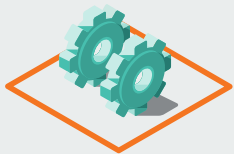


PRONTO xi

Applications Overview



Manufacturing

Make more with less

Trademarks

Pronto Software, Pronto, Pronto Xi, the Pronto interrobang logo, the P interrobang logo, Pronto Woven, Pronto iQ and Pronto Cloud are all registered trademarks of Pronto Software Limited. All other marks are the property of their respective owners.

Copyright © 2022 Pronto Software Limited (ABN 47001337248).

Disclaimer

This document contains statements related to our current and future developments that may constitute forward-looking statements.

They are subject to changes and may be available in a Pronto Xi 770 service pack or future release of Pronto Xi.

All diagrams, drawings, product screenshots and any other types of visualisations in this document, use demo or synthetic data created for display purposes only.

Manufacturing Contents

Make more with less	4
Shopfloor Manufacturing	5
Manufacturing workflow	6
Product data management	7
Bill of Materials	8
Shopfloor processes	14
Manufacturing processes	15
Quality control	15
Costing and General Ledger posting	15
Manufacturing Planning	16
Production Planning	18
Master Production Scheduling	18
Rough-cut Capacity Planning	18
Material Requirements Planning	18
Capacity Requirements Planning (CRP)	19
Manufacturing Scheduler	20
Schedule planning	21
Schedule optimisation	21
Gantt view	21
Printing and reporting	21
Laboratory	22
Test results	23
Auditing	23
Batches requiring testing	23
Selection and dispatch	23
Analysis certificates	23
Quality Management	24
Management overview	24
Document register	24
Drawings and blueprints	24
Technical publications	24
Complaints	25
Action logs	25
Technical bulletins	25
Audit scheduling	25
Equipment calibration	25
Other functionality	26

Make more with less

From trimming the fat on the factory floor to bulking up your production volume, ensure your operations are **lean, scalable** and **cost-effective**

Plan production efficiently with Shopfloor Manufacturing's paperless reports detailing manufacturing resources and raw materials. A flexible product that adapts easily to various production environments, Shopfloor Manufacturing allows you to easily implement lean manufacturing practices.

Manage production data such as bill of materials (BOMs) and item control while efficiently operating the shopfloor with detailed work orders, production feedback and more. Customise your production processes with manufacturing methods such as make to stock, make to order, configure to order and more. No matter which method of production you use, your manufacturing costs can be posted to the General Ledger to ensure that your financials remain up-to-date at all times.

Optimise your materials and capacity planning over multiple sites with Manufacturing Planning, which provides tools such as Master Production Scheduling (MPS), Material Requirements Planning (MRP), Distribution Requirements Planning (DRP), Capacity Requirements Planning (CRP) and more.

As an operations manager or team leader, Manufacturing Scheduler allows you to view your entire operations at a glance. This enables you to maximise your manufacturing resources to reduce product cycle time, foresee downtimes and meet your deadlines. Manufacturing Scheduler provides clear visibility of workload versus available capacity, and allows you to manually or systematically manage sequences and optimise work.

With Quality Management and Laboratory, you can enable continuous improvement through tighter process control and increased audibility. With the ability to log test results accurately, Pronto Xi allows you to efficiently track product quality and create official certificates to reinforce your product testing and compliance processes.

Manufacturing processes can vary greatly between industries – and even within the same company – with each production stage requiring different planning and control methods. Pronto Xi's Manufacturing modules have the flexibility to support most manufacturing processes, including high-volume production, lean manufacturing environments and mass customisation. Each module also integrates seamlessly with other Pronto Xi modules, providing a comprehensive – yet focused – view of your business.

Shopfloor Manufacturing

Whether you are planning to go lean or are looking to bulk up high volume output, Shopfloor Manufacturing will help you keep your manufacturing operations **in shape**



Trim
the fat

A highly flexible solution, Shopfloor Manufacturing includes a sub-module called Manufacturing Planning. Together, these modules will streamline your:

- Product data management – with item control, single and multiple bill of materials (BOMs), routing, work centres, product configurator and kitting
- Shopfloor control – with work orders, production feedback, alternative routings, subcontract operations, costing and General Ledger posting
- Manufacturing processes – with make to stock, repetitive, batch, make to order, assemble to order, configure to order and engineer to order
- Planning – with materials, capacity, exception reporting, subcontracting, sales and operations planning, planning BOMs, super bills and rough-cut capacity planning
- Quality control – with traceability by lot, batch and serial number
- Costing – with standard, average, actual, first-in, first-out (FIFO) and more



Manufacturing workflow

Shopfloor Manufacturing easily adapts to different production environments. This is because its Master Production Scheduling (MPS), Material Requirements Planning (MRP) and Capacity Requirements Planning (CRP) tools – as well as sales and operations planning using planning BOMs and super bills – all support make-to-stock operations.

To support lean manufacturing processes, production can be controlled with or without work orders. Raw materials usage is controlled through traditional stock issue functions, automatic backflushing of materials, or a combination of these.

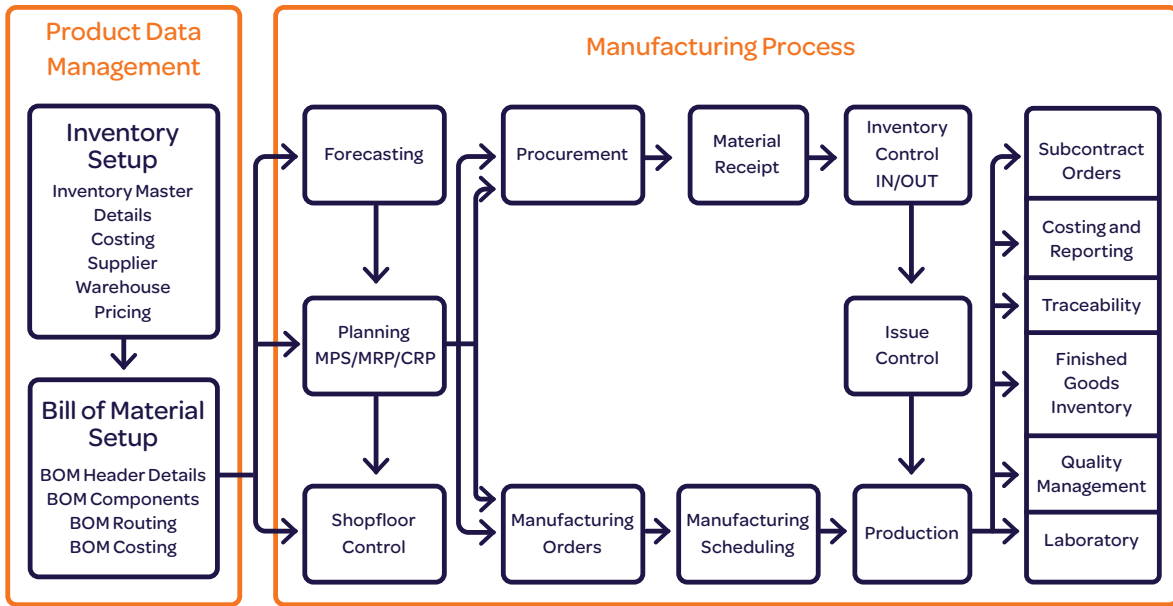
Production results can be captured in real time using barcode readers, radio frequency (RF) units, or via traditional desktop computers. Multi-level batch, lot and serial number tracking are all fully supported throughout the entire system, as is external time and attendance model integration.

Pronto Xi supports sales order kitting and manufacturing of kit items, and offers a powerful configurator module. This means that make-to-stock, make-to-order, assemble-to-order and mass customisation operations are all supported.

Choose your kit items from a predefined list, then have them shipped as a kit or, after some assembly, a finished product.

Work Or	Warehouse	Item Code	Item Description	Status	Priority	Factory Warehouse	Unit	Ordered	Completed	Qty QC
9	Melbourne FG Warehouse	PHARMA-2	Lot Tracked	Complete Updated		Factory3	EACH	500.0000	500.0000	0.0000
11	Melbourne FG Warehouse	PHARMA-2	Lot Tracked	Cancelled		Factory3	EACH	500.0000	0.0000	0.0000
12	Vic Service Warehouse	PHARMA-2	Lot Tracked	Complete Updated		Factory3	EACH	500.0000	500.0000	0.0000
100000	Work In Process Warehouse 1	ACWIRE	Annealed Copper Wire	In Progress		Factory1	M	5000.0000	2.0000	0.0000
100001	Work In Process Warehouse 1	BCWIRE	Bare Copper Wire (2mm dia.)	Committed		Factory1	M	5000000.0000	0.0000	0.0000
100002	Work In Process Warehouse 1	BCWIRE	Bare Copper Wire (2mm dia.)	Committed	A	Factory1	M	5000.0000	0.0000	0.0000
100004	Work In Process Warehouse 1	ACWIRE	Annealed Copper Wire	Cancelled		Factory1	M	5000.0000	0.0000	0.0000
100005	Work In Process Warehouse 1	ACWIRE	Annealed Copper Wire	Cancelled		Factory1	M	5000.0000	0.0000	0.0000
100006	Work In Process Warehouse 1	ACWIRE	Annealed Copper Wire	Cancelled		Factory1	M	5000.0000	0.0000	0.0000
100007	Work In Process Warehouse 1	ACWIRE	Annealed Copper Wire	Cancelled		Factory1	M	5000.0000	0.0000	0.0000
100008	Vic Service Warehouse	ASSEMBLM8	Final Assembly M8	Cancelled		Factory1	EACH	100.0000	0.0000	0.0000
100009	Vic Service Warehouse	ASSEMBLM8	Final Assembly M8	Complete Updated		Factory1	EACH	100.0000	100.0000	0.0000
100010	Vic Service Warehouse	ASSEMBLM8	Final Assembly M8	In Progress		Factory1	EACH	100.0000	0.0000	0.0000
100011	Vic Service Warehouse	SERIALMANU	Serial Manufactured	Complete Updated		Factory1	EACH	10.0000	10.0000	0.0000
100012	Vic Service Warehouse	SERIALMANU	Serial Manufactured	Cancelled		Factory1	EACH	10.0000	0.0000	0.0000
100013	Vic Service Warehouse	SERIALMANU	Serial Manufactured	In Progress		Factory1	EACH	100.0000	99.0000	1.0000
100014	Vic Service Warehouse	10000	Coca Cola 375ml	Firm Planned		Factory1	EACH	1.0000	0.0000	0.0000
500000	Work In Process Warehouse 2	BSTRCOND	Bare Stranded Conductor	In Progress		Factory2	M	100.0000	10.0000	0.0000
500001	Raw Material Warehouse 2	BSTRCOND	Bare Stranded Conductor	Committed		Factory2	M	10.0000	0.0000	0.0000
500002	Work In Process Warehouse 2	BSTRCOND	Bare Stranded Conductor	In Progress		Factory2	M	10.0000	0.0000	0.0000

Manage work orders in one convenient location



Manufacturing workflow

Product data management

A manufacturing system is controlled by the characteristics of the individual item master and its associated records. Items can be set as “normal” saleable inventory items, manufactured products, raw material (not for resale), kit, labour, special or indent.

Planning parameters determine the replenishment algorithms for the MRP or reorder system, and minimum inventory settings provide separate replenishment levels by warehouse.

Product life-cycle management is performed through a number of condition flags and time periods.

Item control occurs via lot, batch and serial number tracking.

Other crucial information such as export details, chemical or hazchem classification, and production drawings (references) can also be captured.

PRONTO XI

What are you looking for? RJ

Manufacturing

ASSEMBLYM8 (16)

Bill of Materials

Find Search Entry Correct Detail Remove Actions

Standard 20 rows

Item Code	Item Description	Factory C...	Factory Description	Type	BOM Description	Status	Lot Size	M..	Low Level
ASSEMBLYM8	Final Assembly M8	FCT2	Factory 2	Primary		Active	1.0000	Y	
BCWIRE	Bare Copper Wire (2mm dia.)	FCT1	Factory1	Primary	Bare Copper wire (2mm)	Active	5000.0000	N	
BOLTPLATE	Bolted Steel Plate	FCT2	Factory 2	Primary		Active	1.0000	Y	
BSTRCOND	Bare Stranded Conductor	FCT2	Factory 2	Primary	Bare Stranded conductor	Active	100.0000	N	
COMB001810A	Coriibu - Bulla NDP 4 SKUs			Primary		Active	1.0000	N	
COUCHKIT	Our couch and cushions			Primary		Active	1.0000	N	
KIT	HFLUX KIT			Primary		Active	1.0000	N	
KITACC	Test Kits in POS App			Primary		Active	1.0000	N	
MRPWITEST	W1 Planning Test			Primary		Active	1.0000	N	
PECK-KIT	Peckish Kit			Primary		Active	1.0000	N	
PHANTOM1	Phantom Manufactured 1	FCT2	Factory 2	Primary		Active	1.0000	Y	
PHANTOM2	Phantom Manufactured 2	FCT2	Factory 2	Primary		Active	1.0000	Y	
PHARMA 1	Consignment Product	FCT3	Factory3	Alternate		Active	100.0000	N	
PHARMA-1	Consignment Product	FCT3	Factory3	Primary		Active	100.0000	N	
PHARMA-2	Lot Tracked	FCT3	Factory3	Primary		Active	100.0000	Y	
PLF1	Pauls Test			Primary		Active	1.0000	N	
SERIALMANU	Serial Manufactured	FCT1	Factory1	Primary		Active	1.0000	Y	
SERIALMANU	Serial Manufactured	FCT1	Factory1	Alternate	Test MRP	Active	1.0000	N	

First Page Up Up Down Page Down Last

Centrally manage your bill of materials

Bill of Materials

Bill of Materials (BOM) supports up to 50 levels of sub-assembly bill structures required to produce the parent assembly. It also displays the quantities of each of these items, and manages costs, work centres and routing processes by warehouse.

The screenshot displays the 'BOM Header Information' form in the Pronto Xi system. The form is organized into several sections:

- Item Details:** Item Code (ASSEMBLYM8), Item Description (Final Assembly M8), and a 'Manufactured' status indicator.
- BOM Details:** BOM Description, BOM ID (16), Factory Code (FCT2 - Factory 2), and Type (P - Primary).
- Planning Details:** Planning Group (Select or Create...), Authorised (Y - Authorised), Authorised Start (06-JUN-2079), and Authorised End.
- Other Details:** Status (Active), Last Change (27-MAY-2021), Lot Size (1,000), Formulation Quantity (1,000), Yield % (100.00), and MPS Item (Y).
- Routing:** Default Route ID (9) and Code (ASSEMBLY).
- Costs (Per 1 EACH):** A table showing Assembly Costs (Material: 0.0000, Labour: 0.0000), Sub-Assembly Costs (Material: 0.0000, Labour: 0.0000), Fixed Costs (Fixed Cost 1: 0.0000, Fixed Cost 2: 0.0000), and Combined Costs (Material: 0.0000).

Get a high level view of BOM data, with access to detailed information if needed

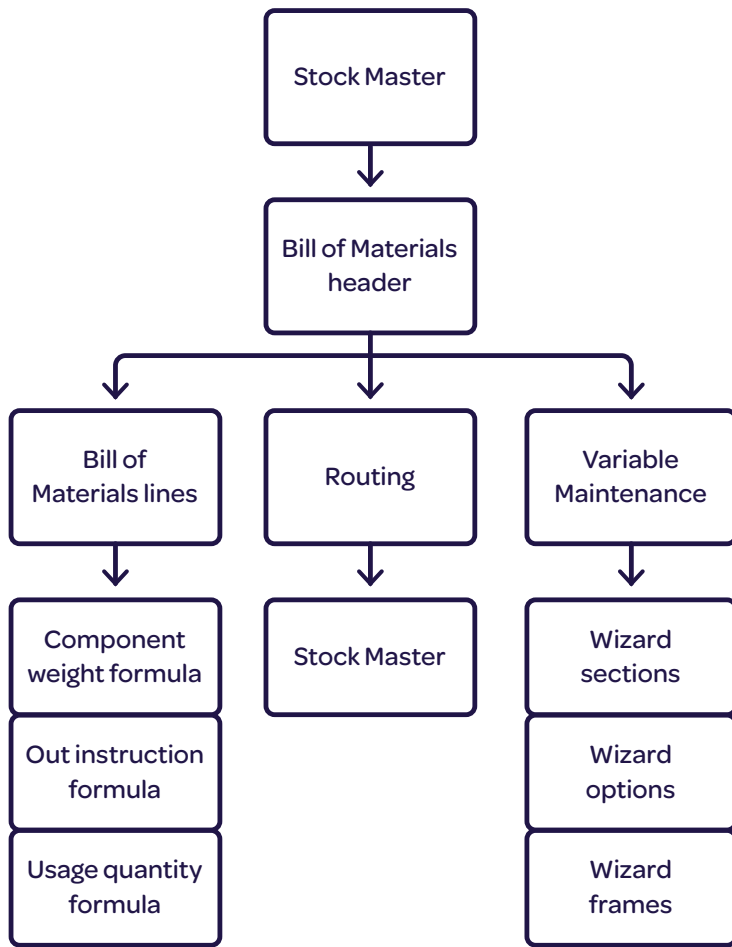
Different types of bills can be built to meet product life cycles – from planning to configured to super bills – that manage every variation of configurable products in make-to-order, assemble-to-order or engineer-to-order environments.

Create and store versions of the same bill for multiple factories, as well as different types of versions. These can be managed through a combination of BOM effective date, version control, engineering change order (ECO) or user-controlled flags. Pronto Xi will also handle designators, split fills, calculated component quantities and other industry-specific solutions.

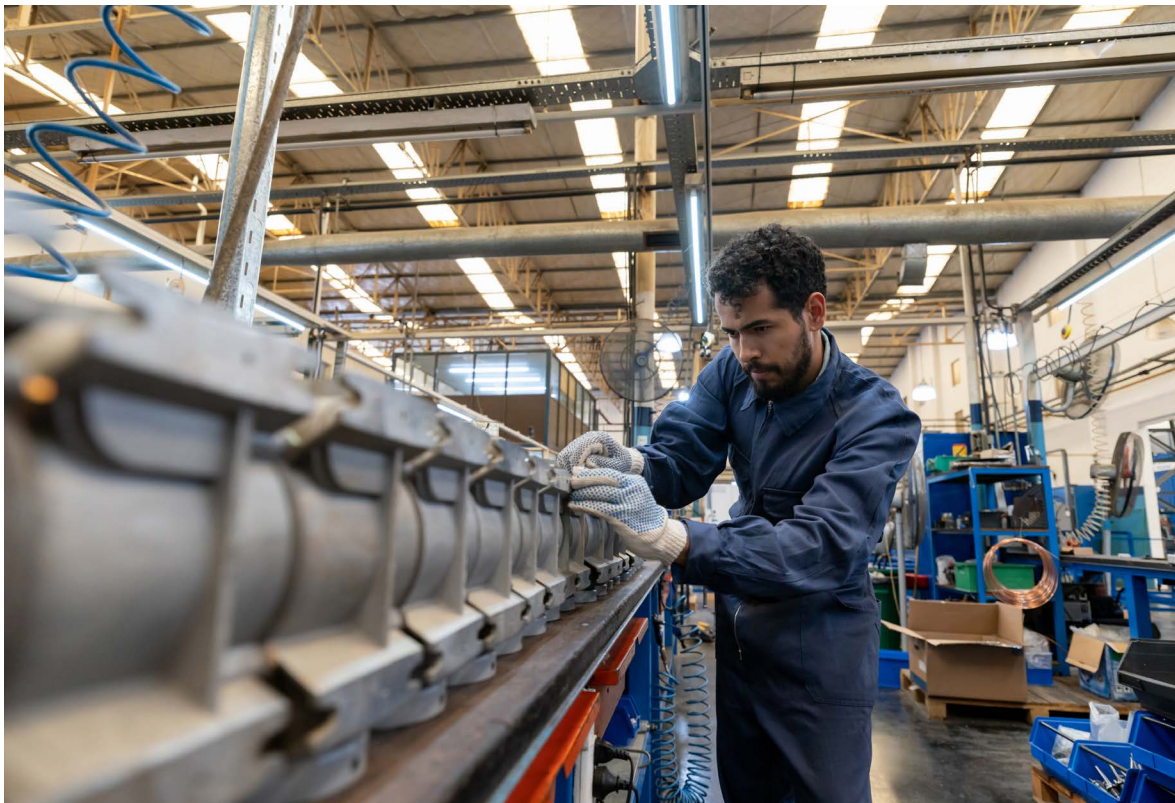
A BOM can be costed in different ways, including standard cost, average cost, FIFO and warehouse level. For added flexibility, you can vary the costing methods for different items – for example, standard cost may be set for a stock item, while FIFO or average cost can be set for a warehouse item.

In addition, you have the ability to add either fixed or average costs (such as overhead operating costs) per unit, which improves the accuracy of the true BOM cost.

In multi-factory manufacturing operations, Pronto Xi delivers BOM cost rollup by production factory. Where the same BOM exists across multiple factories, a cost simulation feature uses source warehouse mapping to ensure the information for each factory is as accurate as possible.



BOM structure



Routing, operations and work centres

These are the sequential steps, operations, equipment and the setup and run times required to make a particular product. This information, together with the associated labour and overhead costs, is used to support:

- discrete manufacturing
- rate-based production
- parallel routing
- multiple cavity tooling
- alternative routing streams
- subcontracting operations

If production capacity reporting is not required, labour and overhead costs can be recorded via Labour and Special Items rather than using the Pronto Xi routing.

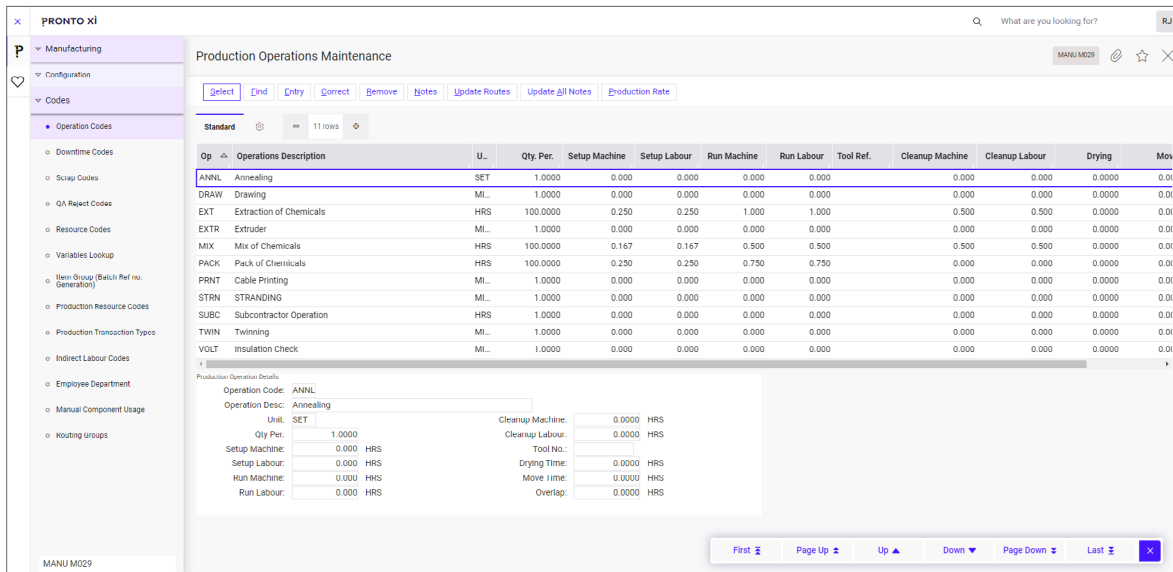
BOMs and routings can also be maintained separately. You can easily define or change component information for bills or operation details. A BOM or routing can be created as new, or can be modified based on an existing version. Revisions are time-stamped, so you can determine the latest version if multiple revisions occur on the same date

The screenshot displays the 'Route Maintenance' interface in the Pronto Xi system. The main window shows details for 'Route ID: 5' with fields for Route Code (EXTRACT), Description, Route ID (5), Factory (FCT3 - Factory3), and Lot Size (1.0000). Below this is a 'Routing Information' table:

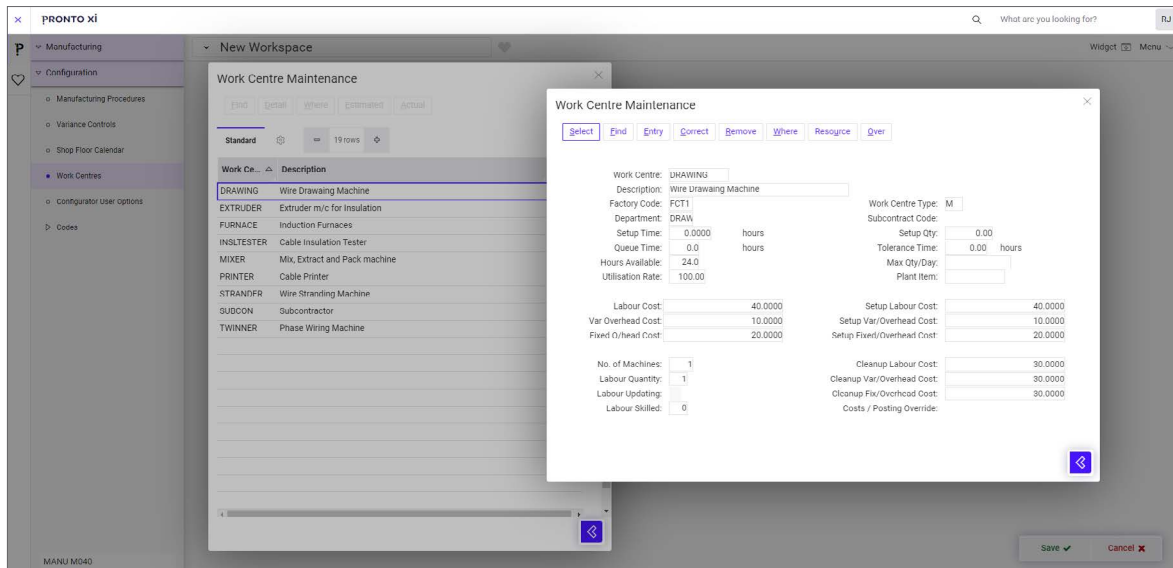
Seq	Pr	N	Code	Operations Description	U	Main Centre	Qty Per	Setup Mach	Setup Labour	Run Machine	Run Labour	Cleanup Ma	Cleanup La	Start Date
10	20	EXT		Extraction of Chemicals	HRS	MIXER	100.0	0.2500	0.2500	1.0000	1.0000	0.5000	0.5000	25-NOV-2019
20	30	MIX		Mix of Chemicals	HRS	MIXER	100.0	0.2500	0.2500	1.0000	1.0000	0.5000	0.0000	25-NOV-2019
30		PACK		Pack of Chemicals	HRS	MIXER	100.0	0.2500	0.2500	0.7500	0.7500	0.0000	0.0000	25-NOV-2019

Below the table are sections for 'Sequencing & Operation' (with fields for Alt, Sequence, Prev Seq, Next Seq, Operation, Main Work Centre, and Quantity Produced), 'Timing & Effective Dates' (with fields for Setup Machine, Setup Labour, Run Machine, Run Labour, Cleanup Machine, Cleanup Labour, Start Date, and End Date), and 'Post Operation & Alternate Routing' (with fields for Drying Time, Move Time, Alternate Work Centre, All Run Time, Multiplier, and CRP Min. Time).

Get route planning and setup information at your fingertips



Review detailed operations information for planning



Set up unique work centre costings and parameters

Exploded BOM view

A data grid view of exploded BOMs is available from the Product Data Management menu.

This view shows details across all levels of sub-assembly components, making it easier to filter and sort your BOMs.

Product configuration

Shopfloor Manufacturing provides powerful configuration and kitting features to support make-to-order, assemble-to-order and engineer-to-order industries. Straightforward features and option scenarios are easily implemented through a kit BOM.

The Sales Configurator equips sales personnel with an easy-to-use wizard-based interface, designed to step the user through item configuration, BOM creation and quoting.

The Sales Configurator acts as a virtual salesperson, enabling users to build a tailored solution based on a set of components and characteristics defined within the configurable BOM. The outcome of this process is the generation of a sales order or quotation order. The Sales Configurator also allows you to create unlimited BOM variations based on a generic BOM, which is a master bill (or master recipe) that is designed for every possible permutation of an item, with built-in constraints for product and manufacturing processes.

When issuing a quotation for a configured item, you can build the item up-front or when the quotation has been accepted by your customer. This reduces the need to manage the life cycle of many discrete inventory items if the quotation is rejected.

The Sales Configurator includes tools to calculate materials usage and production times, including setup, costs and prices. Because relationships between various parameters are typically linear and arithmetic, you can use lookup tables to provide links for any unique parameter relationships that may exist.

This simplified approach takes away the complexity found in more traditional item configuration processes. Reduce the likelihood of error by navigating through a series of radio buttons designed to prompt users for a single response to pre-defined variables. Easily visualise each component of the configuration by using the free space in the wizard screens to display images throughout the stages of configuration.

Se...	Variable	Description	Type	Adjust	Appe...	Gen Seq	Table...	Minimum	Maximum	Value	Unit	Keywords	Key
0.0	COLOUR	Colour	TA		C			0.00	0.00	RED			
0.0	D1	Depth 1	N	N				1.00	2700.00	1			
0.0	DEPTH	Depth	N	Y				1.00	2.00	1			
0.0	G_VAR1	Global variable 1	A					0.00	0.00	EYE			
0.0	L1	Length 1	N	N	1			80.00	2700.00	1300			
0.0	LENGTH	Length	N	Y				10.00	50.00	10			
0.0	NUM_LAPS	No. of Laps	N	Y				1.00	5.00	2			
0.0	WIDTH	Width	N	Y				10.00	30.00	10			

Create BOMs on the fly with the Sales Configurator



The Sales Configurator is seamlessly linked to the Project module, allowing users to create projects and attach configured BOMs.

Offering in-built flexibility and oversight of all stages of the process, Project achieves best practice within the industry. You can create orders from Manufacturing, Sales Configurator or general bill of materials, or simply raise general material requisitions or purchase orders.

Engineer to Order (ETO) applies individual engineering design or significant customisation to satisfy a customer's unique specification. As an integrated solution, Project can take on most ETO requirements, including the costing and tracking of all transactions necessary for ETO work to be completed.



1720 Production Feedback

Standard 20 rows

Transacti...	Transaction Type	Employee Name	Work Cent...	WO/Ref	Item Code	Item Description	Finished Warehouse	Component Warehouse
22-MAR-2022	NP - Non-wo Production Qty	L11	NEW	1720	MC-REGL	Mikes Regression Lot Tracked		Raw Materials
23-MAR-2022	NP - Non-wo Production Qty			1728	MC-REGL	Mikes Regression Lot Tracked	Melbourne Main Warehouse	Raw Materials
23-MAR-2022	NP - Non-wo Production Qty		NEW	1729	MC-REGL	Mikes Regression Lot Tracked	Melbourne Main Warehouse	Raw Materials
23-MAR-2022	NP - Non-wo Production Qty			1730	MC-REGL	Mikes Regression Lot Tracked	Melbourne Main Warehouse	Raw Materials
23-MAR-2022	NS - Non-wo Production (Scr...			1727	MC-REGL	Mikes Regression Lot Tracked	Melbourne Main Warehouse	Raw Materials
29-MAR-2022	P - Production Qty	BRAIN		AA887	BEAD-M01	Bead Manufactured Item		Raw Materials
31-MAR-2022	P - Production Qty	Able Dean	180	AA887	BEAD-M01	Bead Manufactured Item	Melbourne Main Warehouse	Raw Materials
07-APR-2022	SD - Start of day	Dart Simon						
07-APR-2022	SW - Start of Work	Dart Simon	ASSY	AA910	BEAD-GADGET	A manufactured gadget	Melbourne Main Warehouse	Raw Materials
11-APR-2022	P - Production Qty	Able Dean	180				Melbourne Main Warehouse	Raw Materials
11-APR-2022	P - Production Qty	Able Dean	180				Melbourne Main Warehouse	Raw Materials
11-APR-2022	P - Production Qty	Able Dean	69				Melbourne Main Warehouse	Raw Materials
12-APR-2022	P - Production Qty	Dart Simon	69				Melbourne Main Warehouse	Raw Materials
22-APR-2022	SD - Start of day	Able Dean						
27-APR-2022	P - Production Qty		180				Melbourne Main Warehouse	Raw Materials
03-MAY-2022	P - Production Qty		ASSY	AA918	BEAD-GADGET	A manufactured gadget	Melbourne Main Warehouse	Raw Materials
03-MAY-2022	P - Production Qty	Dart Simon	ASSY	AA918	RFAD-GADGET	A manufactured gadget	Melbourne Main Warehouse	Raw Materials
03-MAY-2022	P - Production Qty		180	AA918	BEAD-GADGET	A manufactured gadget	Melbourne Main Warehouse	Raw Materials

First Page Up Up Down Page Down Last

Easy to use data grids for production feedback

Shopfloor processes

Work orders

Work orders are typically used to manage the planning, execution, raw materials consumption and feedback of production results.

In a lean manufacturing environment, Pronto Xi offers orderless and paperless recording of production, using back-flush methods for raw materials consumption and progressive crediting of labour and overhead "hours earned".

Special work order types and processes are available for disassembly-type industries, and for other special operations such as rework and repack.

Production feedback

Production feedback results can be entered in various ways.

As a web-based application with a responsive interface, Shopfloor Manufacturing allows shopfloor managers to easily enter product results on the go using a mobile device.

Back-office users have several ways to enter production results, including the ability to bulk enter production feedback. Quick production entry screens also allow users to copy and paste from external applications.

Alternative routing

Shopfloor Manufacturing allows you to select a specific route from a predefined range on the day of actual production.

You can also make changes to the route ID against an open work order, whether it's at "firm planned" or "committed" status. This provides greater flexibility if you need to make quick changes to individual work orders before production has commenced.

Lot, batch and serial number tracking are supported for finished goods, as well as for components or raw materials.

Subcontracting

With Shopfloor Manufacturing's subcontracting functionality, you can raise purchase orders at various times throughout the life cycle of the work order.

The completion of a subcontractor process can be controlled by either standard purchasing goods receipt or work order production entry.

Shopfloor Manufacturing fully preserves the integrity of stock control of goods produced and payment for subcontracting services, without the need for double-handling or the creation of dummy items.

Manufacturing processes

Shopfloor Manufacturing supports a range of processes that make it easy to manage your make-to-stock, repetitive and batch production functions, which together form a vital hub of supply chain management.

These processes include:

- materials planning via forecasting
- sales orders and stock replenishment policies
- automatic creation of work orders and purchase orders
- initiation of subcontract operations
- creation of vendor schedules
- capacity planning of actual production
- release of shopfloor documentation
- reporting of production results.

Discrete manufacturing, rate-based production, parallel routing, multiple cavity tooling, alternative routing streams and subcontract operations are all supported.

Other standard features include make-to-order, assemble-to-order, configure-to-order and engineer-to-order manufacturing.

Quality control

Traceability

Shopfloor Manufacturing includes an extensive range of traceability tools.

Manufactured goods and purchased raw materials can be tracked by manufacturing batch or lot.

Raw materials and components can also be lot-tracked by their purchase order number if required.

Serial numbered items can be recorded and tracked at various user-controllable transaction points.

Quality assurance

Purchased or manufactured items can be nominated to require quality assurance (QA) inspection before they are formally accepted as saleable items. Following QA inspection, items can be either fully or partially accepted, rejected or returned.

Use-by-date

In many process industries, shelf-life is an important issue. Pronto Xi can automatically generate use-by dates for product labels and other documentation.

Costing and General Ledger posting

Cost calculations and postings to General Ledger can be controlled in a number of ways. Costs can be generated from standard costs, single and multiple BOMs and routings. Alternatively, they can be generated from actual labour and machine time reports, actual cash costs posted to the work order, or timesheet records.

The General Ledger account structure can be set up to attribute costs and variances to a factory, department, item group or work centre. Any updates to product costs and inventory will be handled according to the system cost selected by the user.

Manufacturing modules can be linked to Payroll by recording the times from the work order against the employee code.



Manufacturing Planning

Optimise your materials and capacity planning over single or multiple sites with Manufacturing Planning

Tailored
complexity

By using a combination of actual orders, forecasts, Distribution Requirements Planning (DRP), days cover, and the minimum/maximum replenishment logic, Pronto Xi makes it easy to aggregate demand from a network of distribution centres.

Production Planning, Master Production Scheduling (MPS), Material Requirements Planning (MRP), DRP, super bills, planning BOMs and supply/demand data from the inventory and distribution system are used to create a list of planned work orders.

Once verified, planned work orders are automatically converted to a work order or purchase order in bulk, grouped by product or other operational requirements. The system generates MRP exception messages, while factory loading capacity and materials information can be displayed graphically via Manufacturing Scheduler.

The screenshot shows the 'MPS Maintenance/Enquiry' screen in Pronto Xi. The main content area displays 'Item Details' for 'ASSEMBLYM8'. Key parameters include: Factory: FCT2, Batch Qty: 1.00, Lead Time: 10 days, D.T.F.: 7 days, Unit Desc: EACH, Min. Stock: 10, QA Time: 0 days, P.T.F.: 14 days, Plan Group: Last MPS Run: 27-MAY-2021, EOO: 1, Reorder C.: 0, On Hand: 0. The status is 'CHANGED'. Below the details is a table showing production quantities for various dates:

	Past Due	23JUN21	21JUL21	18AUG21	15SEP21	13OCT21	10NOV21
F/cast:		80	60	60	40	40	
S.Orders:							
Brch/Oth:							
MPS Qty:	10	80	60	60	40	40	
Proj Av.:	0	10	10	10	10	10	10
Av.to.P.:		10	80	60	40	40	

	08DEC21	05JAN22	02FEB22	02MAR22	30MAR22	27APR22	25MAY22
F/cast:							
S.Orders:							
Brch/Oth:							
MPS Qty:							
Proj Av.:	10	10	10	10	10	10	10
Av.to.P.:							

Display when production will be released, completed and available

The screenshot shows the 'Receipt Details' screen in Pronto Xi. The main content area displays a table with the following data:

Day of Need	Quantity	Ty.	Order no.	B	Supp/ItemDue	Whse	Status/Start Date	SO/Link/Alt
27-MAY-2021	10		Planned		10-JUN-2021		27-MAY-2021	
01-JUL-2021	80		Planned		01-JUL-2021		17-JUN-2021	
30-JUL-2021	60		Planned		30-JUL-2021		16-JUL-2021	
01-SEP-2021	60		Planned		01-SEP-2021		18-AUG-2021	
01-OCT-2021	40		Planned		01-OCT-2021		17-SEP-2021	
01-NOV-2021	40		Planned		01-NOV-2021		18-OCT-2021	

Manage planning requirements in real time

Production Planning

Production Planning (PP), super BOMs and planning BOMs facilitate the sales and operations planning process. The Production Plan sets the overall level of manufacturing output and other activities to most effectively satisfy the current and projected levels of sales and forecasts.

Production Plans can be entered by quantity or dollars at the planning group level and exploded via a super BOM and bill of resource to help establish and develop production rates, support plans for material procurements, and workforce requirements.

Master Production Scheduling

Master Production Scheduling (MPS) is the anticipated build plan for critical manufactured items that drive the overall manufacturing plan. It includes the projected on-hand inventory and the available-to-promise quantity as represented by demand, forecast and backlog.

The MPS sets out the quantity of each manufactured item that you plan to manufacture each month. Planned quantities can be set up to 12 months in advance.

A data grid in the MPS Maintenance/Enquiry screen enables you to sort and filter MPS data. Filter using inventory fields such as planning group, reorder policy, warehouse and condition code, then once filtered, save views and drill through to MPS results, including pegging details, receipts and exception details.

Rough-cut Capacity Planning

Rough-Cut Capacity Planning (RCCP) enables you to convert the MPS into requirements for key resources such as labour, machines, warehouse space and suppliers' capabilities.

Material Requirements Planning

Material Requirements Planning (MRP) organises the release of recommended replenishment orders at the appropriate date in the current working time bucket to satisfy the demand for items when they become due.

With MRP you can:

- create planned work order requirements for components and sub-assemblies.
- produce a list of suggested purchases to satisfy the known demand.
- plan the completion dates for these work orders by using lead time.
- print released planned orders and exception reports

Planned work orders are a result of the time phasing of demand management. The net requirement for items is exploded through all levels of their BOM to determine the gross requirements at each level. Applying lead time and adjusting for on-hand and on-order quantities at each level determines the timing and quantity of purchasing and manufacturing.

MRP Enquiry

Item Code: ASSEMBLYM8 Description: Final Assembly M8

Item Type: MPS Item Item Group: Unit Code: EAGI1 Condition:

Supplier: FCT2 Lead Time: 10 QA Lead Time: 0 Pln Policy: D

Fct/Whse: FCT2 Factory 2 Pack Qty: 1 Min Days Cover: 0 Level: 0

On Hand: 0 Min. Stock: 10 Last MRP Run: 27-MAY-2021 EQQ: 1

	Past Due	23-JUN-21	21-JUL-21	18-AUG-21	15-SEP-21	13-OCT-21	10-NOV-21
Gross Reqmt:	0		80	60	60	40	40
Sched Rec:	0						
Net Reqmt:	0	10	80	60	60	40	40
Pfd Ord Rec:	0	10	80	60	60	40	40
Proj O/Hand:	0	10	10	10	10	10	10
Pfd Ord Ret:	0	90	60	60	0	40	40

	08-DEC-21	05-JAN-22	02-FEB-22	02-MAR-22	30-MAR-22	27-APR-22	25-MAY-22
Gross Reqmt:							
Sched Rec:							
Net Reqmt:	0	0	0	0	0	0	0
Pfd Ord Rec:	0	0	0	0	0	0	0
Proj O/Hand:	10	10	10	10	10	10	10
Pfd Ord Ret:	0	0	0	0	0	0	0

See material requirements for products at a single glance

Pronto Xi's planning engine enables sourcing and production visibility across multiple factories. It facilitates alternate factory planning and results in more efficient manufacturing operations.

In addition, MRP, DRP and MPS run sequentially in a single routine, which ensures up-to-date demand quantities.

A vertical MRP view, in addition to a horizontal view, helps you to easily visualise results.

Capacity Requirements Planning (CRP)

Capacity Requirements Planning (CRP) creates a detailed plan by department or work centre based on the constraints as defined by the calendar of resource availability.

The CRP process uses finite scheduling and infinite scheduling to produce a detailed plan of all open work orders and planned requirements from the MRP.





Manufacturing Scheduler

Make sure you have the right hands in the right places with Manufacturing Scheduler

Track and yield

Using a Windows-based drag-and-drop application, Manufacturing Scheduler simplifies scheduling and planning for work centres that process many jobs simultaneously.

You can manage variations in the current schedule, see when priorities have changed or a work centre is unavailable, and view the available options to resolve an issue.

Manufacturing Scheduler also displays visual warnings when work orders are late or when scheduling conflicts occur within a work centre.

Schedule planning

An electronic whiteboard scheduler, Manufacturing Scheduler is used in conjunction with Capacity Requirements Planning (CRP). CRP information used by Manufacturing Scheduler includes a calendar of resource availability, and work centre and work order data.

For each work centre, operations can be moved to a new production slot with a simple drag and drop. Operations can be sorted based on multiple criteria. Once the order of the jobs is set, Manufacturing Scheduler automatically sequences each operation.

You can lock operations or entire work centres once the scheduling has been completed. Locked operations are taken into account according to your settings if you re-run CRP.

Schedule optimisation

As a visual management tool, Manufacturing Scheduler allows you to easily manage your workload to factory capacity constraints with the use of CRP.

You can refine the timing of product batches during weekly production cycles and, for added flexibility, sequence and optimise work based on user-definable parameters.

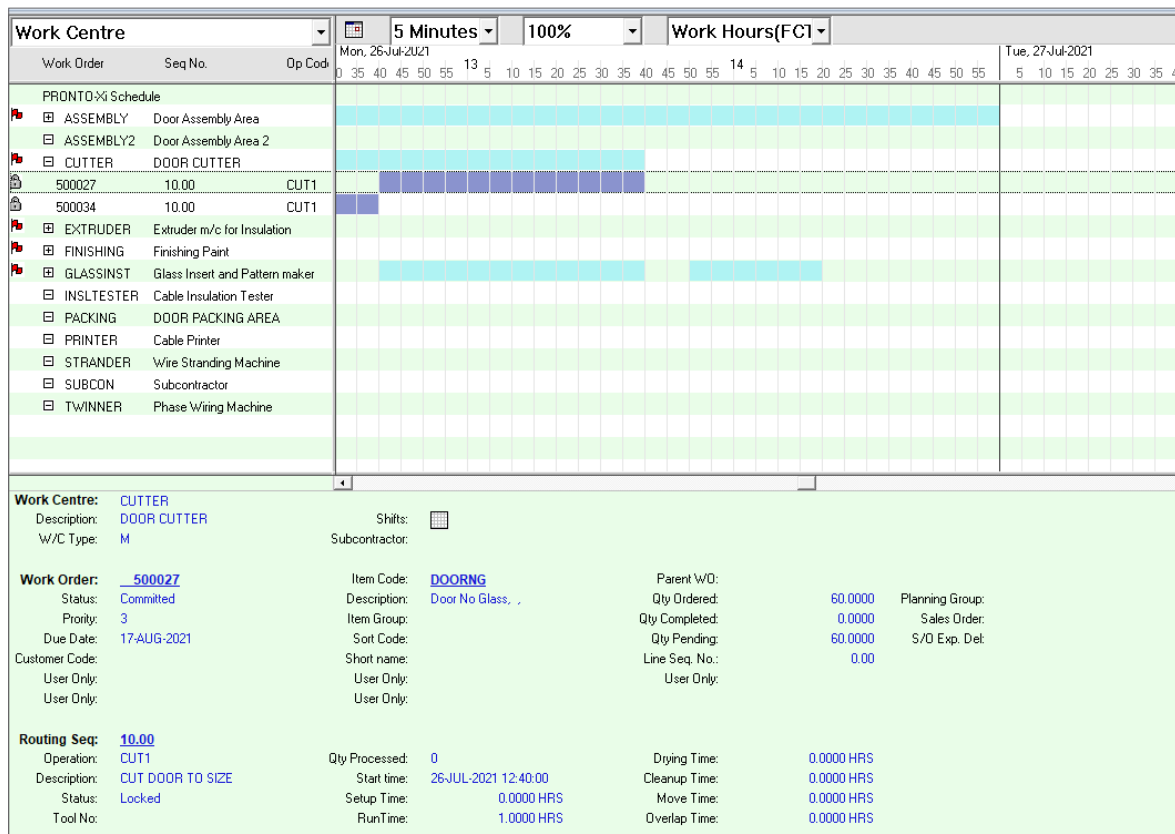
Alternative schedules can be developed and saved as "what-if" scenarios before the data is submitted to Pronto Xi, where all relevant elements are updated.

Gantt view

Manufacturing Scheduler allows you to sort the operations of a selected product by the routing sequence in a Gantt chart. In this view, you can analyse operations in line with the work order routing sequence by displaying links between operations. This simplifies the maintenance and optimisation of production schedules.

Printing and reporting

Manufacturing Scheduler data (including routing sequence, work centre and work order data) can be exported to a Microsoft Excel spreadsheet template, allowing you to report and print the production plan.



Visualisation that enable managing production schedules

Laboratory

Make sure you are **always dealing with the best** by testing, recording and comparing your purchased and manufactured products in Laboratory

Making
the
grade

Laboratory gives you the power to make reprocessing decisions quickly and confidently.

Record and track quality or test criteria for purchased and manufactured products, and lower your operating costs by identifying the lowest complying set of products for any given requirement. Grade test product batches, then classify graded products depending on desired usage, release or future development.

Test results

Laboratory makes it easy to handle numerous types of test results. Grading or classification can be done based on all types of results.

If you are manufacturing the product, the test results will always be actual results.

For purchased products, results can be entered based on a sample or the certificate of analysis provided by the supplier. Actual results can be entered separately and compared against the supplier's sample or certificate of analysis.

As each batch passes through its test procedures, you can enter the results obtained, along with related notes.

Once the test results are entered, the batch can be reclassified. If all classification criteria are met, Laboratory will automatically classify the batch in the highest possible grade.

Reclassified batches are only added to stock and made available for sale if the new classification is flagged as usable.

Auditing

Classification changes and test result changes, are fully audited.

Batches requiring testing

Laboratory provides a screen that displays all non-classified lots and batches you have recently manufactured or received from your supplier. You can use this screen to edit test results and classify these batches.

Selection and dispatch

If a sales order requires a specific grade of product, Pronto Xi only allows you to select lots that meet the specifications for that grade or a higher grade.

Laboratory highlights the lowest possible complying batch that meets requirements, so that higher-grade lots are not unnecessarily selected or dispatched.

Regardless of customer requirements, only saleable grades can be selected during the dispatch process.

Analysis certificates

Products that have passed your quality tests can be automatically issued with an official certificate of analysis, which can be provided to your customers or to government agencies. The layout and test results printed on the certification document can be tailored to your needs.

PRONTO XI

Testing Required

Correct | Notes | Reclassify | Select Range | Page Swap | Test Copy | Print | Doc | Audit

Details

Item Code: HPLL1 | Batch Reference: AD3

Description: Lab Test

Type: A | Classification: 000

COA Date: | Classified: |

Supplier: HPSUP | Received: |

Results

Test	Result	COA Result	Test ID	Out	Spec	Freq
Temp Check	1.2	0.0				
Moisture Check	1.2	1.4	2			
ASTM 401 Test	Pass	Pass				

Page: 1 of 1

Comment:

OK ✓ | Cancel ✕ | Previous ▲ | Next ▼

Detail testing requirements for products

Quality Management

With **flexible and comprehensive** quality management procedures, Quality Management is your key to ongoing optimisation

Quality Management supports continuous improvement and quality management through tighter process control, increased auditing capabilities and certification requirements.

Management overview

Give your managers a clear overview of the status of audits, corrective actions, suggestions and complaints.

Document register

Record and maintain your organisation's documents with the Document Register.

Although it is suitable for any type of document, the register is normally used for internal documents. Details recorded in the register include the document's location on the network, who authorised the document, and which department is responsible for it.

Drawings and blueprints

Catalogue technical drawings, blueprints, files or construction details with the Drawing Index.

The locations of drawings and blueprints – both physical artefacts and files – can be entered and maintained. Drawings can be accessed over the network and opened with an appropriate viewer.

Technical publications

Record and maintain a complete library register of standard reference works, technical bulletins, magazines and periodicals, and any other technical publication used by your organisation with the Technical Library.

Quality
control



Complaints

Log any complaint or request for action that has been received from a customer or generated internally.

You can record a brief description of the complaint, along with the name of the department or employee affected by the complaint.

If the complaint regards an inventory item, you can enter the item code to ensure the complaint records are specific to the one item. You may then enter detailed notes about the nature of the complaint for further action.

Complaints are linked to corrective action logs.

Complaints can be reviewed by customer or by inventory item for Accounts Receivable and Inventory. A customer invoice can also be flagged as "in dispute" and a debtor complaint raised.

Action logs

The Action List allows you to review and maintain log/list/corrective action details. Logged problems are assigned to specific staff for action. When the complaint has been resolved, the resolution is recorded for future reference.

Using the action list, you can also implement an electronic "suggestion box" and use

it as a Corrective Action Request (CAR). Quality Management also provides comprehensive reporting functionality.

Technical bulletins

Technical bulletins can be viewed, maintained and searched by your organisation. Quality Management maintains a separate record of the bulletins you have issued, showing the date of issue, the date it became effective and the author.

Audit scheduling

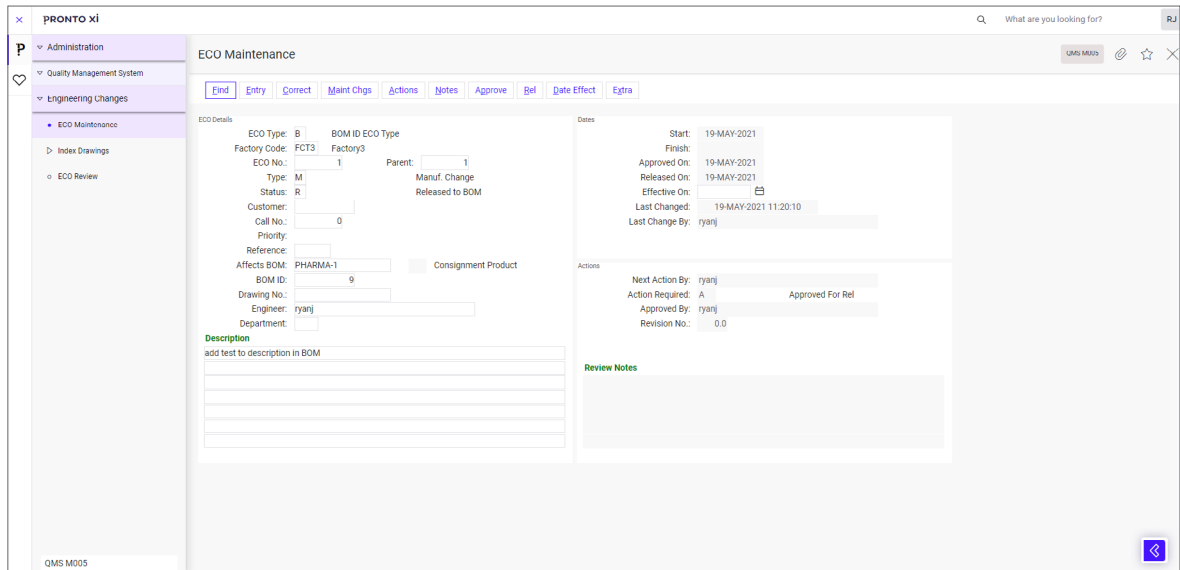
As a part of your organisation's quality standard certification, it may be necessary to conduct regular audits of your procedures. With Quality Management you can schedule the audits as appropriate, maintain details of necessary corrective actions, and ensure each action is performed.

Equipment calibration

With automated warnings if a calibration is overdue, the Calibration Register makes it easy to maintain your equipment calibration records. You can specify how frequently calibrations are needed on each piece of equipment, the method to be used, and the level of accuracy required.

The screenshot shows the 'PRONTO XI' software interface. On the left is a navigation sidebar with a tree view containing 'Administration', 'Quality Management System', and 'Calibration Register' (which is selected). The main window title is 'Calibration Register'. At the top right of the main window is a search bar with the text 'What are you looking for?' and a 'RJ' button. Below the title bar is a toolbar with buttons for 'Find', 'Entry', 'Correct', 'Remove', 'Trans', 'Search', 'Next Due', 'Past Due', 'Notes', and 'Extra'. The main content area is divided into three sections: 'Id Details' with fields for 'Id. Code: UALIPR1', 'Desc: Caliper', and 'Location: M1'; 'Asset Details' with fields for 'Asset Code: 1111', 'Asset No: 9', 'Manufacturer: CALLIPER', 'Model: 123ABC', 'Location: 1M', 'Acquisition: 08-NOV-2015', and 'Grp: PLT'; and 'Calibration Details' with fields for 'Calibration Interval: U', 'Production Units', 'Source: EXTRUDER', 'Method: Measure', 'Accuracy: 1', 'Last Done: 14-MAY-2021', 'Next Due:', and 'Past Due:'. At the bottom left of the main window, there is a small 'QMS MU04' label.

Manage your equipment calibration requirements



Track system settings changes with Engineering Change Orders

Other functionality

Quality Management is integrated with other Pronto Xi modules, allowing you access to a range of features that support quality improvement.

Product batch/lot search

Pronto Xi gives you the ability to search for and trace product batches/lots, and to view and edit quality information for specific products. This includes information about products that have failed quality procedures or have been scrapped.

Engineering change orders

The Engineering Change Order (ECO) Register allows you to control the updating of a bill of material (BOM) or product specification through a formalised process.

Instigated by service, manufacturing or research and development staff, or by a customer call, these specification changes are monitored and released for action via an approval process. This means that Pronto Xi maintains a complete historical record of all ECOs.

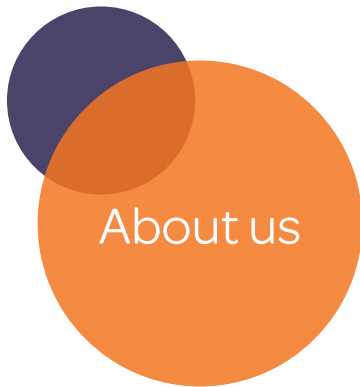
Vendor performance analysis

Pronto Xi allows you to monitor the performance of vendors to check they are meeting your standards or contractual obligations.

Laboratory

You can access the Laboratory module from within Quality Management to monitor test results and ensure product consistency.





PRONTO SOFTWARE

We are an Australian developer of award winning business management and analytics solutions. Pronto Xi, our Enterprise Resource Planning (ERP) software, integrates accounting, operational and mobile features in a single system – optimising business processes and unlocking actionable insights. That's why for more than 40 years, over 1,500 Australian and global organisations, across a wide range of industries, have trusted Pronto Xi to simplify their most complex challenges.

With headquarters and our Development Centre located in Melbourne, we have support offices and consultants based across Australia, as well as a global network of Resellers and Solution Partners. Specialised business units within Pronto Software have the expertise to assist you with pivotal technology – Digital Transformation with Pronto Woven, Cloud and Hosting services with Pronto Cloud and Business Intelligence solutions with Pronto iQ.

When you choose Pronto Software, you gain a team with deep industry experience, giving us the ability to understand your specific needs and build innovative solutions that drive business growth and revenue.

info@pronto.net
1300 PRONTO (1300 77 66 86)

 pronto.net
 @ProntoSoftware

 Pronto-Software
 ProntoSoftware