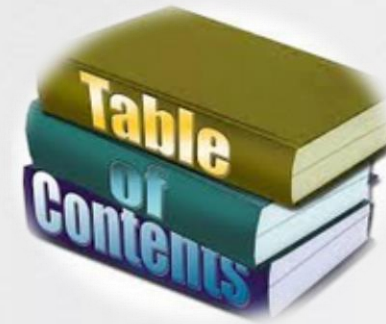


World class ERP for the Print Industry

DynamicsPrint

Powered by Microsoft Dynamics 365

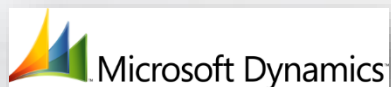


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All in one system

DynamicsPrint is build on Microsoft's world class ERP system Dynamics 365

Microsoft Dynamics 365 is an enterprise resource planning (ERP) solution that is simple to learn and use so you can deliver value faster, take advantage of business opportunities, and drive user involvement and innovation across the organization.



With comprehensive capabilities for financial, human resources, and operations management, in addition to print industry capabilities, it provides the agility you need to expand business opportunities, modify processes, and differentiate your services.

With DynamicsPrint you get all of the above plus a system tailored for the print industry.



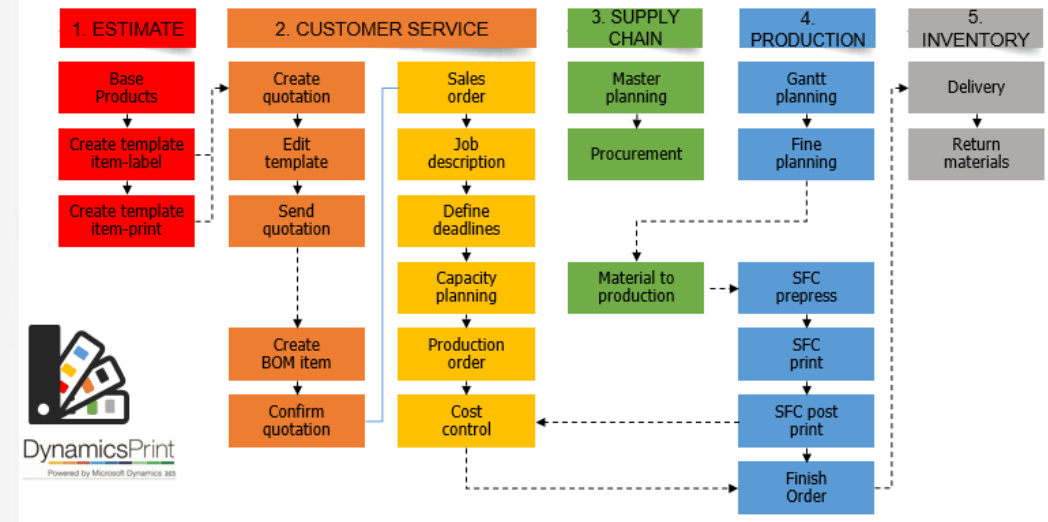
Operations workflow

DynamicsPrint solution is developed to meet the unique needs of the print industry.

Built on the Microsoft Dynamics 365 platform, DynamicsPrint delivers integrated functionality that spans the full print operation; from financial management to the print floor. The solution handles all aspects of a print job, from estimation to scheduling, shop floor to fulfilment, and DynamicsPrint is JDF/JMF certified.

Designed specifically for the print industry, DynamicsPrint is the latest version of Microsoft's proven ERP solution for discrete and process manufacturers. It includes both industry specific and core ERP capabilities in a single, global solution. DynamicsPrint is ideal for global companies that must address multi-language, multi-site, and multi-currency requirements.

DynamicsPrint Operations Workflow



Create a new quotation

The item is attached to a standard calculation, which holds the generic information about the product.

Specify an item number and a quantity, and you are ready to build the quotation calculation.

All the relevant data from the customer table are transferred to the quotation header, and all data from the standard calculation, which describes the product that you are about to configure, are equally updated into the new quote.

A quotation can contain multiple lines, so more than one product can be described. You can also have multiple variants or versions of the same product contained in one quotation.

If the customer requests changes to quantity, substrate, colors etc., in the quote, then this is achieved seamlessly in real time.

When the quote is complete, the user selects the DynamicsPrint button to continue.

Dynamics 365 Finance and Operations Sales and marketing Sales quotations My quotations

Save + New Delete ACTIVITY OPTIONS

MAINTAIN SET UP ATTACHMENTS

Set as complete Attendees Attachments

Change responsible Recurrence pattern

ACTIVITIES 000029 : CONTOSO RETAIL SAN DIEGO

00388 : Presales meeting

General

IDENTIFICATION Activity number 00388 Priority Normal End date/time 11/27/2018 12:00:00 AM PERSONNEL Responsibility Alex Nilsson

Phase All day No

Appointment Type Meeting RECURRING

Purpose

Dynamics 365 Finance and Operations Sales and marketing Sales quotations All quotations

Save + New Delete SALES QUOTATION QUOTATION FOLLOW UP GENERAL RETAIL OPTIONS

GENERATE MODIFY

Confirm Convert to customer

Cancel Change reason code

SALES QUOTATION 000017 : Contoso Retail Los Angeles Lines Header Confirmed

Sales quotation header

DELIVERY ADDRESS Delivery address Contoso Retail Los Angeles Requested receipt date 11/8/2018 Simulate delivery dates

Address 456 Silver Road Pasadena, CA 91103 USA Requested ship date 11/7/2018

REFERENCES Customer requirement Customer reference

DISCOUNTS Total discount % 0.00

Lines

Item	Product name	Text	Product description	Quantity	Delivery name	Unit	Site	Warehouse	Unit price	Discount	Discount percent	M..	Net amount
FG-050	Folder	Grand central 4 colors		5,000.00	Contoso Retail Los Angeles	ea	1	13	0.14				725.00
FG-050	Folder	Grand central 4 colors		6,000.00	Contoso Retail Los Angeles	ea	1	13	0.13				803.78
FG-050	Folder	Grand central 4 colors		7,000.00	Contoso Retail Los Angeles	ea	1	13	0.13				882.23
FG-050	Folder	Grand central 4 colors		8,500.00	Contoso Retail Los Angeles	ea	1	13	0.12				1,000.10

TOTAL PRICE C000000055 : Grand central 4 colors

General

OFFER PRICE Quoted price 725.00 % Quoted price changed 100.00 Yes

1,000 price 145.00

QUOTED PRICE - RUN ON Quoted price - run on 35,664.76 + 1,000

RECOMMENDED SALES PRICE Rec. sales price 716.68 % -1.13

SHORT RUN TIER PRICING Amount Short Run Tier Id

DIRECT COSTS Paper costs 161.88 % 22.33 Labor costs 119.00 % 16.41

Subcontractor % Margin 2 287.77 % 39.69

Variable costs 156.35 % 21.57 Margin 1 406.77 % 56.11

FIXED COSTS Fixed costs 152.25 % 21.00 Margin 3 135.52 % 18.69

Describe the job

The basic information from the standard calculation will now be updated to meet the actual request.

The most basic data is the quantity, the format and the number of pages.

The following example shows a simple job of four pages.

Most of the fields are pre-defined, and now you can edit or add the relevant calculation data, such as paper type and number of colors.

With DynamicsPrint you can impose a job in multiple ways. Whether it is a book, a brochure a label or any other type of print, the system will offer the best solution to optimize the print run. In addition, all relevant alternatives from which you can choose are also presented.

000017 : FG-050
Calculation
C000000055 : Grand central 4 colors

Overview Sheet printing Web Printing Finishing Bind overview

Total price Pricelists extended Define versions Calculation header Product Prepress Trade Delivery

RUN QTY. **FORMAT** **FINISHED SIZE**

Run qty. 5,000 Format 8.5x11 W x H 8.50000

Confirmed No ☐ 11.00000

DESCRIPTION OF THE JOB

4p folder
4+4 colors
Customer pick up

✓	Page type	Pages	Material group	Material type	Quality	Color...	Color...	Grain direction
✓	Text01	4		Offset	Bond	4	4	Horizontal

Versions

✓	Version	Description	Run qty.
✓	Eng	English	3,000
	Fre	French	2,000

Job configuration

A major part of the job requirements are automatically already in the system by now.

From the example, you will see that the paper size (26"x38") has been suggested, and now DynamicsPrint takes care of the rest.

The press is selected and the cardboard (200-52) is picked from the material table. Everything is checked for logical errors.

Quantities for printing and paper consumption is calculated, along with plates and ink.

If you need to modify or add information, you can do it directly from this screen.

Color specifications, information about cutting and folding is added, and time and material is calculated behind the scene.

Sheet	F	B	Paper no.	Pages	No. up	Pp./s...	Passes	Paper description	Pounds
1	4	4	200-52	4	4	16	1	Chorus Art Silk Text	100

PAPER SIZE	FINISHED SIZE	MATERIAL THICKNESS	PAPER USAGE
Size W 26.00000	Width in inches 8.50000	Caliper 5.1000	Sheets 1,349
Size H 38.00000	Height in inches 11.00000	PRINT	Pounds 281
PRINT SIZE	PAPER PRICE INFO	Run qty. 5,000	PLATES
Print W 26.00000	Cost price 120.00	Factor 1	Plates 8
Print H 38.00000	Price unit 1,000.00	Print net 1,250	Extra plates
Corrected No		Print total 1,349	Ver. plates

Passes	No.	Color ID	Description	Item number	Ink use %
1	1		Black	0900-Ink	100
1	2		Yellow	0900-Ink	100
1	3		Magenta	0900-Ink	100
1	4		Cyan	0900-Ink	100

BOM and route

Job details are created automatically.

Based on your own defined business rules, all operations and materials are calculated, and the BOM and route is ready for use.

Click on the "Components" button, and you can see everything which has been calculated so far.

All components have been calculated by following best practices, which have been defined by you in the system when the ERP system was initially set up and implemented.

Now the job is ready for pricing.

Click on the Total Price button, and you can review the key numbers and margins for the job.

All white fields can be edited, and the system will automatically recalculate all other numbers as well when edits/changes are made.

The price which is defined here, will be copied to the quotation line.

Total price	Components	Tools	Waste	Connect to versions	Gang production
Base	Sheet	F	B	Paper no.	Pages
03200	Components	1	4	4	200-52

Description	Work center	Qty	Unit	Name	Time	Total costs	Rec. sales price
Text pages 1 x 4p 4 up	02200	8.00	ea	CTP - Plates		200.00	280.00
Text pages 1 x 4p 4 up	02200	8.00	ea	CTP - Run time	1.00	62.00	86.00
Text pages 1 x 4p 4 up	08500	1.00		Buffer before print	4.00		
Text pages 1 x 4p 4 up	03200	1.00	ea	Make ready press	0.25	55.00	62.50
Text pages 1 x 4p 4 up	03200	1,349.00	ea	Run time press	0.11	24.17	27.47
Text pages 1 x 4p 4 up	03200	2.06	kg	Ink		30.95	41.27
Text pages 1 x 4p 4 up	08500	1.00		Buffer before finishing	2.00		
Text pages 1 x 4p 4 up	05300	338.00	ea	Cut after print	0.87	62.40	69.33
Text pages 1 x 4p 4 up	06100	1.00	ea	Folding make ready	0.20	18.00	28.00
Text pages 1 x 4p 4 up	03200	8,265.00	ft	Folding run time	0.32	69.93	79.47
Text pages 1 x 4p 4 up	03200	1,349.00	ea	Material 200-52 Chorus Art Silk ...		161.88	178.07

Low margin warning: Margin less than : 5.00

TOTAL PRICE
C000000055 : Grand central 4 colors

General

OFFER PRICE Quoted price % 100.00 Yes <input checked="" type="radio"/> No <input type="radio"/> Quoted price 725.04 1,000 price 145.00 QUOTED PRICE - RUN ON Quoted price - run on 35,864.76 1,000 RECOMMENDED SALES PRICE Rec. sales price 869.60 16.63 Change 152.72	DIRECT COSTS Paper costs 161.88 22.33 Subcontractor % Variable costs 243.71 33.62 Margin 1 319.41 44.06	DIRECT LABOR COSTS Labor costs 130.25 17.97 Margin 2 189.16 26.09	FIXED COSTS Fixed costs 163.50 22.55 Margin 3 25.67 3.54
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SHORT RUN TIER PRICING

Amount	Short Run Tier Id

Send quotation

Send the quotation to the customer.

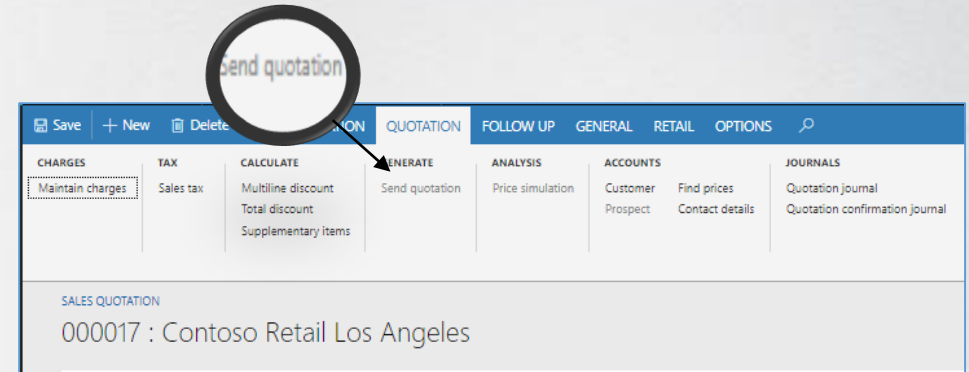
The quotation can be sent via an email or by a standard letter.

In this example we will print the quote.

Click on the quotation tab on top of the screen and select "Send quotation".

Specify the relevant parameters, such as print to screen, to printer or e-mail.

This step by step tutorial shows how even sophisticated job descriptions with nested impositions can be handled with very few key strokes, and provide a comprehensive job description to the customer.



Send quotation

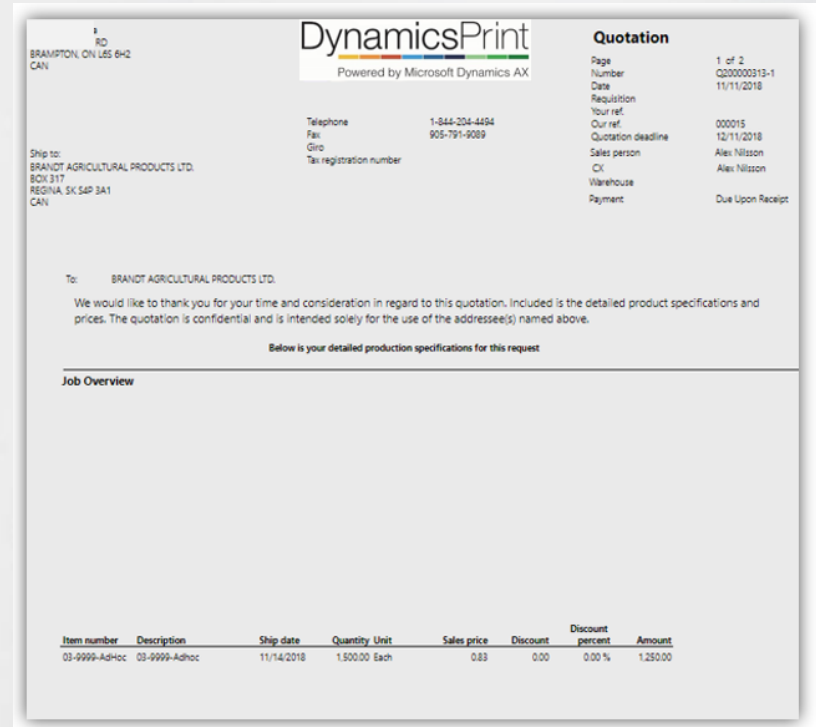
Save + New Delete QUOTATION FOLLOW UP GENERAL RETAIL OPTIONS

CHARGES TAX CALCULATE GENERATE ANALYSIS ACCOUNTS JOURNALS

Maintain charges Sales tax Multiline discount Total discount Supplementary items Price simulation Customer Prospect Find prices Contact details Quotation journal Quotation confirmation journal

SALES QUOTATION

000017 : Contoso Retail Los Angeles



DynamicsPrint
Powered by Microsoft Dynamics AX

Quotation

Page 1 of 2
Number Q200000313-1
Date 11/11/2018
Requisition
Your ref. 000015
Our ref. 12/11/2018
Quotation deadline
Sales person Alex Nilsson
CX Alex Nilsson
Warehouse
Payment Due Upon Receipt

Ship to: BRANDT AGRICULTURAL PRODUCTS LTD.
BOX 317
REGINA, SK S4P 3A1
CAN

Telephone 1-844-234-4494
Fax 905-791-9089
CNO
Tax registration number

To: BRANDT AGRICULTURAL PRODUCTS LTD.

We would like to thank you for your time and consideration in regard to this quotation. Included is the detailed product specifications and prices. The quotation is confidential and is intended solely for the use of the addressee(s) named above.

Below is your detailed production specifications for this request

Job Overview

Item number	Description	Ship date	Quantity	Unit	Sales price	Discount	Discount percent	Amount
03-9999-Adhoc	03-9999-Adhoc	11/14/2018	1,500.00	Each	0.83	0.00	0.00 %	1,250.00

Multiple prices

A quotation can contain different versions, such as quantities, substrate, colors, etc., and show price options

DynamicsPrint provides a very strong tool for the creation of various versions, based on the original calculation.

With a few key strokes, you can create enhanced price lists based on the original quotation. We call it the **Extended price list**.

In the example shown, three quantities and two color combinations are requested – this adds up to six versions.

All six alternatives are calculated and the system flags the cheapest and the fastest combinations for your review.

With one click of the mouse you can export all data to Excel where you can add or change the data if desired.

Select the lines that will be sent back to your customer, and the quotation is ready.

Run qty.

+ New Delete

Run qty.
6,000
7,000
8,500

Color

+ New Delete

Color...	Color...
4	4
5	4

Run qty.	Page type	Color...	Color...	Time	Rec. sales price	Unit price	pr. 1,000 items	Quoted price	Margin 1	Margin 3
6,000	Text01	4	4	9.24	944.60	0.16	157.43	793.67	44.18	3.54
6,000	Text01	5	4	9.48	1,012.97	0.17	168.83	848.26	45.09	3.54
7,000	Text01	4	4	9.49	1,019.30	0.15	145.61	862.06	44.28	3.54
7,000	Text01	5	4	9.74	1,091.32	0.16	155.90	919.97	45.30	3.54
8,500	Text01	4	4	9.87	1,131.53	0.13	133.12	964.81	44.39	3.54
8,500	Text01	5	4	10.13	1,208.43	0.14	142.17	1,027.18	45.52	3.54

OPEN IN EXCEL

Calculation table (usmf)

EXPORT TO EXCEL

Price list

Price list_636775429545812108 - Excel (Product Activation Failed)

Run qty.	Page type	Color 1	Color 2	Time	Rec. sales price	Unit price	pr. 1,000 items	Quoted price	Margin 1	Margin 3	Unit price2	pr. 1,000 items
6,000.00	Text01	4	4	9.24	944.60	0.16	157.43	793.67	44.18	3.54	0.13	132.28
6,000.00	Text01	5	4	9.48	1,012.97	0.17	168.83	848.26	45.09	3.54	0.14	141.38
7,000.00	Text01	4	4	9.49	1,019.30	0.15	145.61	862.06	44.28	3.54	0.12	123.15
7,000.00	Text01	5	4	9.74	1,091.32	0.16	155.90	919.97	45.30	3.54	0.13	131.42
8,500.00	Text01	4	4	9.87	1,131.53	0.13	133.12	964.81	44.39	3.54	0.11	113.51
8,500.00	Text01	5	4	10.13	1,208.43	0.14	142.17	1,027.18	45.52	3.54	0.12	120.84

Commercial print

Brochures or books, both soft- and hard cover, are handled easily through sophisticated and detailed calculations.

Whether you estimate simple flyers, brochures, books or other commercial print products, DynamicsPrint is the most advanced, yet easy-to-use, tool on the market.

In this example, we are going to build a brochure containing 136+4 pages.

You just need to specify quantity, format, pages and colors and with this minimal amount of data most of the calculation for the job is generated with just a few key strokes!

The imposition plan is generated (8 x 16, 1 x 8 and 4 pages) including pagination, and all major operations regarding the cover and text pages are calculated automatically.

The paper is suggested based on the best practice imposition rules.

You can add and/or edit any of the estimated information as needed during this process.

Page type	Pages
Cover	4
Text01	136

Page type	Base	Sheet	F	B	Paper No.	Pages	No. up	Pp./s...
Cover	03200	1	4	4	0200	4	4	16

Page type	Base	Sheet	F	B	Paper no.	Pages	No. up	Pp./s...
Text01	03800	8	2	2	200-01	16	1	16
Text01	03800	1	2	2	200-01	8	2	16

Binding type	Name	Run qty.	No. up	Block qty.	Stations
Glued	Perfect bind	2,800	1	2,928	10

Description	Work center	Qty.	Unit	Name	Time	Total costs	Rec. sales price	Quoted price
Prepress	02099	2.00	ea	Rip	0.50	26.00	32.50	32.50
Prepress	02099	1.00	ea	Photoshop	0.50	26.00	32.50	32.50
Cover 1 x 4p 4 up	02200	10.00	ea	CTP - Plates		250.00	350.00	350.00
Cover 1 x 4p 4 up	02200	8.00	ea	CTP - Run time	1.00	62.00	86.00	86.00
Cover 1 x 4p 4 up	02200	2.00		CTP versions - run time	0.20	12.40	17.20	17.20
Cover 1 x 4p 4 up	08500	1.00		Buffer before print	4.00			
Cover 1 x 4p 4 up	03200	1.00	ea	Make ready press	0.25	55.00	62.50	62.50
Cover 1 x 4p 4 up	03200	791.00	ea	Run time press	0.07	14.50	16.48	16.48
Cover 1 x 4p 4 up	03200	0.58	kg	Ink		8.72	11.63	11.63
Cover 1 x 4p 4 up	08500	1.00		Buffer before finishing	2.00			
Cover 1 x 4p 4 up	05300	1,209.00	ea	Cut after print	3.10	223.20	248.00	248.00
Cover 1 x 4p 4 up	06100	1.00	ea	Folding make ready	0.20	18.00	28.00	28.00
Cover 1 x 4p 4 up	03200	3,100.00	ft	Folding run time	0.20	43.72	49.68	49.68
Cover 1 x 4p 4 up	03200	791.00	ea	Material 0200				
Text pages 8 x 16s	02100	8.00	ea	Proof		40.00	72.00	72.00
Text pages 8 x 16s	02200	48.00	ea	Plate making	7.20	446.40	619.20	619.20
Text pages 8 x 16s	03800	1.00		Machine Make ready	0.25	23.75	35.00	35.00
Text pages 8 x 16s	03800	48.00		Plate Make ready	4.80	456.00	672.00	672.00

Scheduling

Planning can take place in three steps: Define deadlines, long term planning on graphical board and short term planning.

Deadlines

A simple plan can be created with deadlines. A deadline is a predefined date for which an activity or an action is supposed to take place, such as receive material, proofs or delivery.

Gross Planning

The gross planning checks the capacity for all the work centers involved in the job, and according to the deadlines (f.x. delivery date) the job is scheduled. If any problems are identified, the system will show a warning. This could be overloaded capacity, or materials which cannot be ready.

Gantt Chart

The DynamicsPrint Gantt chart works in real time mode. This means that all changes in the scheduling will take new jobs, created by other users, into consideration while the scheduling is done, and vice versa.

Reschedule

One process in a route can be moved to a convenient date/time, and with one key stroke all the corresponding processes is rescheduled according to that.

Description	Work center	Start date	Start time	End date	End time	Scheduled time	Material	Locked	Schedule status
Prepress	02110	11/14/2018	07:03:24 AM	11/14/2018	09:03:24 AM	2.00	-		Completed
CTP	02200	11/14/2018	09:03:24 AM	11/14/2018	10:13:59 AM	1.18	-		Completed
CTP	02200	11/14/2018	10:13:59 AM	11/14/2018	11:59:51 AM	1.76	-		Completed
Buffer before print	08500	11/14/2018	11:59:51 AM	11/14/2018	03:59:51 PM	4.00	-		Scheduled
Buffer before print	08500	11/14/2018	03:59:51 PM	11/14/2018	07:59:51 PM	4.00	-		Scheduled
Sheet print	03200	11/14/2018	10:12:53 AM	11/14/2018	10:43:21 AM	0.51	Released		Completed
Sheet print	03200	11/15/2018	07:00:00 AM	11/15/2018	10:12:53 AM	3.21	OK		Scheduled
Buffer before finishing	08500	11/15/2018	08:43:12 AM	11/15/2018	10:43:12 AM	2.00	-		Scheduled
Buffer before finishing	08500	11/15/2018	10:43:12 AM	11/15/2018	12:43:12 PM	2.00	-		Scheduled
Cut after print	05300	11/15/2018	12:43:12 PM	11/15/2018	12:59:39 PM	0.27	-		Scheduled
Folding	06100	11/15/2018	12:59:39 PM	11/15/2018	01:12:58 PM	0.22	-		Scheduled
Folding	06100	11/15/2018	01:12:58 PM	11/15/2018	01:26:17 PM	0.22	-		Scheduled
Finishing	05300	11/15/2018	01:26:17 PM	11/15/2018	01:53:11 PM	0.45	-		Scheduled
Binding	07300	11/15/2018	01:53:11 PM	11/15/2018	02:19:15 PM	0.43	-		Scheduled
Binding	07400								
Binding	07600								

Grossplan

Move down Check for collision Order Order progress Gang production Fastest delivery date Set status ∨

Work center: 032000 from 11/15/2018 to

☒ Conflict

✓	Order	Production	Customer	Name	Start date ∨	Start time	
	000886	P000310	Scheduled	Cortoso Retail Los Angeles	World War November 11 1918	11/15/2018	11:19:03 AM
	000785	P000785		Cortoso Retail San Diego	20 Dollar note	11/19/2018	03:31:29 PM
	000885	P000311		Cortoso Retail Los Angeles	Schovver book	11/20/2018	09:57:07 AM
	000810	P000310		Cortoso Retail San Diego	20 Dollar note	11/21/2018	03:38:03 PM
	000810	P000310		Cortoso Retail San Diego	20 Dollar note	11/21/2018	03:59:20 PM
	000910	P000312		Cortoso Retail Los Angeles	Magazine	11/26/2018	02:55:25 PM

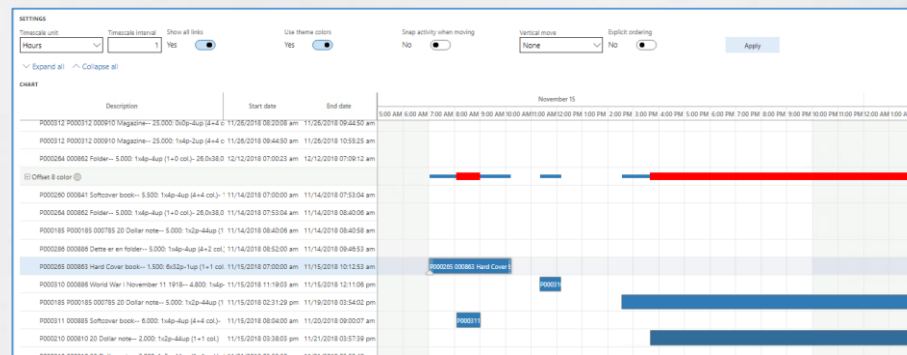
Fine plan

Move up New start time Renumber sorting Up Down ✓ Check process order Reschedule line Reschedule all Order Order progress Gang production Set status

Work center: 032000 from 11/15/2018 to

☒ Conflict

✓	Sort...	Order	Production	Customer	Name	Start date ∨	Start time
	000063	P000265	Scheduled	Cortoso Retail San Diego	Hard Cover book	11/15/2018	07:00:00 AM



Shop Floor Control

The shop floor system provides superior functionality in order to view order information and report any production incidence.

Time and material

The machine operator has all the information needed to complete the production. Start and Stop functionality provides a simple and secure registration of production data to the cost accounting. Registered time and material usage are automatically transferred to the accounting system and as 'Work in Progress'.

Job ticket

At any time, the operator can view the job ticket, which contains all relevant job information.

Job plan

You have access to all job information, including the complete schedule for the selected job.

Job status

All actions are logged in the system with various job statuses, which provide a complete overview of all production in real time.

The screenshot displays the DynamicsPrint Shop Floor Control interface. The top navigation bar includes options like 'Approve registrations', 'Set status', 'Work center', 'Production details', 'Order progress', 'Order details', 'Filter production', 'Pallets', and 'MANAGE'. Below this, a table lists production orders with columns for Name, Description, Material, Production status, Proof, Plates, Work center, Scheduled time, and Order.

Name	Description	Material	Production status	Proof	Plates	Work center	Scheduled time	Order
Leaflet 2 pager	Leaflet: 5.400: 1x2p-8up (2+2 col.)- ...					3200	0.50	000733
Brochure 32	Content-1: 15.000: 1x16p-1up (4+4 ...					3200	5.03	P000185
Brochure 32	Cover: 15.000: 1x4p-4up (4+4 col.)- ...					3200	1.35	P000185

Below the table, a detailed job ticket for 'Mural banner' is shown. It includes a preview of the mural banner image and a table of operations.

Description	Job status	Calc. time	Spent	Now	Qty	Waste qty	Correction code
HP Run time	Started	0.67	0.00	0.00			Internal

Post calculation

Data reported to the cost accounting will, through the post calculation, be compared with the planned data from the order.

Transactions from the shop floor system will be posted to the order and all actual postings will be compared with whatever was scheduled.

The cost control, or post calculation, contains data from the quotation (budget), the job description (scheduled) and from the shop floor (realized).

The postings can be reviewed in different detail levels such as:

Key numbers

The overall numbers and margins

Per category

Comparison per department such as prepress, print, finishing etc.

Per cost center

All transactions per one cost center will be shown in one line.

Per item

The most detailed screen where all operations and materials are viewed with subtotals.

