

“Job Manager” & “Manufacturing Plus” Key Features And Product Comparison Chart

Before we compare “Job Manager” to “Manufacturing Plus” you have to understand the difference between a Job Shop and a Mass Production Operation. This chart will help.

<i>Job Shops</i>	<i>Mass Production Operations</i>
Make to order	Build to stock
No finished goods inventories	Finished goods inventories/SKU's
Different products	Standard products
Sell to other companies	Sell to distributors or end users
Customer order driven	MRP demand forecast driven
Bid on RFQ's to get work	No RFQ's
Estimating is critical	Standard costing
Customer pricing (quotes)	Market pricing
Lead time required	Fill orders from finished goods inventory
Many schedule changes	Few schedule changes
Set ups/changeovers frequent	Set ups/changeovers less frequent
Direct contact with customer	Indirect contact with remote customer

Smaller companies	Larger companies
Owner managed	Professionally managed
Variable overhead allocation	Labor-based overhead allocation
Variable volume	More stable volume
Order backlog is good	Order backlog is bad (stockouts)
More dynamic	More static
More skilled labor (variable tasks)	Less skilled labor (repetitive tasks)
Dynamic scheduling	Static scheduling
Shorter runs	Longer runs
Improve by reducing lead time	Improve by reducing inventories

Job Manager will work for companies that provide a “service” OR make a “product”.

Navision Manufacturing only works for companies that make a product.

What is the difference between Job Manger and NAV Mfg?

4 Way Comparison List: (Jobs, JM, NM, MP)

Note: Job Manager is built on “Jobs”.

Manufacturing Plus is built on NAV Manufacturing.

<u>Feature</u>	<u>NAV Jobs</u>	<u>Job Manager</u>	<u>NAV Mfg</u>	<u>Mfg Plus</u>
Job Shop Vertical Solution	N	Y	N	Y
Production Shop Vertical Solution	N	Y	Y	Y
Works for Companies that Make Products	Y	Y	Y	Y
Works for Companies that Provide a Service	Y	Y	N	N
Bill of Materials	Y	Y	Y	Y
Bill of Material Versions	N	N	Y	Y
“Tree view” BOM available	N	N	N	Y
Router/Task Lines	Y	Y	Y	Y
Router/Task Lines w/Sub-Totals	Y	Y	N	N
Router Versions (ECOs)	N	N	Y	Y
”Service” Routers from Resources.	N	Y	N	N
Employee Time Entries Posts to Jobs (Job Journal / Output Journal)	Y	Y	Y	Y
Optional, PR Time Jrnl Posts to Jobs	Y	Y	Y	Y
Item’s Standard Cost Change Log	N	Y	N	Y
Re-Calc Current Cost Preview with out change to Standard Cost field.	N	Y	N	Y

(“What if” with different Lot Sizes.)

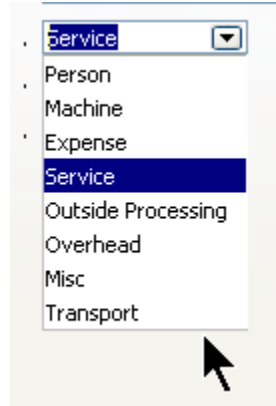
Job “Work In Process” Accounting	Y	Y	Y	Y
Job Percent Complete Analysis	N	Y	N	N
JTD Invoice Amounts shown on Jobs	Y	Y	N	N
Posting of FG Production Quantity will Backflush the Raw Materials.	N	Y	Y	Y
Allows Purchasing of Resources	N	Y	N	Optnl
Vendor Performance Report	N	Y	N	Y
Customer Performance Report	N	Y	N	Y
Open PO by Expected Receipt Date	N	Y	N	Y
Quick Edit of Master Files Screen	N	Y	N	Y
Manual Purchase Order direct to a Job	N	Y	N	N
Manual Sales Order direct to a Job	N	Y	N	N
Cost Analysis: Cost per Part, Cost per Hour, Price per Part, Hours per Part, Parts per Hour	N	Y	N	N
Company Calendars	N	Y	Y	Y
Master Job / Sub-Job	N	Y	N	N
Multiple Flushing Methods	N	Y	Y	Y
Raw Material Demand shows on Item Card	N	Y	Y	Y
MRP I	N	Y	Y	Y
MRP II	N	N	Y	Y
Job Statistics w/ All Drillable Fields	Y	Y	N	N
Multiple Scheduling and Capacity Options	N	Y	Y	Y

“Push” Job Budget to Purchase Order (From Budget or Component List)	N	Y	N	N
Customer Contract Amount per Step	Y	Y	N	N
Customer Contract Amount per Job	N	Y	N	N
Revenue Earned, Over/Under Billed, Projected Cost at Completion, Profit Projections, JTD Margins.	N	Y	N	N
Estimating generates a Sales Quote	N	Y	N	N
Optional: Interface to MS Project	N	Y	N	N
Optional: Enhanced Billing by Job	N	Y	N	N
Print Quote direct in Job	N	Y	N	N
View Quote from the Job	N	Y	N	N
Estimates with Overhead Calculations	N	Y	Y	Y
CD Training Class Available	N	Y	Y	Y
Direct Shop Floor Time Entry	N	Y	N	N
Interface to Shop Floor Execution Syst	N	Y	N	Y

It is not an issue of which is better, it is an issue of which is right for the business needs.

Job Manager Key Features: (Built on Navision’s “Jobs”)

1. Resource Types have been enhanced to 8 “Cost Categories”.



2. A Task List has been added to Item Card and Resource Card. It is expanded to hold more information and do more calculations:

FG101 Finished Good Item 101 - Item Router Tasks							
Task No.	Description	Task Type	Totaling	Allow AutoInsert Contract Line	Comment	WIP-	
▶ 900	Begin Job	Begin-Total					
1000	Pre-Production	Begin-Total					
1100	Design	Posting					
1200	Estimate	Posting			✓		
1999	Total Pre-Product...	End-Total	1000..1999				
2000	Production	Begin-Total					
2100	Grind	Posting					
2200	Paint	Posting					
2300	Polish	Posting					
2400	Clean	Posting					
2500	Materials	Posting					
2999	Total Production	End-Total	2000..2999				
3000	Shipping	Begin-Total					
3100	Pack	Posting					
3200	Ship	Posting		✓			
3999	Total Shipping	End-Total	3000..3999				
9000	Total Job	End-Total	900..9000				

3. New Job Statistics Window (F9) with much more information per tab.

	Orig. Estimate	Curr. Estimate	PO Outstanding Amount	PO Recv'd Not Invoiced	Actuals	Variance	Percent Complete
Revenue	23,110.00	42,221.11			5,500.00	36,721.11	13%
Job Project Quantity .	100.00	100.00			19.00	81.00	19%
Labor Hours	86.00	91.00			107.00	-16.00	100%
Machine Hours	0.50	0.50			0.00	0.50	0%
Labor Cost	2,047.90	1,859.00			3,059.80	-1,200.80	100%
Machine Cost	0.00	0.00			0.00	0.00	0%
Expense	0.00	0.00			0.00	0.00	0%
Material Cost	16,590.00	28,780.00	378.50	1,363.00	4,339.00	24,441.00	15%
Outside Processing . .	0.00	0.00	0.00	0.00	0.00	0.00	0%
Overhead Cost	0.00	0.00	0.00	0.00	0.00	0.00	0%
Misc Cost	0.00	0.00	0.00	0.00	0.00	0.00	0%
Transport	0.00	90.00	0.00	0.00	1.80	88.20	2%
Totals	18,637.90	30,729.00	378.50	1,363.00	7,400.60	23,328.40	
Profit Amount	4,472.10	11,492.11			-1,900.60	-82.22	24.08
Profit Percent	19.35	27.22			-35.05		
Cost Each	186.38	307.29			389.51		

Only Cost Variance Tab is shown. Almost all fields are “Drillable”.

- Implementation of Master Jobs and Sub-Jobs for project costing. The Bold Job Number is the “Master Job” Number.

Job List							
No.	Master Job No.	Is Master Job	Status	Production Type	Production No.	Job Qty Ordered	
1050		✓	Order			0.00	
J-0164	1050		Order	Item	FG101	2.00	
1051		✓	Planning			0.00	
J-0165	1051		Planning	Resource	SERV2	1.00	
1053		✓	Order			0.00	
J-0166	1053		Order	Item	M101	1.00	
1054		✓	Planning			0.00	
J-0176	1054		Planning	Item	FG101	10.00	
J-0177	1054		Planning	Item	JB101	1.00	
J-0178	1054		Planning	Resource	SERV1	1.00	
J-0179	1054		Planning	Resource	SERV2	1.00	
1055		✓	Planning			0.00	

- There are 2 places to add Jobs: Job Card (MTS) or Sales Order Card (MTO). Here is a sample of the Job Button on the Sales Order.

The screenshot shows a software interface for a Sales Order. At the top, there are several input fields: Master Job No., Shipment Date (01/22/09), Posting Description (Order 1015), No. of Archived Versions (0), Responsibility Center, Assigned User ID, Retainage % (10.00), and Status (Open). Below these fields is a table with columns: Type, No., Description, Location Code, Quantity, Reserved Quantity, Unit of Measure, and Un Ex. The table contains one row: Item, FG101, Finished Good Item, BLUE, 20, PCS. A context menu is open over the 'Job' button, listing options: View Line's Tasks, View Line's Planning Lines, View Job Card, View Job's Estimating, Make one Job for this line item, and Make a Job for every line item. At the bottom, there are several dropdown menus: Job, Order, Line, Functions, Posting, and Print.

6. Job Scheduling Improvements made. (Capacity, Allocation, Available)

Company Calendar improved.

Define hours in each day and hours in each shift. (Auto-Allocation)

Re-calc of Router Start and End Dates. (Bi-directional)

DP8 Drill Press #8 - Resource Availability

Period Start	Period Name	Capacity	Qty on Job Router (Order)	Availability After Orders	Qty on Job Router (Quote)	Availability After Quotes	Qty. on Service Order	Net Availability
01/25/03	Saturday	0	0	0	0	0	0.00	0.00
01/26/03	Sunday	0	0	0	0	0	0.00	0.00
01/27/03	Monday	7	12	-5.125	0	-5.125	0.00	-5.13
01/28/03	Tuesday	7	10	-2.75	0	-2.75	0.00	-2.75
01/29/03	Wednesday	7	11	-4.25	0	-4.25	0.00	-4.25
01/30/03	Thursday	7	11	-4	0	-4	0.00	-4.00
01/31/03	Friday	7	0	6.7	0	6.7	0.00	6.70
02/01/03	Saturday	0	0	0	0	0	0.00	0.00
02/02/03								
02/03/03								

Router Resource Load Detail

Job No.	Step No.	Step Resource No.	Resource Group No.	Work Date	Capacity	Hours
J-0037	100	DP8	MACHINES	01/27/03	7.00	8.00
J-0046	30	DP8	MACHINES	01/27/03	7.00	1.75
J-0051	30	DP8	MACHINES	01/27/03	7.00	2.38

7. Router's Step Hours (Load Hours) are now also transferred into a distributed per day Sub-Table.

b - Job Specific Router

Step No. 20 Res.# LABOR 15 Phase Production Dept Task Painting

Est Misc Cost	TotalEstCost	Start Date	Step Started	Step Finished	Step Finish Date	Load Hours	Ign Dur
0.00	10,240.00	01/03/03			01/03/03	0.00	
0.00	6,438.50	01/03/03			01/08/03	21.00	

Router Resource Load Detail

Job No.	Step No.	Step Resource No.	Resource Group No.	Work Date	Capacity	Hours
J-0037	20	LABOR 15	LABORERS	01/04/03	0.00	0.00
J-0037	20	LABOR 15	LABORERS	01/05/03	0.00	0.00
J-0037	20	LABOR 15	LABORERS	01/06/03	24.00	5.00
J-0037	20	LABOR 15	LABORERS	01/07/03	24.00	8.00
J-0037	20	LABOR 15	LABORERS	01/08/03	24.00	8.00

8. Item Card with Improved General Tab & many more Drill Downs. Notice the improved readability with “Supply” VS “Demand” and Net Available.

FG101 Finished Good Item 101 - Item Card

General Invoicing Replenishment Jobs Planning Foreign Trade Item Tracking E - Commerce Whse Kits

No. **FG101** Search Description. . . . **FINISHED GOOD ...**

Description **Finished Good Item 101** **Supply.**

Description 2 **Single Level Sample** Quantity on Hand **9**

Base Unit of Measure **PCS** Purch. Req. Release (... **0**

Shelf No. Qty. on Purch. Order **0**

Bill of Materials Qty. on Prod. Order **0**

Router Exists Qty. on Jobs Remaining **81**

Automatic Ext. Text **Demand.**

Stockkeeping Unit Exists Qty. on Component Lines **0**

Created From Nonstoc... Qty. on Sales Order **20**

Blocked Qty. on Kit Sales Lines **0**

Item Category Code Qty. on Service Order **0**

Product Group Code Qty. on Job Budget **0**

Inventory Posting Group. **FINISHED** Net Available **70**

Gen. Prod. Posting Group **RETAIL** Safety Stock Quantity **0**

Tax Group Code **MATERIALS** Recommended Reorder **0**

Common Item No. Last Date Modified. **05/08/07**

Service Item Group

Item Sales Purchases Functions Help

9. Item Card with Improved Standard Cost Calculations and “Current Cost Calculations”. (What if now available with “ReCalc Current Cost”)

FG101 Finished Good #101 - Item Card

General Invoicing Replenishment **Jobs** Planning Foreign Trade Item Tracking E - Commerce Warehouse

Current Cost Calc Components

Current Cost Lot Size . . . 100

Current Router Cost . . . 25.94

Current BOM Cost 474.54

Calc'd Current Cost . . . 500.48 02/05/05

If Not Using Job Router Scheduling

Est. Production Qty pe... 1.00

Type Item Make to Order

Qty in Job WIP 0

Direct Job Purchases (Qty.) 0

Re-Calc Current Cost Update Standard Cost

Costing Method Standard

Source of FG Production Cost Job Estimated...

Standard Cost 500.4807 02/05/05

Lot Size 100

Unit Cost 500.4807 02/05/05

Item Sales Purchases Functions Help

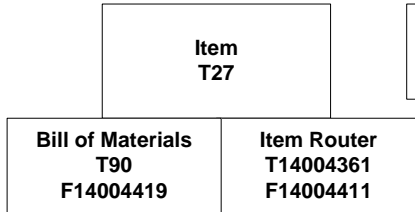
10. “Job Estimating” now can generate a “Sales Quote”. From the Router Line enter the desired “Contract Price” per Step. The Total Contract Price is displayed at the bottom of the Form. Just click on “Make Sales Quote”.

The screenshot shows the 'Specific Router' application window. At the top, there are input fields for 'Step No.' (0), 'Res.#', 'Phase', and 'Task'. Below this is a table with the following columns: 'Unit Machine Price', 'Ext Machine Price', 'Ext Budget Price', 'TotalEstPrice', 'TotalEstCost', 'Percent Margin', and 'Contract Amount'. The table contains several rows of data, with the last row showing a 'TotalEstPrice' of 0.00 and a 'Contract Amount' of 0.00. Below the table, there are summary fields for 'Router', 'Totals', and 'Amt. Each'. A menu is open, showing options like 'Statistics', 'Line Comments', 'Copy Router From', 'Re-Calc Router Schedule', 'Copy Est Price to Contract Amount', and 'Make Sales Quote'. The 'Make Sales Quote' option is highlighted with a mouse cursor.

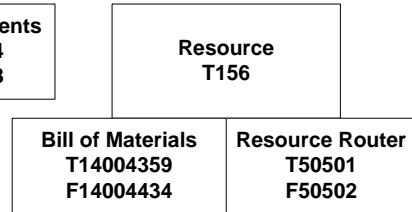
Unit Machine Price	Ext Machine Price	Ext Budget Price	TotalEstPrice	TotalEstCost	Percent Margin	Contract Amount
0.00	0.00	0.00	0.00	0.00	0.00	0.00
450.00	7,501.50	31,240.00	38,741.50	15,923.80	57.00	37,000.00
0.00	0.00	820.00	1,525.60	692.00	55.00	1,525.60
48.00	624.00	42,040.00	42,664.00	25,745.00	40.00	42,664.00
0.00	0.00	0.00	925.00	500.00	50.00	1,000.00
0.00	0.00	0.00	92.50	50.00	46.00	92.50
0.00	0.00	5,025.00	5,025.00	2,350.00	53.00	5,025.00
48.00	84.00	0.00	84.00	78.75	6.00	84.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00

The Job Manager Design Guide

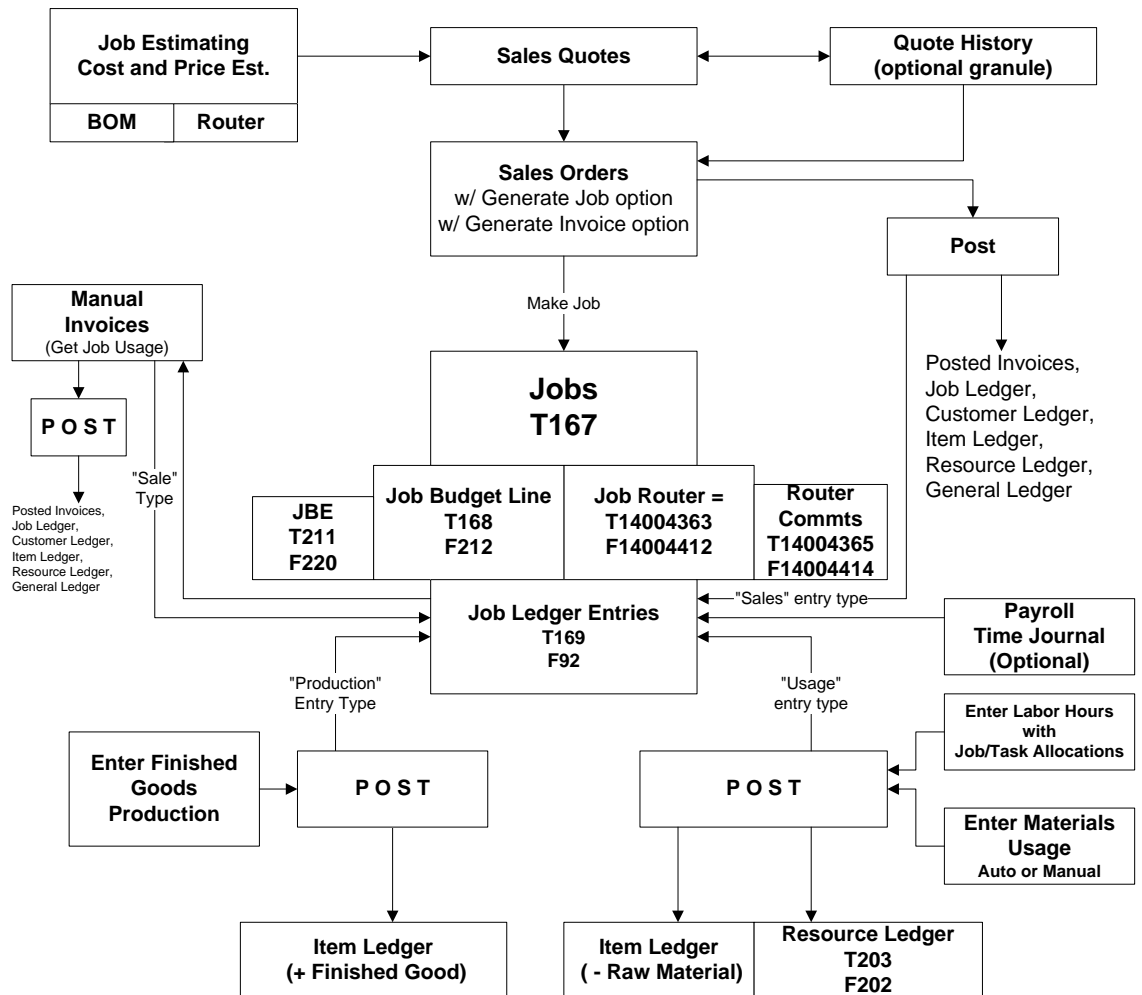
Make a Product



Provide a Service



Master Files Above



Manufacturing Plus

Manufacturing Plus is a series of general improvements to Navision's Manufacturing Software. It may be purchased individually or in combination with other Cost Control Granules.

Manufacturing Plus provides clear views into Production Standard Costing, Current Costing, Future Costing, Estimating, and Pricing. Many enhancements have been added to the Item Card, Production BOM, and Production Order Card.

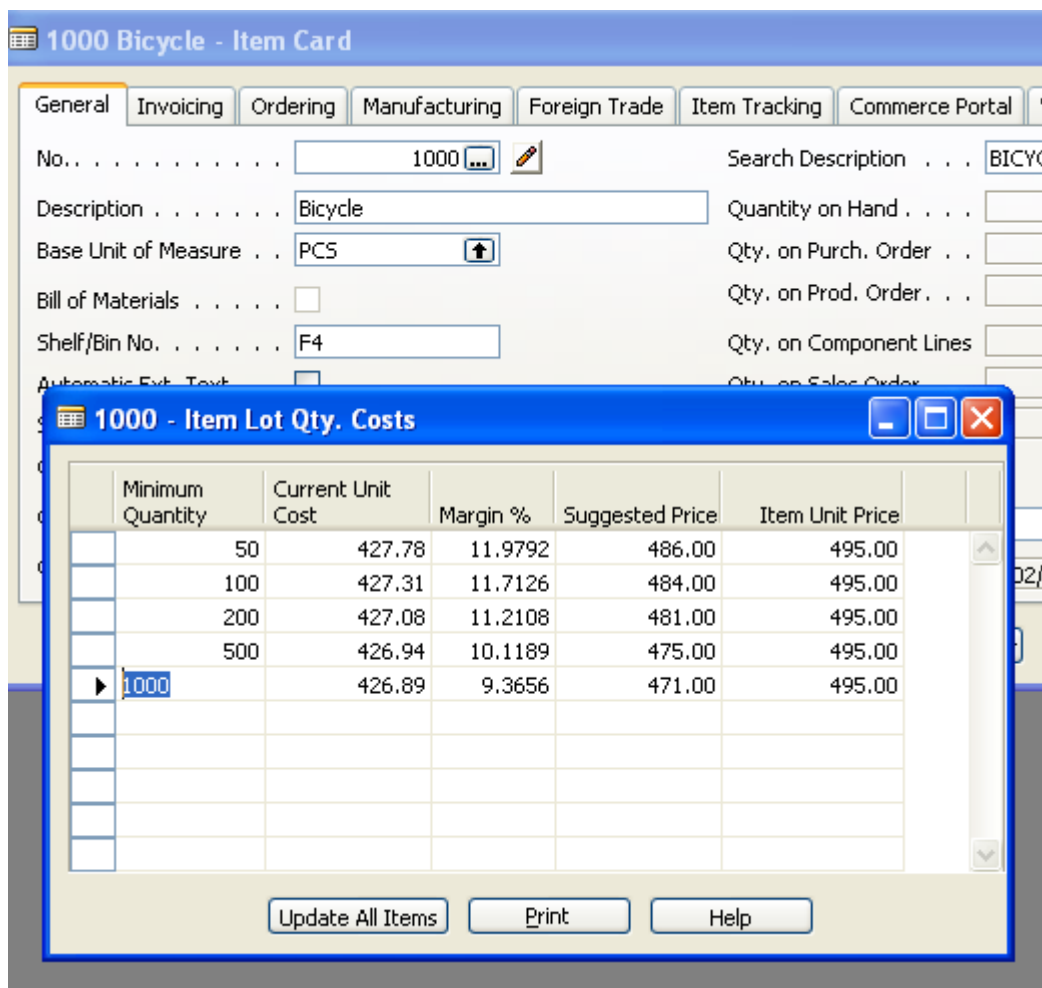
Manufacturing Plus is designed to quickly launch a new Customer's Installation with an "out of the box" solution for accurate costing and clear visibility to Work Center / Machine Center activities. Manufacturing Plus can work just as easily for a Production type Manufacturer as it can for a Job Shop with Actual Costing requirements. Employee's time allocation to Production Orders is optional, but very easily tracked within the Manufacturing Plus Objects.

Key Features:

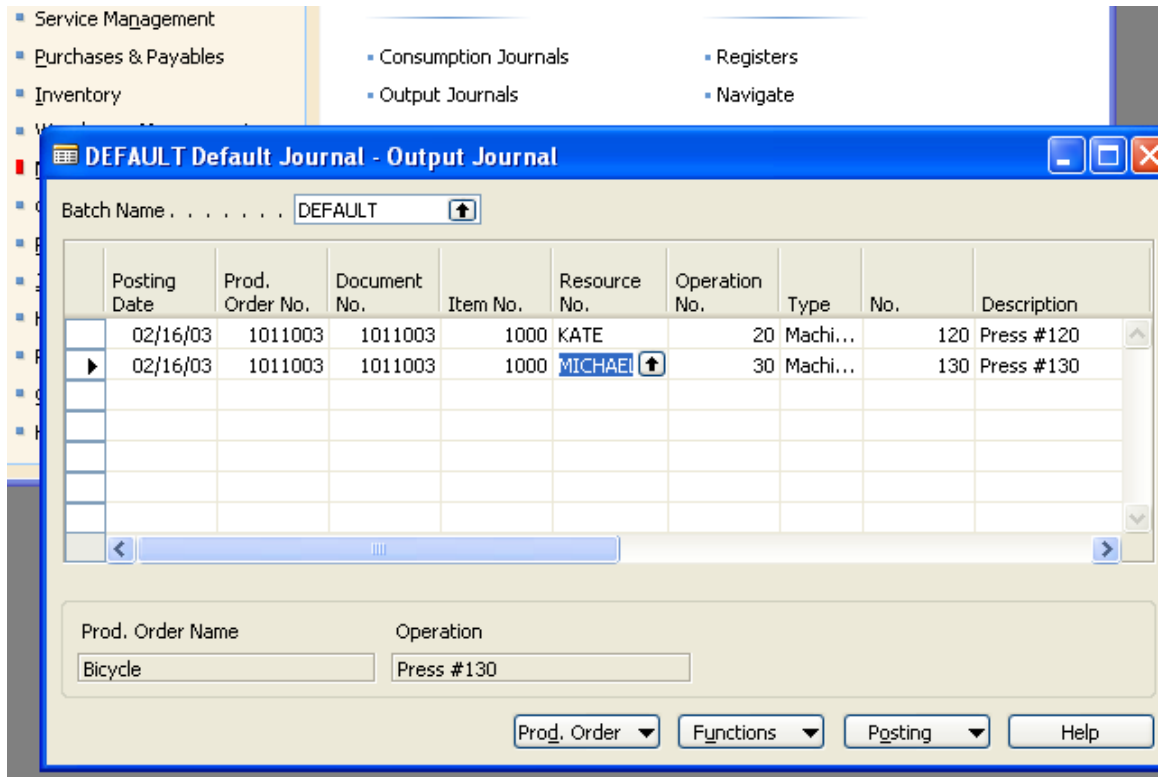
- New Statistics Card for: Standard Cost, Current Cost, and Future Cost information. (see below)

Item No. . . .	1000	Unit/Standard Cost	Current/Future Cost	Variance	
Description . .	Bicycle				
Lot Size	10.00	406.75	441.92	35.18	
Overhead Rate	0.00	Single-Lev Material Cost .	355.195	371.223	16.03
Indirect Cost %	0	Single-Lev Capacity Cost	51.55	70.70	19.15
Scrap %	0	Single-Lev Subcon. Cost .	0.00	0.00	0.00
Production BOM	1000	Single-Lev Mfg. Ovhd ...	0.00	0.00	0.00
Routing No. . .	1000	Single-Lev Cap. Ovhd ...	0.00	0.00	0.00
Parameters for Current/Future Costs		Rolled-up Material Cost .	274.275	290.587	16.31
New Lot Size	0.00	Rolled-up Capacity Co...	132.47	151.336	18.87
New Overhead Rate . .	0.00	Rolled-up Subconrd Cost	0.00	0.00	0.00
New Indirect Cost % . .	0.00	Rolled-up Mfg. Ovhd C...	0.00	0.00	0.00
New Scrap %	0.00	Rolled-up Cap. Overh...	0.00	0.00	0.00
New Production BOM...		Last Cost Calc. Lot Size .	10.00	10.00	
New Routing No. . . .		Last Cost Calc BOM No. .	1000	1000	
New Cost Factor	0.00	Last Cost Calc BOM Rev.		VER.2	
New Calculation Date . .		Last Cost Calc Router ...	1000	1000	
		Last Cost Calc Router ...		VER.2	
		Last Cost Calc Date . . .	02/16/03	03/10/03	
		Last Cost Action Date . .	02/16/03	03/10/03	
		Last Cost Factor	0.00	1.00	

- Ability to Re-Calc Current and Future Cost with out effecting Standard Cost. (see above picture)
- Variance Statistics between Standard Cost and Current/Future Cost. (see above picture)
- Enhanced Single Level and Rolled up Cost Reports. (not shown)
- Standard Cost Log files to hold each re-calculation or Current Cost Re-calculation. (not shown)
- Enhanced Quantity Discounts with display of calculated current cost. Lot Size Quantity Levels have been added with Current Cost/Price at different Lot Sizes. Ability to add "Margin %" to calculate Suggested Price. (Great for Estimating) (see picture below) This will assist in identifying your "Economic Order Quantity".



- Output Journal has “Resource No.” added to enable posting of Employee’s Time against Production Orders. Details are posted to the Capacity Ledger Entries and Value Entries. This enables true “Job Costing” for those that need a higher level of detail.



- Production BOM Card enhanced with Lookup to Sub-BOM capabilities. Card also shows: Item's Flushing Method, RM Current Cost, and calculates the Extended Cost.

Main Menu

Main Menu

- General Ledger
- Fixed Assets
- Sales & Receivables

Manufacturing

- Items
- Production BOM
- Reports
- Documents

1000 Bicycle - Production BOM

General

No. 1000

Description Bicycle

Unit of Measure Code . . . PCS

Status Certified

Search Name BICYCLE

Version Nos.

Active Version. VER2

Last Date Modified 02/20/03

Type	No.	Description	BOM Number	Item's Flushing Method	Quantity per	Unit of Me Code
Item	1100	Front Wheel	1100	Manual	1	PCS
Item	1200	Back Wheel	1200	Manual	1	PCS
▶ Item	1300	Chain Assy	1300	<input type="button" value="↑"/> <input type="button" value="↓"/>	1	PCS
Item	1400	Mudguard front		Manual	1	PCS
Item	1450	Mudguard back		Manual	1	PCS
Item	1500	Lamp		Manual	1	PCS
Item	1600	Bell		Manual	1	PCS
Item	1700	Brake	1700	Manual	1	PCS
Item	1800	Handlebars		Manual	1	PCS
Item	1850	Saddle		Manual	1	PCS

- Router Status Updater is a Quick Editor for updating the Prod. Order's Routing Line Status. (Multiple Orders or Work Centers)

Starting Date-Time	Prod. Order No.	Status	Routing Status	Input Quantity	Operation No.	Type	No.
01/29/01 9:03:00 AM	1011003	Released	Planned	16	10	Work Center	100 A
01/29/01 11:57:00 AM	1011003	Released	Planned	16	20	Machine Center	120 P
01/29/01 1:45:00 PM	1011004	Released	Planned	10	10	Work Center	100 A
01/29/01 3:57:00 PM	1011003	Released	Finished	16	30	Machine Center	130 P
01/30/01 8:15:00 AM	1011004	Released	Planned	10	20	Machine Center	120 P
01/30/01 10:45:00 AM	1011004	Released	Planned	10	30	Machine Center	130 P
01/30/01 1:17:00 PM	1011003	Released	In Progress	-2	40	Machine Center	110 P
01/30/01 2:05:00 PM	1011004	Released	Planned	10	40	Machine Center	110 P

Benefits:

- Saves time configuring your new database.
- Statistical Analysis on all data.
- Quick and Easy views into your critical data.
- “Actual Cost” reporting now available on Production Orders. (Vs. Expected Costing only)

Dependencies:

- Navision Manufacturing (all granules to get the most benefit)
- Navision Sales & Receivables, Order Management
- Navision Inventory

Other Misc. Features:

Totals on Consumption Journal screen.

Totals on Output Journal screen.

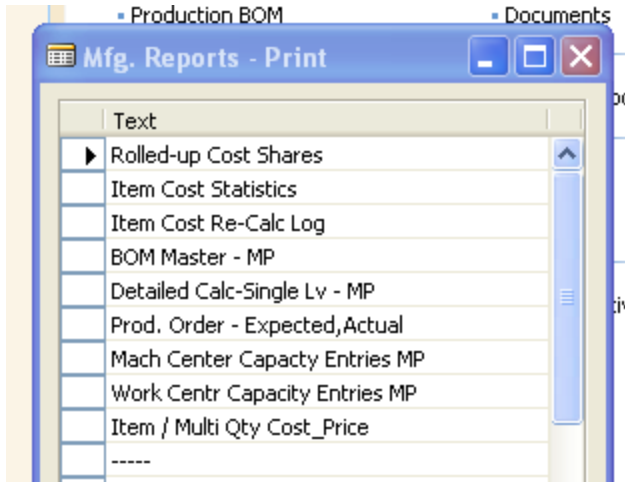
Enhanced Consumption Test Report

Enhanced Output Test Report

Totals on Planning Worksheet and Test Report of data pre-carry out.

Totals on Requisition Worksheet and improved test report.

New Reports with Manufacturing Plus:



Production Order, Component, Unit Cost is now non-editable.

Production Order, Router, "Input Qty" is now non-editable.

Work Center Card has new flow field into "Needed Time". (Capacity Need)
Also, displays count of Machine Centers within this Work Center.

Machine Center has new field "Current Capacity Need" (similar to W/C)

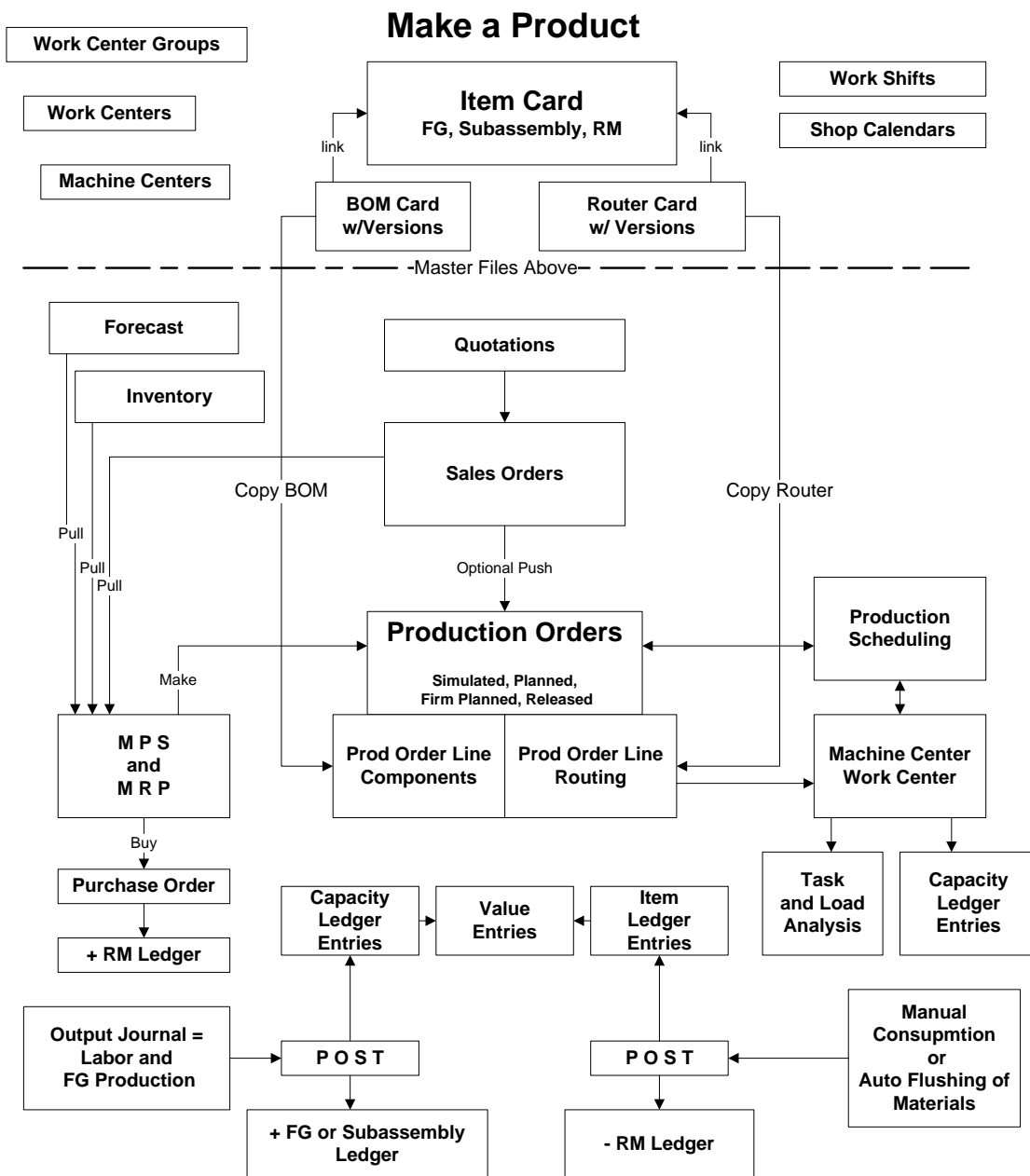
Routing Line, "Personnel" has lookup to Resource List.

Routing Line, "Tools" has new lookup to a Tool Table.

Routing Line, Run Time now has reciprocal "Units/Time" displayed and is backward calculation capable.

Item Cost Statistics has Quick Edit option.

Navision Manufacturing



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For video details visit: www.NavisionDemo.com