



aleyant

Spreadsheet Calculator Pricing Engine

- The Spreadsheet Calculator Pricing Engine requires a working knowledge of Excel and as such we are unable to provide free technical support for this method

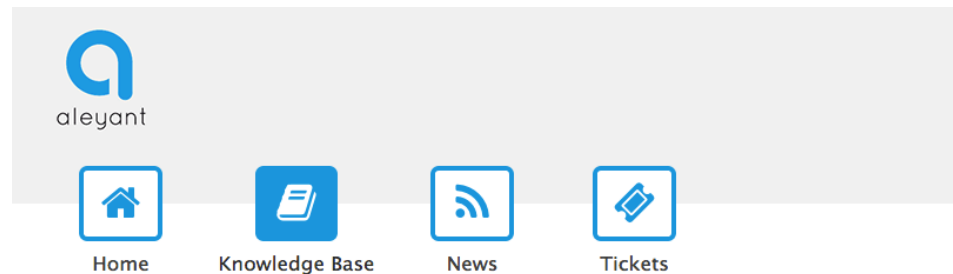
- The Spreadsheet Calculator Pricing Engine is used where it is difficult or impossible to fit your needs into the Calculator Pricing Engine solution
- It provides a greater degree of flexibility and control and allows for far more complex calculations to be used

Are There Limitations?

- Virtually any Excel spreadsheet can be used however please note:
 - Macro's, Special Function Libraries & any controls that “float” over the spreadsheet such as dropdown lists, are not supported
 - Data to be uploaded to Pressero must reside on the first sheet

- Chapter 14 of the Pressero Online Documentation

http://support.aleyant.com/kb/a599/ch_014_creating-a-spreadsheet-method-pricing-engine.aspx



Ch. 014. Creating a Spreadsheet Method Pricing Engine

PRESSERO > Documentation Manual

Please note that using this method requires advance knowledge of excel and is included only in the Enterprise Packages. Because of the technical nature of this method, we are unable to provide free technical support beyond what is already included in this article.

The Spreadsheet option has been developed to meet the needs of complex calculations that cannot be done with the standard pricing engines and enables you to manage your own pricing, especially when it is difficult or impossible to fit into the **Calculator Pricing Engine** schema. With the Spreadsheet Pricing Engine, nearly any spreadsheet that you can use in Excel can be used as a pricing engine.

- The starting point for the Spreadsheet Calculator Pricing Engine differs from the other Pricing Engine formats in that we start within Excel and not the Pressero Admin portal
 - The first stage is to create a fully working Excel sheet that reflects the product selection options, rules and pricing matrix
 - The second stage is to upload the specific data for the respective pricing engine into Pressero

To Reiterate Basic Rules

- Within your Excel spreadsheet
 - Macro's, Special Function Libraries & any controls that “float” over the spreadsheet such as dropdown lists, are not supported
 - Data to be uploaded to Pressero must reside on the first sheet
 - A “Quantity” Parameter must be defined for the Pricing Engine to work

But What About Excel Formulae?

- As stated “The Spreadsheet Calculator Pricing Engine requires a working knowledge of Excel and as such we are unable to provide free technical support for this method”

<http://www.techonthenet.com/excel/formulas/>

- Lets start with some basic guidelines
 - The Excel sheet must replicate the respective product options and calculate the final output values for the calculated “Final Price”, “Weight” and Unit or “Each Price”
 - There must be a Quantity field with a minimum value of 1
 - Think about ease of use and future updating requirements – format should be future proof

A Suggested Format

- Create an “Options” area that defines the specific product options as used in a Calculator Pricing Engine to define Quantity, Grid & Calculator Parameters
- Create a “Calculations” area that will be used to generate the respective formulae and test the Pricing Engine – think of this as the Final Output from the Pricing Engine

- Start with the Options area as per example here



Spreadsheet Calculator Method Pricing Engine

Set Price/Options Area:

Quantity:
Quantity: 1

Markup:
Minimum: 0
Maximum: 30
Value: 1

Fixed Costs:
Progress: 90
Cells: 30

Number of Sides:
1
2

Proofing:
Pop: 0
Hard Copy: 0

Create:
No
Yes

Fold:
No
Yes

Variable Cost (per Unit A3):

Item	Set-Up:	Per Unit	% Charge:	Cost/1000 (A3)
Click:		0.10	50%	
Cut/Pack:				20
Crease:	20			40
Fold:	10			30
Printing:	20			100

CELLOGLAZING:

Celloglazing:	Lower Qty:	Higher Qty:	Matt		Gloss	
			Price/2 Sides:	Price/1 Side:	Price/2 Sides:	Price/1 Side:
None	1	100	\$0.70	\$0.91	\$0.69	\$0.79
Matt 1 Side	101	125	\$0.58	\$0.75	\$0.57	\$0.67
Matt 2 Sides	126	150	\$0.51	\$0.65	\$0.50	\$0.61
Gloss 1 Side	151	200	\$0.40	\$0.51	\$0.39	\$0.49
Gloss 2 Sides	201	250	\$0.34	\$0.45	\$0.33	\$0.43
	251	300	\$0.30	\$0.41	\$0.29	\$0.39
	301	400	\$0.25	\$0.36	\$0.24	\$0.34
	401	500	\$0.22	\$0.32	\$0.21	\$0.30
	501	600	\$0.20	\$0.29	\$0.19	\$0.27
	601	700	\$0.19	\$0.28	\$0.18	\$0.24
	701	800	\$0.18	\$0.26	\$0.17	\$0.23
	801	900	\$0.17	\$0.24	\$0.16	\$0.21
	901	1500	\$0.16	\$0.23	\$0.15	\$0.19

Paper Size:

Paper Size	Qty/Pack:	Lower Qty:	Higher Qty:	Qty/A4 Sheet
APP-A4	20	1	1000	1
APP-A5	30	1	2000	2
APP-A6	35	1	3000	3
APP-A7	40	1	4000	4
APP-DL Landscape	50	1	6000	3
APP-DL	60	1	8000	3
6PP-DL	70	1	16000	2

PAPER TYPE: (Price per Sheet)

Paper Type:	APP-A4	APP-A5	APP-A6	APP-A7	APP-DL Landscape	APP-DL	6PP-DL	Weight/1000 (A3)
Gloss 11gsm	0.025125	0.037625	0.00891125	0.00482625	0.01150825	0.01150825	0.017625	0
Gloss 12gsm	0.038615	0.0193075	0.00865375	0.00482675	0.01287167	0.01287167	0.0193075	0
Gloss 15gsm	0.04587	0.022935	0.0114675	0.00573375	0.01529	0.01529	0.022935	0
Gloss 17gsm	0.0531	0.02655	0.013275	0.0066375	0.0177	0.0177	0.02655	0
Gloss 20gsm	0.06498	0.03249	0.016245	0.0081225	0.02166	0.02166	0.03249	0
Gloss 25gsm	0.08198	0.04099	0.020495	0.0102475	0.02732667	0.02732667	0.04099	0
Gloss 30gsm	0.09902	0.04951	0.024755	0.0123775	0.03300667	0.03300667	0.04951	0
Gloss 35gsm	0.11461	0.057825	0.028625	0.01450625	0.03820333	0.03820333	0.057825	0
Gloss 40gsm	0.28978	0.14489	0.072445	0.0362225	0.09659333	0.09659333	0.14489	0
Satin 11gsm	0.033989	0.0169945	0.00849725	0.004248625	0.01132967	0.01132967	0.0169945	0
Satin 12gsm	0.038958	0.019479	0.0097395	0.00486975	0.012986	0.012986	0.019479	0
Satin 15gsm	0.04703	0.023515	0.011725	0.00587875	0.01567667	0.01567667	0.023515	0
Satin 17gsm	0.05312	0.02656	0.01328	0.00664	0.01770667	0.01770667	0.02656	0
Satin 20gsm	0.06469	0.032345	0.0161725	0.00808625	0.02156333	0.02156333	0.032345	0
Satin 25gsm	0.083	0.0415	0.02075	0.010375	0.02766667	0.02766667	0.0415	0
Satin 30gsm	0.09793	0.048965	0.0244625	0.01224125	0.03264333	0.03264333	0.048965	0
Satin 35gsm	0.115003	0.0575015	0.02875075	0.014375375	0.03834333	0.03834333	0.0575015	0
Satin 40gsm	0.282423	0.1412115	0.07060725	0.03530625	0.09806667	0.09806667	0.1412115	0

- As you can see
 - Make the options area easily navigatable – the different parameters, options, pricing impact etc are easily distinguished
 - Use of colours further promotes ease of understanding making it future proof when amendments are required
 - Data can be inserted on the sheet itself or derived from other sheets or even other spreadsheets to optimise control of pricing as an example when a substrate cost changes

- The Calculations section allows the formulae to be created and tested to validate the operation of the spreadsheet and selected parameters
- We advise breaking down the complexity of the formulae into smaller sections, allowing smaller elements to be calculated independently and thus reducing the overall complexity of the resulting formulae

Calculations Area



Spreadsheet Calculator Pricing Engine Example

Calculations Area:

Test Conditions:	
Quantity:	500
Number of Sides:	1
Paper Type:	Gloss 113gsm
Paper Size:	4PP-A4
Celloglazing:	Gloss 1 Side
Proofing:	PDF
Crease:	YES
Fold:	No
Markup (%)	30

COST: _____
 WEIGHT: _____
 EACH: _____

Costs Calculation:

Fixed Costs: 17.00
 Determine Unit Paper Cost: 0.04
 Calculate Click Charge: 75.00
 Printing & Cut/Pack Charge: 80.00
 Celloglazing Charge: 0.24
 Proofing: 0
 Test Quantity vs. Paper Size: 1
 Calculate correct paper volume: 500
 Check Markup not exceed Limits: 1
 Calculate Markup: 1.4

- Fixed + Progress/Celloglazing setup if selected + Cut/Pack Setup charge depending on paper size selected
- Compare Paper Size entered, and quantity is within defined limits, then use that to determine position in Paper Type Cost table to retrieve correct UNIT cost of paper selected
- Factors in actual number sheets used (AS size) for the respective Paper Size selected before applying click charge
- Factors in actual number sheets used (AS size) for the respective Paper Size selected before applying set-up cost + cost allocated/2000 AS sheets, ALSO FACTORS IN NUMBER SIDES
- Takes the actual number AS sheets as quantity field for calculation of celloglazing costs
- If within limits returns 1, else 0 (used to reduce formulae in each of the cost calculations above)
- Calculates correct quantity of AS sheets for selected Paper Size quantity
- Confirms margin range is between limits defined
- Simple check ensure Markup within limits then calculates factor for application in total cost

Set Price/Options Area:

Quantity:		Fixed Costs:	
Quantity:	1	Prepress:	50
		Cello:	20

Markup:		Number of Sides:		Proofing:	
Minimum:	Maximum:	1	2	PDF:	0
0	30	2		Hard Copy:	0
Value:					

Variable Cost (per Unit AS)			
Item:	Set Up:	Per Unit	% Charge:
Click:	0.10		50%
Cut/Pack:		20	30
Crease:		40	40
Fold:		10	30
Printing:		20	100

Crease:	
No	Yes

Fold:	
No	Yes

Celloglazing:	Lower Qty:	Higher Qty:	Matt		Gloss	
			Price/1 Side:	Price/2 Sides:	Price/1 Side:	Price/2 Sides:
None	1	100	\$0.70	\$0.91	\$0.69	\$0.79
Matt 1 Side	101	125	\$0.58	\$0.75	\$0.57	\$0.67
Matt 2 Sides	106	150	\$0.51	\$0.65	\$0.50	\$0.64
Gloss 1 Side	151	200	\$0.40	\$0.51	\$0.39	\$0.49
Gloss 2 Sides	201	250	\$0.34	\$0.45	\$0.33	\$0.43
	251	300	\$0.30	\$0.41	\$0.29	\$0.39
	301	400	\$0.25	\$0.36	\$0.24	\$0.34
	401	500	\$0.22	\$0.32	\$0.21	\$0.30
	501	600	\$0.20	\$0.29	\$0.19	\$0.27
	601	700	\$0.19	\$0.28	\$0.18	\$0.24
	701	800	\$0.18	\$0.26	\$0.17	\$0.23
	801	900	\$0.17	\$0.24	\$0.16	\$0.21
	901	1000	\$0.16	\$0.23	\$0.15	\$0.19

Paper Size:				
Paper Size:	SCut/Pack:	Lower Qty:	Higher Qty:	Qty/AS Sheet
4PP-A4	20	1	1000	1
4PP-A5	30	1	2000	2
4PP-A6	35	1	3000	3
4PP-A7	40	1	4000	4
4PP-DL Landscape	50	1	6000	3
4PP-DL	60	1	8000	3
6PP-DL	70	1	16000	2

Enter only the 4PP-A4 sheet price, the other sizes are automatically calculated

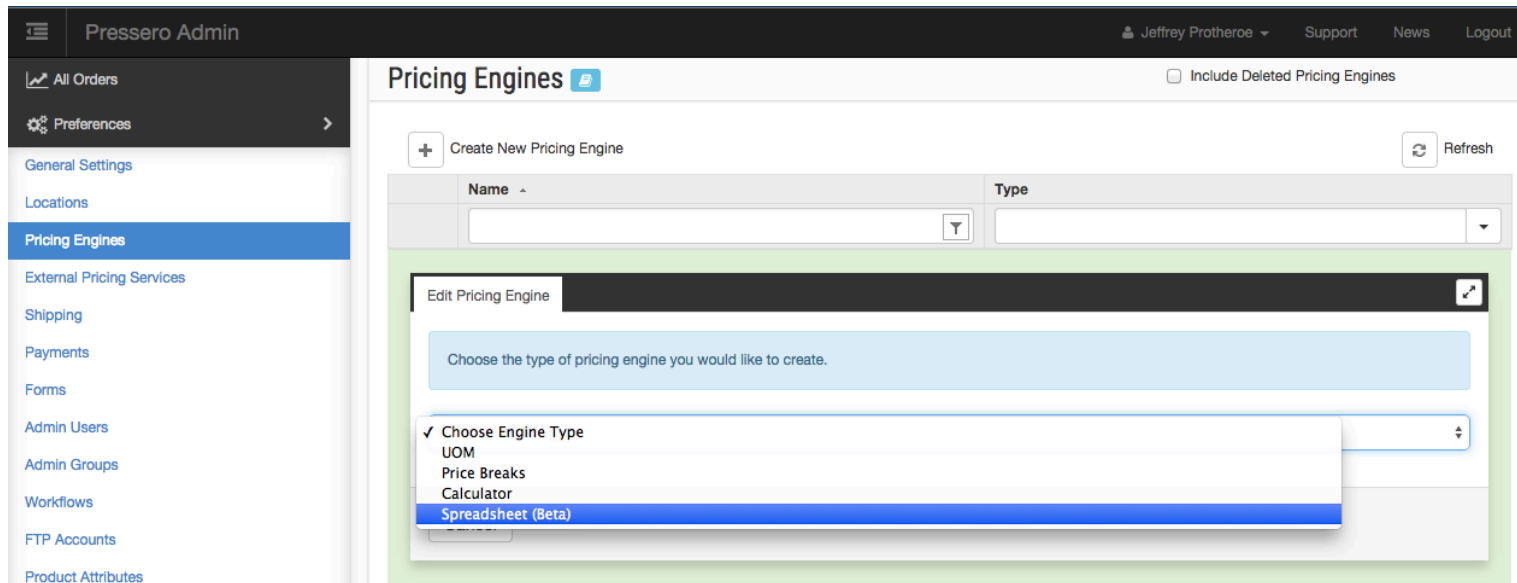
Allows you to enter weight at later stage for future requirements

Paper Type:	PAPER TYPE: (Price per Sheet)							Weight/1000 (AS)
	4PP-A4	4PP-A5	4PP-A6	4PP-A7	4PP-DL Landscape	4PP-DL	6PP-DL	
Gloss 113gsm	0.035725	0.0178625	0.00893125	0.004465625	0.011908333	0.011908333	0.0178625	0
Gloss 128gsm	0.038615	0.0193075	0.00965375	0.004826875	0.012871667	0.012871667	0.0193075	0
Gloss 150gsm	0.04587	0.022935	0.0114675	0.00573375	0.01529	0.01529	0.022935	0
Gloss 170gsm	0.0531	0.02655	0.013275	0.0066375	0.0177	0.0177	0.02655	0
Gloss 200gsm	0.06498	0.03249	0.016245	0.0081225	0.02166	0.02166	0.03249	0
Gloss 250gsm	0.08198	0.04099	0.020495	0.0102475	0.027326667	0.027326667	0.04099	0
Gloss 300gsm	0.09902	0.04951	0.024755	0.0123775	0.033006667	0.033006667	0.04951	0
Gloss 350gsm	0.11461	0.057305	0.028625	0.01432625	0.038203333	0.038203333	0.057305	0
Gloss 400gsm	0.28978	0.14489	0.072445	0.0362225	0.096593333	0.096593333	0.14489	0
Satin 113gsm	0.033989	0.0169945	0.00849725	0.004248625	0.01129667	0.01129667	0.0169945	0
Satin 128gsm	0.036856	0.018428	0.009214	0.00460975	0.012966	0.012966	0.018428	0
Satin 150gsm	0.04703	0.023515	0.0117575	0.00587875	0.01567667	0.01567667	0.023515	0
Satin 170gsm	0.05312	0.02656	0.01328	0.00664	0.01770667	0.01770667	0.02656	0
Satin 200gsm	0.06469	0.03245	0.016125	0.0080625	0.021563333	0.021563333	0.03245	0
Satin 250gsm	0.081	0.0415	0.02075	0.010375	0.027666667	0.027666667	0.0415	0
Satin 300gsm	0.09793	0.04895	0.0244825	0.01224125	0.032643333	0.032643333	0.04895	0
Satin 350gsm	0.11503	0.057505	0.0287575	0.01437375	0.038333333	0.038333333	0.057505	0
Satin 400gsm	0.29429	0.147145	0.0735725	0.03678625	0.09896667	0.09896667	0.147145	0



Uploading to Pressero

- We now need to link the Excel Spreadsheet back to the respective Pricing Engine within Pressero



The screenshot displays the Pressero Admin interface. The top navigation bar includes the user name 'Jeffrey Protheroe', 'Support', 'News', and 'Logout'. The left sidebar contains a menu with items such as 'All Orders', 'Preferences', 'General Settings', 'Locations', 'Pricing Engines' (highlighted), 'External Pricing Services', 'Shipping', 'Payments', 'Forms', 'Admin Users', 'Admin Groups', 'Workflows', 'FTP Accounts', and 'Product Attributes'. The main content area is titled 'Pricing Engines' and features a 'Create New Pricing Engine' button and a 'Refresh' button. Below these buttons is a table with columns for 'Name' and 'Type'. A modal window titled 'Edit Pricing Engine' is open, showing a prompt to 'Choose the type of pricing engine you would like to create.' A dropdown menu is open, listing options: 'Choose Engine Type', 'UOM', 'Price Breaks', 'Calculator', and 'Spreadsheet (Beta)' (highlighted).

Uploading to Pressero

Pricing Engines

Include Deleted Pricing Engines

Edit Pricing Engine 


Name the engine; select a new Excel spreadsheet file to upload; and enter in the cell references for Output Cells, Quantity Parameters and Other Parameters. Spreadsheet engines are under beta test; please be cautious about using them on production websites.


Engine Name * 


New Engine


Upload Completed Excel File * 

Select

Output Cells 

Qty Parameters * 

Other Parameters 

Attribute Cells 

Save

Cancel



Output Cells

Displays values of:
Total Price
Weight
Unit (each) Price

Output Cells ?

F13
F15
F17

Pricing Engines

Include Deleted Pricing Engines

Edit Pricing Engine

Name the engine; select a new Excel spreadsheet file to upload; and enter in the cell references for Output Cells, Quantity Parameters and Other Parameters. Spreadsheet engines are under beta test; please be cautious about using them on production websites.

Engine Name * ?

Upload Completed Excel File * ?

Output Cells ?

Qty Parameters * ?

Other Parameters ?

Attribute Cells ?

Qty Parameters

Qty Parameters:
Consist of three elements
Prompt Cell (Name)
Simulated User Selection
Range Cell(s)

Pricing Engines

Include Deleted Pricing Engines

Edit Pricing Engine 

Name the engine; select a new Excel spreadsheet file to upload; and enter in the cell references for Output Cells, Quantity Parameters and Other Parameters. Spreadsheet engines are under beta test; please be cautious about using them on production websites.

Engine Name *

New Engine

Upload Completed Excel File *

Select

Output Cells

Qty Parameters *

Other Parameters

Attribute Cells

Save


Cancel


Qty Parameters *

B14,C14,N14
B15,C15,P19:P20
B22,G22,N21


Other Parameters


Other Parameters:
Consist of three elements
Prompt Cell (Name)
Simulated User Selection
Range Cell(s)


Pricing Engines  Include Deleted Pricing Engines


Edit Pricing Engine 


Name the engine; select a new Excel spreadsheet file to upload; and enter in the cell references for Output Cells, Quantity Parameters and Other Parameters. Spreadsheet engines are under beta test; please be cautious about using them on production websites.


Engine Name * 


Upload Completed Excel File * 

Output Cells 

Qty Parameters * 

Other Parameters 

Attribute Cells 


Other Parameters 


B16,C16,V15:V32
B17,C17,W14:AC14
B18,C18,M37:M41
B19,C19,R19:R20
B20,C20,S25:S26
B21,C21,S29:S30

Attribute Cells


Attribute Cells:
Used primarily with
integration to 3rd party
systems to pass further
production related details
such as finishing, press used
etc.


Requires two attributes:
Attribute Key (process stage
such as finishing, press, etc)
Attribute Value (the process
or machine e.g. Staple,
Perfect Bind, Heidelberg etc


Pricing Engines  Include Deleted Pricing Engines


Edit Pricing Engine 


Name the engine; select a new Excel spreadsheet file to upload; and enter in the cell references for Output Cells, Quantity Parameters and Other Parameters. Spreadsheet engines are under beta test; please be cautious about using them on production websites.


Engine Name * 

Upload Completed Excel File * 

Output Cells 


Qty Parameters * 

Other Parameters 


Attribute Cells 

We End Up With

Pricing Engines


Include Deleted Pricing Engines 

Name the engine; select a new Excel spreadsheet file to upload; and enter in the cell references for Output Cells, Quantity Parameters and Other Parameters. Spreadsheet engines are under beta test; please be cautious about using them on production websites.


Engine Name * 

A Spreadsheet Calculator Pricing Engir


Upload Completed Excel File * 

Download 

Existing Excel File

Output Cells 


F13
F15
F17

Qty Parameters * 

B14,C14,N14
B15,C15,P19:P20
B22,C22,N21

Other Parameters 

B16,C16,V15:V32
B17,C17,W14:AC14
B18,C18,M37:M41
B19,C19,R19:R20
B20,C20,S25:S26
B21,C21,S29:S30



Attribute Cells 

Save








Cancel

Delete

- Load the Excel file to the Spreadsheet Pricing Engine and SAVE

Pricing Engines  Include Deleted Pricing Engines 

Name the engine; select a new Excel spreadsheet file to upload; and enter in the cell references for Output Cells, Quantity Parameters and Other Parameters. Spreadsheet engines are under beta test; please be cautious about using them on production websites.

Engine Name *  A Spreadsheet Calculator Pricing Engin	Upload Completed Excel File *  <input type="text"/> <input type="button" value="Select"/>	Download  Existing Excel File
Output Cells  F13 F15 F17	Qty Parameters  B14,C14,N14 B15,C15,P19:P20 B22,C22,N21	Other Parameters  B16,C16,V15:V32 B17,C17,W14:AC14 B18,C18,M37:M41 B19,C19,R19:R20 B20,C20,S25:S26 B21,C21,S29:S30
Attribute Cells  <input type="text"/>		

- Finally before assignment to a Product we test the Pricing Engine – Please note to set the “Allow Arbitrary Values” where relevant

Culture: English (US) | Minimum Cost: 0

	Minimum Quantity ?	Maximum Quantity ?	Decimal Places ?	Allow Arbitrary Quantities ?
Q1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>
Q2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
Q3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>
Q4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
Q5	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>

Show Per Piece Price

[Set Options](#)

Pricing Calculator

Quantity:	<input type="text" value="1000"/>	Number of Sides:	<input type="text" value="1"/>
Markup (%):	<input type="text" value="10"/>	Paper Type:	<input type="text" value="Gloss 113gsm"/>
Paper Size:	<input type="text" value="4PP-A4"/>	Celloglazing:	<input type="text" value="Matt 1 Side"/>
Proofing:	<input type="text" value="PDF"/>	Crease:	<input type="text" value="Yes"/>
Fold:	<input type="text" value="No"/>		

- With a working knowledge of Excel, the Spreadsheet Calculator Pricing Engine approach is a powerful and versatile tool
- If the rules are followed it is a simple, easy to use solution that can be optimised to significantly reduce the number of pricing engines deployed and provide for complex operational parameters to be utilised