

HOW TO: Working With Figure Exact

The figure exact option for material calculations is used to cost the job more specific because of expensive material or specific costing needs. The purpose of this figure exact settings boil down the idea if a job takes 25% of a sheet, how much should be allocated for purchase and how much should be issued to the work order?

SYSTEM PARAMETERS

There are three system parameters that can be used

The screenshot shows the 'Work Orders' system parameters dialog box. The 'Shipping' pane on the left has a 'O/P %' label and a list of input fields, each containing the value '35.000'. The 'Work Orders' pane on the right contains a list of checkboxes with labels. Three red arrows point from the '35.000' values in the 'Shipping' pane to the checkboxes for 'Figure Requirements Exact', 'Allocations Normal, Issuing Exact', and 'Figure Exact Using Part Size' in the 'Work Orders' pane. The 'Work Orders' pane also includes other checkboxes like 'Initial Release Status Not Started', 'Save B.O.M. On Closing W.O.', 'Enable Serial Number Tracking', etc., and a 'Default View Part Type' dropdown menu at the bottom.

1. Figure Requirements Exact – This parameter is used as the default parameter when new bill of material are added to routers. There is a checkbox on the material screen that says 'Use Exact Material Calculation'
2. Allocations Normal, Issuing Exact – This parameter specifies if the issuing of BOM will be using the exact amount or the amount based on the sheet. If 25% of the sheet was used on this job if

you check this box you would be issuing 25%. If this box is not checked you would be issuing 1 sheet.

3. Figure Exact Using Part Size – This parameter specifies if the calculation uses the Part Size or the Blank Size. If the box is checked the Part Size is used. If the box is not checked the Blank Size is used.

BILL OF MATERIAL SETUP

The material screen is shown below which highlights the figure exact checkbox. This is initially set to the value in the system parameter. If you are making 10 pieces the following calculations would be used.

If the box is checked the requirements would be 0.921 and allocations 0.921

If this box is not checked the bill of material requirements will be 1.25 and allocation 1.25

Material ID : 00303 **ALUMINIZED STEEL 20GA (0.36)**

Part Size :	18.000	X	22.000
Blank Size :	23.000	X	46.125
Stock Size :	48.000	X	120.000
Safety Stock :	0.000	X	0.000

Per Blank : 2

Quantity Required : 1.00000 Vend Ship : SHTS Qty On Hand : 115.000
Days Out : 0 Vend Sell : LBS Qty Allocated : 36.852
Weight Factor : 0.0000000 Vend Unit : 64.5000000 Qty Ordered : 0.000
Thickness : 0.3600 Shape : Sheet Vendor :
Shear Direction : Width Sequence : 1 ASSEMBLY Color :
 Nestable Certifications Required Use Exact Material Calculation Default Pull Item From Inventory
View Part View S/U Sheet Historic Gross Weight : 5.00000
Cad File
Sheet File
Setup Sheet
Additional paperwork
Override Price :
 Lot Price

PRINTING A WORK ORDER AND ISSUING

If you are making 10 pieces the following calculations would be used.

BOM Figure Exact	System Parameter Allocations Normal , Issue Exact	Figure Exact Using Part Size	Allocations	Work Order Printout Requirement	Issue Material Requirement
FALSE	FALSE	FALSE	1.25	1.25	1.25
TRUE	FALSE	FALSE	0.921	1.25	1.25
TRUE	TRUE	FALSE	0.921	0.921	0.921
TRUE	TRUE	TRUE	0.688	0.688	0.688
FALSE	TRUE	FALSE	1.25	0.921	0.921
FALSE	TRUE	TRUE	11.25	0.688	0.688
TRUE	FALSE	TRUE	0.688	1.25	1.25
FALSE	FALSE	TRUE	1.25	1.25	1.25

Previously the parameter 'Figure Exact Using Part Size' is ignored if figure exact is not checkmarked on the router. If the figure exact is not checked on the router the calculation is as follows. In the above example blanks per sheet is equal to 4.

Quantity Fabricating / (Part Per Blank * Blanks Per Sheet)

Else it will do the normal way

CEILING(Quantity Fabricating / Part Per Blank) / Blanks Per Sheet

A better example would be Fabricating 240 pieces, parts per blank is 50 and blanks per sheet is 1

'Figure Exact Using Part Size' checked would be 4.8 and without it checked would be 5