UGN

Sound Solutions for the Automotive Industry®

Costing Module

User Manual

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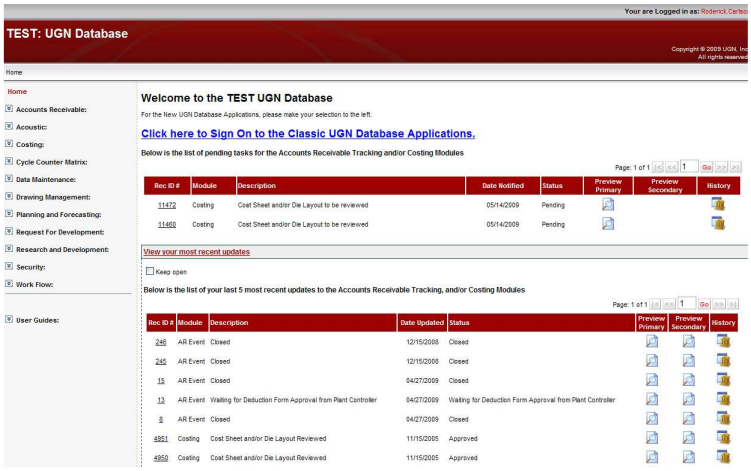
Introduction

This documentation is a guide to the web-based Costing module. It illustrates a step-by-step instruction on how to add/change/delete records, generate and print reports. The purpose of the Costing Module is to calculate the cost of each part produced at UGN. Certain team members are notified to approve the cost sheets. Once the cost sheets are approved, another set of UGN team members are notified.

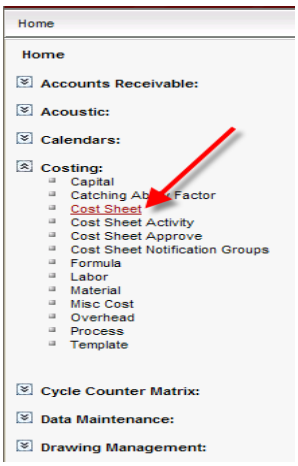
General Rules for New UGN Database modules

First of all, there is no "log on" or "sign on" screen to get to any of the new UGN Database applications. Security is handled by the active directory account of the team member's computer. Once the team member logs onto the computer, the new UGN Database will be automatically available.

Next, there is a new set of sections on the "Home" page of the UGN Database. In order to guide the user to the appropriate screen (and save users several mouse clicks), the UGN Database will check if there are any pending tasks for any of the new UGN Database Modules. *(Old modules that still require team members to click into the "Classic UGN Database Applications" will NOT see pending tasks on the home page. The team members still need to manually navigate to the appropriate pages. As each module is rebuilt, the pending tasks for the new modules will be placed in the lists below.)* A second list has been added to show the five most recent updates by the team member.



On the left side of the UGN Database is a "tree menu" which contains the links to each page of the new modules. Depending upon the rights of the team member, different menu links will be available. For any user with "read only" or "admin" rights to the Costing Module, the "Cost Sheet" link is available to search for cost sheets.

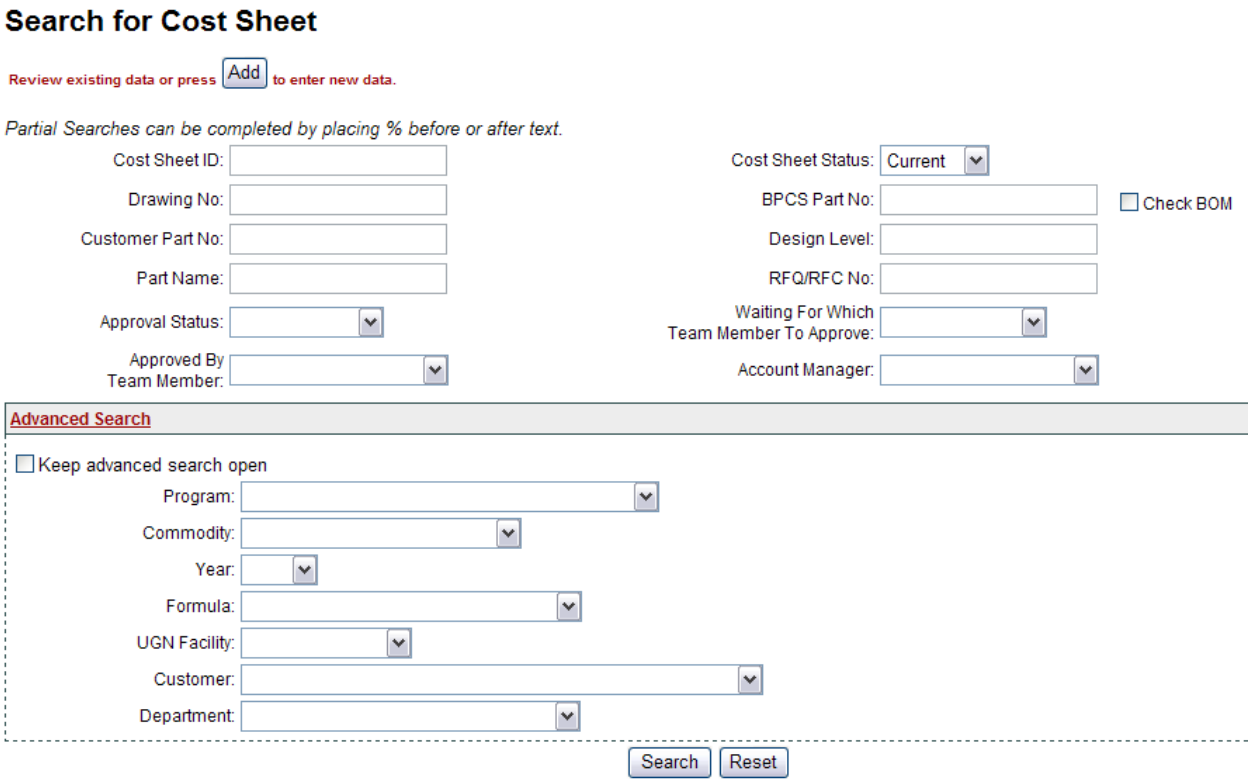


The Costing Module

The rest of this document will describe the costing module specifically.

Cost Sheet List/Search

After selecting the Cost Sheet link from the tree menu, the list/search page will be shown.



The **Cost Sheet search parameters** as follows:

Parameter	**Description**
Cost Sheet ID	The main identifier of each cost sheet
Cost Sheet Status	Current, pending, previous, proposal: the types of cost sheets available.
Drawing No	The Drawing Management System (DMS) number associated with the cost sheet.
BPCS Part No	If the cost sheet is for a semi-finished good or raw material, or if the cost sheet is carried over from the old system, the part number relating to the BPCS system can be searched. *Check BOM indicates that the Materials will be searched instead of the top level part number.*
Customer Part No	Particularly relating to changes requested in a "Request for Quote (RFQ"), the part number created by the customer that identifies the part manufactured by UGN. (In the actual detailed view of the cost sheet, all BPCS Part number/Finished Good Part numbers will be listed which are associated to this Customer Part number.
Design Level	The design level of the new part being quoted. This is also referenced from the RFQ.
Part Name	The name of the part.
RFQ/RFC	The identifier of the RFQ or "Request for Change (RFC)" document. When the new "Request for Development (RFD)" document combines RFQ and RFC, the RFD identifier will be here.

Program	The UGN Program, which often corresponds to vehicle model
Commodity	The UGN Commodity is the type of part or "product line" that UGN produces.
Year	The year of the vehicle.
Formula	Each part is built with a certain formula, which contains certain measurements and bill of materials.
UGN Facility	Location of where the part is produced.
Customer (CABBV)	The CABBV is the customer abbreviation used in the billing system of UGN (Future 3 and BPCS).
Account Manager	The account manager at UGN that requested the cost sheet.
Department	The department at the UGN Facility that will be working on the part.
Approval Status	If the cost sheet has been approved or is pending approval by team members.
Waiting for which team member to approve	A dynamic list of team members who have cost sheets waiting for approval. As a team member approves all cost sheets, the name will be removed from the dropdown list.
Approved by team member	A dynamic list of team members of whom approved at least one cost sheet in the past.

The **Cost Sheet results are** as follows:

For team members with "read only" rights and NO approval rights to cost sheets, a list of results will show only approved cost sheets.

For team members with "read only" rights WITH approval rights to cost sheets, a list of results will have rows containing a yellow background or white background. Rows with a yellow background indicate at least one team member still needs to approve the cost sheet. Rows with a white background indicate the cost sheet has been approved. Cost sheets that have been created BUT NOT sent to anyone for approval are not available to these team members at this point and, thus, are not included in the result list.

For team members with "admin" rights, costing coordinators, all possible cost sheets are available. The same color scheme applies as mentioned previously. Those particular team members can also click the "add" button to create new cost sheets.

Any of the three types of team members mentioned above can click the preview links to see cost forms or die layout forms, if they exist. Team members with "read only" rights can click on the cost sheet ID to see approval details and history. Team members with "admin" rights can click on the cost sheet ID to see all details of the cost sheet.

Regarding the search result set of records, users can navigate the number of pages that are shown or directly jump to a certain page. All search parameters are saved and the page number is saved until the team member closes the browser.

Use the parameters above to filter the list below. A row with yellow background indicates approvals are pending by one or more team members. A row with red background indicates at leat one team member has rejected the cost form.

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Cost Sheet	Notifications	Part Name	PartNo	New Design Level	RFQ/RFC	Preview Cost Form	Preview Die Layout
13043	Approvers	SILENCER TUNNEL F	90712AJ00A	EZ5-A0945	15742		
13042	Approvers	SILENCER TUNNEL F	RSS-90712AJ00A	EZ5-A0945	15742		
13041	Approvers	INS, DASHBOARD	74260-SWA-A010X	A-09-00763	15743		
13040	Approvers	INS, DASHBOARD	74260-SWA-A010	A-09-00763	15743		
13039	Approvers	DIE-CUT BARRIER	6147	04	15743		
13038	Approvers	Dash Inner RHD	67900 3KE0A	Proposal 2	15479		
13037	Approvers	Hood Insulator	65840 3JA0A	Proposal 4	15485		
13020	Approvers	Hood Insulator	65840 3JA0A	Proposal 3	15484		
13015	Approvers	Dash Outer - RHD	67810 3KA0A	Proposal 3	15482		
13011	Approvers	INS, DA/BD LWR OUT	74251-TK8A-A000	TK8A-F-2515	15542		
13010	Approvers	INSULATOR, HOOD	74141-TK8A-X000	TK8A-F-1153	15543		
13009	Approvers	Dash Outer - RHD	67810 3KA0A	Proposal 3	15482		
13001	Approvers	Dash Inner- LHD	67900 3JA0A	Proposal 2	15478		
13000	Approvers	AFR-1603-10024-1(00)	AFR-1603-10024-1(00)		15478		
12999	Approvers	INS, RR FLR CTR	74689-TR0A-A000	TR0A-F-1027	15754		

Cost Sheet Detail

For team members with “admin” rights, costing coordinators, when the Cost Sheet ID is clicked on the list page, then all details for the cost sheet are shown.

There are three sections to the detail screen.

Section	**Description**
Cost Sheet BPCS PartNo(s), Customer PartNo, and DrawingNo	All fields relating to the identification or description of the part being quoted. Buttons to manage the cost sheet.
Program Customer	Make, Program, Program Year, and Customer
Calculation Factors	All fields relating to the price or measurement of the part. See additional instructions below.
Totals	The results showing the total of each calculation factor broken down into a table.

With every section that is a “grid”, there are special instructions for adding, editing, and deleting rows. A set of buttons are located on the right side of each grid.

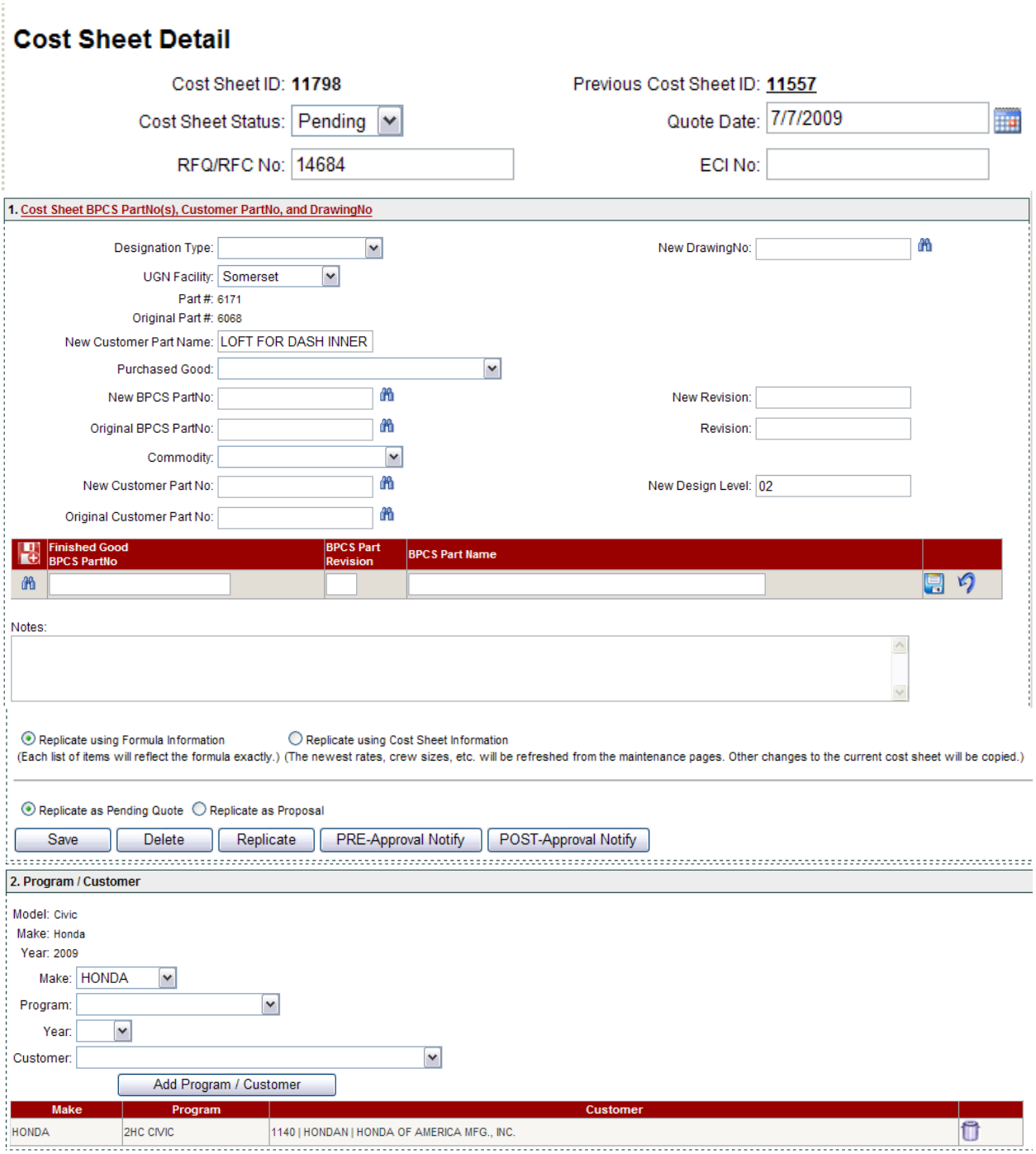
To add a row, enter information in the last row and then click the “save” button.

To ignore the change, click the “undo” button.

To edit a row, click the “edit” button, change the information, and then click the save button.

To delete a row, click the “delete” button.

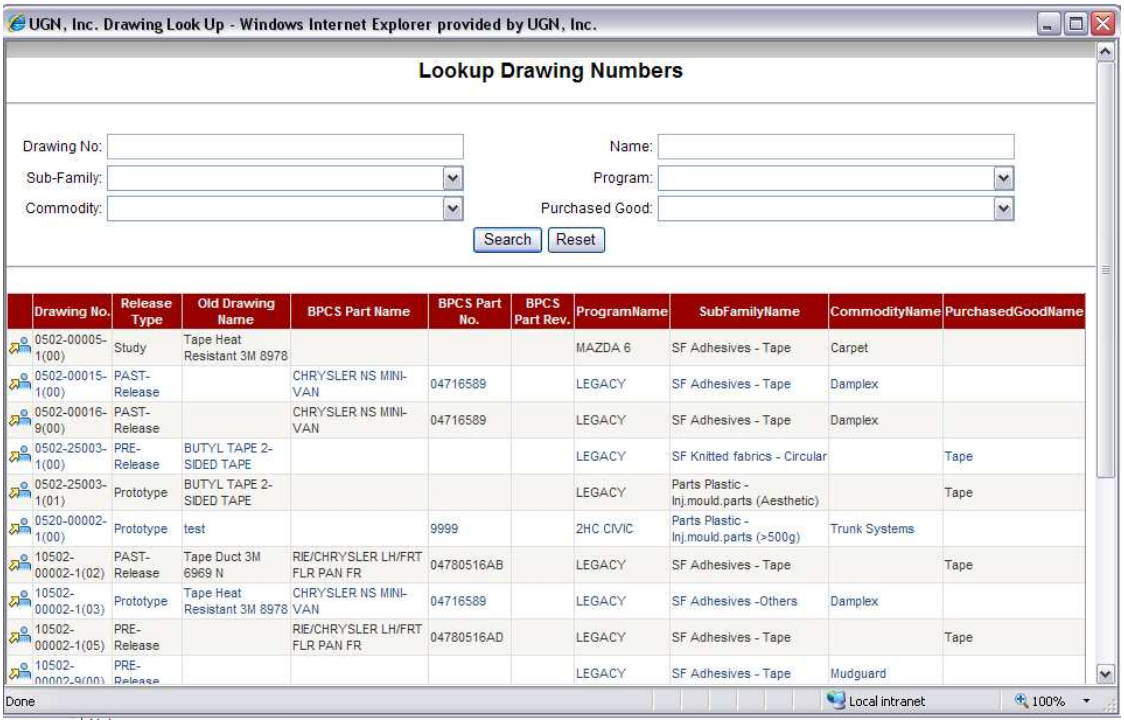
In some cases, if the grid is too large to fit on the web page, such as the customer information on the cost sheet details page, then a set of controls will be above the grid to handle inserting and updating information.



Control Name	**Description**
Cost Sheet Status	If a cost sheet status is changed and a previous cost sheet exists, then the cost sheet status of the previous cost sheet will be changed to previous.
Quote Date	The current date of when the Cost Sheet was created becomes the default.
Part # / Original Part #	If the cost sheet was pulled from the old system and the part # has a value, it will be displayed in the label.

Designation Type	This is a category for the type of part at UGN. Finished Goods are parts sold to customers. Semi-Finished Goods are parts made by UGN and used by UGN to put into Finished Goods. Raw Materials are parts purchased from Vendors. If Finished Good is selected, then the Customer Part No field, Original Customer Part No field, Commodity field and Finished Good BPCS Part No Grid are shown. If Semi-Finished or Raw Material is selected, the New BPCS Part No field, Original BPCS Part No, and Purchased Good fields are shown. If any other item is selected, then all fields are shown. The designation type will be consistent with the BPCS System. *(The Phantom type is a type of formula and will be discussed later).*
 Drawing No, Customer Part No, and BPCS Part No	Each number can be searched from a popup box. Once selected in the popup box, the corresponding field will be updated.
BPCS Part Revision	Each BPCS Part No in the BPCS System has a revision assigned to it.
Finished Good BPCS Part No Grid (list)	A grid appears for parts with the designation type of Finished Goods. There is a list of Finished Good BPCS Part numbers that are associated to a Customer Part number. The user can search for a BPCS Part number based on a row by row basis. Another option is to press the copy button to find all Finished Good BPCS Part numbers for a particular customer part number.
Save	Create or update the cost sheet.
Delete	Delete the cost sheet.
Replicate	Copy parts of the cost sheet with various options: Replicate using Formula Information (Each list of items will reflect the formula exactly.) Replicate using Cost Sheet Information (The newest rates, crew Sizes, etc. will be refreshed. Other changes to the current cost sheet will be copied.) Replicate as Pending Quote (Cost Sheet Status) Replicate as Proposal (Cost Sheet Status)
PRE-Approval Notify	Open the web page that creates/updates team member who need to approve the cost sheet.
POST-Approval Notify	Open the web page that creates/updates the team member list of those who will be notified when the cost sheet has been approved by all required team members.

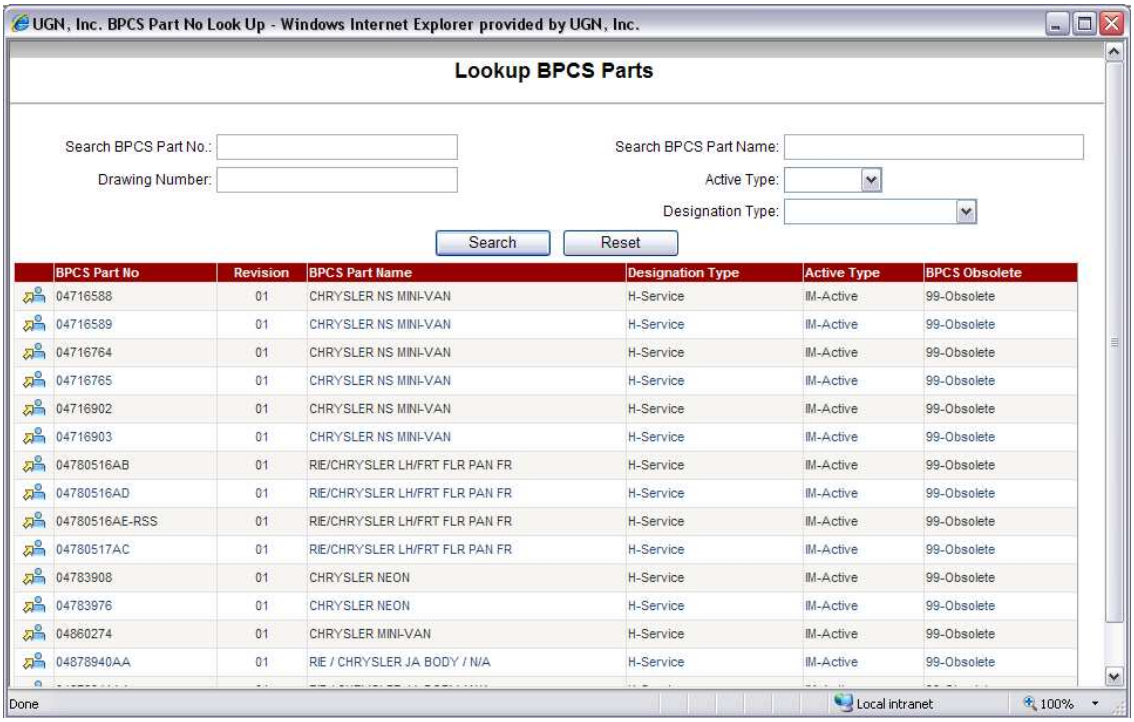
DMS Drawing No Popup:



The above popup occurs when a user needs to search for a DMS Drawing No.

Control	**Description**
Drawing No	The DMS Drawing Identification Number
Name	The name of the drawing
Sub-Family	If the part is a raw material, the sub-family name can be used to search. This is a vendor defined description of a part.
Program	If the part is a finished good, it can be found based on UGN Program, which relates to vehicle model, defined by the customer.
Commodity	If the part is a finished good, it can be searched based on a descriptive type.
Purchased Good	This is a UGN defined description of a raw material purchased by UGN.
Search	Button to search for a field.
Reset	Button to clear all search parameters.
	Button to select a row and populate the parent page.

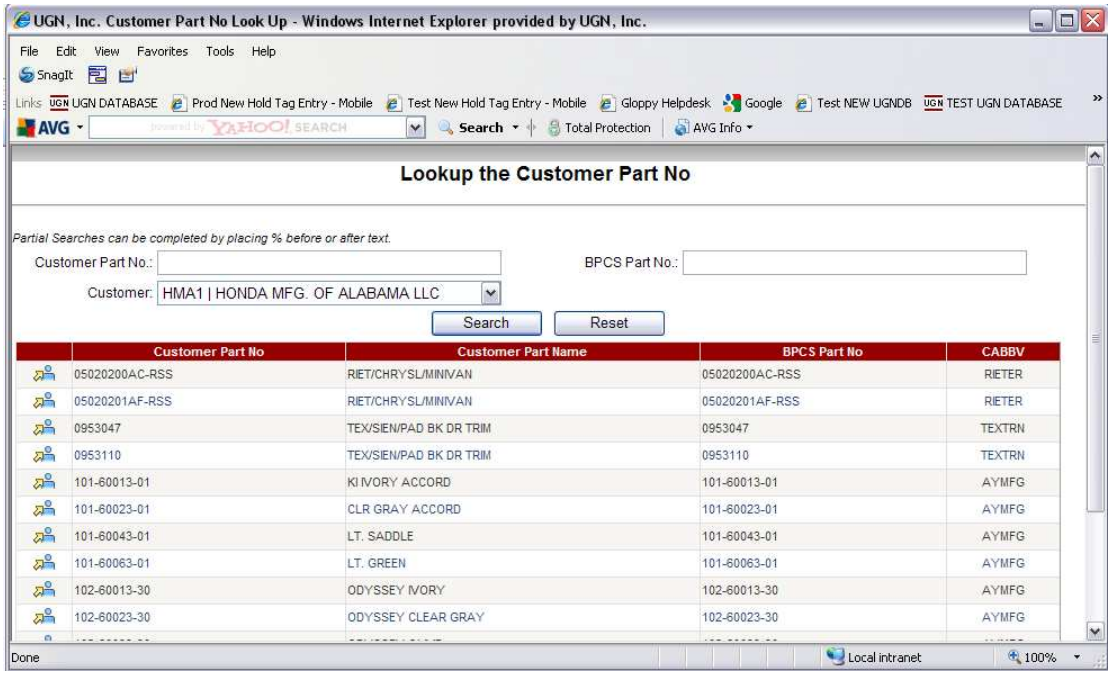
BPCS Part No Popup:



The above popup occurs when a user needs to search for a BPCS Part No.

Control	**Description**
BPCS Part No	The BPCS Part Number
Name	The name of the part
Drawing No	In the BPCS System itself, a drawing number might be assigned to the BPCS part number. This will increase in the future.
Active Type	In the BPCS System, parts are set to active or inactive.
Designation Type	In the BPCS System, parts are assigned to a category. The most commonly used types for the Costing module will be: semi-finished good, finished good, raw material, phantom, and possibly service.
Search	Button to search for a field.
Reset	Button to clear all search parameters.
	Button to select a row and populate the parent page.

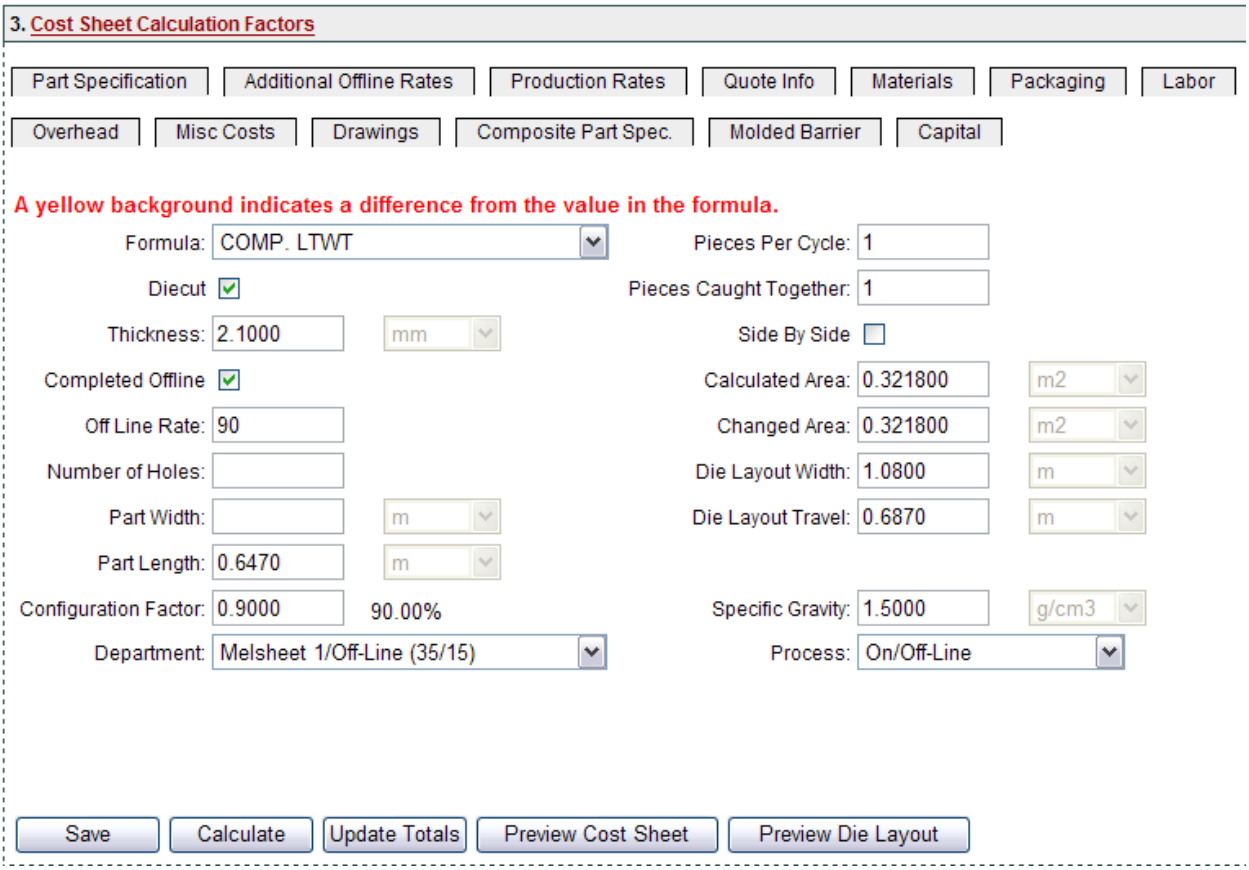
Customer Part No Popup:



The above popup occurs when a user needs to search for a Customer Part No.

Control	**Description**
Customer Part No	The Customer Part Number
BPCS Part No	The BPCS Part Number
Customer CABBV	In the BPCS System itself, a customer abbreviation is assigned to a customer part no.
Search	Button to search for a field.
Reset	Button to clear all search parameters.
	Button to select a row and populate the parent page.

Calculation Factors



Part Specifications:

If a value in these fields is different than the default value of the formula, then the background color of the field will be yellow. The units are read-only at this point.

After all required information is entered, then the calculate button can be pressed to see the new totals in the bottom section of the web page.

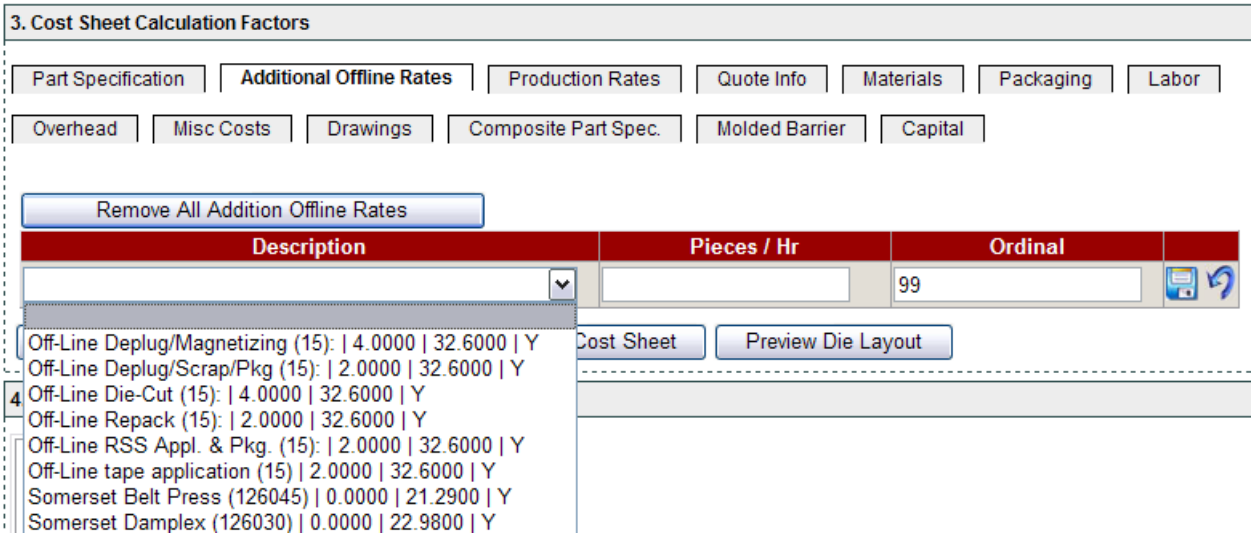
The following fields are available to the Costing Coordinator:

Fields/Buttons	**Description**
Formula	The *formula* dropdown list. After the selection, the system will automatically set as default any or all values for *Labor, Overhead, Materials, Packaging,* and/or *Misc. Costs* entered in the formula maintenance page. Based on the formula selection, the fields/buttons on the form will enable or disable. **This is a required field.**
Die Cut	This field will be set as a default from the formula selection with an option to overwrite. If the *die cut* check box is checked then the formula is used in die-layout parts. If left unchecked, no die-layout will be available.
Thickness	The *thickness* for the part indicated on the cost sheet
Completed Off Line	If a *completed off line* is required, this field should be checked.
Off Line Rate	If the *completed off line* is checked, then the *off line rate* for the part indicated on the cost sheet should be entered. The *off line rate* is used to determine “per piece” and “hourly capital rate” for capital.

Number of Holes	The *number of holes* for the part indicated on the cost sheet. The *number of holes* is used to determine the "de-plug capacity limit" for production rates.
Part Width in Meters	The *part width in meters* for the part indicated on the cost sheet
Part Length in Meters	The *part length in meters* for the part indicated on the cost sheet
Configuration Factor	The *configuration factor* for the part indicated on the cost sheet. By default the *configuration factor* will be set to 90%. The *configuration factor* is used to determine "quoted press cycles" and "max quoted pieces" for production rates.
Repack Material	The *repack material* for the part indicated on the cost sheet. The *repack material* is used with "repack" formula.
Approx Weight	The *approximate weight* for the part indicated on the quote. The *approximate weight* is used with the "repack" formula and will be used to display on the quote sheet.
Pieces/Cycle	The *pieces/cycle* for the part indicated on the cost sheet. The *pieces/cycle* is used to determine the "percent recycle", "catching ability", "quoted press cycles", "max quoted pieces", "line speed limit", "cycle limit", "mix capacity limit", "press cycles", "mix capacity kg/hr" and "coating weight" for production rates.
Pieces/Caught Together	The *pieces/caught together* for the part indicated on the cost sheet. The *pieces/caught together* is used to determine the "catching ability capacity" for production rates.
Side by Side	The *side-by-side* check box for the part indicated on the cost sheet. The *side by side* is used to determine the "catching ability" for production rates.
Calculated Area in sq M	The *calculated area in sq m* for the part indicated on the cost sheet. The *calculated area in sq m* is used to determine the "quoted part weight", "percent recycle", "mix capacity limit" and "mix capacity kg/hr" for production rates.
Changed Area in sq M	The *changed area in sq m* for the part indicated on the quote. The *changed area in sq m* is used to determine the "mix capacity limit" and "mix capacity kg/hr" for production rates.
Die Layout Width in Meters	The *die layout width in meters* for the part indicated on the cost sheet. The *die layout width in meters* is used to determine the "percent recycle", "mix capacity limit", "mix capacity kg/hr", "recycle rate kg/hr" and "coating weight" for production rates.
Die Layout Travel in Meters	The *die layout travel in meters* for the part indicated on the cost sheet. The *die layout travel in meters* is used to determine the "percent recycle", "line speed limit", "mix capacity limit", "line speed m/min", "mix capacity kg/hr", "recycle rate kg/hr" and "coating weight" for production rates.
Specific Gravity	The *specific gravity* for the part indicated on the cost sheet. The *specific gravity* is used to determine the "part weight", "mix capacity limit", "mix capacity kg/hr" and "recycle rate kg/hr" for production rates.
Weight/Area g/m2	The *weight/area* for the part indicated on the cost sheet. The *weight/area* is used to determine the "part weight" in grams for production rates. **Note: 'Weight/Area' and 'Specific Gravity' are mutually exclusive. 'Weight/Area' will be displayed in case of Fleece formula. 'Specific Gravity' will be displayed in case of Non-Fleece formula.**
Production Rate	The *production rate* for the part indicated on the cost sheet. The *production rate* is used to determine the "per piece" and "hourly capital rate" for capital.

Number of Carriers	The *number of carriers* for the part indicated on the cost sheet
Foam	The *pounds of foam* for the part indicated on the cost sheet
Department	The *department* dropdown list. The *department* is used to determine the "coating weight" for production rates.
Process	The *process* dropdown list.
Calculate	Based on the measurements and other information added on each tab, the values will be calculated. New information will be added to the "Production Rates" tab and the "Totals" section on the bottom of the web page.
Update Totals	If the user manually overrides a value of a standard cost per unit but does not want to do a row by row calculation from all of the tabs, hen only the totals section will be updated based on the manual values.

Additional Offline Rates:



Labor rates that are checked as "offline" on the Labor Maintenance page are available in the dropdown box of the "Additional Offline Rates" tab of the Cost Sheet Detail web page.

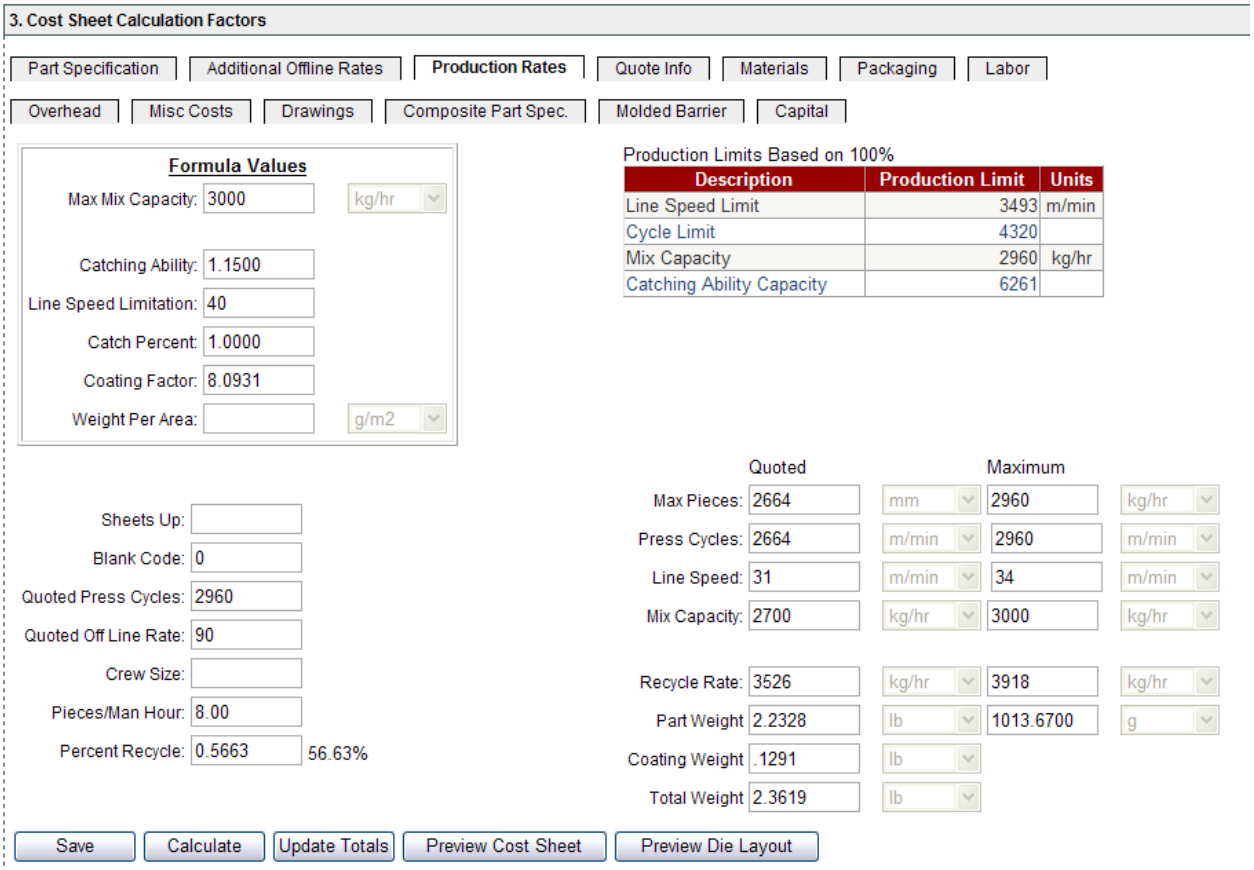
The user must be careful to match the item to the same item on the labor tab in order for calculations to be correct.

The **Additional Offline Rates** tab contains the following fields.

Fields	**Description**
Rate Description	The selection in the dropdown box, which corresponds to offline labor.
Pieces Per Hour	The pieces per hour.
Ordinal	Identify the order of items as they should appear in the Cost Form.

Production Rates:

The **Production Rates** tab was designed to display the calculated rates based on the part specification entered for the cost sheet. The information displayed on this screen will later be used to export the data to a cost form and/or die-layout. If the costing coordinator sees a problem with the calculation, all fields may be overwritten.



The **Production Rates** tab is designed with the following fields.

Fields	Description/Calculations
Max Mix Capacity	The *max mix capacity* found in the current cost sheet formula selection
Max Forming Rate	The *max forming rate* found in the current cost sheet formula selection. **This field will be displayed only for a Fleece-Type formula.**

Catching Ability	Based on the *side by side* value on the current cost sheet, a query will run to get any items from the Catching Ability Factors table that match the *side by side* value. To get the right *catching ability* value, the following condition must fall true:
	If (pieces per cycle < 2) then
	Catching Ability = 1.15
	Else
	If (part length in meters > CAF("MinPartLength")) & (part length in meters <= CAF("MaxPartLength")) Then
	Catching Ability = CAF("CatchingAbilityFactor")

	End If End If
Line Speed Limitation	The *line speed limitation* found in the current cost sheet formula selection
Catch Percent	The *catch percent* by default is 1.

Coating Factor	Based on the current cost sheet formula, a query will run to get any items from the Formula – Coating Factors table that match the formula value. To get the right *coating factor* value, the following condition must fall true:
	
	If (thickness > CF("MinThickness")) & (thickness <= CF("MaxThickness")) then
	Coating Factor = CF("CoatingFactor")
	End If

Weight Area	This field will be displayed, if it is non-zero and non-null. Based on 'Weight/Area' entered in Cost Sheet 'Part Specification' tab, it will be displayed.
Production Limits Based on 100%	

Line Speed Limit	The *line speed limit* is calculated in the following format:
	
	If (pieces per cycles, die-layout travel & line speed limitation <> NULL) Then
	Line Speed Limit = ((line speed limitation * pieces per cycles * 60) / die layout travel)
	End If

Cycle Limit	The *cycle limit* is calculated in the following format:
	
	If (pieces per cycles <> NULL) Then
	Cycle Limit = Formula("MaxCyclePress") * pieces per cycle
	End If

Mix Capacity	The *mix capacity* is calculated in the following format:
	
	If (changed area <> calculated area) Then
	If (thickness, changed area, specific gravity, & max mix capacity) <> NULL or 0 Then
	If (diecut is unchecked) Then
	Mix Capacity = (max mix capacity / (changed area * thickness * specific gravity)) / 2.205 'convert kgs to lbs
	Else
	If (Formula("ReturnRecycle") is checked) Then
	Mix Capacity = (max mix capacity / (changed area * thickness * specific gravity))
	Else
	Factor =((die layout width * die layout travel * thickness * specific gravity) / 454 * 1000)
	Mix Capacity = ((max mix capacity / *Factor*) * piece/cycle)
	End If
	End IF
	End If
	Else
	If (thickness, calculated area, specific gravity, & max mix capacity) is

	not null or 0 Then
	If (diecut is unchecked) Then
	Mix Capacity = (max mix capacity / (calculated area * thickness * specific gravity)) / 2.205 'convert kgs to lbs
	Else
	If (Formula("ReturnRecycle") is checked) Then
	Mix Capacity = (max mix capacity / (calculated area * thickness * specific gravity))
	Else
	Factor =((die layout width * die layout travel * thickness * specific gravity) / 454 * 1000)
	Mix Capacity = ((max mix capacity / *Factor*) * piece/cycle)
	End If
	End IF
	End If
	End If

Deplug Capacity	Based on the current cost sheet formula, a query will run to get any items from the Formula – Hole Deplug Factors table that match the formula value. To get the right *deplug capacity* value, the following condition must fall true:
	
	If (thickness <> NULL) & (number of holes <> 0) Then
	If (thickness > HDF("MinThickness")) & (thickness <= HDF("MaxThickness") Then
	Deplug Capacity = HDF("DeplugFactor") / number of holes
	End If
	End If

Catching Ability Capacity	The *catching ability capacity* is calculated in the following format:
	
	If (catching ability, catch percent, & pieces caught together) <> Null or 0 Then
	Catching Ability Capacity = (((3600 / catching ability) * 2) * catch percent) * pieces caught together)
	End If

Forming Rate (Fleece)	(Max Forming Rate / (Die Layout Width * Die Layout Travel * (Weight Area / 1000))) * Pieces Per Cycle
Off Line Specific	
Sheets Up	The *sheets up* used for the part, if any.
Blank Code	The *blank code* used for the part, if any.
Quoted Press Cycles	The *quoted press cycles* for the part, if any.
Quoted Off Line Rate	The *quoted off line rate* for the part, if any.

Pieces/Man Hour	The *pieces/man hour* is calculated in the following format using the first item in the Cost Sheet – Labor table:
	
	If (crew size & offline rate <> Null or 0) Then
	Pieces/Man Hour = (off line rate / crew size)
	End If

Percent Recycle	The *percent recycle* is calculated in the following format: *Percent Recycle* = ((die layout travel * die layout width) - (pieces per cycle * calculated area)) / (die layout travel * die layout width)

Fields	Description/Calculations
Quoted Max Pieces	The *quoted max pieces* is calculated in the following format: *Quoted Max Pieces* = quote press cycles * pieces per cycle
Maximum Max Pieces	The *maximum max pieces* is the minimum value of the production limits displaying in the "Production Limits Based on 100%**"** text box.
Quoted Press Cycles	The *quoted press cycles* is calculated in the following format: *Quote Press Cycles* = maximum press cycles * configuration factor
Maximum Press Cycles	The *maximum press cycles* is calculated in the following format: *Maximum Press Cycles* = max pieces / pieces per cycle
Quoted Line Speed m/min	The *quoted line speed* is calculated in the following format: *Quoted Line Speed* = maximum line speed * configuration factor
Maximum Line Speed m/min	The *maximum line speed* is calculated in the following format: *Maximum Line Speed* = ((maximum press cycles * die layout travel) / 60)
Quoted Mix Capacity kg/hr	The *quoted mix capacity* is calculated in the following format: *Quoted Mix Capacity* = maximum mix capacity * configuration factor

Maximum Mix Capacity kg/hr	The *maximum mix capacity* is calculated in the following format:
	
	If (changed area <> calculated area) Then
	If (thickness, changed area, specific gravity, & maximum max pieces) <> NULL or 0 Then
	Maximum Mix Capacity = (changed area * thickness * specific gravity * max pieces)
	End If
	Else
	If (thickness, calculated area, specific gravity, & maximum max pieces) is not null or 0 Then
	Maximum Mix Capacity = (calculated area * thickness * specific gravity * max pieces)
	End If
	End If

Quoted Recycle Rate kg/hr	The *quoted recycle rate* is calculated in the following format: *Quoted Recycle Rate* = maximum recycle rate * configuration factor

Maximum Recycle Rate kg/hr	The *maximum recycle rate* is calculated in the following format:
	
	If (diecut is checked) Then
	Maximum Recycle Rate =((die layout travel * die layout width * maximum press cycles * thickness * specific gravity) - maximum mix capacity)
	End If

Part Weight	The *part weight* is calculated in the following format: If (specific gravity <> Null or 0) Then *Part Weight* = (calculated area * specific gravity * thickness) * 1000 / 454

	Else
	Part Weight = (calculated area * weight area)
	End If

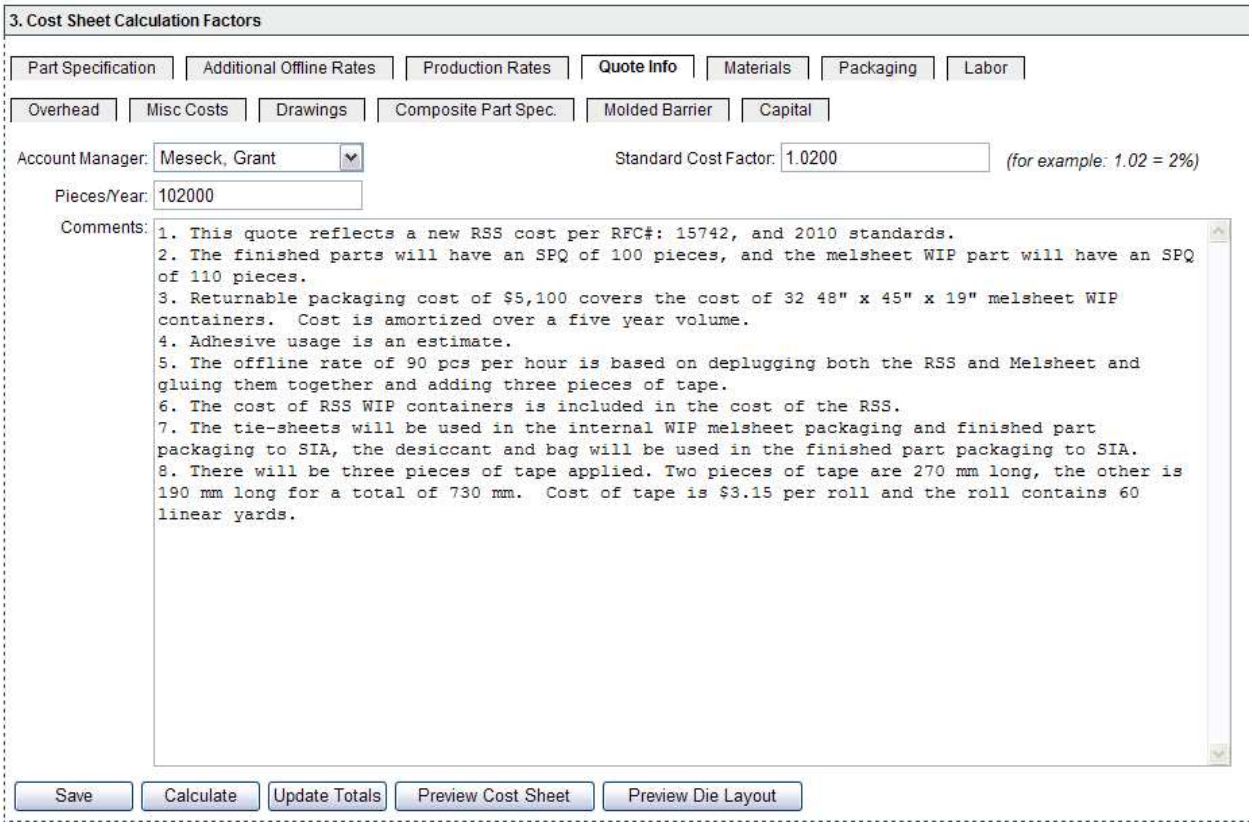
Gm	The *gm* is calculated in the following format: *gm* = part weight * 454

Coating Weight	The coating *weight* is calculated in the following format:
	
	If (department <> NULL) then
	If (department begins with "Melsheet") Then
	Coating Weight = (10.76 * (die layout travel * (die layout width - 0.1) * coating factor) / (454 * pieces per cycle)
	Else
	Coating Weight = (10.76 * (die layout travel * die layout width * coating factor) / (454 * pieces per cycle)
	End If
	Else
	Coating Weight = (10.76 * (die layout travel * die layout width * coating factor) / (454 * pieces per cycle)
	End If

Total Weight	The *total weight* is calculated in the following format: *Total Weight* = part weight + coating weight

Quote Info:

The **Quote Info** tab was designed to allow the Costing Coordinator to enter general information on a cost sheet. The information entered will later be used to display on the cost form. The standard cost factor is the default factor used when calculating the materials, packaging, labor, overhead, additional offline rates, and misc cost tabs.



The **Quote Info** screen is designed with the following fields.

Fields	**Description**
Account Manager	The *account manager* is a default value that is associated to the customer *cabbv* entered on the header info
Standard Cost Factor	The *standard cost factor*. The default value is 1.02.
Pieces Per Year	The *pieces per year*.
Comments	*Comments* that will be used to display on the cost sheet.

Materials:

The **Materials** tab was designed to allow the Costing Coordinator to add, update or delete multiple material entries to a cost sheet. The information entered will later be used to display on the cost form.

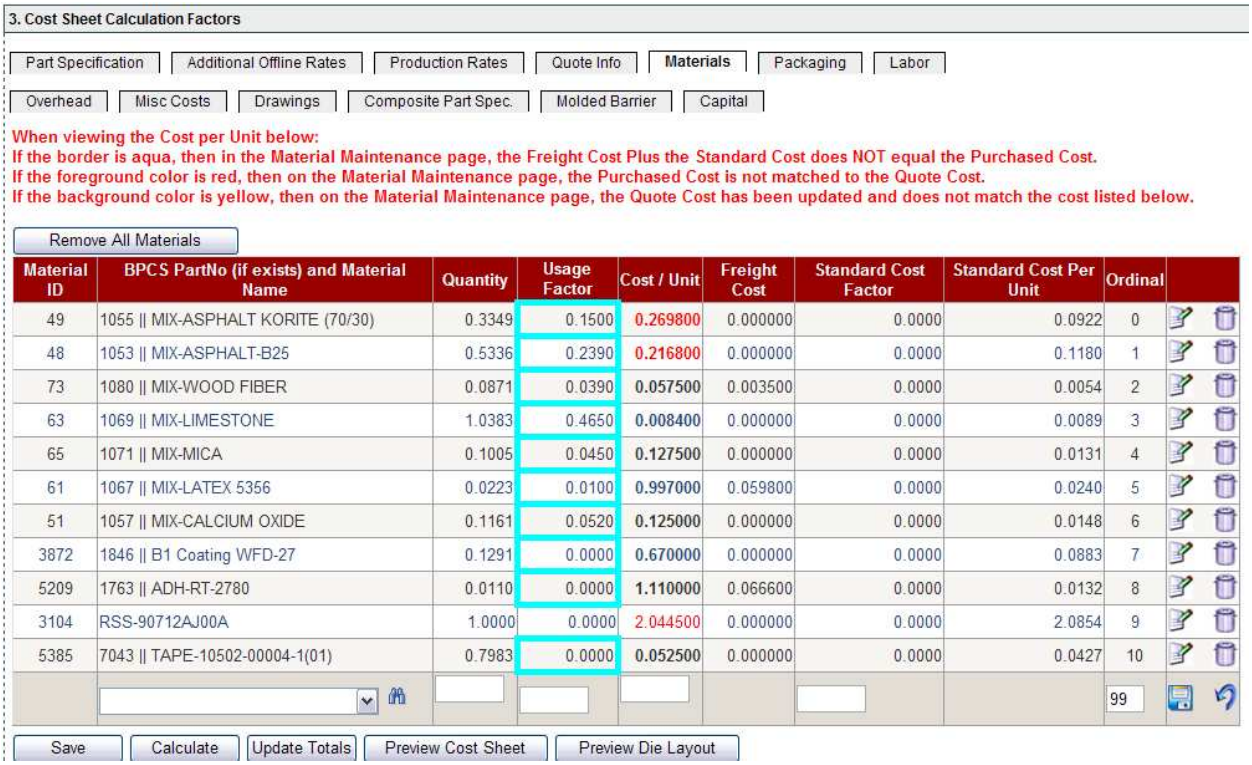
Please notice that as the BPCS purchased cost and BPCS standard cost are updated from the BPCS System to the UGN DB automatically and daily, the user will be see background and foreground colors on the appropriate cell change.

If the border is aqua, then on the Material Maintenance page, the freight code plus the standard cost does not equal the purchased cost.

If the foreground color is red, then on the Material Maintenance page, the purchased cost is not equal to the quote cost.

If the background color is yellow, then on the Material Maintenance page, the cost that should be used does not match the cost on this tab.

The Costing Coordinator is notified daily via email of the changes to the BPCS System.



The **Materials** screen is designed with the following fields.

Fields	Description
Material	To add a new item to the list, select a *material* from the drop down list. The list is sorted by *BPCS #* and then by *Material Description*. **This is a required field.**
Quantity	The quantity
Cost/Unit	The *cost/unit* will be defaulted from the material maintenance page when the formula is selected on the part specifications tab.
Standard Cost Factor	If the Quote Info tab's value needs to be ignored, then this value can be set greater than 0.
Standard Cost Per Unit	This is the calculated value that will be presented on the cost form.
Ordinal	The *ordinal* will determine the order of display on the cost form.

Packaging:

The **Packaging** tab was designed to allow the costing coordinator to add, update or delete multiple packaging entries to a cost sheet. The information entered will later be used to display on the cost form.

Please notice that as the BPCS purchased cost and BPCS standard cost are updated from the BPCS System to the UGN DB automatically and daily, the user will be see background and foreground colors on the appropriate cell change.

If the foreground color is red, then on the Material Maintenance page, the purchased cost is not equal to the quote cost.

If the background color is yellow, then on the Material Maintenance page, the cost that should be used does not match the cost on this tab.

The Costing Coordinator is notified daily of the changes to the BPCS System.

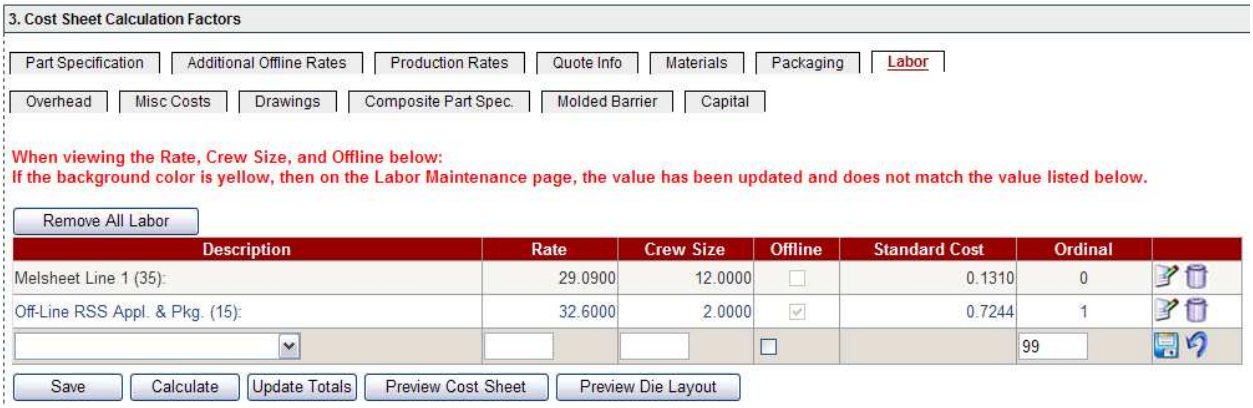
The **Packaging tab** is designed with the following fields.

Fields	Description
Material ID	**The unique identifiers used only in the costing module to identify parts**
BPCS PartNo and Material Name	To add a new item to the list, select an item from the drop down list. The list is sorted by *BPCS # (if it exists)* and then by *Material Description*. **This is a required field.**
Cost/Unit	The *cost/unit* will be defaulted from the material maintenance page when the formula is selected on the part specifications tab.
Units Needed	The *units needed* to a line item.
Parts/Container	The *parts/container* to a line item.
Units Needed/ Parts Per Container	A calculation shown on the cost form.
Standard Cost Per Unit	This is the calculated value that will be presented on the cost form.
Use this value	A line item that will be used on the cost form.

Labor:

The **Labor** tab was designed to allow the Costing Coordinator to add, update or delete multiple labor entries to a cost sheet. The information entered will later be used to display on the cost form.

If the background color is yellow, then the rate, crew size, and/or offline selection are different than what are on the Labor Maintenance page.

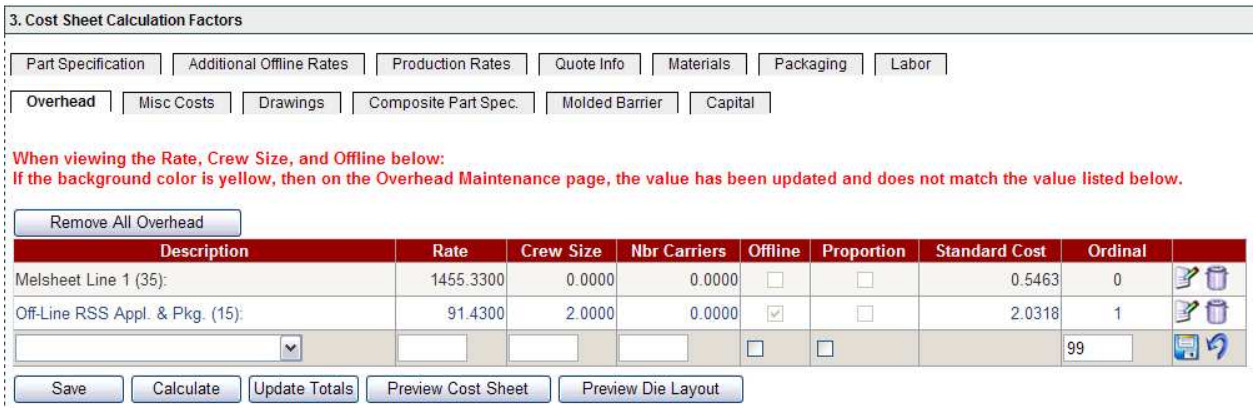


The **Quote – Labor** tab is designed with the following fields.

Fields	Description
Description	To add a new item to the list, select a *description* from the drop down. **This is a required field.**
Rate	The *rate* will default from the labor maintenance page after the formula is selected on the part specification tab.
Crew Size	The *crew size* will default from the labor maintenance page after the formula is selected on the part specification tab.
Off Line	The line item that will be used for *off line*. It will be defaulted from the labor maintenance page after the formula is selected on the part specification tab.
Standard Cost	This is the calculated value that will be presented on the cost form.
Ordinal	The *ordinal* will determine the order of display on the cost form.

Overhead:

The **Overhead** tab was designed to allow the Costing Coordinator to add, update or delete multiple Overhead entries to a cost sheet. The information entered will later be used to display on the cost form



If the background color is yellow, then the rate and/or crew size are different than what are on the Labor Maintenance page. Please note the labor and overhead names are IDENTICAL.

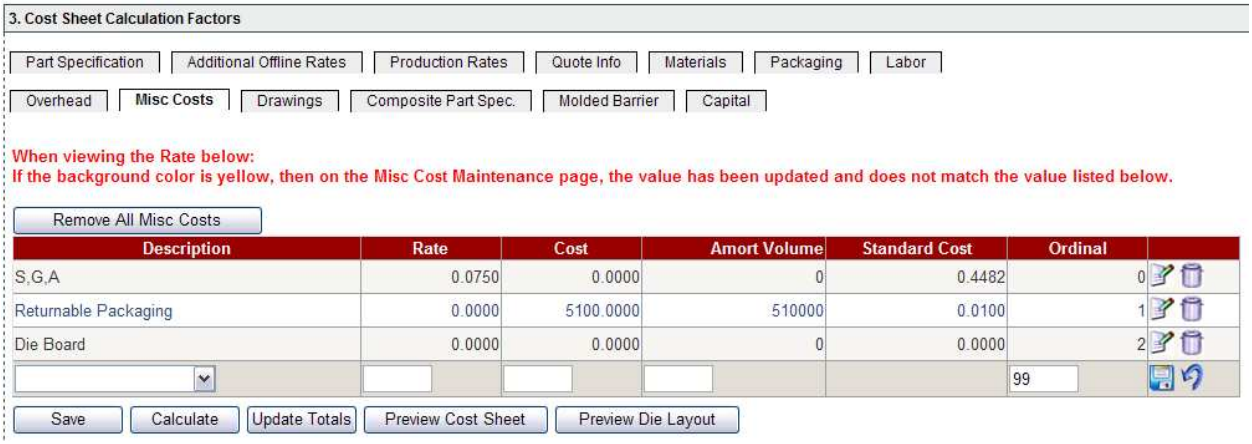
The **Overhead tab** is designed with the following fields.

Fields	Description
Description	To add a new item to the list, select a *description* from the drop down. **This is a required field.**
Rate	The *rate* will default from the labor maintenance page after the formula is selected on the part specification tab.
Crew Size	The *crew size* will default from the labor maintenance page after the formula is selected on the part specification tab.
Off Line	The line item that will be used for *off line*. It will be defaulted from the labor maintenance page after the formula is selected on the part specification tab.
Proportion	Check if needed
Standard Cost	This is the calculated value that will be presented on the cost form.
Ordinal	The *ordinal* will determine the order of display on the cost form

Misc Costs:

The **Misc. Costs** tab was designed to allow the costing coordinator to add, update or delete multiple miscellaneous cost entries to a cost sheet. The information entered will later be used to display on the cost form.

If the background color of the rate is yellow, then on the Misc Cost Maintenance page, the value has been updated.

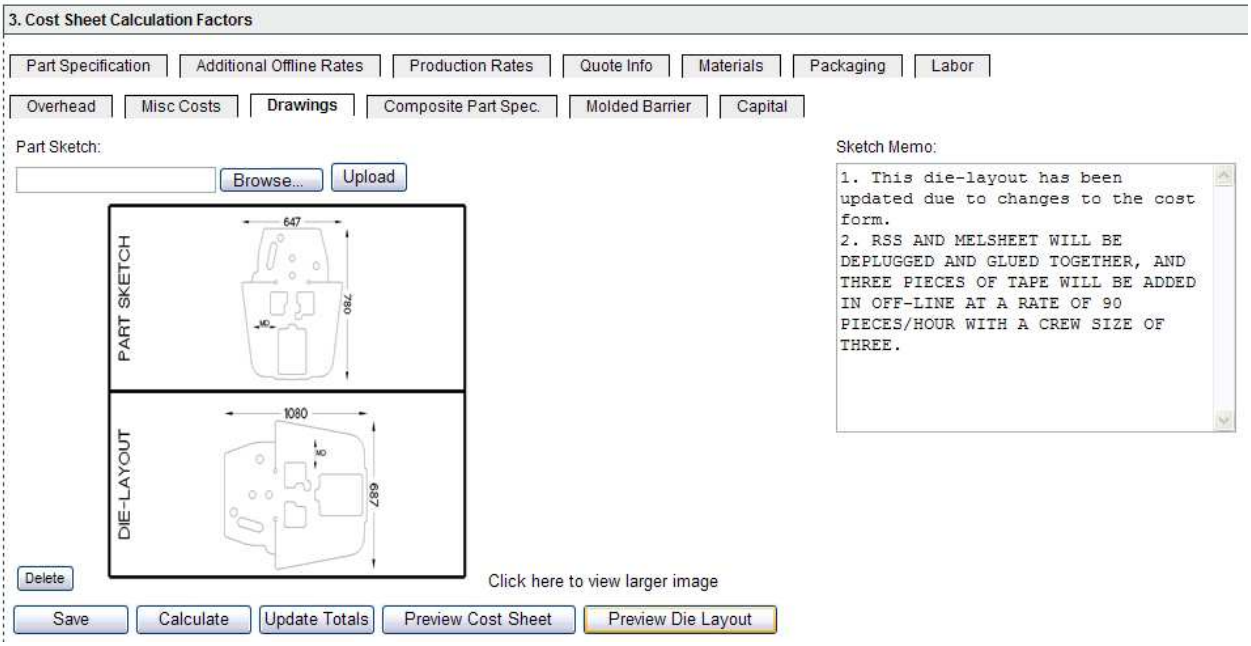


The **Misc. Costs tab** is designed with the following fields.

Fields	Description
Description	To add a new item to the list, select a *description* from the drop down. **This is a required field.**
Rate	The *rate* will default from the labor maintenance page after the formula is selected on the part specification tab.
Cost	The *cost* for each line item, if needed.
Amort. Volume	The *amortization volume* for each line item, if needed.
Standard Cost	This is the calculated value that will be presented on the cost form.
Ordinal	The *ordinal* will determine the order of display on the cost form

Drawings:

The **Drawings** screen was designed to allow the costing coordinator to upload a die-layout image to a cost sheet. The information entered will later be used to display on the die-layout.

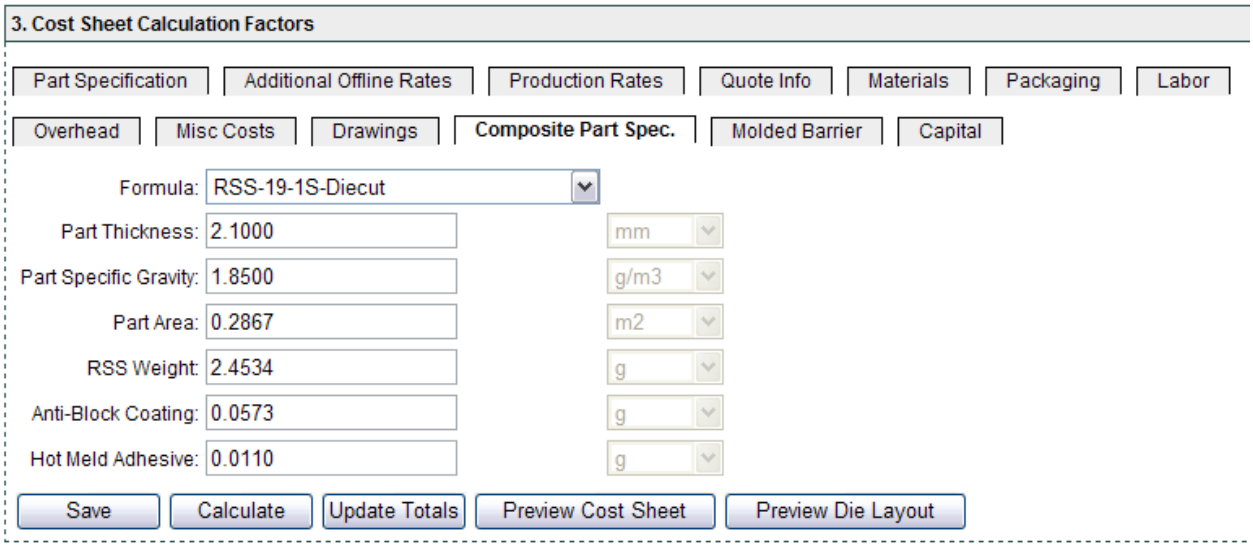


The **Drawings tab** is designed with the following fields.

Fields	Description
Part Sketch – Browse	Click on the **Browse** button to help you search and select a file for the upload process. Files that end with a .jpg extension (JPEG) will be allowed in the upload process.
Part Sketch – Upload Image	After you have located the image, click on the Upload Image button to save the image to the database assigned to the quote. **Note:** *The image may appear a bit distorted on the html front end. The resolution on a print out is much clearer.*
Sketch Memo	Comments in the *sketch memo* area that will be used to display on the die-layout.

Composite Part Specification:

The **Composite Part Spec** tab was designed to allow the costing coordinator to add or update composite part specs to a cost sheet. The information entered will later be used to display on the cost form

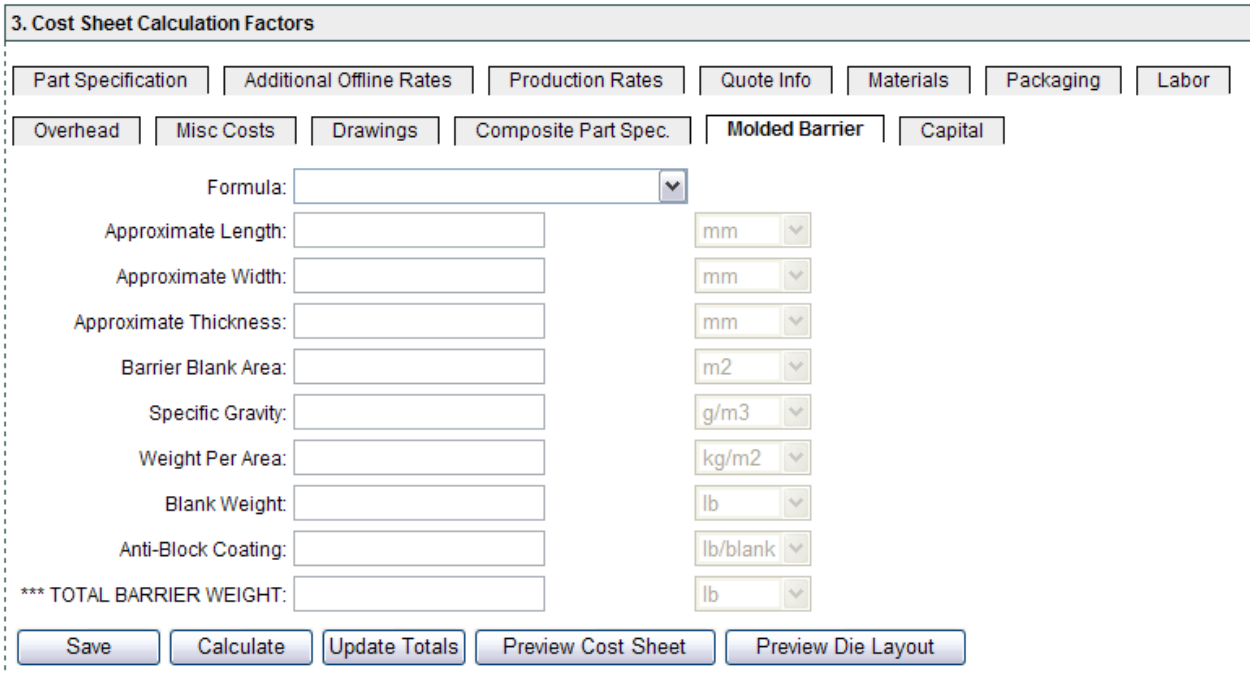


The **Composite Part Spec tab** is designed with the following fields.

Fields	Description
Formula	A *part formula* dropdown list
Part Thickness in mm	The *part thickness in mm*
Part Specific Gravity	The *part specific gravity*
Part Area m2	The *part are m2*
RSS Weight (lbs)	The *RSS weight in pounds*
Anti-Block Coating (lbs)	The *anti-block coating in pounds*
Hot Melt Adhesive (lbs)	The *hot melt adhesive in pounds*

Molded Barrier:

The **Molded Barrier** tab was designed to allow the costing coordinator to add, update Molded Barrier information to a cost sheet. The information entered will later be used to display on the cost form.

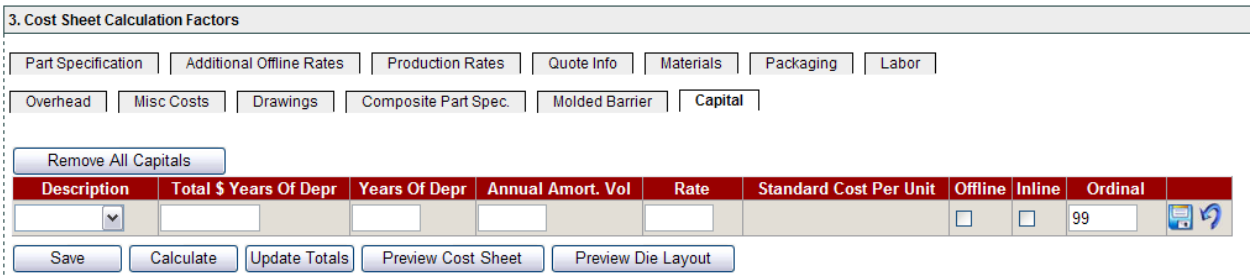


The **Molded Barrier tab** is designed with the following fields.

Fields	**Description**
Formula	The *formula* dropdown list
Approx. Length	The *approximate length in mm.* The *approximate length in mm* is then divided by 25.4 and displayed as the *approximate length in inches.*
Approx. Width	The *approximate width in mm.* The *approximate width in mm* is then divided by 25.4 and displayed as the *approximate width in inches.*
Approx. Thickness	The *approximate thickness in mm*
Barrier Blank Area	The *barrier blank area in m2*
Specific Gravity	The *specific gravity in g/cm3*
Weight/Area	The *weight/area in kg/m2*
Blank Weight	The *blank weight in lbs*
Anti-Block Coating	The *anti-block coating in lbs/blank*
Total Barrier Weight	The *total barrier weight in lbs*

Capital:

The **Capital** tab was designed to allow the costing coordinator to add, update or delete multiple capital entries to a cost sheet. The information entered will later be used to display on the cost form.

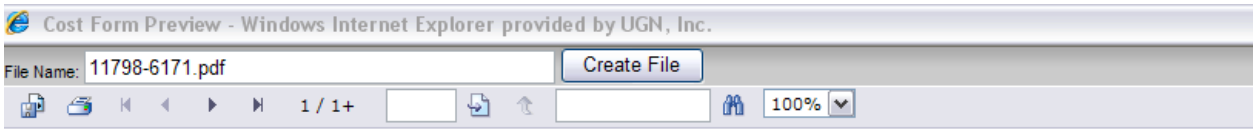


The **Cost Sheet – Capital** tab is designed with the following fields.

Fields	**Description**
Description	The *description* dropdown list. **This is a required field.**
Total $ Years of Depr	The *total $ amount* for each capital, if needed.
Years of Depr.	The *years of depreciation* for each capital, if needed.
Annual Amort. Volume	The *capital annual volume* for each capital, if needed.
Rate	If there is a *production rate* entered in the Cost Sheet – Part Specifications tab or either *off line* or *in line* is checked; the calculation for *per piece* is as follows: *Per Piece* = ((total $ amount / years of depr.) / annual volume)
Standard Cost Per Unit	The calculated value that will be presented on the cost form
Off Line	Check *off line* to calculate the offline rate for *per piece* and *hourly capital rate*.
In Line	Check *in line* to calculate the quoted max pieces for *per piece and hourly capital rate*.

Previewing a Cost Sheet/Form

By clicking on the “preview cost sheet” button located on any cost sheet, it opens a popup with the cost form. If a value is different between the previous cost form and the current cost form, it will be highlighted in yellow. Due to the large amount of information on each tab of the cost sheet, multiple pages may be needed. The previous copy of the quote is on the next page. If the user has “admin” rights, then the “create file” button can be pressed to save the preview as a PDF file in a shared network folder. All users have the ability to manually convert this document to another type of document (MS Excel, MS Word, Rich Text File, and PDF) and print.



UGN Sound Solutions for the Automotive Industry

Standard Cost Form (Current)

Print Date: 9/2/2009

CURRENT Cost Sheet ID: 11798 — Changes are highlighted in yellow — **PREVIOUS ID (see next page):** 11557

Customer:	Honda	**Year:** 2009	**Model:** Civic
Account Manager:	Grant Meseck		**Department:** Somerset Fleece Line (126055)
Part No:	6171		**Process:** On Line
Part Name:	LOFT FOR DASH INNER		**Volume:** 288628
DMS Drawing No:			**On-Line Rate:** 0 pcs/hr
New Design Level:	02		

Part Specifications

Formula:	LOFT-12/37/5.5/5.5/40	**Area:**	1.8149 m2
Nominal Thickness:	20.0000 mm	**Fleece Weight:**	3.1981 lb
Weight/Area:	800.0000 g/m2	**Coating:**	lb
Die Layout Travel:	1090.0000 mm	***TOTAL PART WEIGHT:**	3.1981 lb
Die Layout Width:	2200.0000 mm		

Comments — **Quote Date:** 07/07/2009

1. This quote reflects a new blend of this FR Loft pad per RFC#: 14684.
2. Blank size is 1,665 mm x 1,090 mm (+/-20 mm). This reflects the nominal size.
3. Packaging cost and SPQ are estimates.

Material Breakdown

BPCS - Material	Vendor	Units Needed	Cost Per Unit	Freight	Standard Cost Per Unit
5250 - Bi-Co PET Fiber	STEIN FIBERS LTD	0.3838 lb	0.7314	0.0000	0.2863
5249 - PET Staple Fiber	STEIN FIBERS LTD	1.1833 lb	0.5100	0.0000	0.6155
5347 - FR Shoddy	WM. T. BURNETT FOAM LLC	0.1759 lb	0.4240	0.0000	0.0761
5248 - Shoddy Synthetic/Cotton Blend	OMNIX, S.A. DE C.V.	0.1759 lb	0.2090	0.0000	0.0375
5290 - Fleece Recycle	UGN INC.	1.2792 lb	0.0633	0.0000	0.0826
				Total Material Cost:	1.0980

Direct Labor

Somerset Fleece Line (55)	Crew Size:	5.0000	Rate:	23.7700		0.0000
					Total Direct Labor:	

Total Manufacturing Cost: $1.0980

TOTAL STANDARD COST: $1.0980

Cost Form Preview - Windows Internet Explorer provided by UGN, Inc.

File Name: 11798-6171.pdf Create File

2 / 2 100%

Standard Cost Form (Previous)

Print Date: 9/2/2009

PREVIOUS Cost Sheet ID: 11557

Customer: Honda
Account Manager: Grant Meseck
Part No: 6171
Part Name: LOFT FOR DASH INNER
DMS Drawing No:
New Design Level: 02

Year: 2009

Model: Civic
Department: Somerset Fleece Line (126055)
Process: On Line
Volume: 288628
On-Line Rate: 828 pcs/hr

Part Specifications

Formula:	LOFT-12/37/5.5/5.5/40		Area:	1.8149	m2
Nominal Thickness:	20.0000	mm	Fleece Weight:	3.1981	lb
Weight/Area:	800.0000	g/m2	Coating:		lb
Die Layout Travel:	1090.0000	mm	***TOTAL PART WEIGHT:	3.1981	lb
Die Layout Width:	2200.0000	mm			

Comments

1. This quote reflects a new blend of this FR Loft pad per RFC#: 14684.
2. Blank size is 1,665 mm x 1,090 mm (+/-20 mm). This reflects the nominal size.
3. Packaging cost and SPQ are estimates.

Quote Date: 06/01/2009

Material Breakdown

BPCS - Material	Vendor	Units Needed	Cost Per Unit	Freight	Standard Cost Per Unit
5250 - Bi-Co PET Fiber	STEIN FIBERS LTD	0.3838 lb	0.6600	0.0000	0.2584
5249 - PET Staple Fiber	STEIN FIBERS LTD	1.1833 lb	0.5100	0.0000	0.6155
5347 - FR Shoddy	WM. T. BURNETT FOAM LLC	0.1759 lb	0.4240	0.0000	0.0761
5248 - Shoddy Synthetic/Cotton Blend	OMNIX, S.A. DE C.V.	0.1759 lb	0.2090	0.0000	0.0375
5290 - Fleece Recycle	UGN INC.	1.2792 lb	0.0633	0.0000	0.0826
				Total Material Cost:	1.0701
Packaging - UGN, Inc.	Pieces Per Container:	30.0000			
PKG-FLEECE-67X43.25		0.0667	1.6832		0.1145
				Total Packaging Cost:	0.1145

Direct Labor

Somerset Fleece Line (55)	Crew Size:	5.0000	Rate:	23.7700	0.1435
				Total Direct Labor:	0.1435

Previewing a Die-Layout

By clicking on the “preview die layout” button located on any cost sheet, it opens a popup with the die layout. If a value is different between the previous die layout and the current die layout, it will be highlighted in yellow. Users may click the image to see a larger view. As mentioned above, users may also print this document or convert it to another type of document. Again, the die layout of the previous cost sheet will be on the second page.

Die Layout Preview - Windows Internet Explorer provided by UGN, Inc.

1 / 1+ 75%

UGN

Die - Layout (Current)

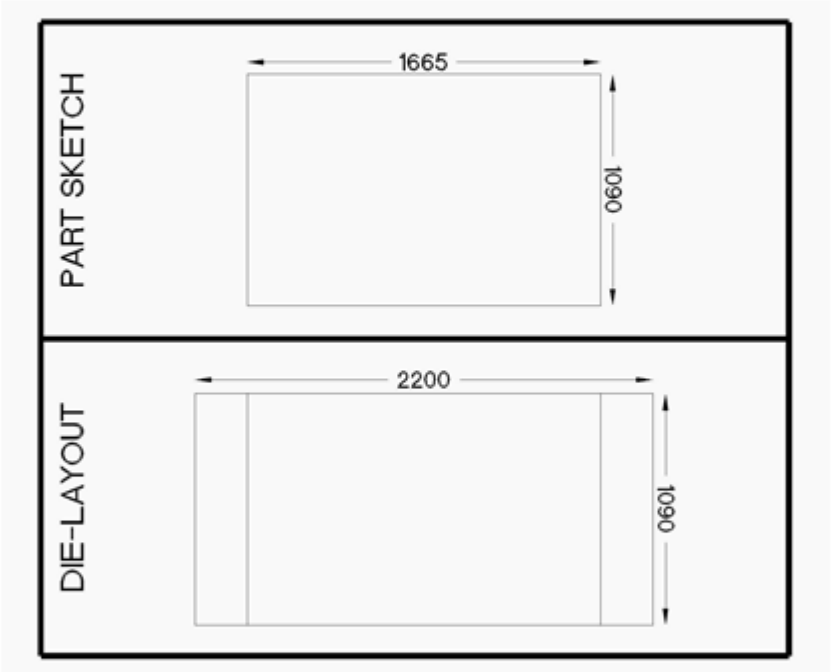
Print Date:9/2/2009

Somerset Fleece Line (126055)

Current Die-Layout Information

CURRENT Cost Sheet ID: 11798 Changes are highlighted in yellow PREVIOUS ID (see next page): 11667

Customer:	Honda	Year:	2009	Model:	CMc
Quote Date:	07/07/2009			DMS Drawing No:	
Part Name:	LOFT FOR DASH INNER			Design Level:	02
Part No:	6171			Annual Volume:	288628



Part Specifications	
Formula:	LOFT-12/37/5.5/5.5/40
Weight/Area (g/m2):	800.0000
Part Area (m2):	1.8149
Part Thickness, nominal (mm):	20.0000
Part Weight (g):	659172
Coating (wet-lbs/part):	0.0000

Production Rates	Quoted - 87.60%	Max - 100%
Pieces / Man Hour:	0	0
Press Cycles/Hour:	0	0
Line Speed m/m:	0	0
Net Forming Rate (kg/hr):	0	0
Recycle Rate (kg/hr):	0	0

Comments

1. This die-layout reflects a new blend of this FR Loft pad per RFC#: 14684.
2. Blank size is 1,665 mm x 1,090 mm (+/-20 mm). This reflects the nominal size.

Die Layout Preview - Windows Internet Explorer provided by UGN, Inc.

2 / 2 75%

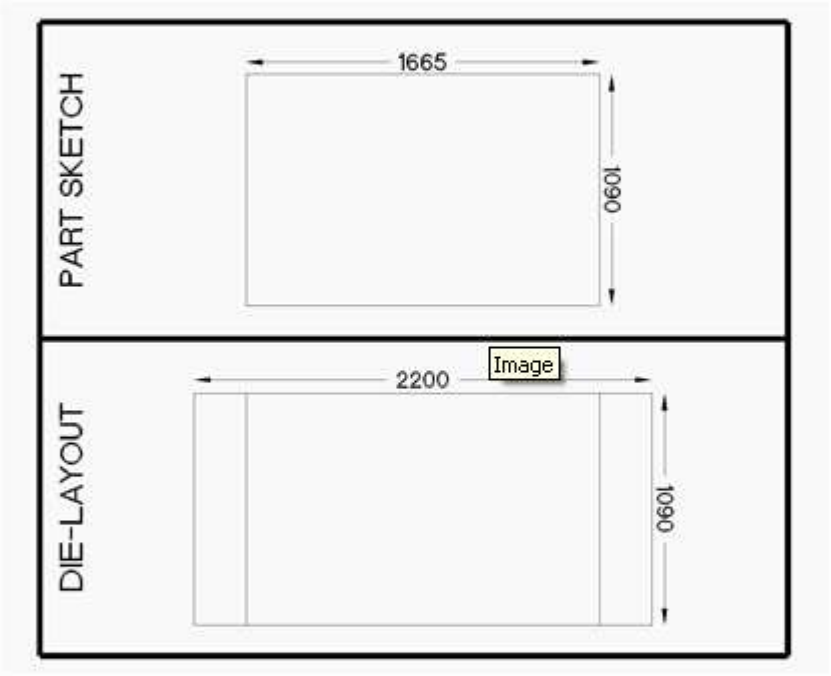
Die - Layout (Previous)

Print Date: 9/2/2009

Previous Die-Layout information

PREVIOUS Cost Sheet ID: 11667

Customer:	Honda	Year:	2009	Model:	Civic
Quote Date:	06/01/2009			DMS Drawing No:	
Part Name:	LOFT FOR DASH INNER			Design Level:	02
Part No:	6171			Annual Volume:	288628



Part Specifications

Formula:	LOFT-12/37/5.5/5.5/40
Weight/Area (g/m2):	800.0000
Part Area (m2):	1.8149
Part Thickness, nominal (mm):	20.0000
Part Weight (g):	659172
Coating (wet-lbs/part):	0.0000

Production Rates

	Quoted - 87.60%	Forming Rate Max - 100%
Pieces / Man Hour:	828	946
Press Cycles/Hour:	828	946
Line Speed m/m:	15	17
Net Forming Rate (kg/hr):	1202	1374
Recycle Rate (kg/hr):	386	441

Comments

1. This die-layout reflects a new blend of this FR Loft pad per RFC#: 14684.
2. Blank size is 1,665 mm x 1,090 mm (+/-20 mm). This reflects the nominal size.

Pre-Approval Notification

After all of the information on a cost sheet has been entered and is ready for the approval process, the Costing Coordinator will click a button to send an email notification to a list of team members requesting their approval.

To send a pre-approval notification, click on the "**Pre-Approval Notify"** button to display the **Pre-Approval List page**.

Team members can pull the list of approvers from a previously defined "Notification Group" or from a previous cost sheet. Please see a later section describing notification groups.

The user can select the group or type the previous cost sheet and click the "pull" button .

There are two levels of routing. Team members who are plant managers, in the product development department, in the corporate engineering department, or the purchasing department should be notified first. When a team member is selected, the possible role or "subscription" is available to choose.

The second level routing is for account managers or a vice president of operations.

The costing coordinator can choose to notify all team members, certain levels, and/or team members who have already been notified.

The history of the approval routing is listed at the bottom of the page.

An email will be sent to appropriate team members. There will be two or two hyperlinks in the email.

1) A link to the page where the team member should approve the cost sheet.
2) A link to preview the cost form.
3) A link to preview the die layout, if it exists.

Team members will be reminded daily, via email, to review pending cost sheets.

Please recall the description of the home page of the UGN Database. Any pending cost sheets will also be listed on the home page. The hyperlinks on the home page will direct the team members to the appropriate place to make the approval. So, team members now have two places to be reminded of pending cost sheets: email daily and viewing the home page.

In addition, team members can navigate to a Cost Sheet Approve page which lists all costs sheets pending approval. Finally, team members can search on the main Cost Sheet List page any cost sheets pending their approval or have already approved.

Cost Sheet Pre-Approval List

Cost Sheet ID: 11438

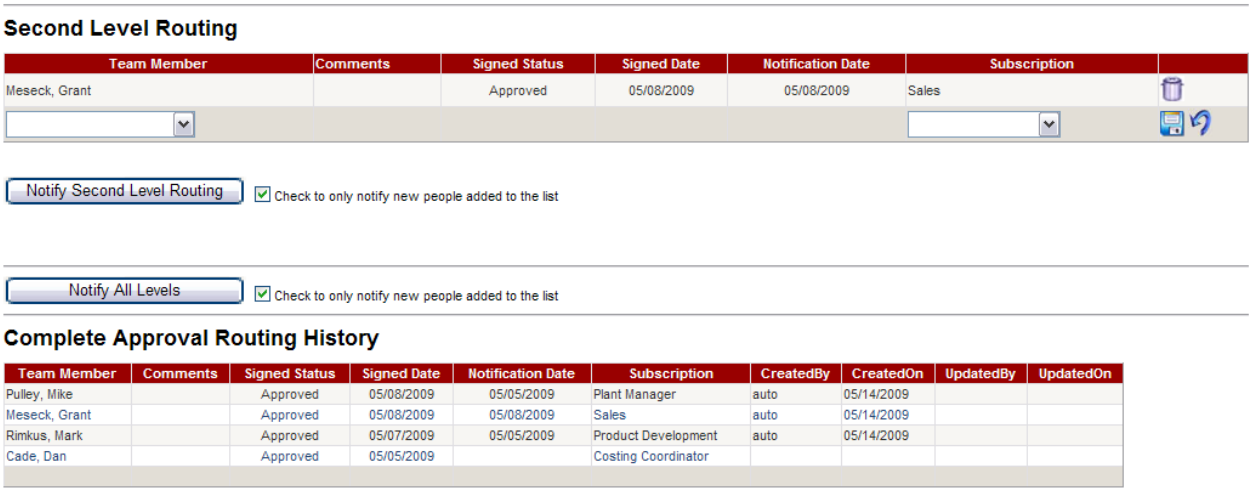
Choose a Notification Group:

Choose another cost sheet to copy the list(s) from: 10573

First Level Routing

Team Member	Comments	Signed Status	Signed Date	Notification Date	Subscription	
Pulley, Mike		Approved	05/08/2009	05/05/2009	Plant Manager	
Rimkus, Mark		Approved	05/07/2009	05/05/2009	Product Development	

Notify First Level Routing Check to only notify new people added to the list

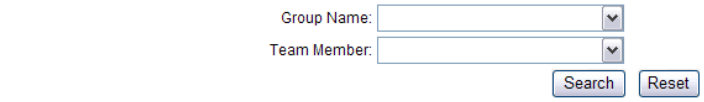


The **Pre-Approval List** page is designed with the following fields.

Fields	**Description**
Team Member	The *team member* dropdown list who will be receiving the cost form and/or die-layout for approval. After a selection has been made the system will verify if the team member is available for approval based on his/her workflow status. If the employee is not available, then a message will display to alert the user to select the backup person for the approval process. Also the subscription list will be filtered to make assignment faster. **This is a required field.**
Comments	The costing coordinator will have the ability to read the approvers comments. **This is a read only field.**
Signed Status	If the approval needs to be reset, the costing coordinator will delete the row and re-add the team member to the list. This way, the history table at the bottom will include the activity.
Date Signed	The costing coordinator will have the ability to read the date when the cost sheet was approved and if there is anyone left pending approval. **This is a read only field.**
Notification Sent	This shows the date when the approver was notified (to review the cost form). **This is a read only field.**
Notify Check boxes	The costing coordinator can check or uncheck to notify new team members in the list or all team members in the lists.
Notify Buttons	The costing coordinator can choose to notify all team members, certain levels, and/or team members who have already been notified.

Notification Group Maintenance

Cost Sheet Pre-Approval Notification Group and Team Member Maintenance



List of Groups

Group	Obsolete		Copy Group
Test	☐		
Other	☐		
test 2	☐		
test 3	☐		

Team Members for selected Group

Group	Team Member	Subscription	
test 2	Barta, Brett	Sales	
test 3	Barta, Brett	Sales	
test 3	Hall, Bryan	Corporate Engineering	
Test	Hall, Bryan	Corporate Engineering	
test 2	Hall, Bryan	Corporate Engineering	
Test	Meade, Jim	Sales	
Test	Myotte, Ronald	Purchasing	
test 2	Myotte, Ronald	Purchasing	
test 3	Myotte, Ronald	Purchasing	
test 2	Pulley, Mike	Plant Manager	
test 3	Rimkus, Mark	Product Development	

Groups can be created to organize approvers. For example, perhaps the group name could be the same as a commodity. Certain engineers need to be associated with a commodity. Then when the Pre-Approval List page is opened (for a specific Cost Sheet), the team members can be pulled from this list and automatically assigned to proper routing levels and subscriptions.

Fields	**Description**
Group Name	Search by existing group names
Team Member Name	Search by team member
List of groups	Created, edit, or delete groups
List of team members	Add or remove team members to groups

Post-Approval Notification

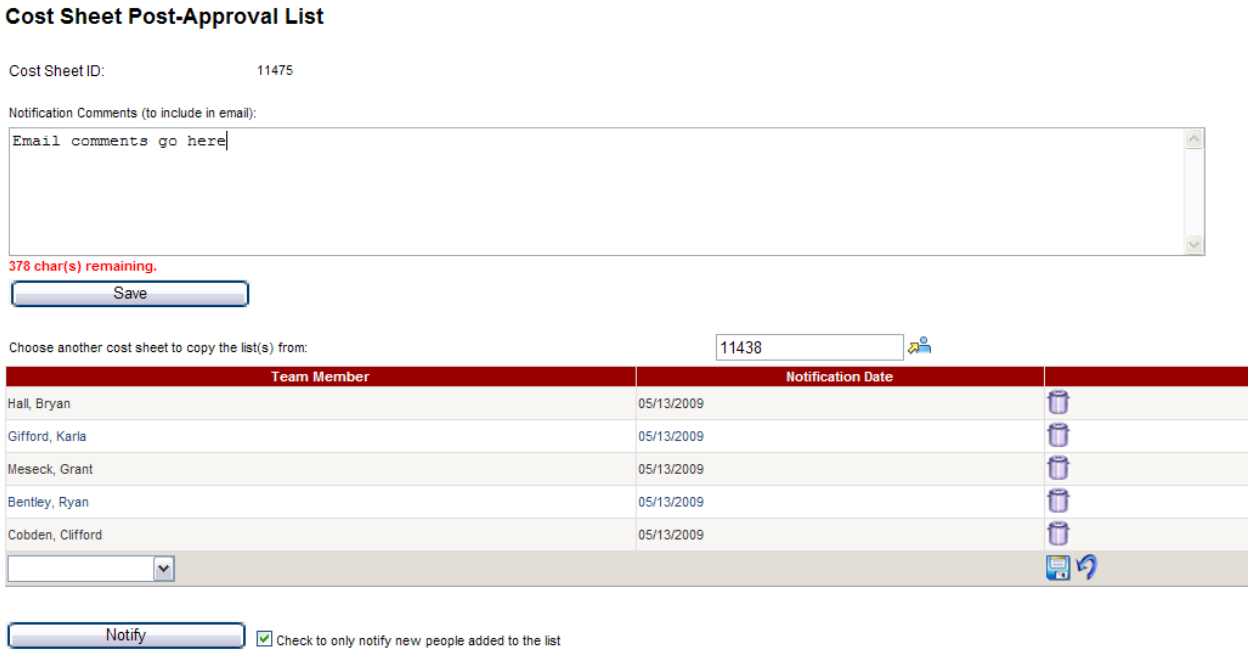
Soon after the costing coordinator receives a final confirmation via an email notification from an Account Manager approving a cost sheet, then a post-approval notification will be sent with hyperlinks to the latest cost form and/or die-layout form.

The costing coordinator can send a post-approval notification by clicking on the "**Post-Approval Notify**" button to display the **Post- Approval List** page.

The costing coordinator can save the email message for later notifications if needed and to refer back to what was sent if all emails were lost.

The costing coordinator can also pull the list of team members from a previous cost sheet.

Finally, the costing coordinator can determine of all team members should be notified or just new team members added to the list.



The **Post-Approval List** page is designed with the following fields.

Fields	Description
Team Member	The *team member* dropdown list of whom will be receiving the final cost form and/or die-layout. **This is a required field.**
Notification Sent	The *Notification Sent* field will default to the current date when the email is sent. **This is a read only field.**
Notify Check box	The costing coordinator can check or uncheck to notify new team members in the list or all team members in the lists.
Notify	The costing coordinator can choose to notify all team members, certain levels, and/or team members who have already been notified.

Cost Sheet Approval List

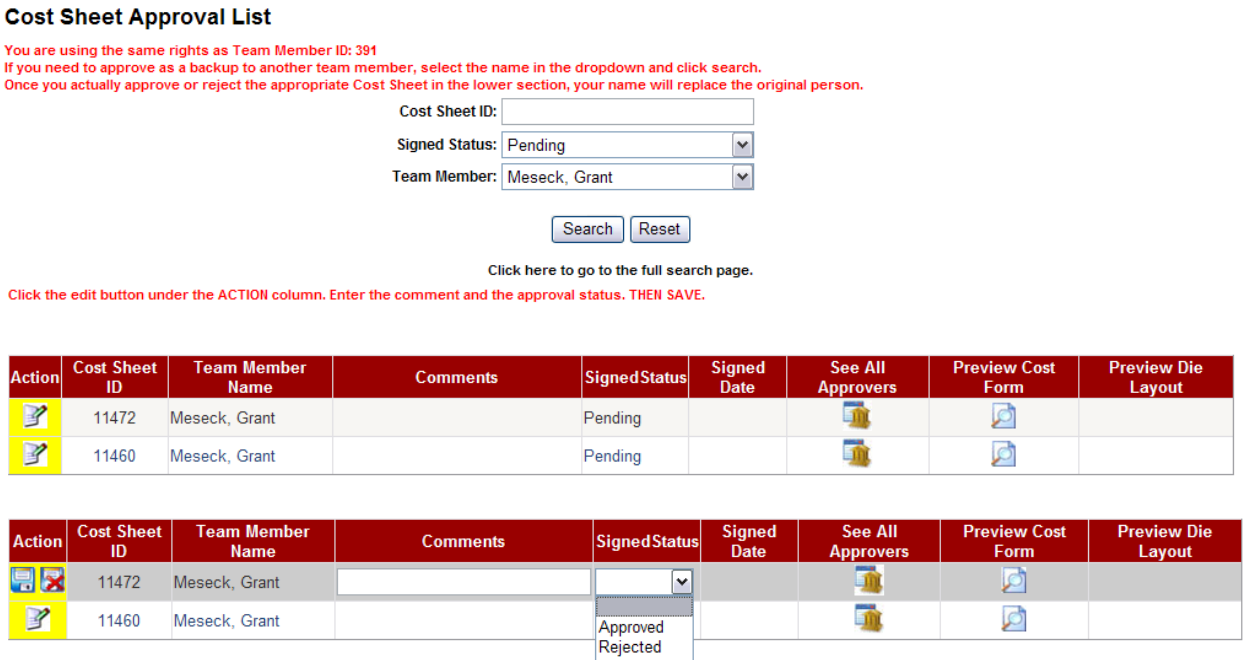
The **Cost Sheet Approval List** page was designed to allow approvers to approve or reject cost forms and/or die layout forms.

Team members who are working as a backup to someone else should change the name of the team member in the dropdown box.

Team members can search for a specific cost sheet. For deeper searching, however, the main cost sheet list page should be used. There is a link that can navigate the user to that page.

As cost sheets are approved or rejected, they are filtered out of this list.

However, the team member can change the dropdown value of the "signed status" to view approved or rejected cost sheets for a particular team member.

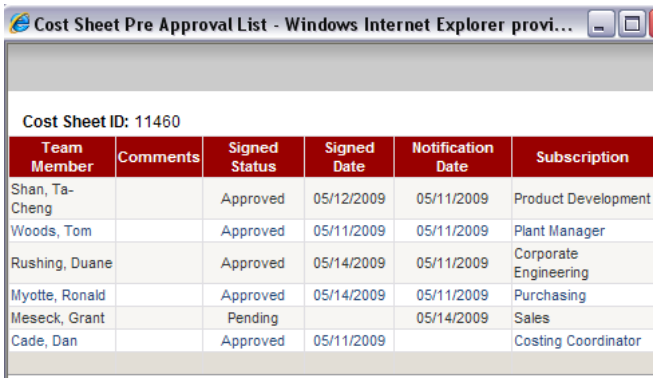


Note: *The Cost Sheet Approval List will only display cost sheets that were assigned to the team members who is connected at the time.*

Fields	Description
Action	Click this button to determine if the cost form should be approved or rejected.
Cost Sheet ID	The appropriate cost sheet identifier
Team Member	The team member that will perform the action. ***This will be updated to the new team member if a backup is operating here.***
Comments	The approver may enter comments. ***Rejections require comments.***
Signed Status	Approved or Rejected
Signed Date	The date when the cost sheet was approved or rejected.
See All approvers	Opens a popup to see all approval details from all approvers.
Preview Cost Form	Opens a popup to show the cost form
Preview Die Layout	Opens a popup to show the die layout form

Cost Sheet Pre-Approval Popup

This is the popup that show pre-approval information for a cost sheet.



Team Member	Comments	Signed Status	Signed Date	Notification Date	Subscription
Shan, Ta-Cheng		Approved	05/12/2009	05/11/2009	Product Development
Woods, Tom		Approved	05/11/2009	05/11/2009	Plant Manager
Rushing, Duane		Approved	05/14/2009	05/11/2009	Corporate Engineering
Myotte, Ronald		Approved	05/14/2009	05/11/2009	Purchasing
Meseck, Grant		Pending		05/14/2009	Sales
Cade, Dan		Approved	05/11/2009		Costing Coordinator

Maintenance

A series of "Maintenance" pages on the **Costing Menu** are used by the Costing Coordinators to set pre-defined values when creating/updating cost sheets. The information in each maintenance page must be updated as often as possible.

With every section that is a "grid", there are special instructions for adding, editing, and deleting rows. A set of buttons are located on the right side of each grid.

To add a row, enter information in the last row and then click the "save" button.

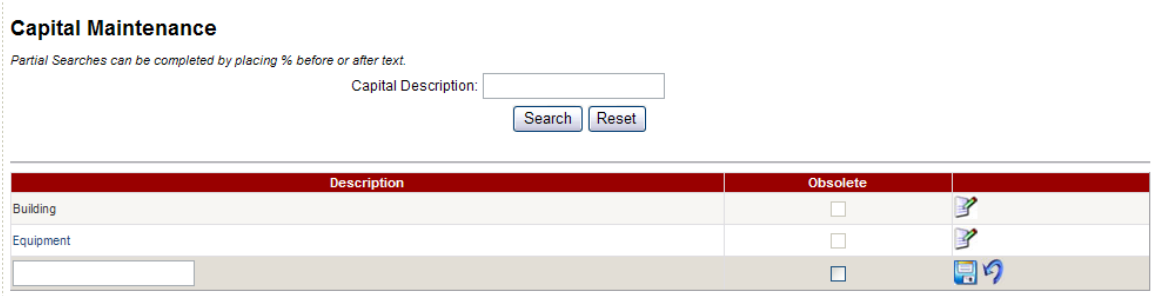
To ignore the change, click the "undo" button.

To edit a row, click the "edit" button, change the information, and then click the save button.

To delete a row, click the "delete" button.

Capital

The **Capital** screen was designed for Costing Coordinators to add, edit, or delete capital to the Costing module. This table is used in the **Capital** tab of cost sheets



The **Capital Maintenance** page is designed with the following fields:

Fields/Buttons	Description
Description	To add a new item to the list, enter the on the last row and click save. **This is a required field.**
Obsolete	A value is NEVER deleted. Instead, it is set to obsolete. This is to ensure no lost references in the cost sheets that might use the value.

Catching Ability Factor

The **Catching Ability Factor** page was designed for the calculations in the cost sheets. This should NEVER be edited without careful consideration. It would change how ALL cost sheets are calculated.

Catching Ability Factor Maintenance

Min Part Length	<=	Max Part Length	Side By Side	Factor	Obsolete
0.0000	<=	0.3000	☐	1.3000	☐
0.3000	<=	0.4000	☐	1.5000	☐
0.4000	<=	0.5000	☐	1.8000	☐
0.5000	<=	10.0000	☐	1.1500	☐
0.0000	<=	0.3000	☑	1.1500	☐
0.3000	<=	0.6000	☑	1.2000	☐
0.6000	<=	0.7000	☑	1.3000	☐
0.7000	<=	0.8000	☑	1.4500	☐
0.8000	<=	0.9000	☑	1.6300	☐
0.9000	<=	1.0000	☑	1.8000	☐
1.0000	<=	1.1000	☑	2.0000	☐
1.1000	<=	1.2000	☑	2.3000	☐
1.2000	<=	10.0000	☑	1.1500	☐

Formula List

The formula list page allows team members search for existing formulas. The formulas are the main basis for the calculation factors and items used in a cost sheet.

Costing coordinators can click the “add” button to create a new formula.

Formula List

Partial Searches can be completed by placing % before or after text.

Review existing formulas or press [Add] to enter a new formula.

Formula Name: | BPCS Part Name:
Drawing No: | BPCS Part No:
Department: | Process:
Template:

[Search] [Reset]

Page: 1 of 7 |< << 1 Go >> >|

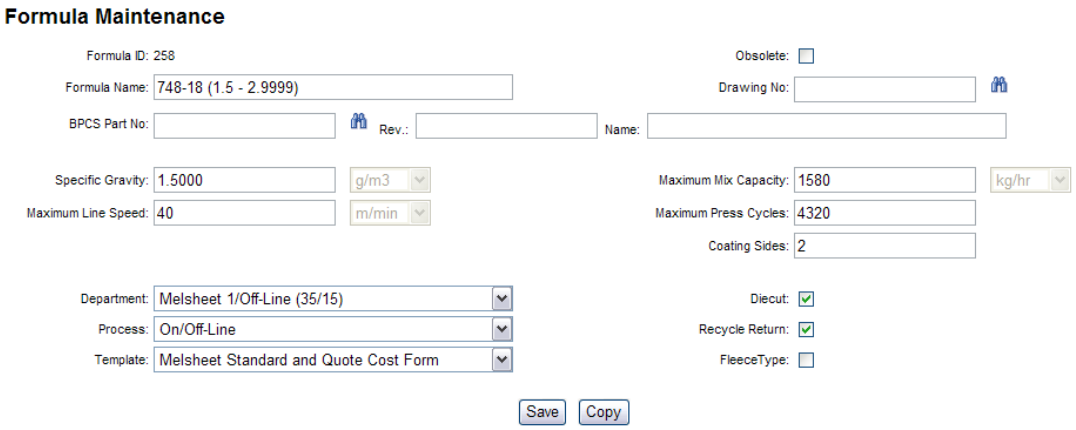
Formula	DrawingNo	BPCS PartNo	BPCS Rev.	Department	Process	Template
unknown						
unknown						
697-NF				Melsheet 2 (25)	On/Off-Line	Melsheet Standard and Quote Cost Form
748-18 (1.5 - 2.9999)				Melsheet 1/Off-Line (35/15)	On/Off-Line	Melsheet Standard and Quote Cost Form
748-18 (3.0 - 3.9999)				Melsheet 1/Off-Line (35/15)	On/Off-Line	Melsheet Standard and Quote Cost Form
748-18 (60-80%)				Melsheet 1/Off-Line (35/15)	On/Off-Line	Melsheet Standard and Quote Cost Form
748-19 (1.5-2.9999)				Melsheet 1/Off-Line (35/15)	On/Off-Line	Melsheet Standard and Quote Cost Form
748-19 (3.0 - 3.9999)				Melsheet 1/Off-Line (35/15)	On/Off-Line	Melsheet Standard and Quote Cost Form
748-19 (4.0 - 6.0)				Melsheet 1/Off-Line (35/15)	On/Off-Line	Melsheet Standard and Quote Cost Form
748-M3				Melsheet 1/Off-Line (35/15)	On/Off-Line	Melsheet Standard and Quote Cost Form
AFR				Somerset Fleece Line (126055)	On Line	Fleece
AFR-12/7/41/40				Somerset Fleece Line (126055)	On Line	Fleece
AFR-14/8/38/40				Somerset Fleece Line (126055)	On Line	Fleece
AFR-17/37/16/30				Somerset Fleece Line (126055)	On Line	Fleece
AFR-19/35/16/30				Somerset Fleece Line (126055)	On Line	Fleece

Fields/Buttons	Description
Formula	Click on the Formula in the result list to view its details of a formula
Drawing No	In many cases, a DMS Drawing number was created for the formula
BPCS Part No / Rev.	In the BPCS System, there is a part with a designation type called “phantom,” which should correspond to a formula used to build the part. Each part has a revision.
Department	Certain formulas use different UGN departments for part creation. Different departments affect the calculations.
Process	The process used in the formula. Different processes affect the calculations
Template	This determines which fields should be used and how some calculations are made in the cost sheet.

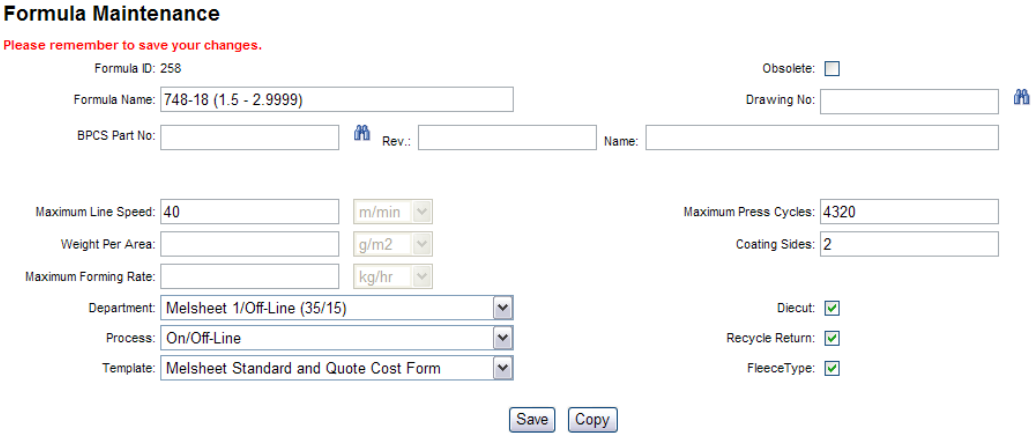
Formula Maintenance

The details of the formula can be seen on the maintenance page. There are several tabs with information that will be explained after the fields below are described. The Formula information is used in the **-Cost Sheet: Part Specification**, **Composite Part Specs** and **Molded Barrier** tabs.

Fleece-Type Formula



Fleece-Type Formula



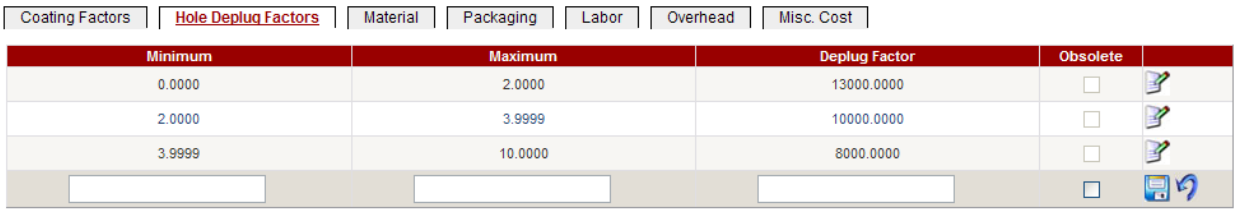
Fields/Buttons	Description
Formula ID	This value is automatically generated. **This is a required field.**

Obsolete	Check if the formula should no longer be used. There is no delete in order to prevent cost sheets from losing the reference.
Formula Name	The descriptive name of the formula.
BPCS Part No / Rev.	In the BPCS System, there is a part with a designation type called “phantom,” which should correspond to a formula used to build the part. Each part has a revision. There is a popup available to search for the BPCS Part No.
BPCS Part Name	In the BPCS System, there is a name for the part.
Drawing No	In many cases, a DMS Drawing number was created for the formula. There is a popup available to search for the Drawing No.
Department	Certain formulas use different UGN departments for part creation. Different departments affect the calculations.
Specific Gravity	Numeric value used in the cost form (non-fleece type)
Maximum Mix Capacity	Numeric value used in the cost form (non-fleece type)
Maximum Line Speed	Numeric value used in the cost form
Maximum Press Cycles	Numeric value used in the cost form
Weight Per Area	Numeric value used in the cost form (fleece type)
Coating Sides	Numeric value used in the cost form
Max Forming Rate	Numeric value used in the cost form (fleece type)
Die Cut	Determines if Die Layout should be used on cost sheet. Also determines some calculations.
Recycle Return	Determines some calculations.
Fleece Type	Determines some calculations
Process	The process used in the formula. Different processes affect the calculations
Template	This determines which fields should be used and how some calculations are made in the cost sheet.
Save	Insert or update the formula
Copy	Copy the formula for another version or purpose. All values on all tabs will be copied. Please work with the application group as new formulas are used to see if any calculations need to be adjusted or added.

Formula Coating Factors

Fields/Buttons	Description
Min	To add a new item to the list, enter the *minimum* value for a coating factor on the last line. **This is a required field.**
Max	The *maximum* value of a coating factor on the last line. **This is a required field.**
Coating Factor g/ft2	The *coating factor* as g/ft2. **This is a required field.**

Formula Deplug Factors



Fields/Buttons	Description
Min	To add a new item to the list, enter the *minimum* value for a deplug on the last line. **This is a required field.**
Max	The *maximum* value of a deplug factor. **This is a required field.**
Deplug Factor	The *deplug factor* **This is a required field.**

Formula Materials

Fields/Buttons	Description
Material	To add a new item to the list, select the *material* from the drop down list on the last line. **This is a required field.**
Usage Factor	The *percent of part used.*
Ordinal	The order in which the list should display in the **Cost Sheet – Materials** page as a default.

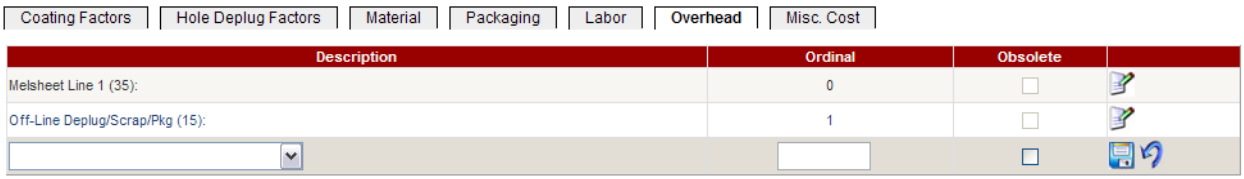
Formula Packaging

Fields/Buttons	Description
Packaging	To add a new item to the list, select the *packaging* from the drop down list on the last line. **This is a required field.**
Ordinal	The order in which the list should display in the **Cost Sheet – Packaging** page as a default.

Formula Labor

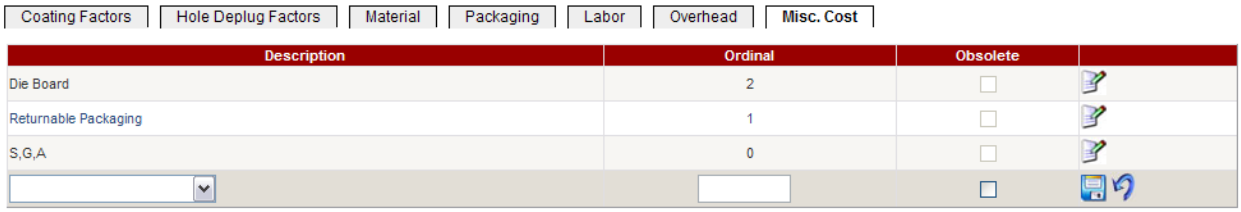
Fields/Buttons	Description
Labor Items	To add a new item to the list, select the *labor items* from the drop down list on the last line. **This is a required field.**
Ordinal	The order in which the list should display in the **Cost Sheet – Labor** page as a default.

Formula Overhead



Fields/Buttons	Description
Overhead Items	To add a new item to the list, select the *overhead items* from the drop down list on the last line. **This is a required field.**
Ordinal	The order in which the list should display in the **Cost Sheet – Overhead** page as a default.

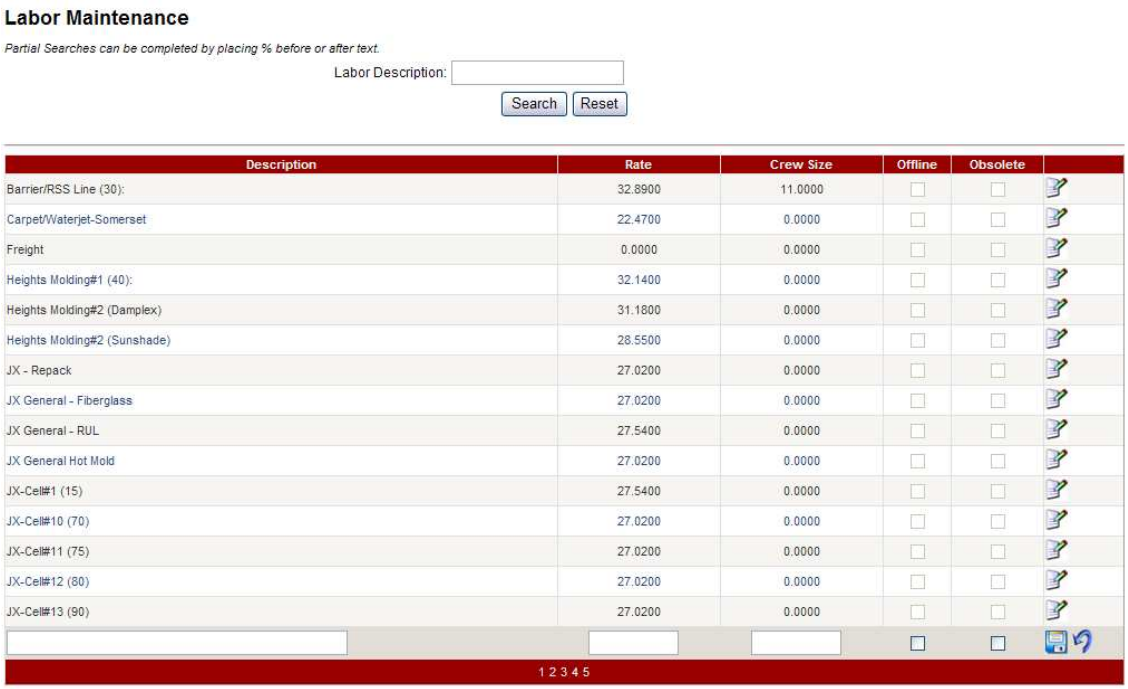
Formula Misc. Cost



Fields/Buttons	Description
Cost Item	To add a new item to the list, select the *cost items* from the drop down list on the last line. **This is a required field.**
Ordinal	The order in which the list should display in the **Cost Sheet – Misc. Costs** tab as a defaulted.

Labor

The **Labor** page was designed for costing coordinators to add, edit, or delete labor information to the Costing module with the option to search by *Description*. This table is used in both **Formula – Labor** and **Cost Sheet- Labor** pages.



The **Labor** page is designed with the following fields:

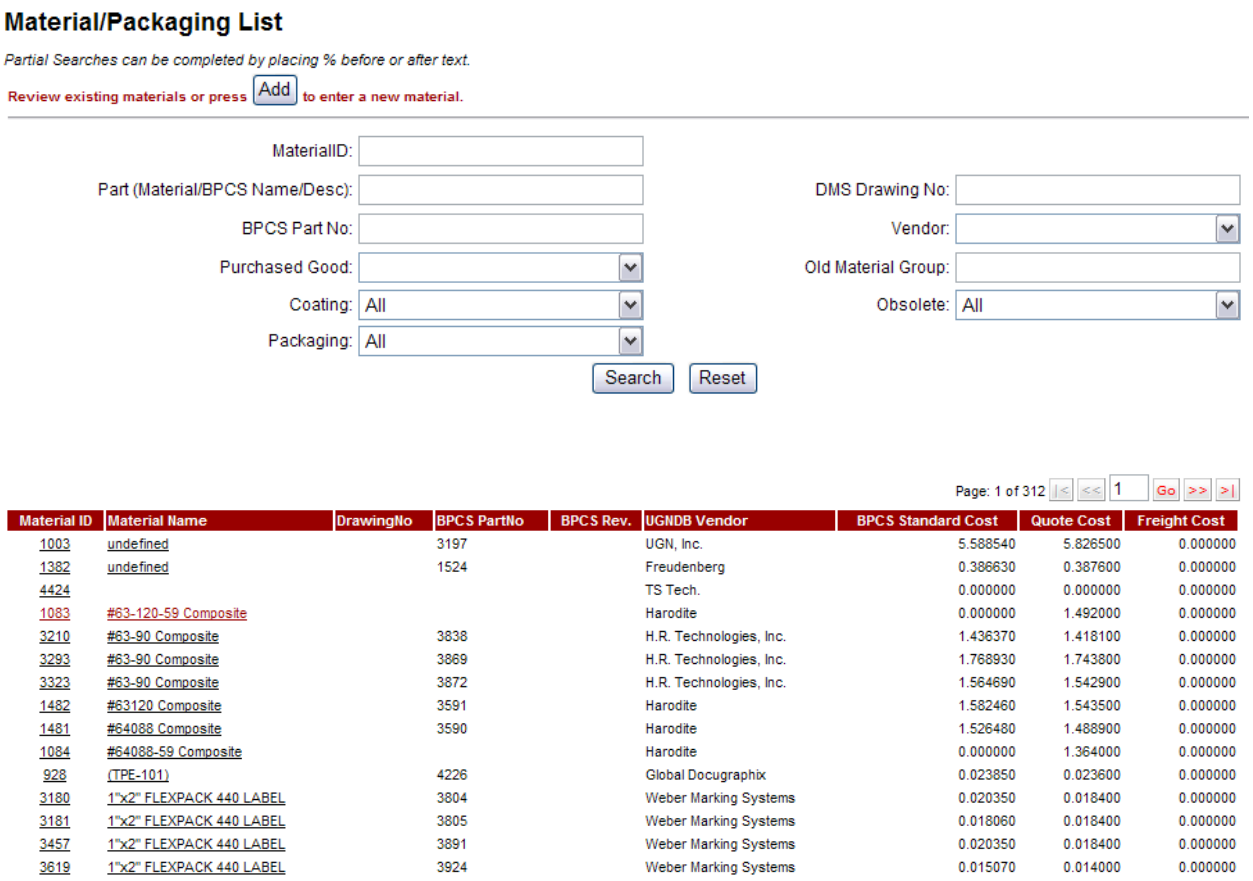
Fields/Buttons	Description
Description	To add a new item to the list, enter the *on the last line*. **This is a required field.**
Rate	The *rate* for the labor.
Crew Size	The number of *crew size.*
Off Line	Check the item if required for *offline.*
Obsolete	This will indicate to the team member to no longer use this value.

Material/Packaging List

The **Material/Packaging List** page was designed for costing coordinators to display a list of materials that were added to the costing module with the ability to search by *Material ID, Part, BPCS PartNo. Purchased Good, Vendor, Coating Usage, Packaging usage, or obsolete.* The Materials information is used in the **Formula – Material** tab and **Cost Sheet– Materials** tab. Costing coordinators can add new materials by clicking on the "add" button. Team members can view the details of a material by clicking on the Material ID or Name.

The **Packaging List** was designed for Costing Coordinators to display a list of materials that were added to the costing module. The Materials table is used in **Formula – Packaging** tab and **Cost Sheet – Packaging** tab.

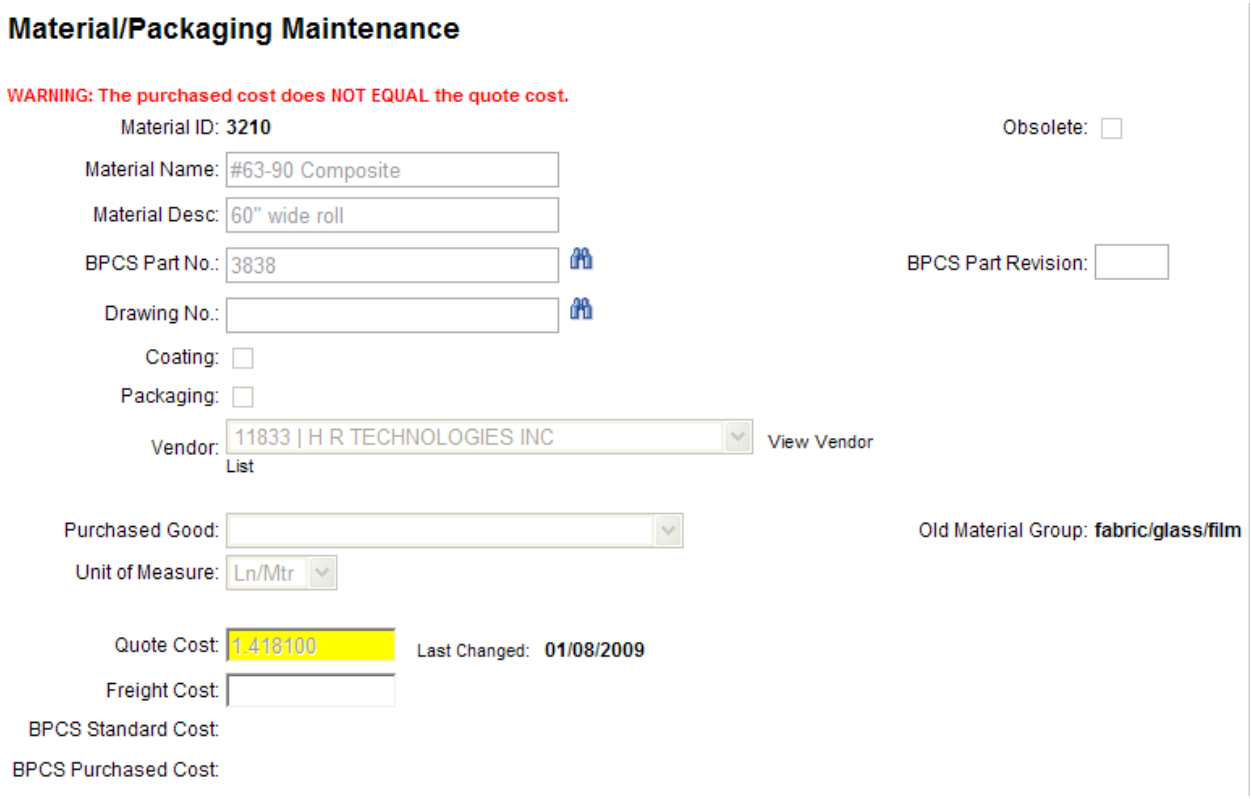
Note: *Only materials that have the packaging value set to true will display in the* ***Packaging Material List****.*



Material/Packaging Maintenance

The BPCS standard cost and purchased cost are downloaded daily from the BPCS System into the UGN Database. An email is sent to the costing coordinators with a list of the changes. The costing coordinator should check each of those materials to see if any changes are needed for the quote cost, which is the cost that should be used in cost sheets. If the BPCS purchased cost is not equal to the quote cost, then the background color of the quote cost will be yellow. If the purchased cost plus the freight cost does not equal the BPCS standard cost, the background color of the freight cost will be yellow.

Note: *Only materials that have the packaging value set to true will display in the* ***Packaging List****.*



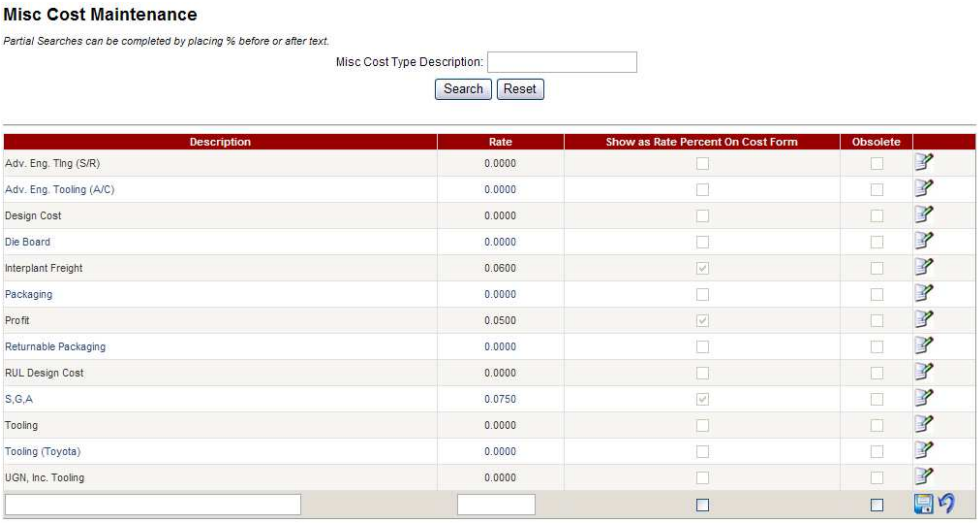
The **Material Detail** page is designed with the following fields:

Fields/Buttons	**Description**
Material ID	This is the unique identifier of a material. Once the record is saved, the system will get the next sequential *material id*. **This is a read only field.**
Material Name	The name of the *material*. **This is a required field.**
Material Description	The *description* of the material.
BPCS PartNo	The *BPCS part number*. The system will verify if the BPCS number entered is used in another material. If so, the system will display a warning message. The BPCS PartNo popup is available for searching.
DrawingNo	Enter the DMS Drawing No associated with the part. The DMS DrawingNo popup is available for searching.
Purchased Good	Select the type of raw material
Material Group	If an old material group was used in the old system, it will be carried over to a label.
Vendor	Select a *vendor* from the drop down list. This list is derived from the BPCS System. If a value does not exist, the costing coordinator may add a new value in the Vendor Maintenance page of the Data Maintenance Module.
Quote Cost	The *quote cost per unit, which will be used in the cost sheets.* A label will be shown the last time this page changed.
Unit of Measure	Select the *unit of measure*. If the value is missing, the costing coordinator can add a value in the Unit Maintenance page of the Data Maintenance Module.
Freight Cost	The *freight cost*. A label will show the last time this value changed.
BPCS Standard Cost	The standard cost of the part in the BPCS System. This is a label. A second label will indicate the last time it changed.
BPCS Purchased Cost	The purchased cost of the part in the BPCS System. This is a label. A second label will indicate the last time it changed.
Coating	If the material requires *coating*, this box is checked
Packaging	If the material is used for *packaging*, this box is checked

Obsolete	If the material will no longer be in use, this box is checked
Save Record	The **Save Record** button should be clicked completed the entry or update.
Copy	The **Copy** button will recreate a new material record with the same information of a current material. The *BPCS Number* and *Make Obsolete* values will not be included in the copy process.

Misc. Costs

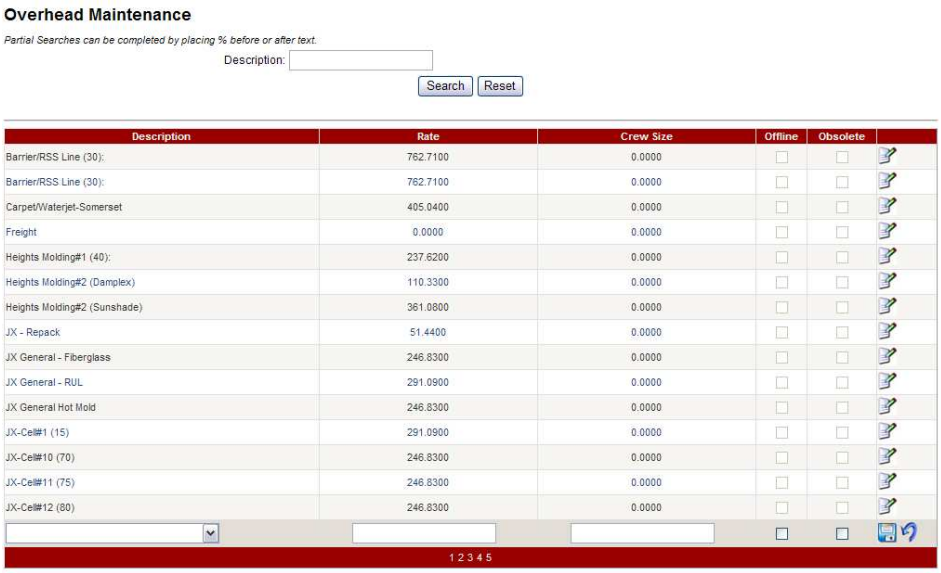
The **Misc Costs** page was designed for costing coordinators to add, edit, or delete costs to the Costing module with the ability to search for a particular description. This table is used in both **Formula – Misc Costs** tab and **Cost Sheet- Misc. Costs** tab.



Fields/Buttons	**Description**
Description	To add a new item to the list, enter the *on the last line.* **This is a required field.**
Rate	The *rate* for the labor.
Show as Rate Percent on the Cost Form	If this is checked, then the cost forrm should show the rate or the percentage.
Obsolete	This will indicate to the team member to no longer use this value.

Overhead

The **Overhead** page was designed for costing coordinators to add, edit, or delete overhead information to the Costing module with the option to search by *Description*. This table is used in both **Formula – Overhead** tab and **Cost Sheet-Overhead** tab.

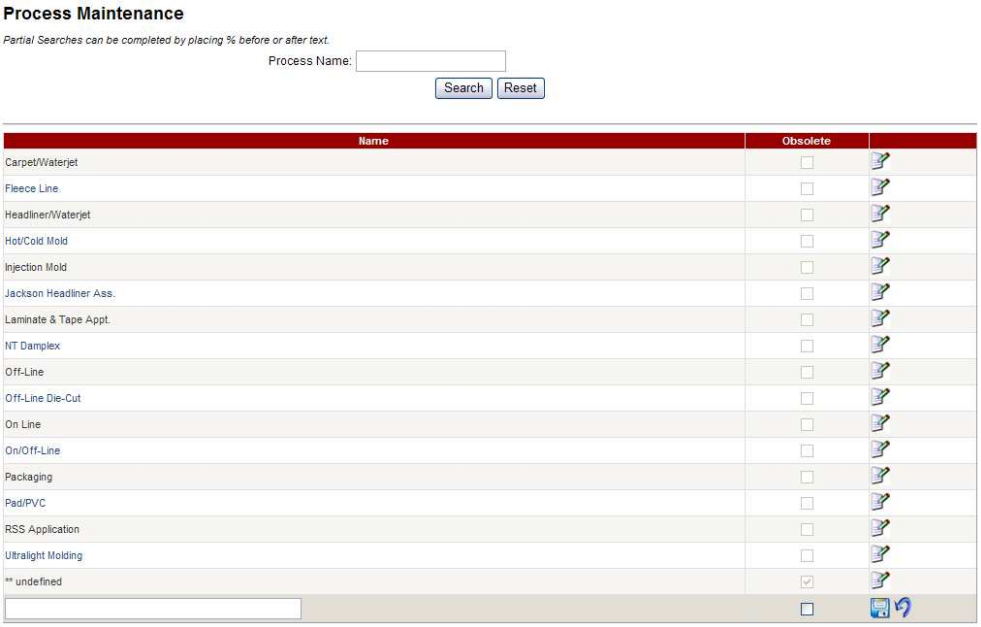


The **Overhead** screen is designed with the following fields:

Fields/Buttons	**Description**
Description	To add a new item to the list, enter the *description* on the last line. **This is a required field.**
Rate	The *rate* for the labor.
Crew Size	The number of *crew size.*
Off Line	This is checked if the item if required for *offline.*
Obsolete	This will indicate to the team member to no longer use this value.

Processes

The **Process** page is designed for costing coordinators to display a list of processes that were added to the Costing module with the ability to search by *Process* name. The Process table is used in **Formula – top level properties** and **Cost Sheet – Part Specification** tab.

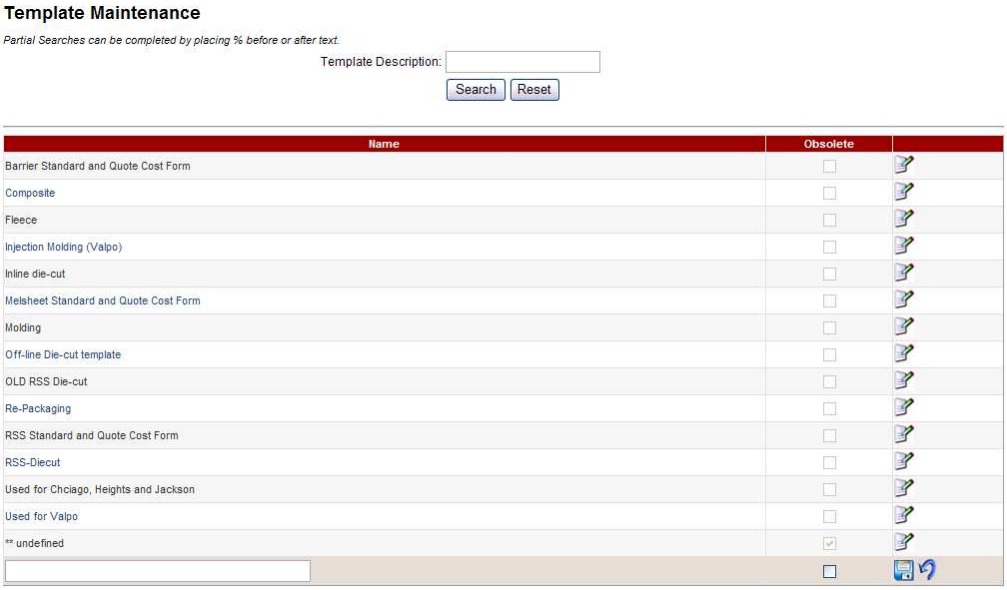


The **Process** page is designed with the following fields:

Fields/Buttons	Description
Name	To add a new item to the list, enter the *on the last* line. **This is a required field.**
Obsolete	This will indicate to the team member to no longer use this value.

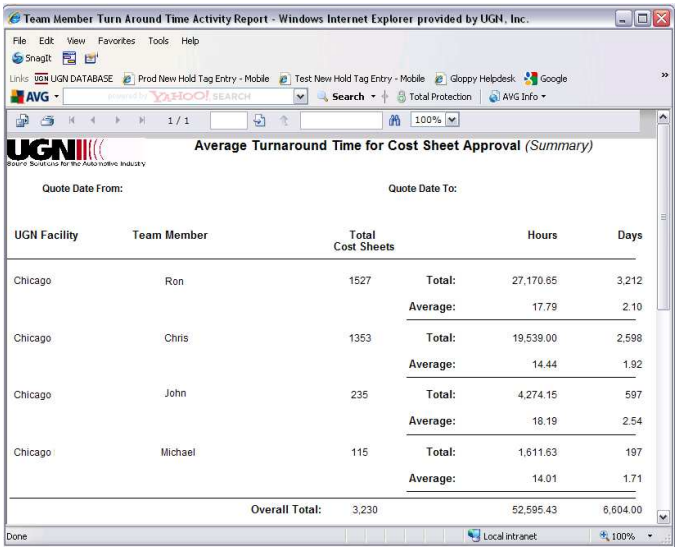
Template

The **Template** page is designed for costing coordinators to display a list of templates that were added to the costing module with the ability to search by *Template* name. The Template table is used in **Formula – top level properties** and used in the calculations of cost sheets, as well as a deciding factor in which fields are used when presenting the cost form and die layout form.



The **Template** page is designed with the following fields:

Fields/Buttons	Description
Name	To add a new item to the list, enter the *on the last* line. **This is a required field.**
Obsolete	This will indicate to the team member to no longer use this value.

Cost Sheet Activity Report

The cost sheet activity report on the **Costing Menu** screen is used to show the response time in summary or detail of a particular team memory or facility, based on an optional date range.