

Rules Based Calculations

The Quanti system allows the formulas, yields and working variables to be calculated based on a set of rules that can be determined by either specific mathematical formulae.

The Yield calculations are used in the determination of quantities required in the BOM and to assist in calculating material requirements and costs of materials used in jobs.

The Formula calculations are used by the system to determine the result of specific rules based equations that need to be calculated in order to assign a setup or run time or a fixed or variable scrap value to a particular component of the BOM.

The Working Variables calculations are used where the formula is either repetitive and need only be calculated once but used several times or a formula that is only required to calculate values for display purposes or as part of the working for other formulas or calculations as shown.

FormulaID	Rank	Operand1	Operator	Operand2	Ordering
Product Type : 3 Layer Ext Print Lam Slit					
MPID20-S0-OP10-R10	10	1	*	uomconv	903
MPID20-S1-OP10-R10	10	1	*	1	904
MPID20-S1-OP10-R20	10	1	*	packing_rolls	905
MPID20-S2-OP10-R10	10	1	*	1	906
MPID20-S2-OP10-R20	10	@Substrates.sub3_yield	/	1000	907
MPID20-S2-OP10-R30	10	@Substrates.sub2_width	*	@Lamination.lam2_adhesivegsm	908
MPID20-S2-OP10-R30	20	Rank-10	/	1000000	909
MPID20-S3-OP10-R10	10	1	*	1	910
MPID20-S3-OP10-R20	10	@Substrates.sub2_yield	/	1000	911
MPID20-S3-OP10-R30	10	@Substrates.sub1_width	*	@Lamination.lam1_adhesivegsm	912
MPID20-S3-OP10-R30	20	Rank-10	/	1000000	913
MPID20-S4-OP10-R10	10	1	*	@Printing.prt_colours	914
MPID20-S4-OP20-R10	10	@Substrates.sub1_yield	/	1000	915

PouchType	BaseUOM	TargetUOM	Rank	Operand1	Operator	Operand2
WorkingVar : glb_cutoff						
WorkingVar : glb_final_width						
WorkingVar : glb_no_across						
WorkingVar : inkcolour						
NONE	NONE	NONE	10.00	@Printing.prt_covcolour	*	@Printing.prt_gsmcolour
NONE	NONE	NONE	20.00	Rank-10	/	0.3
NONE	NONE	NONE	30.00	Rank-20	*	@Substrates.sub1_width
NONE	NONE	NONE	40.00	Rank-30	/	100000000
WorkingVar : inkwhite						
WorkingVar : lam_fix_scrap						
WorkingVar : lam_var_scrap						

PouchType	BaseUOM	TargetUOM	Rank	Operand1	Operator	Operand2
Product Type : 3 Layer Ext Print Lam Slit						
NONE	KG	KG	10	1	*	1
NONE	KG	KM	10	@Substrates.sub1_gsm	+	@Substrates.sub2_gsm
NONE	KG	KM	20	Rank-10	+	@Substrates.sub3_gsm
NONE	KG	KM	30	Rank-20	+	@Printing.prt_gsmwhite
NONE	KG	KM	40	Rank-30	+	@Printing.prt_gsmcolour
NONE	KG	KM	50	Rank-40	+	@Printing.prt_gsmcoldseal
NONE	KG	KM	60	Rank-50	+	@Lamination.lam1_adhesiv
NONE	KG	KM	70	Rank-60	+	@Lamination.lam2_adhesiv
NONE	KG	KM	80	@Slitting.slt_width	/	1000
NONE	KG	KM	90	Rank-80	*	Rank-70
NONE	KG	KR	10	@Substrates.sub1_gsm	+	@Substrates.sub2_gsm
NONE	KG	KR	20	Rank-10	+	@Substrates.sub3_gsm
NONE	KG	KR	30	Rank-20	+	@Printing.prt_gsmwhite

System Benefits

There are many benefits of the Quanti Product Configuration and Estimation System and some of these were also touched on in the introduction. The following section aims to go into these benefits in a bit more detail to highlight the best aspects of the system.

Quotes

- Cost up to 10 quantity breaks per quote line.
- Template driven pre-defined estimate bills of manufacture.
- Graphic estimate bill of manufacture view.
- Configuration rules and data in tabular form for easy maintenance.
- Copy function for time saving on data entry of similar quotes.

- Authorisation for approval process of quotes.
- Copy into MasterCard function to save duplication of common data entry.
- Cost Estimate Report and BOM view reporting on estimate and quantities.

MasterCard

- Tabbed form layouts for easy configuration of specification data for each manufacturing process.
- Clear, Delete and Refresh functions for easy maintenance.
- Simple navigation and context sensitive behaviour of cursor.
- Menu options for most screen functions.

- Email notification for business process workflow automation.
- Authorisation for approval process of MasterCard.
- Authorisation for production approval process of MasterCard.
- Copy MasterCard into ERP System to streamline bills of manufacture creation and improve accuracy and consistency of data.
- Matching up of estimation work centres and materials to ERP Items through MasterCard utilities.
- Extensive notes on each MasterCard form to put special instructions for the production environment.
- MasterCard data base easily linked to reporting tools for creation of Job Orders, Job Bags or Production Paperwork.



Quanti

Product Configuration & Estimation System

Suite 207, Level 2 Professional Chambers,
120 Collins Street, Melbourne, Victoria, Australia, 3000.
P +61 3 9639 2121 F +61 3 9639 2414 E enquiries@quanti.com.au





Introduction

The Quanti Product Configuration and Estimation System is a computer software package designed to create bills of manufacture, with quantities and costs to streamline the estimation and pricing process of a business. The Quanti system is a completely template driven bill of manufacture (BOM) creation tool that can easily export the BOM structure into many Enterprise Resource Planning Systems. The system not only creates the BOM based on a pre-defined template, but it calculates all of the quantities of each material in the BOM, the time taken to setup or run a machine, the quantities of fixed and or variable material scrap and of course the cost per unit of measure of the product you configure for estimation. The Quanti system also comes complete with a MasterCard system that captures and records all of the technical information about a configured product to be printed onto a Job Bag, Job or Work Order for a manufacturing environment.

System Features

There are many features of the Quanti Product Configuration and Estimation System and some of these were touched on in the introduction. The following section aims to go into these features in a bit more detail to highlight the best aspects of the system.

Quotes

The Quotes form on the Quanti System is the area designed for the creation of the BOM with all of the quantities, operations, work centres, rates and costs attached to it. The Quotes form is broken up into a series of tabs, each of which represent a manufacturing process and or raw material input. These tabs are designed to collect all of the information required to configure a product for estimation. The Main tab is where all of the basic information about the quote is collected, such as the customer name, the product type, the unit of measure and of course the quantity breaks to be estimated on.

One of the features of the Quanti system is when you select a product type from your pre-defined list a graphic representation of the estimate BOM appears in the frame to the right on the main screen. This graphic BOM gives the user a graphic view of how the BOM will look in terms of its structure, components and levels. Another feature of the system is to be able to estimate on up to 10 quantity breaks at a time and get a cost for those at the click of a button. If you then add your freight cost and a sell price, then a Price % Margin is automatically calculated for you. Assuming that you are satisfied with your estimate and price, you can click a button and electronically notify

Quote Arabian Packaging V1.9716 SQL 16/Apr/2009 apdflex_app
Quotes MasterCard

Status: Quote

Main Substrates Printing Lamination Slitting Converting Dispatch

Quote No: Q434 Line No: 1 EstJobID: 1503

FamilyCode: DUBAI MACARONI CO. ProductCode:

Customer: DUBAI MACARONI CO. Address: P.O. BOX 16808 Jebel Ali Industrial Zone

Contact: Mr. Daghlan Sales Rep: Ameer Phone: Fax: 971-4 880 1779

FG Item: 1000687 New Product: Annual Volume:

Product Yield: Cut Off: No Access:

Product: 3 Layer Flat Print Lam Slit Roll Qty: 580 Roll UOM: OD

Description: MEAL MAKER FRIED NOODLES (SACHETS)

ID	Qty	Cost \$/um	Freight	Price %	Sell Price	Converted
1	500.0000	18.78222238	0.0000	32.7081	24.3000	
2	1000.0000	16.36442676	0.0000	32.6578	21.2000	

Date Created: 15/04/2009 8:03:45 AM
Authorized: 15/04/2009 1:00:18 PM

Estimate No: Initiator: Est Job No: custname: DUBAI

UomConv - UomConv(0.00000, 0.00000)
SlitMaterial, 21.54288, 0, 1, .
Slitting1 - 501(5000.00000, 0.00000)
LaminatedMaterial2, 1.00000, 300, 0.03, .
Packing_Rolls, 0.04725, 0, 1, .
Lamination2 - L01(8400.00000, 1.20000)
LaminatedMaterial1, 1.00000, 400, 0.05, .
ExtendedMaterial, 0.00000, 400, 0.04

the sales manager or another person in your business via email directly from the system. The work flow notification is another feature of the system that delivers information quickly and efficiently so you can gain a competitive advantage over other businesses who might be tendering on the same work. Another feature of the Quotes is the ability to copy an existing quote to a new quote so that you might be able to change one small aspect of the product configuration and then calculate the cost without the need to re-enter all of the information again for the new product. This has proven time and time again to be a measureable efficiency gain for businesses using the Quanti system.

Authorise & Send to MasterCard

The Quanti System has authorisations in it whereby only a person with the right security level can authorise or approve an estimate. This crucial step can be incorporated into a work flow process that the business decides is the formal estimation process and this can be reflected in the system via the quote status and electronic work flow notifications via email.

The Send to MasterCard function allows an administrator of the system to pre-determine which fields from the estimate configuration are copied across to the MasterCard for technical specification of the manufactured product. This prevents the double entry of any data that was captured during the estimate configuration that is also required in the MasterCard for technical specification of the manufactured product.

MasterCard

The MasterCard form on the Quanti System is the area designed for the setup and configuration of the technical specifications of the manufactured product. This technical specifications database can be viewed using the MasterCard so that all of the information relevant to a manufacturing process is displayed in its own tab on the MasterCard form.

The MasterCard has been specifically designed to capture all of the technical information required to manufacture a product and this information can be easily printed onto a Job Bag,



Date Created: 15/04/2009 8:03:45 AM
Authorized: 15/04/2009 1:00:18 PM

Estimate No: Initiator: Est Job No: custname: DUBAI

Quote Arabian Packaging V1.9716 SQL 22/Apr/2009 apdflex_app
Quotes MasterCard

Status: Quote

Main Substrates Printing Inks Lamination Slitting Converting

Quote No: 178 Line No: Client ID: 66 Date Created: 21/04/2009

Customer: MASAFI MINERAL WATER Job ID: 1891

Item: 1000687 Description: MASAFI 1.5L Label JAPAN Revision: 1

Lat Size: 200 UOM: Product Group: Client Prod Code: OCC: Final Width (mm):

Packaging: Family Code: FGBEWATR Product Code: FGBEVRG Sheet Width: Sheet Length:

Material Code: Material Source: Rew Dir To Cut: 3

Pallet Label: Pallet Label Type: Pallet Label Qty: 3

Core Label: Core Label Type: Core Label Qty:

Roll Label Use: Roll Label Type: Roll Label Qty:

WIP Label Use1: WIP Label1: WIP Label Qty1:

WIP Label Use2: WIP Label2: WIP Label Qty2:

Status: Repeat Job Status Notes:

Notes:

Job Paperwork or Work Order for a manufacturing environment. Changes to the MasterCard can be tracked through revision numbers and there is a 2 level authorisation on the MasterCard so that the appropriate checking procedures can take place before printing the Job instructions for the manufacturing environment.

Send to ERP System

The Quanti system allows the estimate BOMs that are configured to form the basic structure of the BOM that will be setup in your Enterprise Resource

Planning (ERP) system. This process is automated by the Send to ERP System function whereby the estimate BOM is converted into a live BOM that will be used for manufacturing and recording material transactions, operational transactions and costs.

With the click of a button the BOM is automatically created in your ERP system and is ready for a sales order to be raised for it and a manufactured job to be created so you can schedule it and order raw materials for it as easy as that.