom (P), Planner (L), Feature (F)

All make items utilize manufacturing orders to post inventory to stock. Sometimes the order is created before the reporting, sometimes (UPR's) after.

Buy items are purchased items. They may contain components although MRP will stop exploding at the Buy part.

Phantoms are assemblies that are immediately consumed in the manufacturing process. When a phantom is a component of a make item, Work Orders attach the components of the phantom to the soft bill of materials, not the phantom.

Planners are non-inventory numbers that sit on top of groups of master scheduled items that allow shipment forecast entry and explosion by percentage.

Features are a category of options used by Models when processing Features and Options.

Demand Type

(I)ndependent - Forecasts or Customer Orders, (D)ependent - No forecasts or customer orders, just product structure demand or (C)ombined - Maybe some of both. System control determines if on hand inventory, lot sizing and safety stock are processed at MPS or MRP time by demand type.

Model Flag

Is this a Model for Features & Options?

Models are make items consisting of features and options. One generic number that may be many different configurations. Features and Options is a build to order environment where the configuration determined at order entry is passed to work order maintenance to configure the soft bill.

Lots Required/Locations Required

Requires a lot ID or bin location for all inventory transactions.

Related Fields to Shop Floor Control

Warn Neg On Hand Trans^{9.0}

A warning message will be issued for inventory transactions that will generate a negative on hand balance if this field is "Y". If "N", no warning message, if " ", retrieve value from System Control. May also be overridden at Warehouse Inventory level (IN0801).

Warn Neg Available Trans^{9.0}

A warning message will be issued for inventory transactions that will generate a negative available balance (on hand - allocated) if this field is "Y". If "N", no warning message, if " ", retrieve value from System Control. May also be overridden at Warehouse Inventory level (IN0801).

Bar Code/UPC Symbol^{9.0}

30 characters

Unit of Measure

May be any valid two character designation 8.8.

PURCHASING

Inspection Required

This flag, when attached to the PO line during PO Entry (PO0110), is edited by the PO Receipt transaction to determine if that specific transaction may be performed for this product on this purchase order. May also be set in Product/Vendor Maintenance (PO0802).

Related Fields to Shop Floor Control

GENERAL MANUFACTURING

Planner ID

MRP & MPS sorting and control. This is the prime mechanism to manage and measure the material plan. Used by Auto PO Create, Auto WO Create, Requisition Entry to process orders and schedules through the supply chain.

Mfg. Completion Variance

The default percentage for considering manufacturing orders complete by Work Order Close (SF0220). Override to System Control.

Production Report Req'd at All

Paypoints^{9.0}

Work Order Close (SF0220) will issue a warning message when paypoints exist that do not have quantity good or scrap reported. Close will still occur. Override to System Control.

Material Issue Variance %^{9.0}

Work Order Close (SF0220) will issue a warning message when (total quantity required - total quantity issued) for all components expressed as a percentage is not attained. Override to System Control.

Labor Reported at All Ops^{9.0}

Work Order Close (SF0220) will issue a warning message when current labor standards exist at an operation but labor is not reported. Close will still occur. Override to System Control.

Posting Warehouse

The warehouse a make item is posted to or the warehouse a component is picked from. Override to System Control. May also be overridden on order. Allocations from Shop Floor made against this warehouse.

Related Fields to Shop Floor Control

Posting Transaction Code

The inventory transaction code that will be used when a work order receipt is posted. Override to System Control.

Allow By Products

A "Y" indicates that this item is an assembly that may contain components which are By-Products. A By-Product is an item that is received from the manufacturing process in addition to the ordered item. Production receipts may include the scheduled make item as well as the by-product(s) against one order.

MPS Item

Designates MPS items. MPS Items are processed by MPS Generation (MP0060) and Rough Cut Generation (RC0060).

Standard Issue Quantity 8.3

Used by the Consolidated Pick for Repetitive items, this is the standard issue size of a component when issued to staging from the posting warehouse. Quantity in excess of required is netted for future allocations.

Line Rates Shift 1, 2, 3

The default production rates per hour for repetitive items. This is the override to the Production Line and may be overridden on the specific schedule in Production Scheduling Workbench (SF0310). Quantity scheduled is divided by line rate to determine run time.

Group Technology Code 1, 2, 3

Three alpha numeric fields to allow sorting of the production schedule in the Scheduling Workbench.

Default Group Code

If a Default Group Code was created in MS0824 then that code may be applied here and all the subsequent fields on this screen will default from those values (except Scheduling Level).

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| PRMS Overview | 199.00 | 349.00 | Manufacturing Planning | 199.00 | 349.00 |
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