2025 DYNAMICS CON

dynamicscon.com

Get started with Manufacturing in Business Central

(Managing your operations in BC)

Introductions

Javier Diazgranados

Supply Chain Analyst

- Started as an ERP consultant in 1999
- Areas of expertise
  - Production Management
  - Procurement
  - Supply Chain Management
  - Warehousing
  - Product Design / Costing
  - Material Planning
  - Maintenance Engineering
- Live in Medellin, Colombia

Jenn Claridge

Vice President, ERP

- Started as an en user in 2004 migrating from a DOS based system.
- Started in consulting in 2008.
- Areas of expertise
  - Supply Chain
  - Warehousing
  - Production / Manufacturing
  - Projects
  - Service Orders
- Live in an 1883 Schoolhouse

Session Outcomes

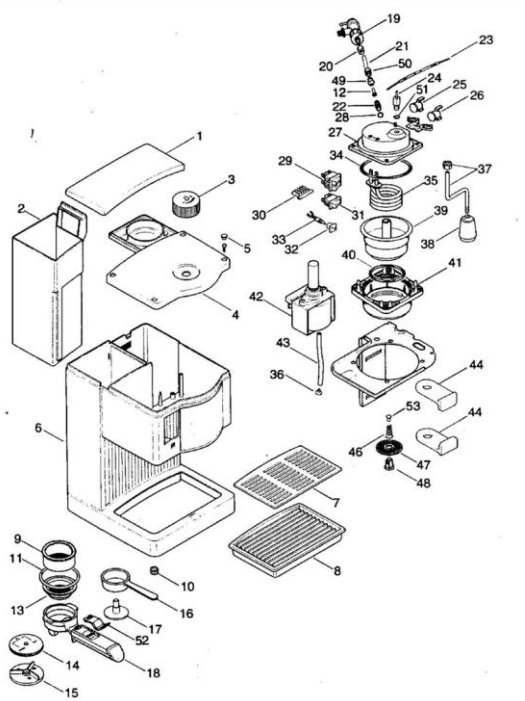
- Understand **types of Manufacturing** and how they could be implemented in MS D365 Business Central
- Understand the out of the box **strengths** and **weaknesses** of different options in BC regarding:
  - Bill of Materials
  - Routings
  - Work Centres / Machine Centres
  - Resources

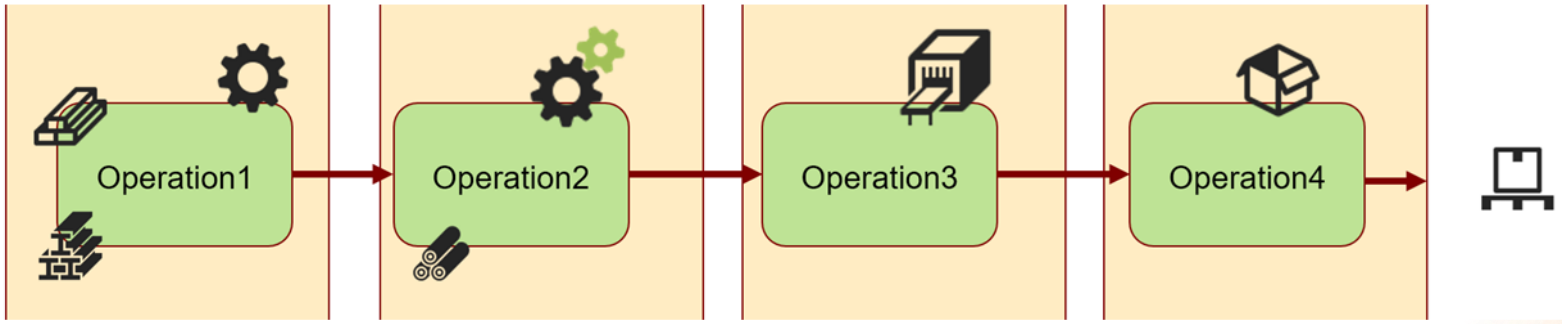
Agenda

- Operations Management and Types of Manufacturing
- Roles and Replenishment Systems
- Bill of Materials (BOM)
- Routings (Process)
- Jobs / Projects
- Capacity Planning
- Analytics and Reports
- Outcomes

Operations Management

Product Design





Types of Manufacturing

- Job Shop
- Make to Order (MTO)
- Engineer to Order (ETO)
- Make to Stock (MTS)
- Assemble to Order (ATO)
- Configure to Order (CTO)
- Process Manufacturing

Types of Manufacturing

Job Shop

- Typically, **small and simple**. Looking for good **Job Costing**, **Time collecting**, Materials purchased individually to each job.

Engineer to Order (ETO)

- Very engineering and design focused. Easy to spot as they have **almost 1:1 engineer to assembly technician**. They want to use **JOBS in BC/NAV** (usually with an addon)

Configure/Assemble to Order

- **Can't predict what finished goods they'll sell** because **every FG is different**. Can act a little like a Make to Stock/Make to Order manufacturer.

Process Manufacturing

- **Totally different from the others**. Often uses the term Recipe vs BOM. Describe intermediate production. Items can't be in stock unless in packages of some kind.

Types of Manufacturing

Make to Order (MTO) Manufacturing

- Very **repetitive**, Long term fixed pricing, Item/Customer Unique, Materials ordered to the job, Long contracts, Planning Critical, **FG Shipped when made**.
- **Customers** provide forecast, Price is set by item, Often use Customer Item No., All material allocated to orders, Usually more than a year, MRP/MPS and Forecasts

Make to Stock (MTS) Manufacturing

- Very **repetitive**, Fixed pricing set by Mfg, Items in catalog, **Warehousing (Raw and FG)**, Market sets price, Planning Critical.
- **Sales** provide forecast, Customer price book common, Many customers buy same item, Need warehouse management, Standard Cost, MRP/MPS and Forecasts.

Roles in BC: Manufacturing vs Project

Cronus - DynamicsCon | Production Orders | Sales & Purchases | Journals | Worksheets | **Product Design** | Capacities | All Reports

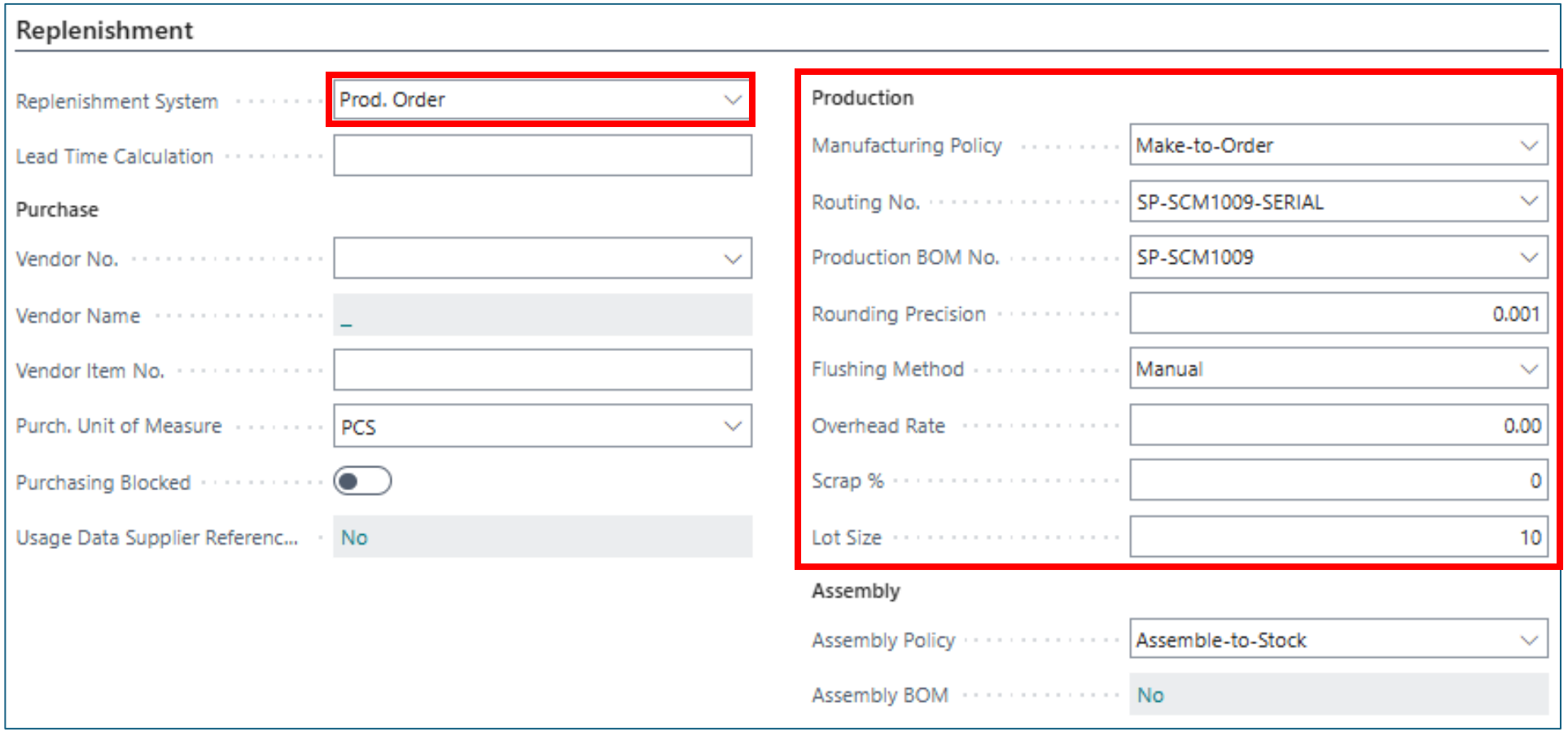
Production BOM | Certified | Under Development | Routings | Routing Links | Standard Tasks | Families | Items | Produced | Raw Materials | Stockkeeping Units

Cronus - DynamicsCon | Sales & Purchases | **Projects** | Resources | Journals | Posted Documents | All Reports

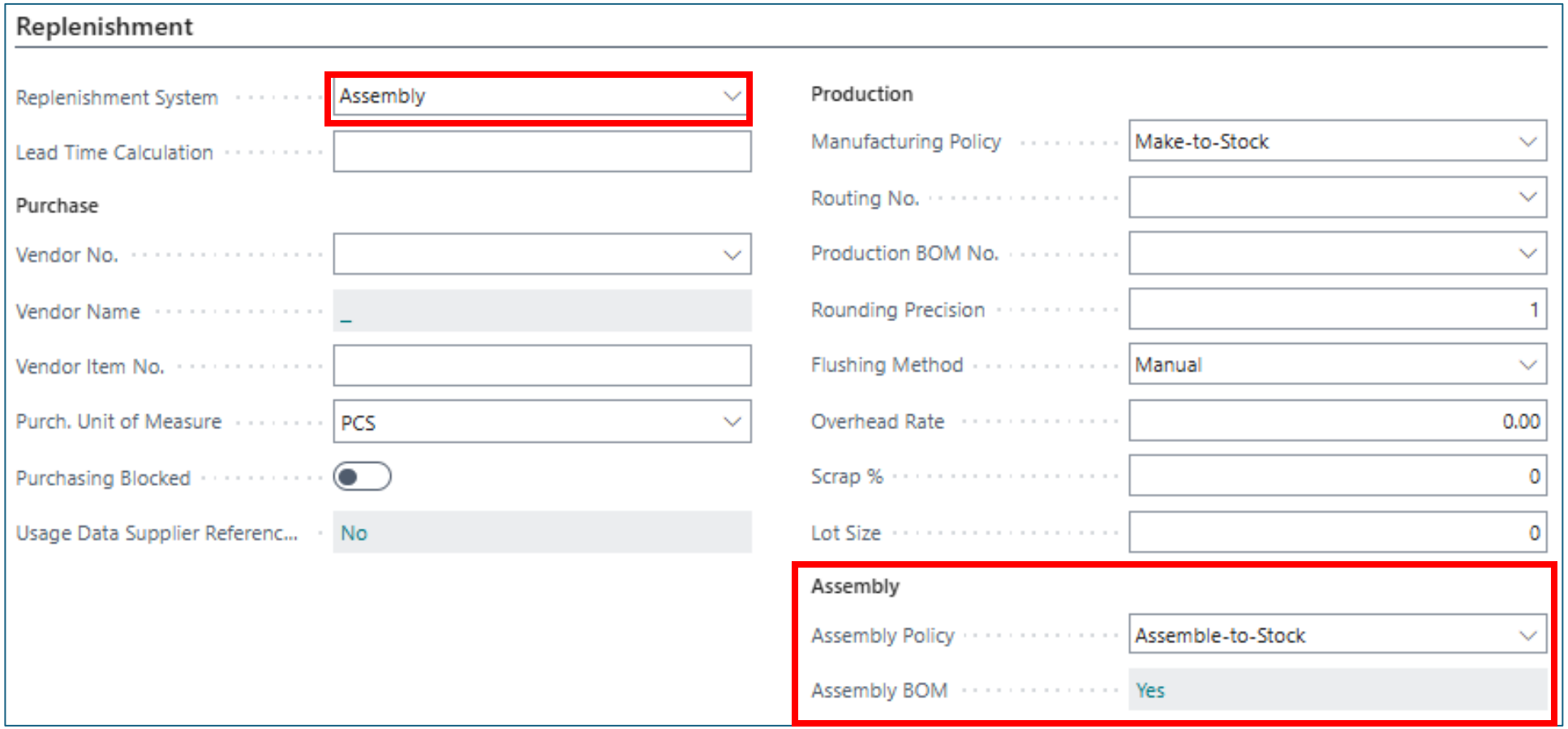
Projects | Planned and Quoted | Unassigned | Project Registers | Project Journals | Recurring Project Journals

Open | Completed | Project Tasks | Project Planning Lines | Project G/L Journals

Replenishment System

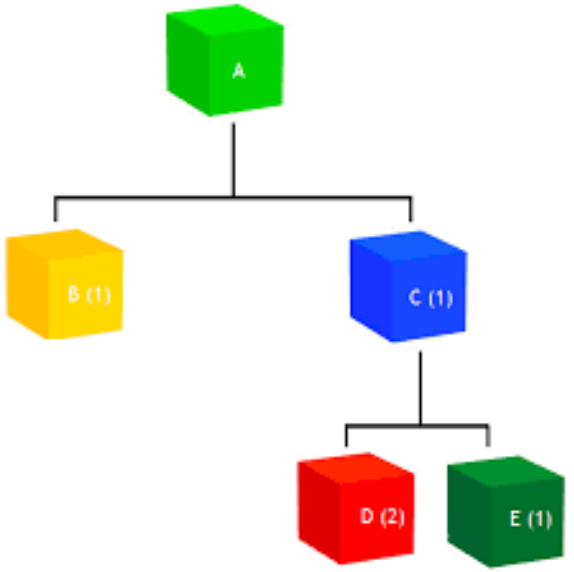


Replenishment System

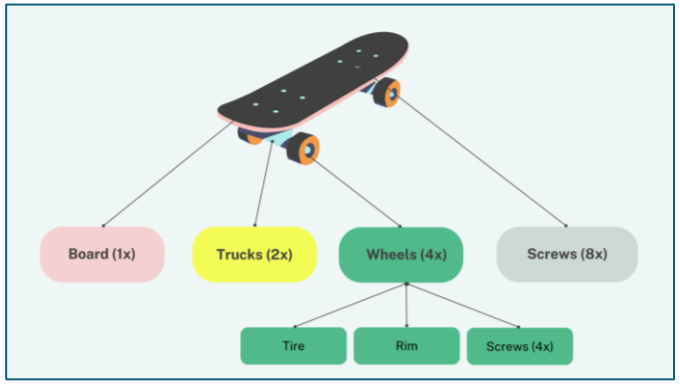


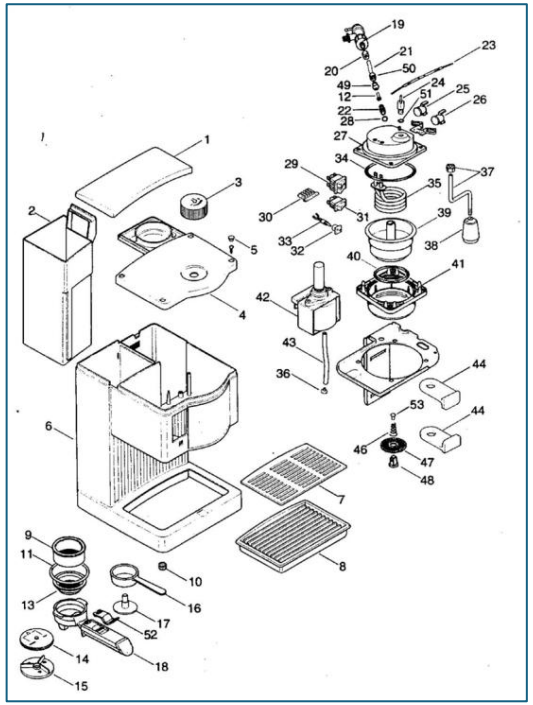
BILL OF MATERIALS (BOM)

- A BOM is a **critical input** for Material Requirements Planning (**MRP**).
- The BOM **lists** all the components, parts, and raw materials needed to manufacture a product, while MRP uses this information to **calculate** the precise **quantities** and timing of **when** those materials need to be available for production.
- Essentially, the BOM defines "**what**" goes into a product, and MRP determines "**how much**" and "**when**".

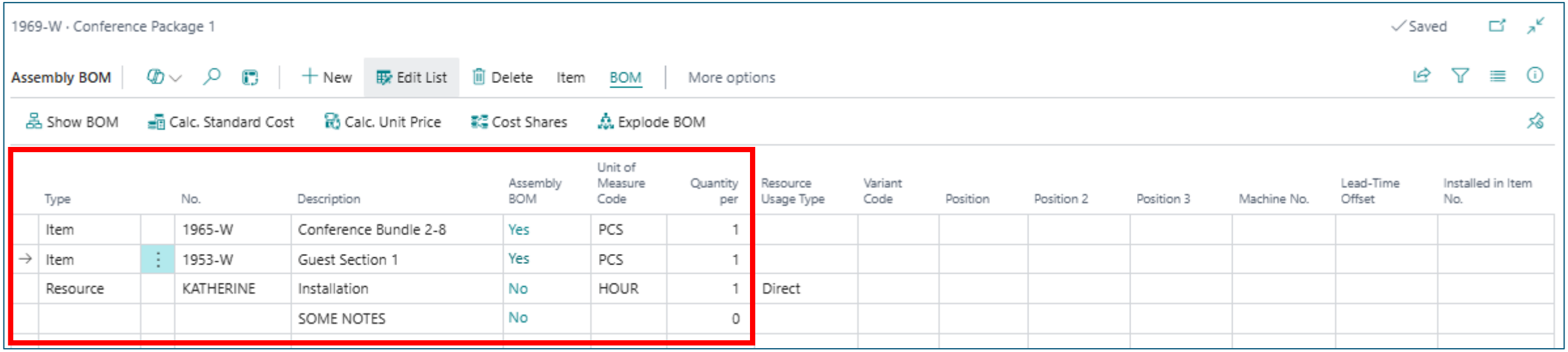


BILL OF MATERIALS (BOM)





Assembly BOM

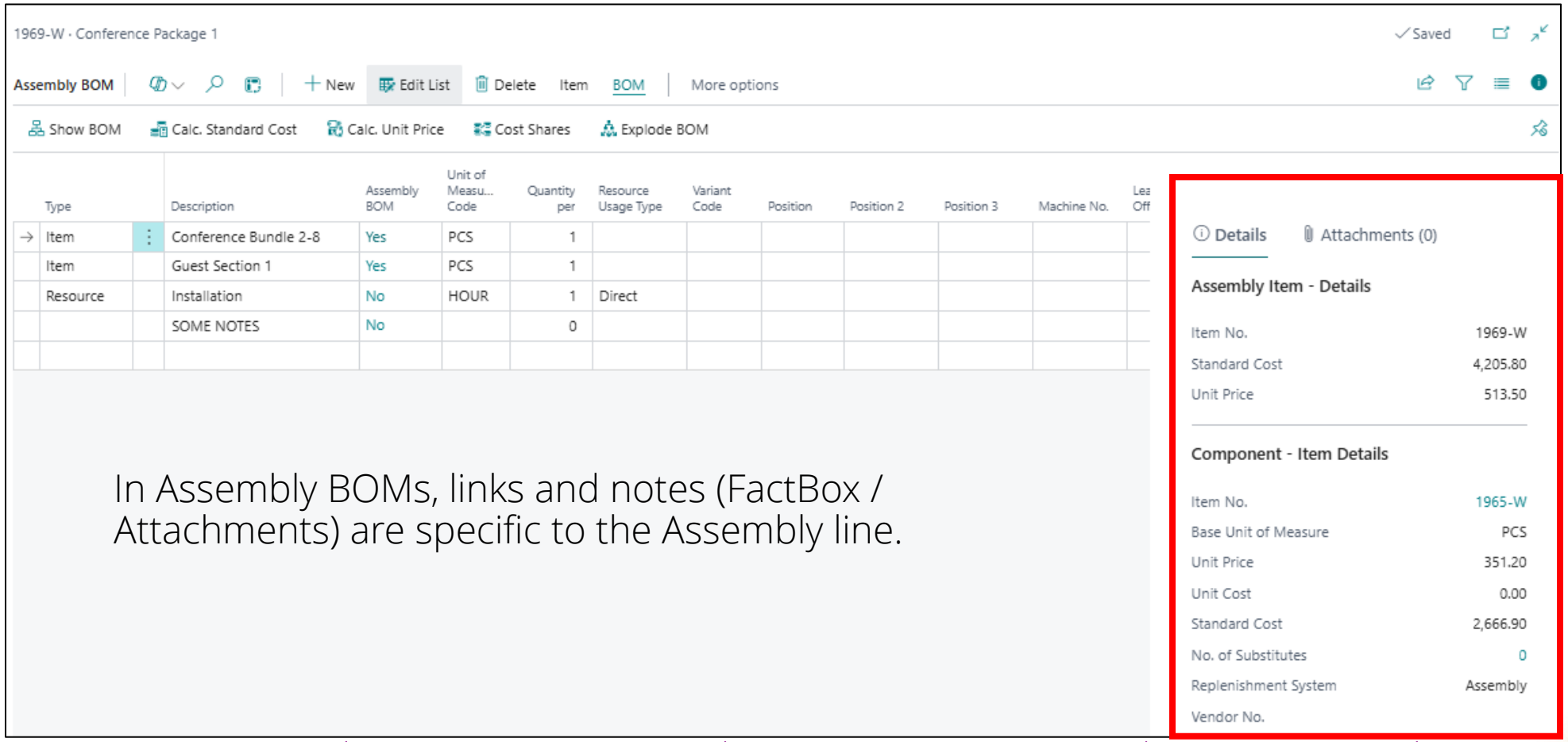


Type	No.	Description	Assembly BOM	Unit of Measure Code	Quantity per	Resource Usage Type	Variant Code	Position	Position 2	Position 3	Machine No.	Lead-Time Offset	Installed in Item No.
Item	1965-W	Conference Bundle 2-8	Yes	PCS	1								
Item	1953-W	Guest Section 1	Yes	PCS	1								
Resource	KATHERINE	Installation	No	HOUR	1	Direct							
		SOME NOTES	No		0								

Item No, Variant, Description (and notes), Unit of Measure, Qty per, Position, Lead-Time Offset.

Assembly BOM Specific: Type (Item / Resource), Resource Usage Type, Machine No (txt), Installed on Item (Links between lines in the BOM), Details (FactBox).

Assembly BOM



Assembly BOM

BOM Structure

Saved

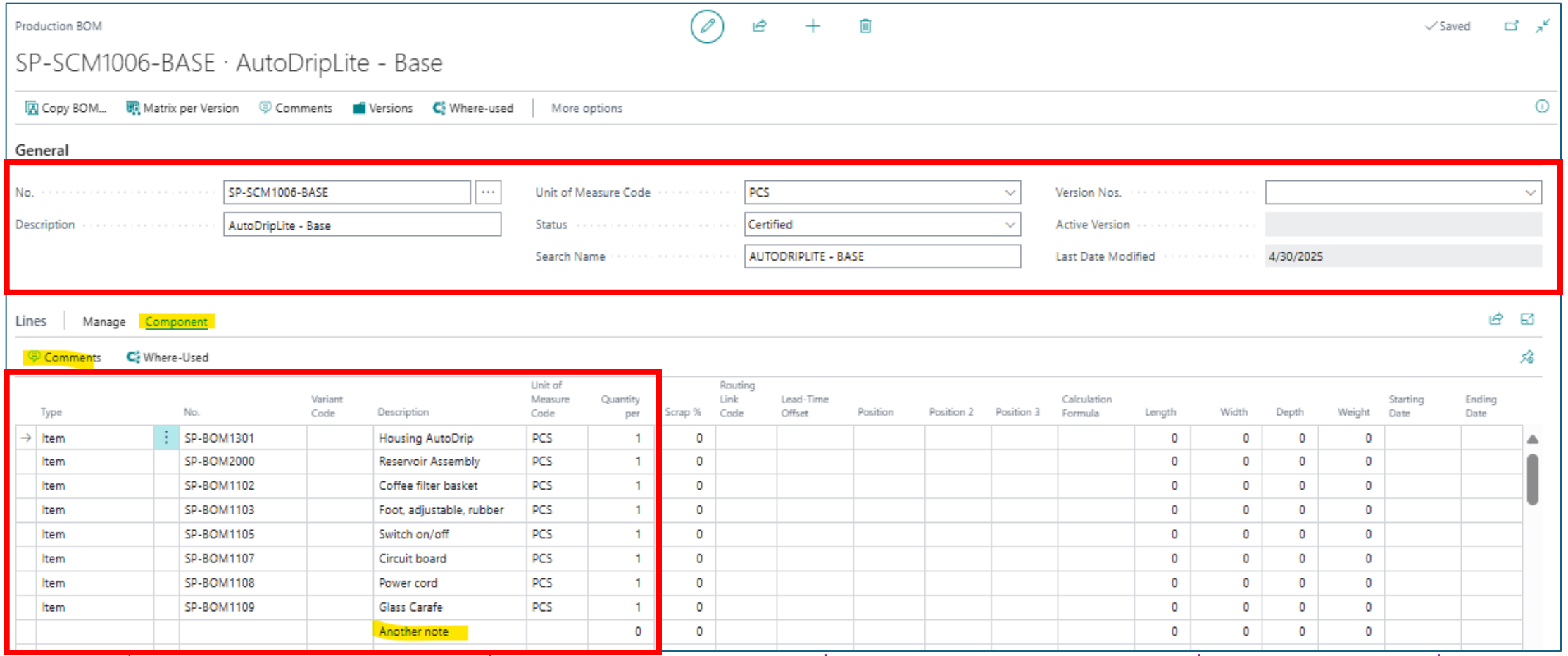
Item Filter: 1969-W

Home | Item Availability by

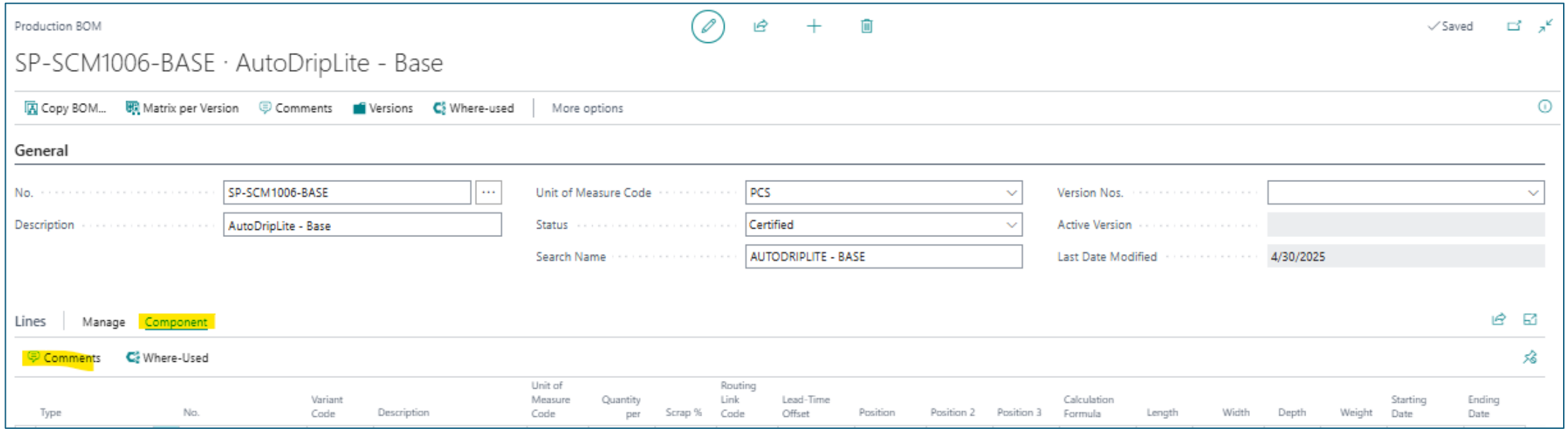
Show Warnings

Type	No.	Description	Low-Level Code	Qty. per Parent	Qty. per Top Item	Unit of Measure Code	Replenishm... System	Variant Code	Warning	Lead-Time Offset	Safety Lead Time	Lead Time Calculation
Item	**1969-W**	**Conference Package 1**	0	1	1	PCS	Assembly					
Item	**1965-W**	**Conference Bundle 2-8**	1	1	1	PCS	Assembly		_			
Item	1920-S	ANTWERP Conference Table	2	1	1	PCS	Purchase		_			
Item	2000-S	SYDNEY Swivel Chair, green	2	8	8	PCS	Purchase		_			
Resource	KATHERINE	Installation	0	1	1	HOUR	Transfer		_			
Item	**1953-W**	**Guest Section 1**	1	1	1	PCS	Assembly		_			
Item	1960-S	ROME Guest Chair, green	2	4	4	PCS	Purchase		_			
Item	1906-S	ATHENS Mobile Pedestal	2	1	1	PCS	Purchase		_			
Resource	KATHERINE	Installation	0	1	1	HOUR	Transfer		_			

Production BOM



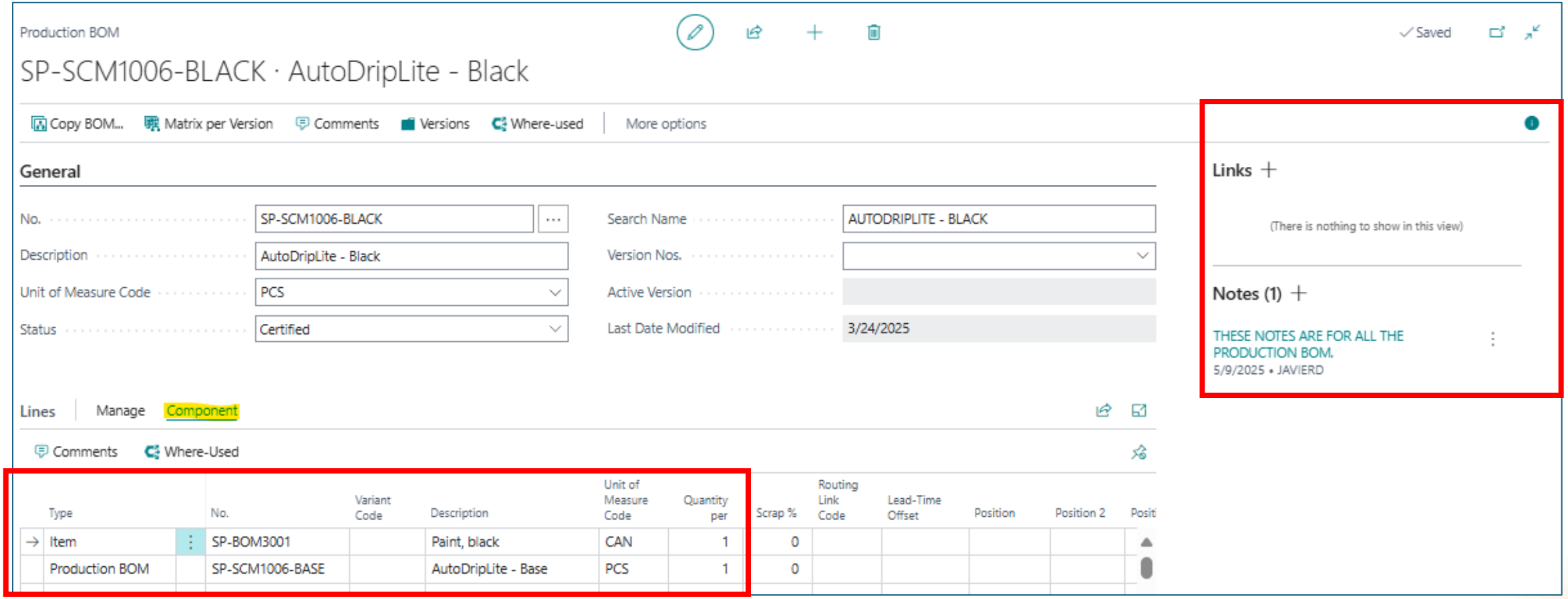
Production BOM



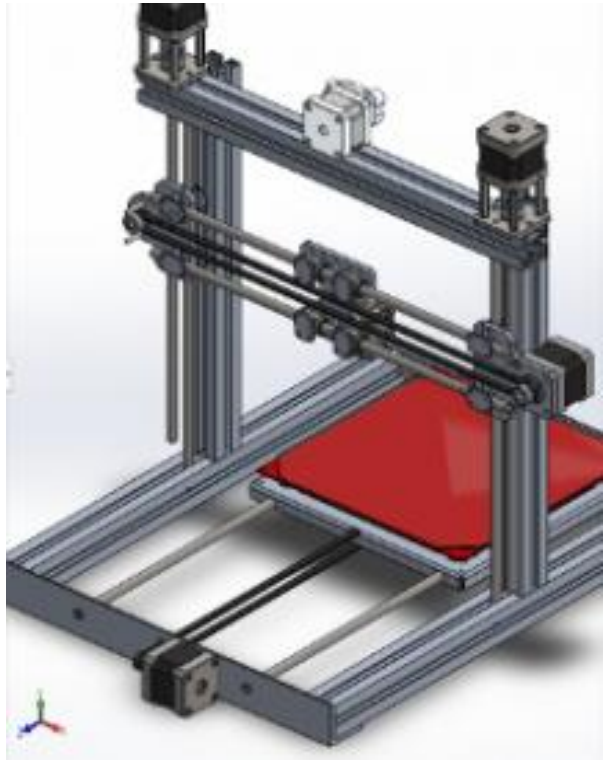
Item No, Variant, Description (and notes), Unit of Measure, Qty per, Position, Lead-Time Offset.

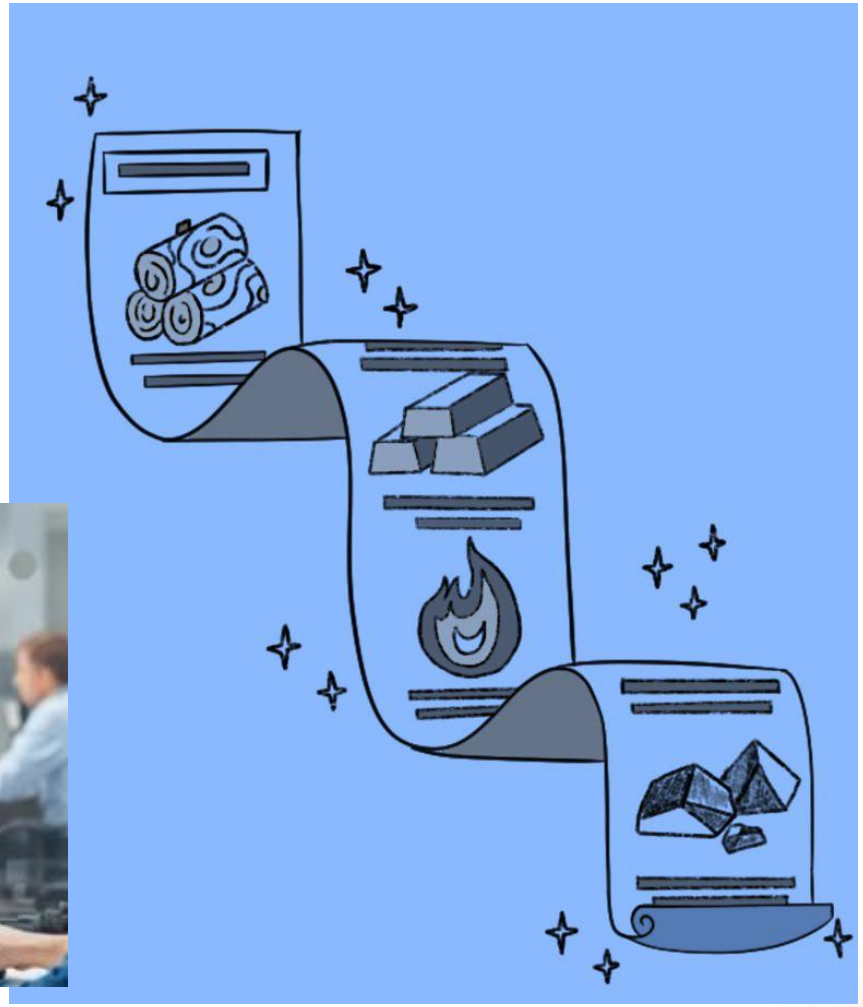
Production BOM Specific: Type (Item / Production BOM), Scrap %, Routing Link Code, Calculation Formula (Length, Width, Depth, Weight), Status, Versions, Date Validation.

Production BOM



BOM for Projects (later)



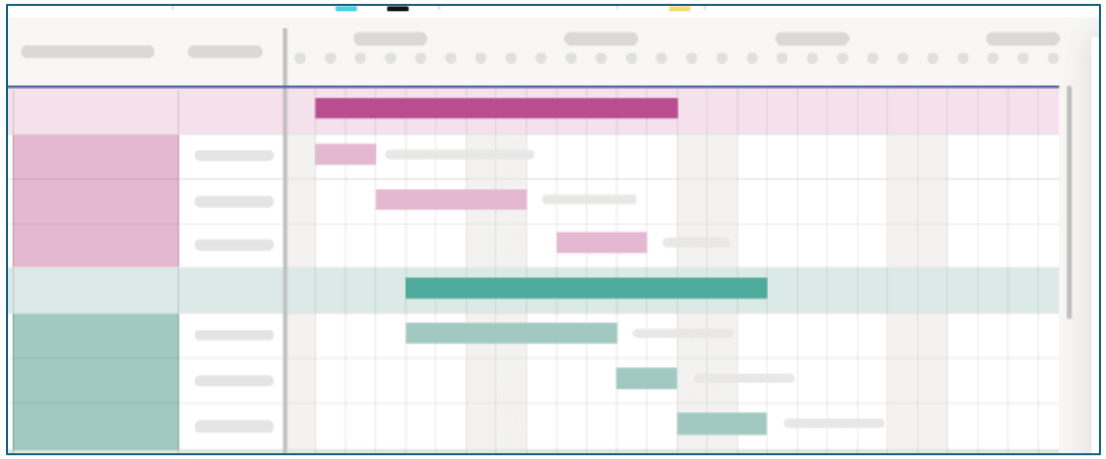


Assembly BOM vs Production BOM

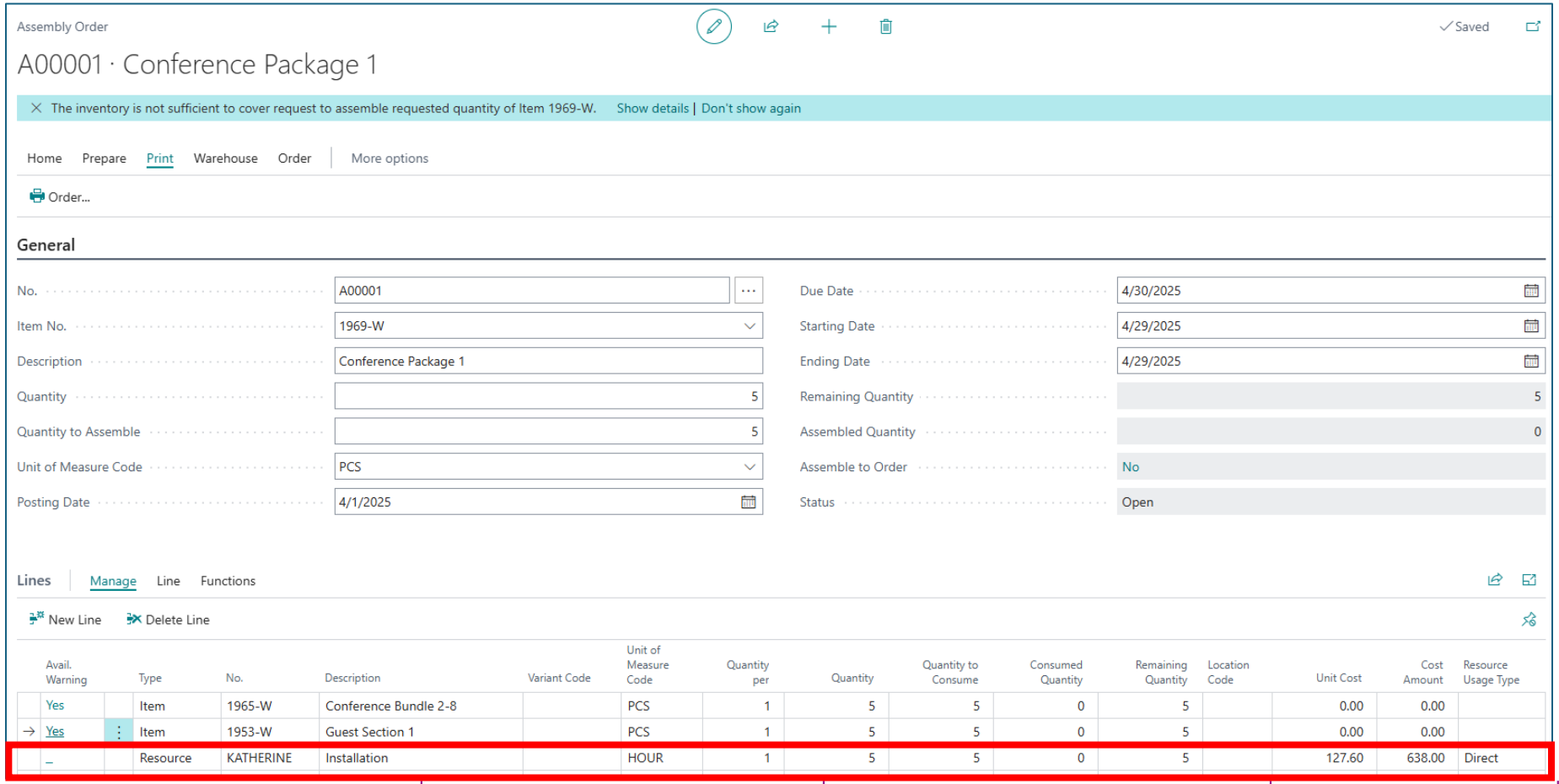
	ASSEMBLY BOM	PRODUCTION BOM
Items (No, Variant, Description, Qty Per, Unit of Measure)	YES	YES
Link to subassembly BOM	YES	NO
Resources (Usage Type, Machine No)	YES	NO
Position (1, 2, 3)	YES	YES
Lead-Time Offset (days required)	YES	YES
Default Location and Bin	YES	NO *
FactBox (Links and Notes)	YES	YES
FactBox (Item and Resource details)	YES	NO
Scrap %	NO *	YES
Calculation Formula (Size, weight, Qty, etc.)	NO	YES
Routing Link Code	NO	YES
BOM Options (Structure, Cost, Price, Shares, Explode BOM)	YES	NO *
Copy BOM, Versions, comments, status, link to different items.	NO	YES
Phantom BOMs (Explode BOM / Production BOM)	YES	YES

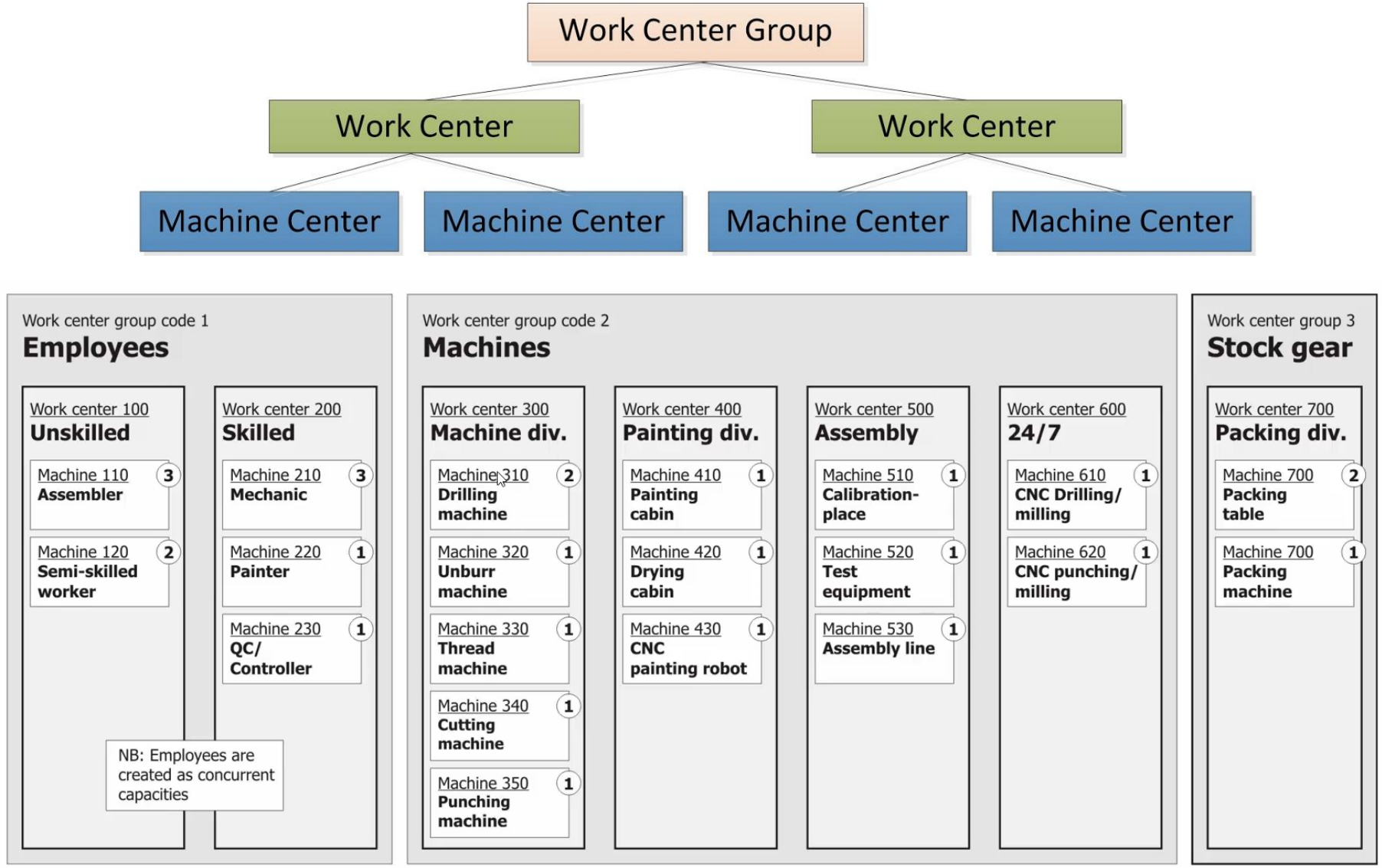
ROUTINGS (Process)

- The routing is the basis of **process scheduling**, capacity planning, scheduled assignment of material needs, and manufacturing documents.
- What operations are required?
- What´s the status of the Op.?
- How much does it cost?
- What´s required for the Op?
- When needs to be done?



ROUTINGS – Assembly




Work Center Group
Work Center
Work Center
Machine Center
Machine Center
Machine Center
Machine Center
Work center group code 1
Employees
Work center 100
Unskilled
Machine 110
Assembler
3
Machine 120
Semi-skilled worker
2
Work center 200
Skilled
Machine 210
Mechanic
3
Machine 220
Painter
1
Machine 230
QC/ Controller
1
NB: Employees are created as concurrent capacities
Work center group code 2
Machines
Work center 300
Machine div.
Machine 310
Drilling machine
2
Machine 320
Unburr machine
1
Machine 330
Thread machine
1
Machine 340
Cutting machine
1
Machine 350
Punching machine
1
Work center 400
Painting div.
Machine 410
Painting cabin
1
Machine 420
Drying cabin
1
Machine 430
CNC painting robot
1
Work center 500
Assembly
Machine 510
Calibration-place
1
Machine 520
Test equipment
1
Machine 530
Assembly line
1
Work center 600
24/7
Machine 610
CNC Drilling/ milling
1
Machine 620
CNC punching/ milling
1
Work center group 3
Stock gear
Work center 700
Packing div.
Machine 700
Packing table
2
Machine 700
Packing machine
1

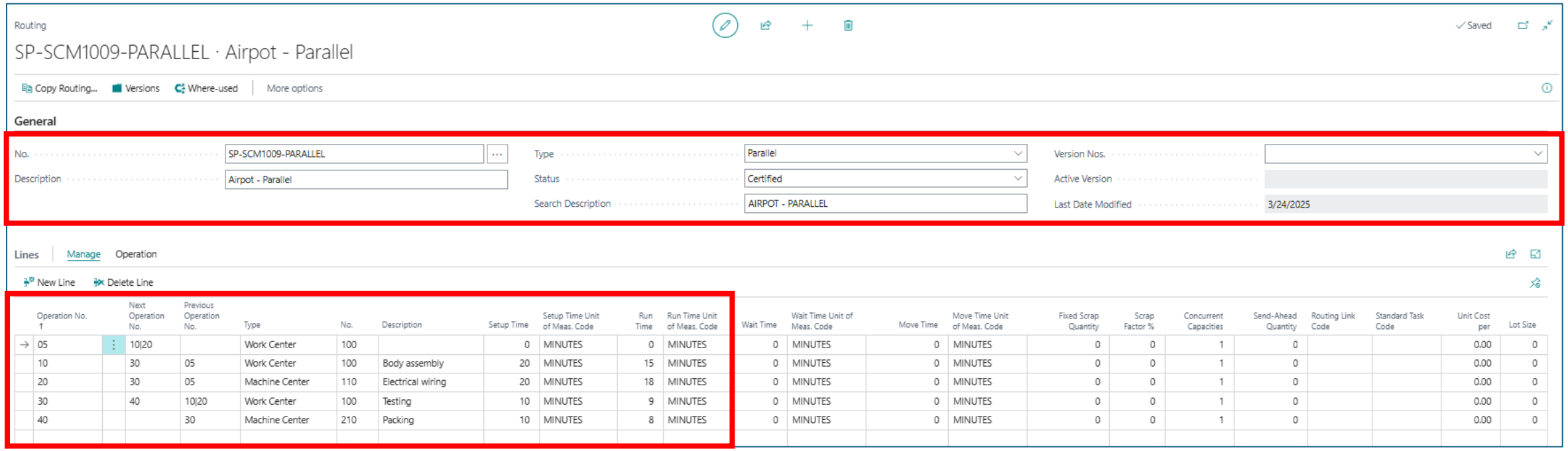
ROUTINGS – Production Orders

Routings

+ New | Manage | More options

No. ↑	Description	Type	Status	Version Nos.
SP-BOM2000	Reservoir Assembly	Serial	Certified	
SP-SCM1004	AutoDrip	Serial	Certified	
SP-SCM1009-PARALLEL	Airpot - Parallel	Parallel	Certified	
SP-SCM1009-SERIAL	Airpot - Serial	Serial	Certified	
SP-SCM1009-SUB-1	Airpot - Subcontracting 1	Serial	Certified	
SP-SCM1009-SUB-2	Airpot - Subcontracting 2	Serial	Certified	

ROUTINGS – Production Orders



Routing

SP-SCM1009-PARALLEL · Airpot - Parallel

Saved

Copy Routing... | Versions | Where-used | More options

General

No.	SP-SCM1009-PARALLEL	Type	Parallel	Version Nos.	
Description	Airpot - Parallel	Status	Certified	Active Version	
		Search Description	AIRPOT - PARALLEL	Last Date Modified	3/24/2025

Lines | Manage | Operation

New Line | Delete Line

Operation No.	Next Operation No.	Previous Operation No.	Type	No.	Description	Setup Time	Setup Time Unit of Meas. Code	Run Time	Run Time Unit of Meas. Code	Wait Time	Wait Time Unit of Meas. Code	Move Time	Move Time Unit of Meas. Code	Fixed Scrap Quantity	Scrap Factor %	Concurrent Capacities	Send-Ahead Quantity	Routing Link Code	Standard Task Code	Unit Cost per	Lot Size
05	10|20		Work Center	100		0	MINUTES	0	MINUTES	0	MINUTES	0	MINUTES	0	0	1	0			0.00	0
10	30	05	Work Center	100	Body assembly	20	MINUTES	15	MINUTES	0	MINUTES	0	MINUTES	0	0	1	0			0.00	0
20	30	05	Machine Center	110	Electrical wiring	20	MINUTES	18	MINUTES	0	MINUTES	0	MINUTES	0	0	1	0			0.00	0
30	40	10|20	Work Center	100	Testing	10	MINUTES	9	MINUTES	0	MINUTES	0	MINUTES	0	0	1	0			0.00	0
40		30	Machine Center	210	Packing	10	MINUTES	8	MINUTES	0	MINUTES	0	MINUTES	0	0	1	0			0.00	0

ROUTINGS – Assembly vs Production

	ASSEMBLY	PRODUCTION
Routing Header (Type, Status, Versions)	NO	YES
Operation ´s sequence (Serial / Parallel, Lot Size, Send-Ahead Qty)	NO	YES
Duration details (setup time, run time, wait time, move time)	NO	YES
Scrap (Fixed Qty and %)	NO	YES
Scheduling settings (Min / Max process time, Concurrent Capacities, Routing Link Code)	NO	YES
Operation Details and Standard Task (Comments, Tools, Personnel, Quality Measures).	NO *	YES
FactBox (Links & Notes)	BOM Line	Routing header
Routing Sheet	NO	YES

ROUTINGS – Assembly

Assembly Order

Cronus - DynamicsCon

21. April 2025

JAVIERD

Order No.	A00001	**Asm. to Order No.**	No Assembly Header **A00001**

Assembly Item

Item No.	1969-W	Due Date	04/30/25
Description	Conference Package 1	Starting Date	04/29/25
Quantity	5	Ending Date	04/29/25
Quantity to Assemble	5	Location Code	
Quantity Assembled		Bin Code	
Unit of Measure	PCS		

Bill of Material

Type	No.	Description	Variant	Due Date	Quantity per	Quantity	Unit of Measure	Location Code	Bin Code	Quantity to Consume	Quantity Picked	Quantity Consumed
Item	1965-W	Conference Bundle 2-8		04/29/25	1	5	PCS			5		
Item	1953-W	Guest Section 1		04/29/25	1	5	PCS			5		
Resource	KATHERINE	Installation		04/29/25	1	5	HOUR			5		

Capacity Planning – Resources

Resource Availability

Saved

RESOURCE3 · RESOURCE3

Options

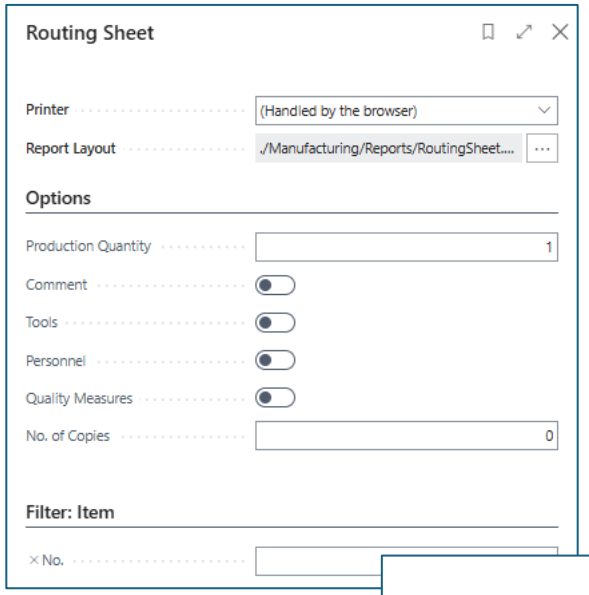
View by: Week

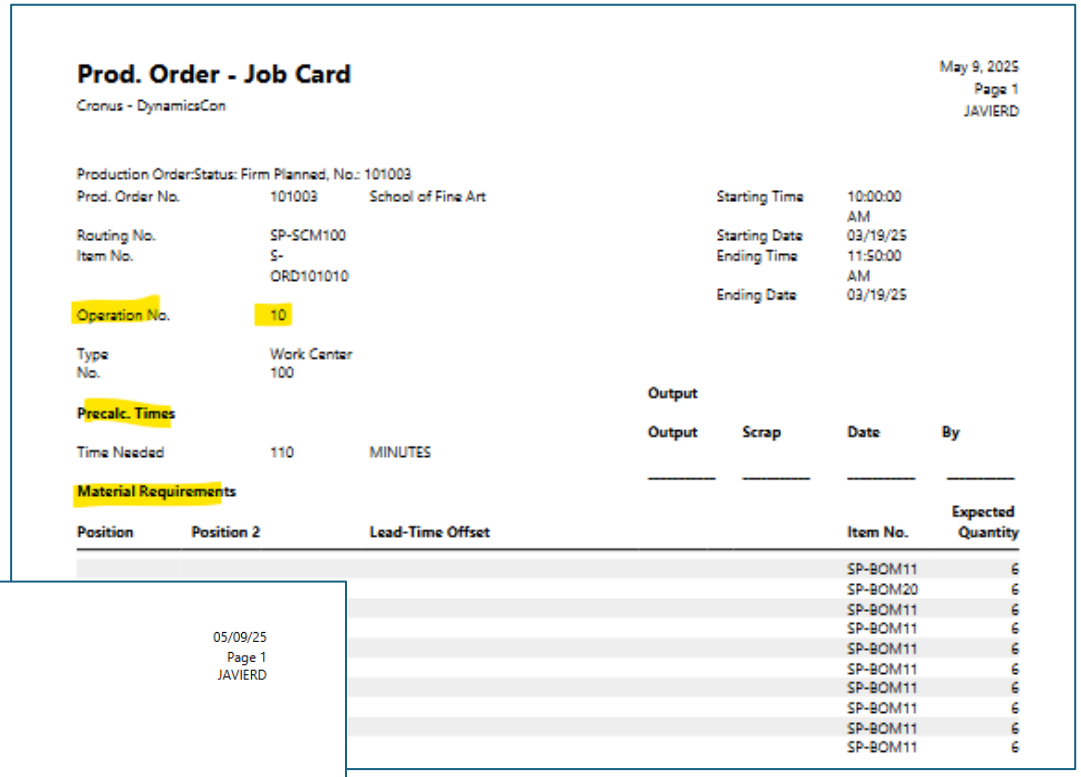
View as: Net Change

Lines

Period Start	Period Name	Capacity	Qty. on Order (Project)	Availability After Orders	Project Quotes Allocation	Availability After Quotes	Qty. on Service Order	Qty. on Assembly Order	Net Availability
9/9/2024	37	40	0	40	0	40	0	0	40
9/16/2024	38	40	0	40	0	40	0	0	40
9/23/2024	39	40	0	40	0	40	0	0	40
9/30/2024	40	40	0	40	0	40	0	0	40
10/7/2024	41	40	19	21	0	21	0	0	21
10/14/2024	42	40	0	40	0	40	0	0	40
10/21/2024	43	40	0	40	0	40	0	0	40
10/28/2024	44	40	0	40	0	40	0	0	40

ROUTINGS – Production





Prod. Order - Job Card

Cronus - DynamicsCon

May 9, 2025
Page 1
JAVIERD

Production Order:Status: Firm Planned, No.: 101003

Prod. Order No.	101003	School of Fine Art	Starting Time	10:00:00 AM
Routing No.	SP-SCM100		Starting Date	03/19/25
Item No.	S-ORD101010		Ending Time	11:50:00 AM
			Ending Date	03/19/25
Operation No.	10			
Type	Work Center			
No.	100			

Precalc. Times

			Output			
			Output	Scrap	Date	By
Time Needed	110	MINUTES				

Material Requirements

Position	Position 2	Lead-Time Offset	Item No.	Expected Quantity
			SP-BOM11	6
			SP-BOM20	6
			SP-BOM11	6
			SP-BOM11	6
			SP-BOM11	6
			SP-BOM11	6
			SP-BOM11	6
			SP-BOM11	6
			SP-BOM11	6
			SP-BOM11	6

Routing Sheet

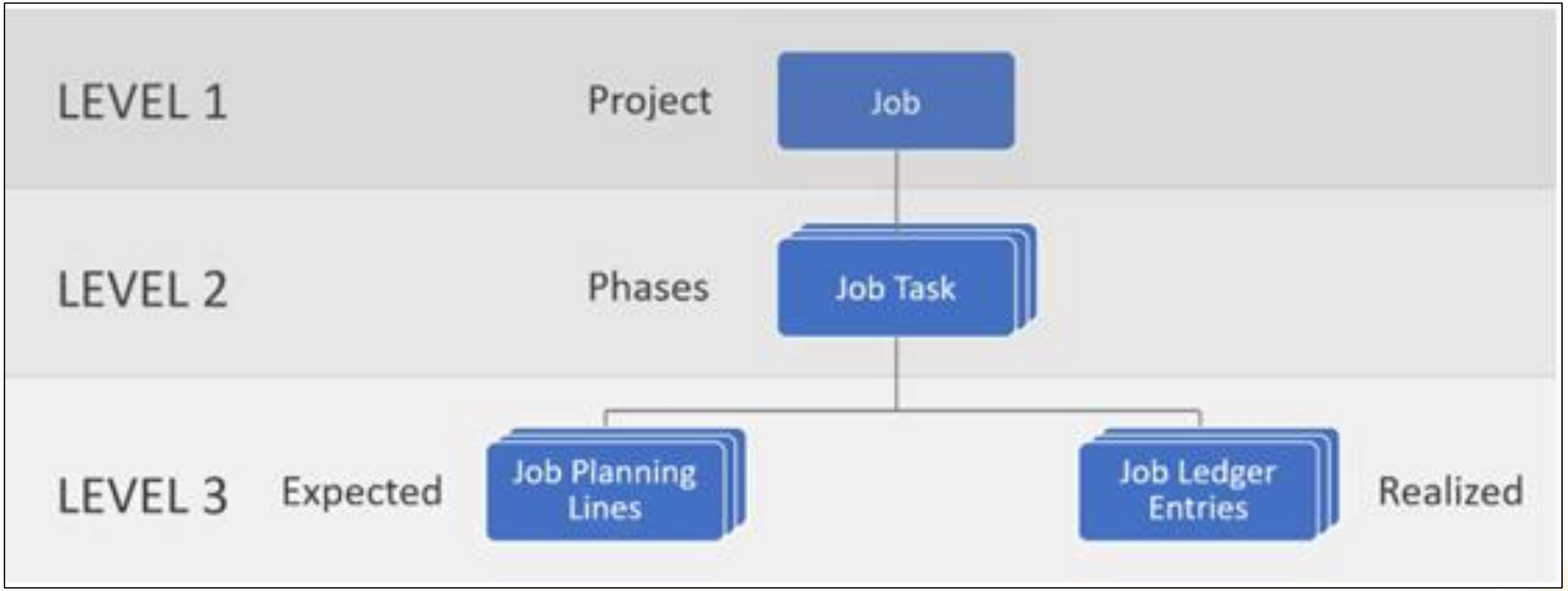
Cronus - DynamicsCon

05/09/25
Page 1
JAVIERD

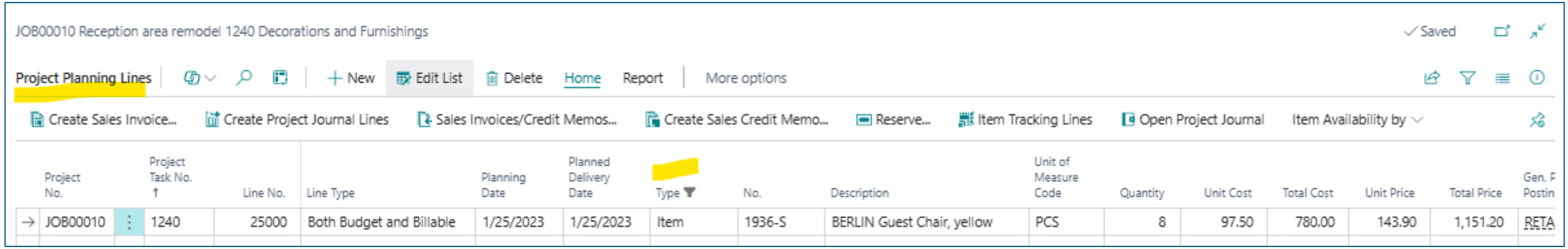
SP-SCM1009 Airpot Routing No. **SP-SC** Production Quantity **1**

Operation No.	Type	No.	Send-Ahead Quantity	Scrap Factor %	Setup Time	Wait Time	Move Time	Run Time	Total Time	Time Unit
10	Work Center	100	0	0	20	0	0	15	35	MINUTE
20	Machine Center	110	0	0	20	0	0	18	38	MINUTES
30	Work Center	100	0	0	10	0	0	9	19	MINUTE
40	Machine Center	210	0	0	10	0	0	8	18	MINUTES

Jobs / Projects

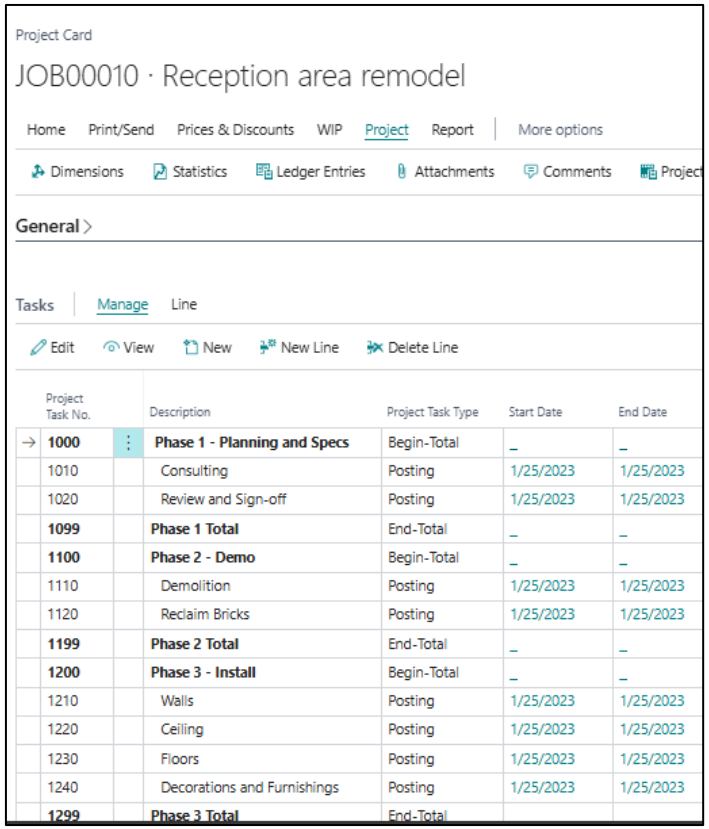


Jobs / Projects – BOM



Project No.	Project Task No.	Line No.	Line Type	Planning Date	Planned Delivery Date	Type	No.	Description	Unit of Measure Code	Quantity	Unit Cost	Total Cost	Unit Price	Total Price	Gen. P Postin
JOB00010	1240	25000	Both Budget and Billable	1/25/2023	1/25/2023	Item	1936-S	BERLIN Guest Chair, yellow	PCS	8	97.50	780.00	143.90	1,151.20	RETA

Jobs / Projects – Routing



Project Card

JOB00010 · Reception area remodel

Home | Print/Send | Prices & Discounts | WIP | Project | Report | More options

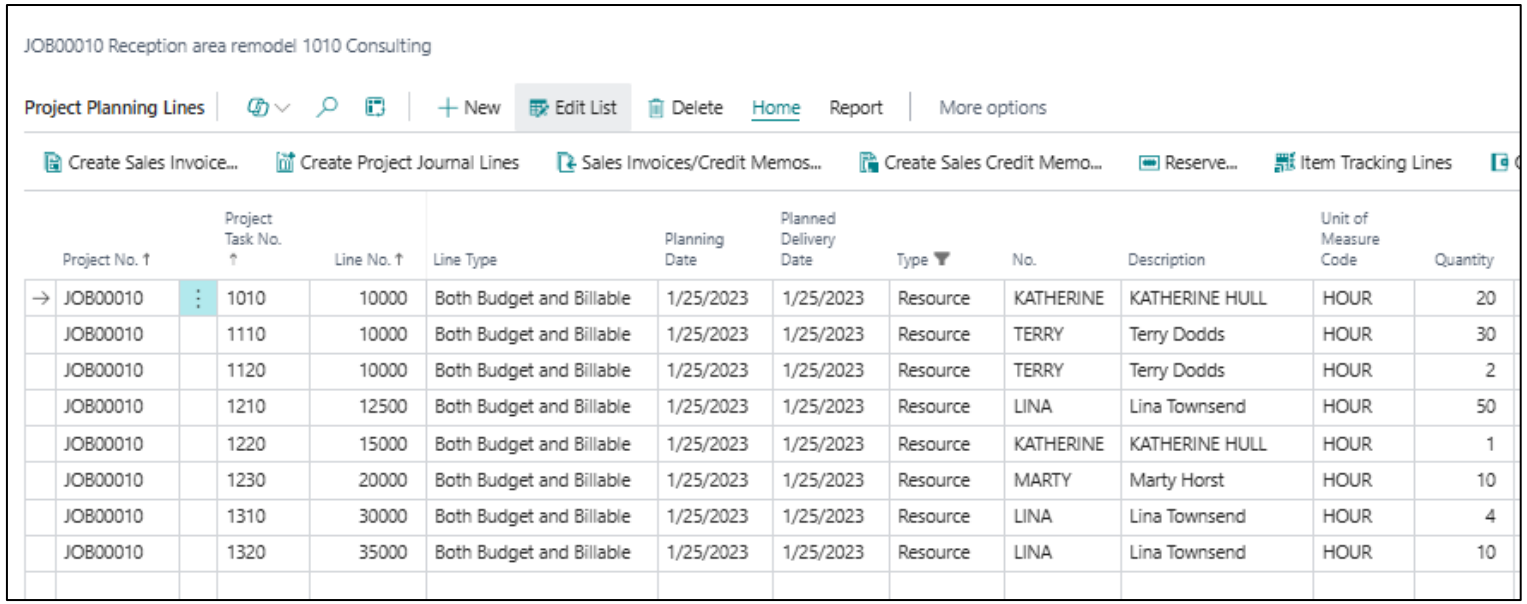
Dimensions | Statistics | Ledger Entries | Attachments | Comments | Project

General

Tasks | Manage | Line

Edit | View | New | New Line | Delete Line

Project Task No.	Description	Project Task Type	Start Date	End Date
1000	**Phase 1 - Planning and Specs**	Begin-Total		
1010	Consulting	Posting	1/25/2023	1/25/2023
1020	Review and Sign-off	Posting	1/25/2023	1/25/2023
1099	**Phase 1 Total**	End-Total		
1100	**Phase 2 - Demo**	Begin-Total		
1110	Demolition	Posting	1/25/2023	1/25/2023
1120	Reclaim Bricks	Posting	1/25/2023	1/25/2023
1199	**Phase 2 Total**	End-Total		
1200	**Phase 3 - Install**	Begin-Total		
1210	Walls	Posting	1/25/2023	1/25/2023
1220	Ceiling	Posting	1/25/2023	1/25/2023
1230	Floors	Posting	1/25/2023	1/25/2023
1240	Decorations and Furnishings	Posting	1/25/2023	1/25/2023
1299	**Phase 3 Total**	End-Total		



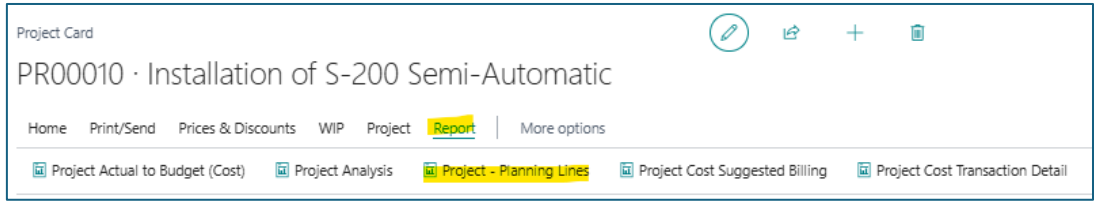
JOB00010 Reception area remodel 1010 Consulting

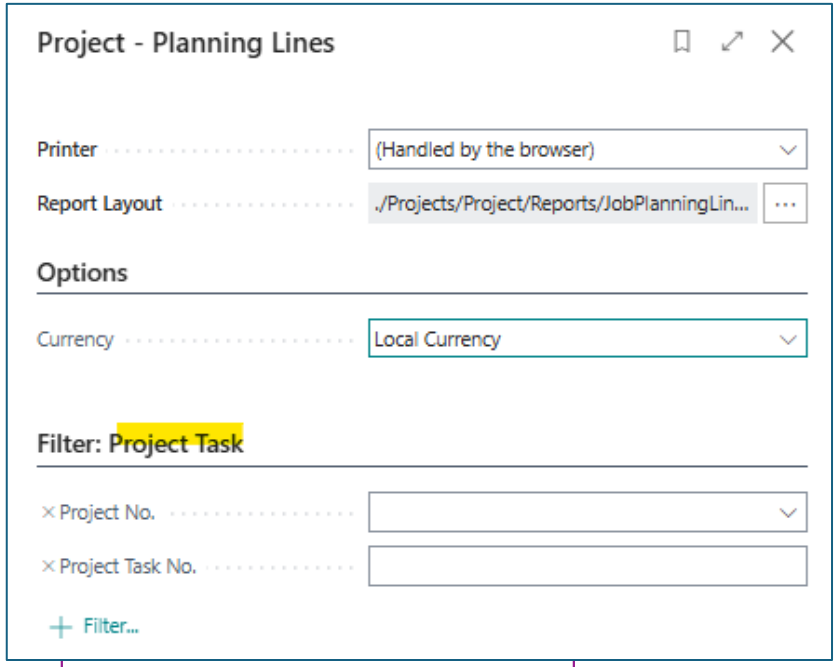
Project Planning Lines | New | Edit List | Delete | Home | Report | More options

Create Sales Invoice... | Create Project Journal Lines | Sales Invoices/Credit Memos... | Create Sales Credit Memo... | Reserve... | Item Tracking Lines

Project No.	Project Task No.	Line No.	Line Type	Planning Date	Planned Delivery Date	Type	No.	Description	Unit of Measure Code	Quantity
JOB00010	1010	10000	Both Budget and Billable	1/25/2023	1/25/2023	Resource	KATHERINE	KATHERINE HULL	HOUR	20
JOB00010	1110	10000	Both Budget and Billable	1/25/2023	1/25/2023	Resource	TERRY	Terry Dodds	HOUR	30
JOB00010	1120	10000	Both Budget and Billable	1/25/2023	1/25/2023	Resource	TERRY	Terry Dodds	HOUR	2
JOB00010	1210	12500	Both Budget and Billable	1/25/2023	1/25/2023	Resource	LINA	Lina Townsend	HOUR	50
JOB00010	1220	15000	Both Budget and Billable	1/25/2023	1/25/2023	Resource	KATHERINE	KATHERINE HULL	HOUR	1
JOB00010	1230	20000	Both Budget and Billable	1/25/2023	1/25/2023	Resource	MARTY	Marty Horst	HOUR	10
JOB00010	1310	30000	Both Budget and Billable	1/25/2023	1/25/2023	Resource	LINA	Lina Townsend	HOUR	4
JOB00010	1320	35000	Both Budget and Billable	1/25/2023	1/25/2023	Resource	LINA	Lina Townsend	HOUR	10

Jobs / Projects





Project Planning Lines

Cronus - DynamicsCon

April 21, 2025
Page 1
JAVIERD

Project Task: Project No.: PR00010

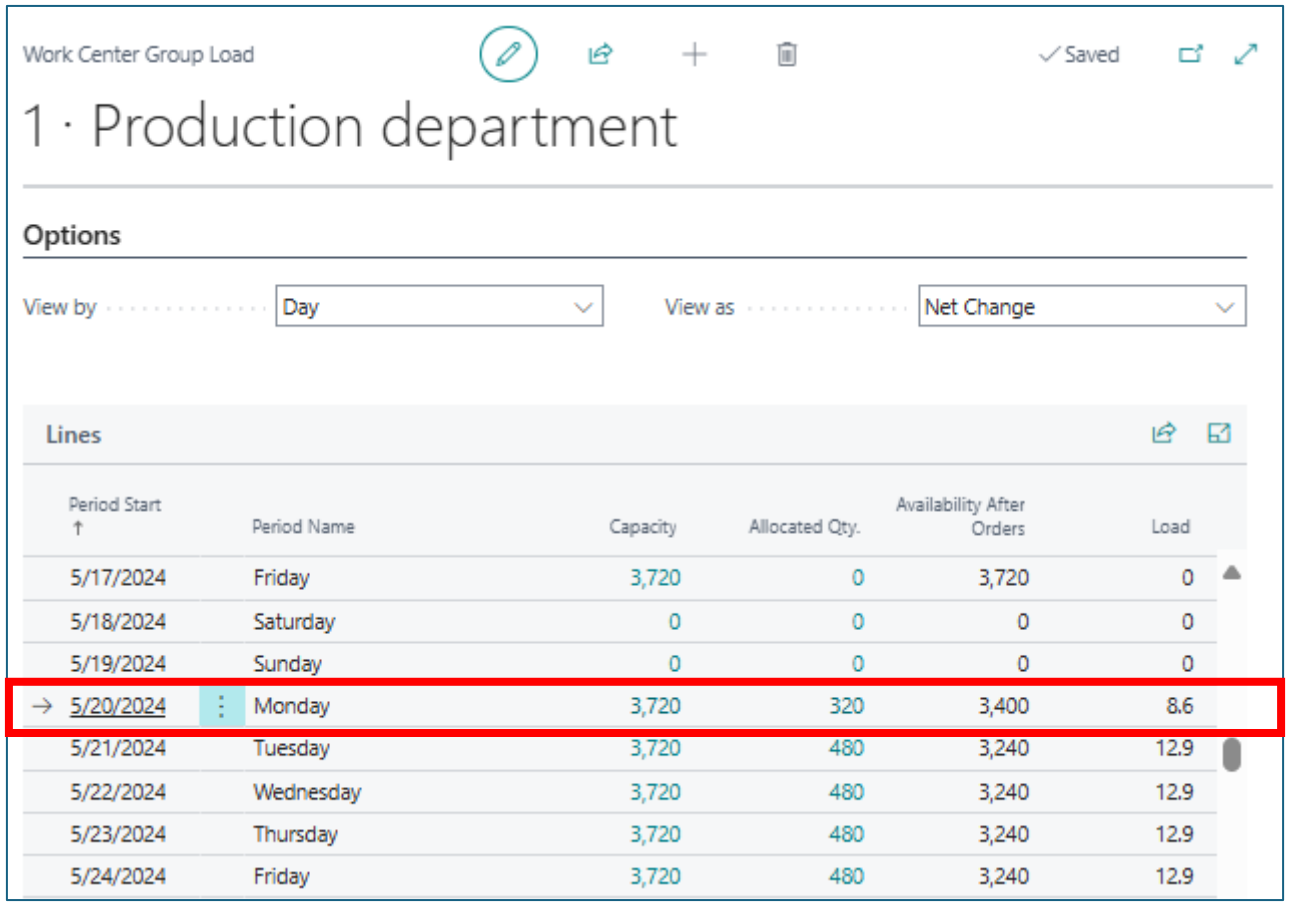
Project No. PR00010 Installation of S-200 Semi-Automatic

Line Type	Planning Date	Type	Document No.	No.	Description	Quantity	Unit of Measure Code	Total Cost (CAD)	Line Discount Amount (CAD)	Line Amount (CAD)
Project Task No.		**110**			**Pre-installation requirements**					
Budget	10/07/24	Resource		RESOU	RESOURCE3	3	HOUR	210.00	0.00	300.00
Billable	10/07/24	Item		SER203	Pre-installation requirements	3	HOUR	0.00	0.00	300.00
Billable	10/07/24	Text			Check-list:	0		0.00	0.00	0.00
Billable	10/07/24	Text			* Space constraints	0		0.00	0.00	0.00
Billable	10/07/24	Text			* Water quality, inlet, drain out	0		0.00	0.00	0.00
Billable	10/07/24	Text			* Electrical requirements	0		0.00	0.00	0.00
						Budget		**210.00**	**0.00**	**300.00**
						Billable		**0.00**	**0.00**	**300.00**
Project Task No.		**220**			**Delivery**					
Bud. +Bill.	10/07/24	Item		S-210	S-210 Semi-Automatic	1	PCS	0.00	0.00	2,400.00
						Budget		**210.00**	**0.00**	**2,700.00**
						Billable		**0.00**	**0.00**	**2,700.00**
Project Task No.		**240**			**Installation**					
Budget	10/07/24	Resource		RESOU	RESOURCE3	3	HOUR	210.00	0.00	300.00
Billable	10/07/24	Item		SER203	Installation	2	HOUR	0.00	0.00	200.00
Budget	10/07/24	Item		F-100	Remote pump	1	PCS	0.00	0.00	100.00
						Budget		**420.00**	**0.00**	**3,100.00**
						Billable		**0.00**	**0.00**	**2,900.00**
Project Task No.		**260**			**Configuration**					
Budget	10/07/24	Resource		RESOU	RESOURCE3	1	HOUR	70.00	0.00	100.00
Billable	10/07/24	Item		SER203	Configuration	2	HOUR	0.00	0.00	200.00
						Budget		**490.00**	**0.00**	**3,200.00**
						Billable		**0.00**	**0.00**	**3,100.00**
						Total Budget		**490.00**	**0.00**	**3,200.00**
						Total Billable		**0.00**	**0.00**	**3,100.00**

EXECUTION

	ASSEMBLY	PRODUCTION	PROJECTS
Register Output	YES	**YES**	NO
Register Consumption	**YES***	**YES**	**YES**
Register Detail Time	NO	**YES**	**YES***
Time phased inventory consumption – Routing Links	NO	**YES**	**YES***
Report Scrap on Consumption and Output	NO	**YES**	NO
Production Families	NO	**YES**	NO
Subcontract Purchasing	NO	**YES**	**YES**
Record Quality Measures	NO	**YES**	NO
Flushing Labour	**YES**	**YES**	NO
Flushing Material	**YES**	**YES**	NO
Use Time Sheets for Labour Collection	Eh....	NO	**YES**
Actual shop floor time collection	No	**YES**	**YES**
Use of Output Journal	No	**YES**	NO

Capacity Planning – Production



Period Start	Period Name	Capacity	Allocated Qty.	Availability After Orders	Load
5/17/2024	Friday	3,720	0	3,720	0
5/18/2024	Saturday	0	0	0	0
5/19/2024	Sunday	0	0	0	0
5/20/2024	Monday	3,720	320	3,400	8.6
5/21/2024	Tuesday	3,720	480	3,240	12.9
5/22/2024	Wednesday	3,720	480	3,240	12.9
5/23/2024	Thursday	3,720	480	3,240	12.9
5/24/2024	Friday	3,720	480	3,240	12.9

Capacity
Amount of work that can be done in a specified time period at this work center group. It´s based on Calendar Entries: Work Shift Code, Dates, Efficiency, Number of WC or MC.

Allocated Qty
The amount of capacity that is needed to produce a desired output in a given time period. It´s based on "Prod. Order Capacity Need): Operations in Production Orders, dates, setup and run time (Qty and Due Dates)

Capacity Planning – Production

Calendar Entries

New | Edit List | Delete

Capacity Type	No.	Work Shift Code	Starting Date-Time	Ending Date-Time	Efficiency	Capacity	Capacity (Total)	Capacity (Effective)
Work Center	100	1	5/20/2024 8:00 AM	5/20/2024 4:00 PM	100	3	1,440	1,440
Work Center	200	1	5/20/2024 8:00 AM	5/20/2024 4:00 PM	100	1	480	480
Work Center	300	1	5/20/2024 8:00 AM	5/20/2024 4:00 PM	100	1	480	480
Work Center	300	2	5/20/2024 4:00 PM	5/20/2024 11:00 PM	100	1	420	420
Work Center	400	1	5/20/2024 8:00 AM	5/20/2024 4:00 PM	100	1	480	480
Work Center	400	2	5/20/2024 4:00 PM	5/20/2024 11:00 PM	100	1	420	420

Capacity Planning – Production

Prod. Order Capacity Need

Production Order | Automate | Fewer options

Type	No.	Prod. Order No.	Starting Date-Time	Ending Date-Time	Date	Sen... Ah... Type	Time Type	Allocated Time	Prod. Order No. & Time Type
Work Center	100	101001	5/20/2024 10:40 AM	5/20/2024 10:55 AM	5/20/2024		Setup Time	15	101001 - 1 Setup Time
Work Center	100	101001	5/20/2024 10:55 AM	5/20/2024 4:00 PM	5/20/2024	Input	Run Time	305	101001 - 2 Run Time

Capacity Planning – Resources

Resource Availability

Saved

RESOURCE3 · RESOURCE3

Options

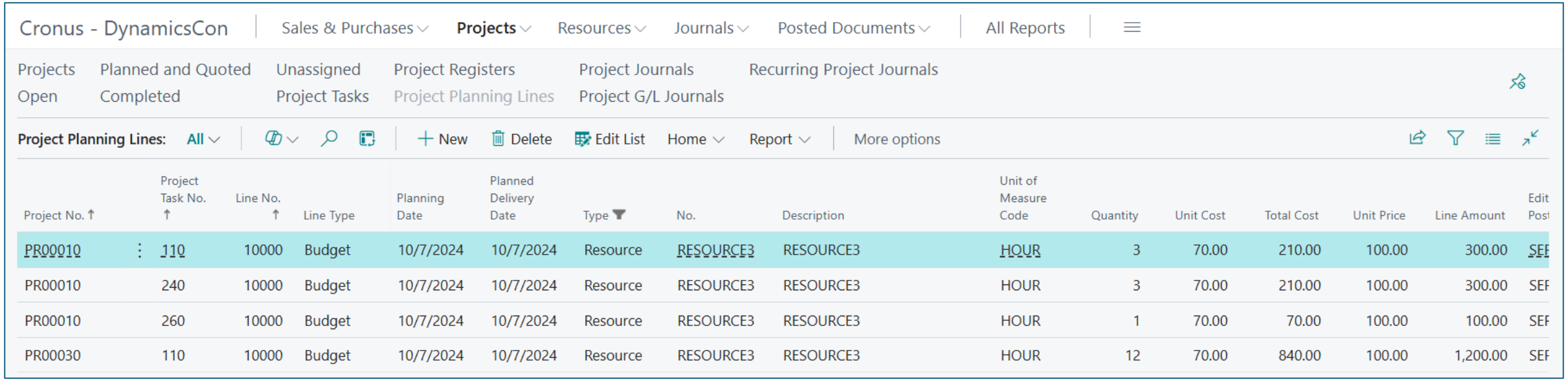
View by: Week

View as: Net Change

Lines

Period Start	Period Name	Capacity	Qty. on Order (Project)	Availability After Orders	Project Quotes Allocation	Availability After Quotes	Qty. on Service Order	Qty. on Assembly Order	Net Availability
9/9/2024	37	40	0	40	0	40	0	0	40
9/16/2024	38	40	0	40	0	40	0	0	40
9/23/2024	39	40	0	40	0	40	0	0	40
9/30/2024	40	40	0	40	0	40	0	0	40
10/7/2024	41	40	19	21	0	21	0	0	21
10/14/2024	42	40	0	40	0	40	0	0	40
10/21/2024	43	40	0	40	0	40	0	0	40
10/28/2024	44	40	0	40	0	40	0	0	40

Capacity Planning – Resources



Project No.	Project Task No.	Line No.	Line Type	Planning Date	Planned Delivery Date	Type	No.	Description	Unit of Measure Code	Quantity	Unit Cost	Total Cost	Unit Price	Line Amount	Edit Post
PR00010	110	10000	Budget	10/7/2024	10/7/2024	Resource	RESOURCE3	RESOURCE3	HOUR	3	70.00	210.00	100.00	300.00	SEF
PR00010	240	10000	Budget	10/7/2024	10/7/2024	Resource	RESOURCE3	RESOURCE3	HOUR	3	70.00	210.00	100.00	300.00	SEF
PR00010	260	10000	Budget	10/7/2024	10/7/2024	Resource	RESOURCE3	RESOURCE3	HOUR	1	70.00	70.00	100.00	100.00	SEF
PR00030	110	10000	Budget	10/7/2024	10/7/2024	Resource	RESOURCE3	RESOURCE3	HOUR	12	70.00	840.00	100.00	1,200.00	SEF

Analytics and Reports

Manufacturing

› Explore

Power BI Reports (12)
- Manufacturing Report (Power BI)
- Current Utilization (Power BI)
- Historical Utilization (Power BI)
- Work Center Load (Power BI)
- Allocated Hours (Power BI)
- Expected Capacity Need (Power BI)
- Finished Prod. ...down (Power BI)
- Consumption Variance (Power BI)
- Capacity Variance (Power BI)
- Average Product...Times (Power BI)
- Released Produc...ders (Power BI)
- Production Scrap (Power BI)

Product Design (1)
- Reports (4)
  - Quantity Explosion of BOM
  - Where-Used (Top Level)
  - Routing Sheet
  - Item BOM Compare List

Capacities (1)
- Reports (3)

Planning (1)
- Reports (3)

Operations (1)
- Reports (7)

Costing (1)
- Reports (11)

Project

› Explore

Power BI Reports (8)
- Projects Report (Power BI)
- Projects Overview (Power BI)
- Project Tasks (Power BI)
- Project Profitability (Power BI)
- Project Realization (Power BI)
- Project Perform...dget (Power BI)
- Project Invoiced...Type (Power BI)
- Project Invd. S...Cust. (Power BI)

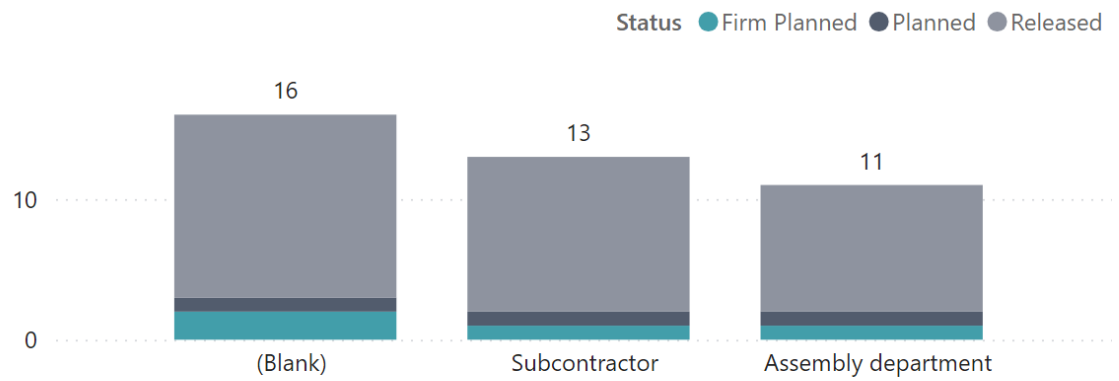
Projects (1)
- Reports (15)
  - Project Analysis
  - Project - Planning Lines
  - Project Cost Transaction Detail
  - Project Register
  - Project WIP To G/L
  - Customer Projects (Cost)
  - Items per Project
  - Completed Jobs
  - Customer Projects (Cost)
  - Customer Projects (Price)
  - Project Actual to Budget (Cost)
  - Project Actual to Budget (Price)
  - Project Cost Suggested Billing
  - Project Cost Budget
  - Project List

Production Order Overview

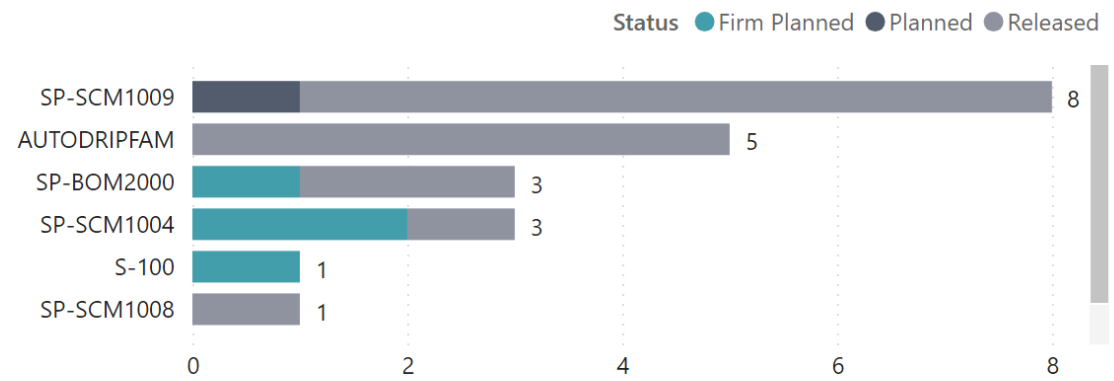
Company Name: YELLOWSTONE - Last Refreshed: 14/03/2025 04:58 PM

Count of Prod. Order Key
29

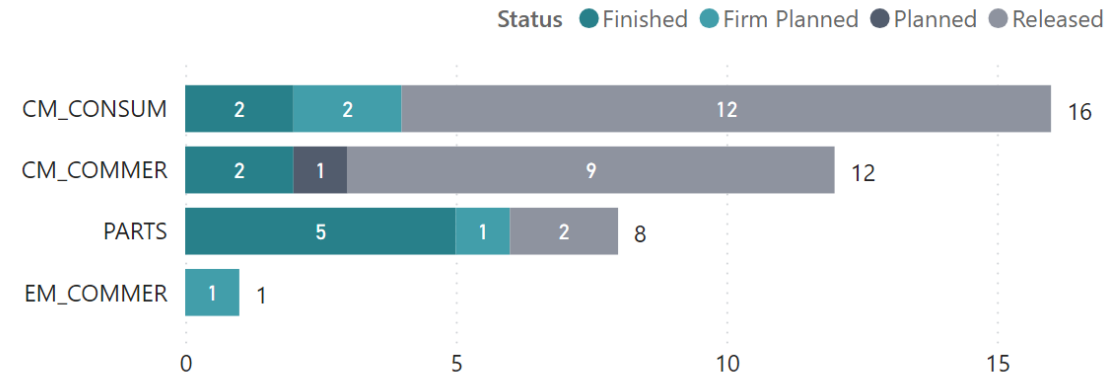
Production Orders by Work Center



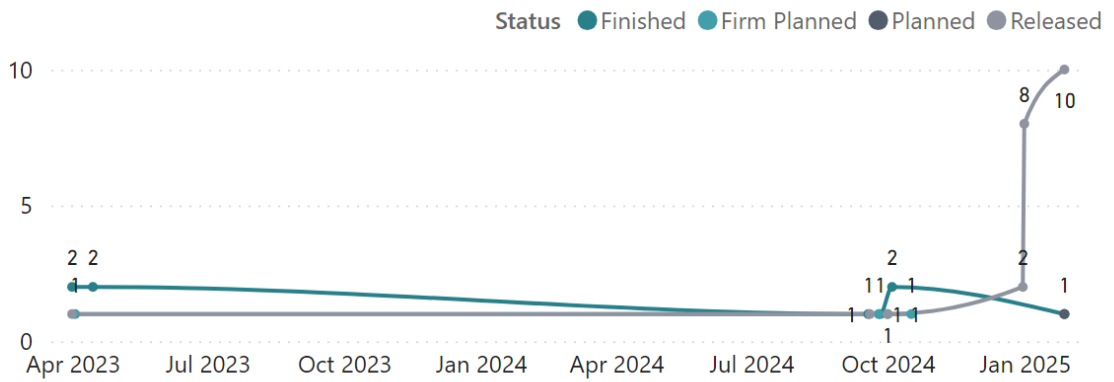
Current Production Orders



Production Order Lines by Item Category



Number of Order Lines by Date and Status



USE CASES: Type – BC Module

The Manufacturing process is **short and simple**. Almost all the cost is related to BOM. Standard products. Don´t care about **setup** or **run** time. BOM is **specific** to the item.

Assemble to Order (ATO) - Assembly Orders

USE CASES: Type – BC Module

The company produce items that requires a lot of **engineering and design requirements**, depending on the Customer needs. Scheduling people and machines is not easy because most of the **operations are not the same**.

Engineer to Order (ETO) - Jobs / Projects

USE CASES: Type – BC Module

Every FG is **different**, **but** the basic BOM and the Manufacturing Process is **kind of the same** for every order.

Configure to Order (CTO) - Production Orders

USE CASES: Type – BC Module

The products are **standard**, they are shipped when they are made, Production Scheduling is critical. Very **repetitive** process. Customer provided **forecast** (often use customer Item No).

Make to Order (MTO) - Production Orders

USE CASES: Type – BC Module

The production is **long**, some items are standard, others are not. Some of them components could be made (assembled / fabricated) in advanced and kept in stock. **Engineering**, Design and Customer approval is very important. You likely have a Project Manager

Engineer to Order (ETO) – Projects

- **Components: Purchased, Assemblies and Production Orders**

Outcomes

- Each client has **different** requirements: business processes, manufacturing requirements, Operation management approach.
- Business Central works great for **Manufacturing Managers** and **Project Managers**.
- Depending on the **Types of Manufacturing** processes, some modules in BC are **better** fit.
- **BOM** is critical for **Material Planning**
- **Routing** is critical for capacity planning
- BC has different **reports and tools** to support the **Operations Manager** requirements.


2025
DYNAMICS
CON

Javier Diazgranados

javierd@sabrelimited.com

Jenn Claridge

Jennc@sabrelimited.com


2025
DYNAMICS
CON