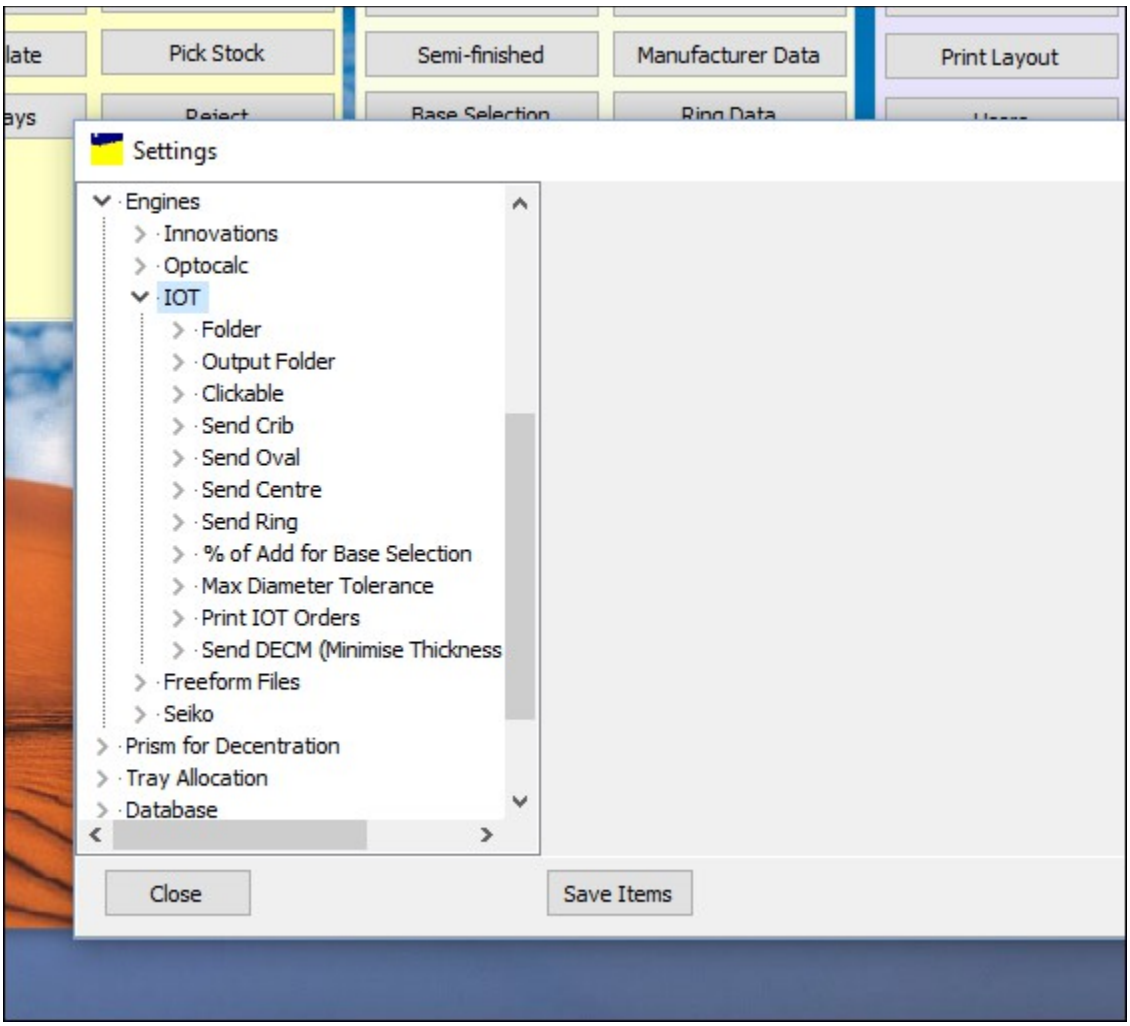
Setting up a Freeform Design using IOT Calculation Software

The following instructions advise on how to set Kalahari up to process lenses using the IOT Calculation Engine/other free-form engines.

Kalahari Setting

Kalahari has a number of settings that can be activated to send data tags to the IOT Calculation Engine. Within the 'Settings' menu of Kalahari the following can be found.

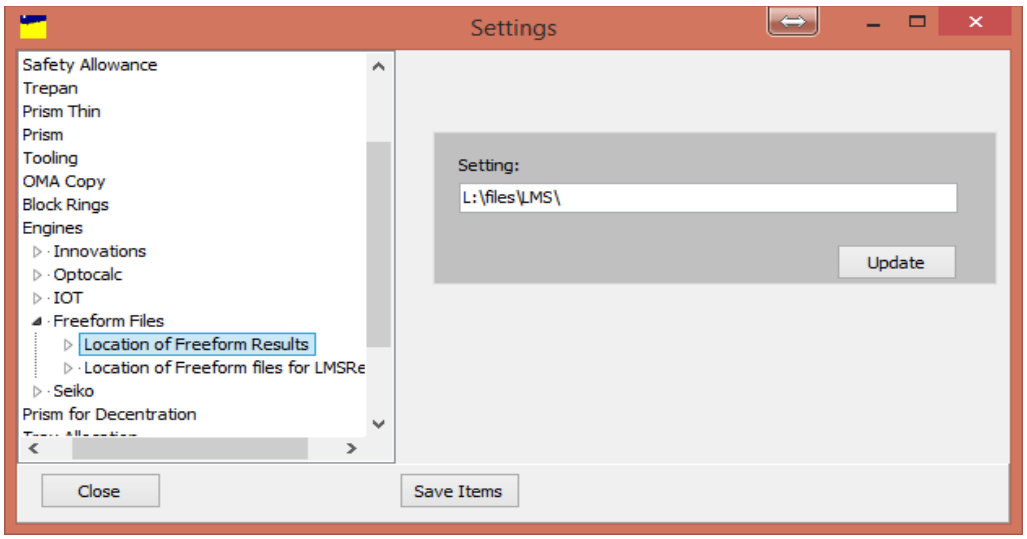


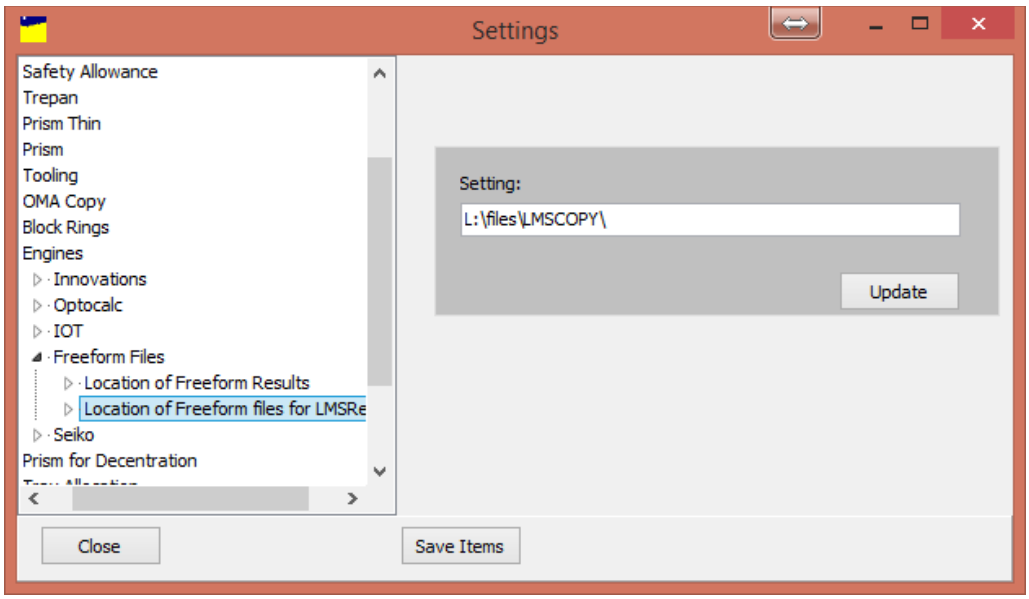
The following settings are available for the IOT Engine:

- Folder - Location of files output from Kalahari
- Output Folder - Location of update file from IOT
- Clickable - Not active during testing

- Send Crib - Adds the Crib Diameter to the file
- Send Oval - Send the oval measurements
- Send Centre - Pass the centre subs within the file
- Send Ring - Include the ring data (switch off to force IOT to select ring)
- % of add for base selection - This is the amount of Add required
- Max Diameter Tolerance - Largest diameter possible
- Print IOT Orders - Option to suppress the printout. If Normal SI ticket from Kalahari is not printed then you use LMSReader to do the printing.
- Send DECM (Minimise Thickness) - Option to minimise the thickness

A decision must be made for the correct selection of these option based on the machine and lab requirements.



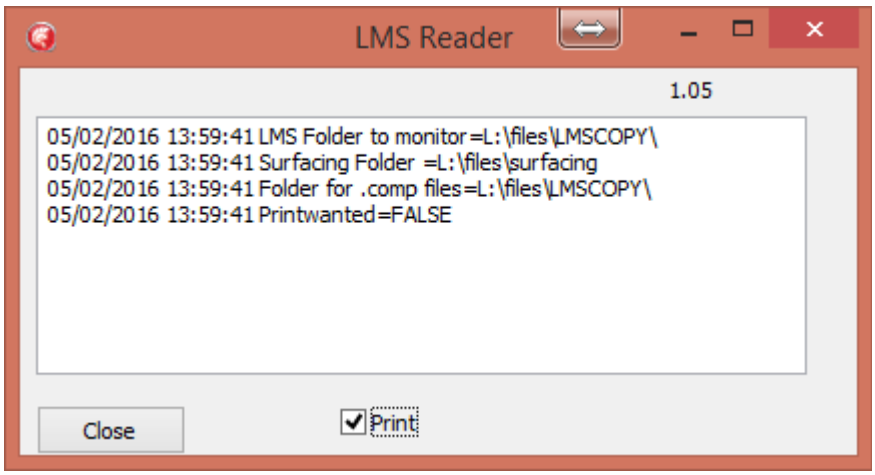


There are 2 location relating to the results of information. These should be populated with the relative information from the freeform calculation engine.

Location of Freeform Results = Location for 3D files (.sdf) and LMS files. Set in the IOT software
Location of Freeform files for LMSReader = Copy of files output from the calc engine (IOT set this up on their system also) that the LMSReader (Freeform ticket printer) picks up and processes.

LMSReader.exe

A separate program that works on a timer (automatically) to scan the folder set in Kalahari for Location of Freeform files for LMSReader (read from Kalahari settings file). Printing by this method allows the added and modified values in the LMS results file (the modified .OMA file produced by IOT software) to be printed on a ticket. These values simply would not be available at the normal point if printing in Kalahari. The program needs to reside in the same progs folder as Kalahari does. LMSReader also updates the original .OMA file in the Surfacing folder (ready by VCADevice) with any additional or modified data from LMS results file allowing surfacing equipment to use the same vaues as the LMSReader printed ticket. Because of this, blocking the IOT freeform lenses should take place after the new LMSReader ticket has been produced.



Review the print Kalahari surfacing print configuration layout file to include all of the desired new fields

Freeform lens set up (manual method – for Wizard method, see further on in document)

Setting Up the Lens in Annapurna

When setting the lens up in Annapurna this will be set as a progressive lens. Although the semi finished product will be a Single Vision blank this will be mapped over in Kalahari.

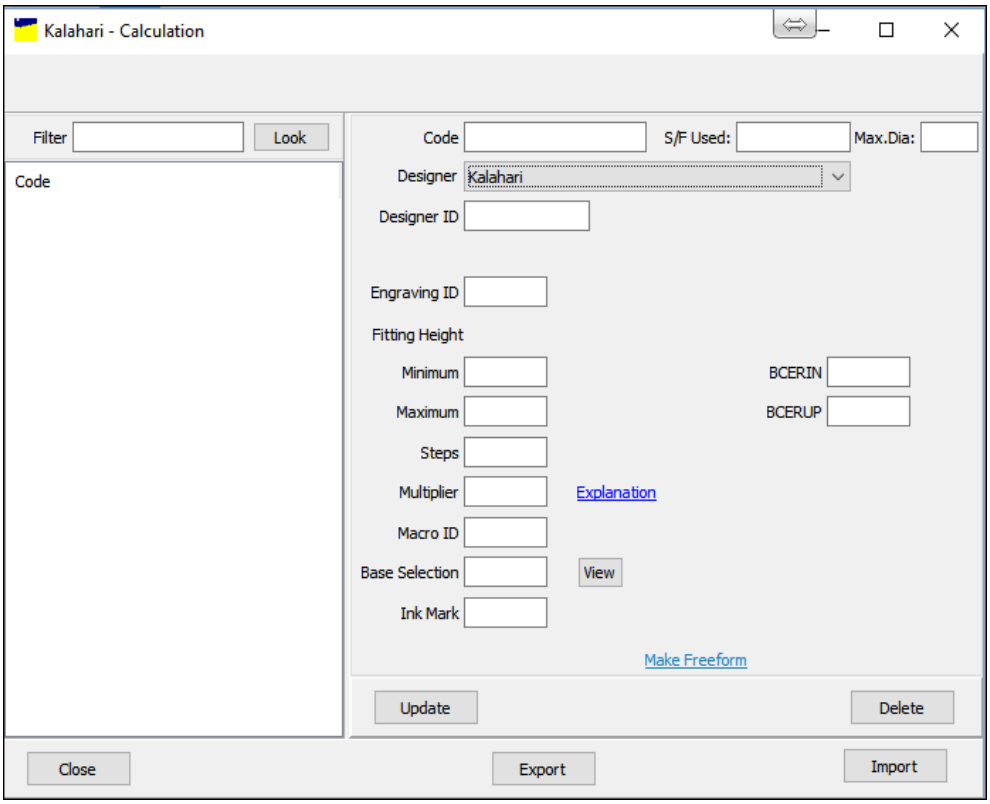
Dependant on the type of progressive that is being ordered it may be necessary to provide extra information. These will be options like back Vertex distance, Pantoscopic Tilt, Frame angle, corridor Length, etc.. These will be defined using the lens macros.

Setting the design in Kalahari

Using the Annapurna code the lens needs to be mapped in the freeform section of Kalahari. Use the code that was set up in Annapurna and follow these steps. For this example the:

Progressive Code = XAPR1

Single Vision Code = XOSV



From the previous screen shot information needs to be added. Starting at the top a lens code is require (this is the Annapurna lens code)

Code = Annapurna Lens Code

S/F Used = Kalahari Base Lens Code

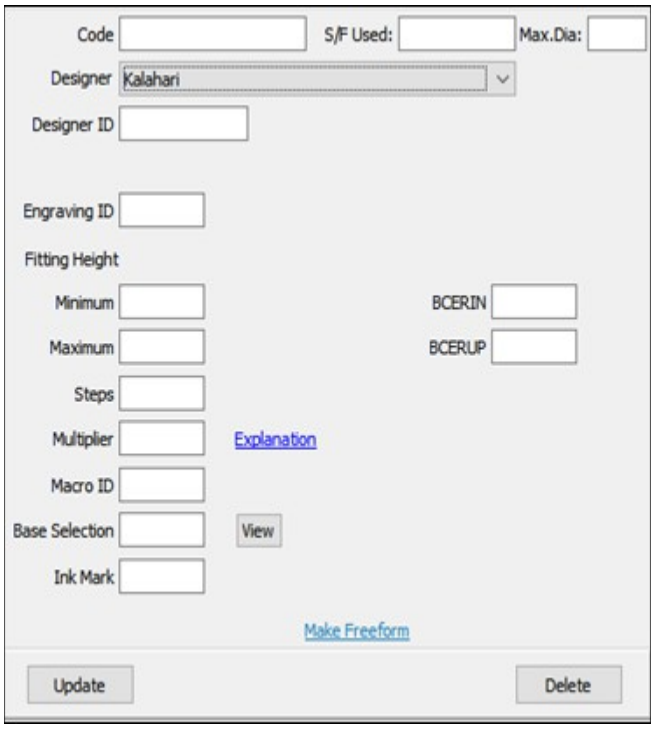
Max Dia = Largest Diameter Available

Designer = Freeform designer option

Designer ID = Name of lens design

Engraving ID = Required ID for the laser engravings

Fitting Height information



Minimum = Shortest fitting height required

Maximum = Longest fitting height possible

Steps = Increment between each fitting height

Multiplier = see additional information from link

Macro ID = Location of Macro

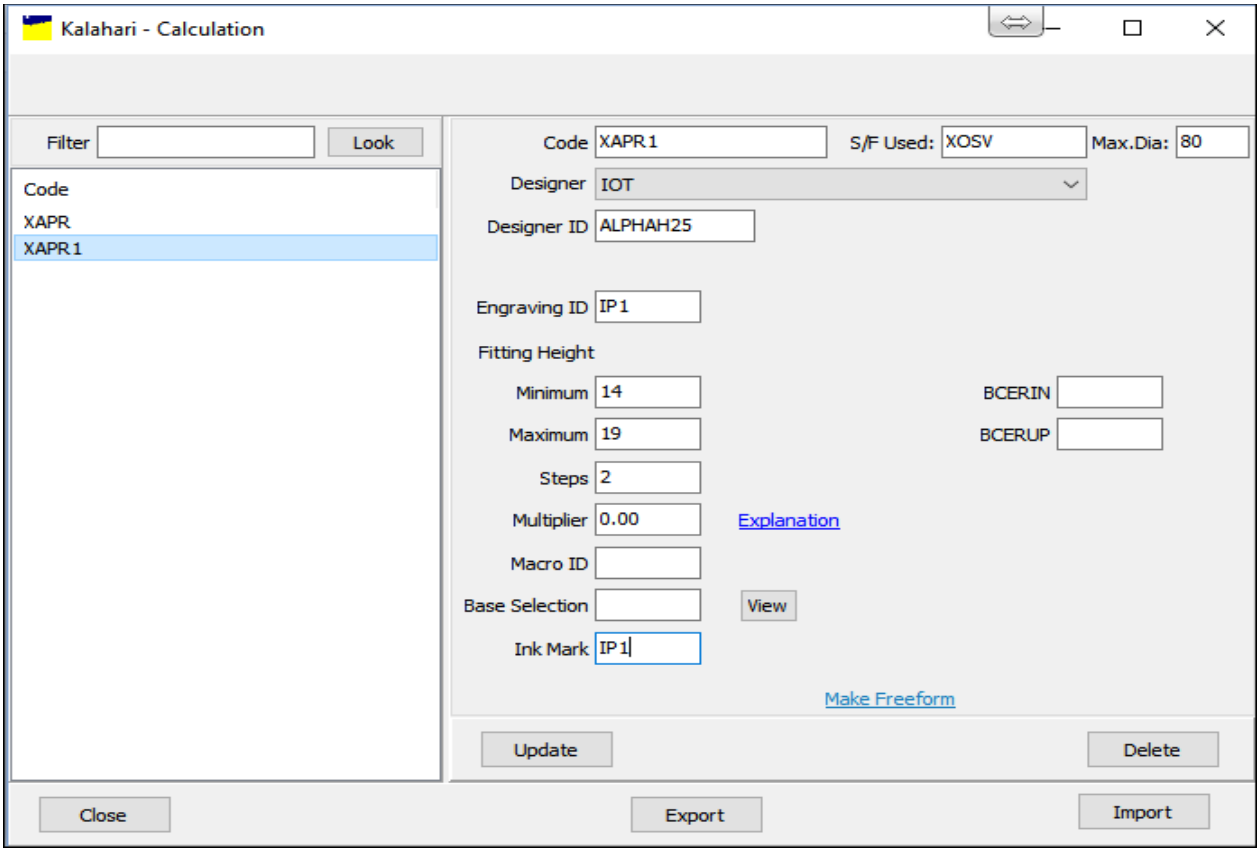
Base Selection = differing base selection if required by design

Ink Marking = Required marking for inker

BCERIN = Horizontal distance from blank centre to the engraving reference point

BCERUP = Vertical distance from blank centre to the engraving reference point

Once this data has been entered the screen should look as follows.

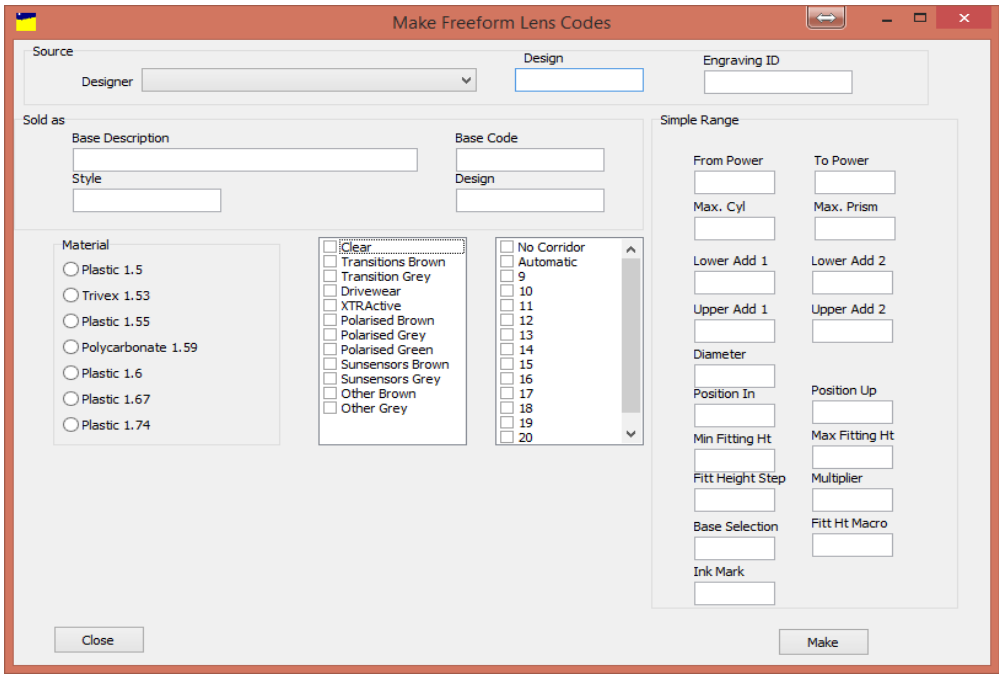


When orders are entered into the Annapurna system it will link to the code in Kalahari. This will allow the product to be calculated with the necessary information for the calculation engine.

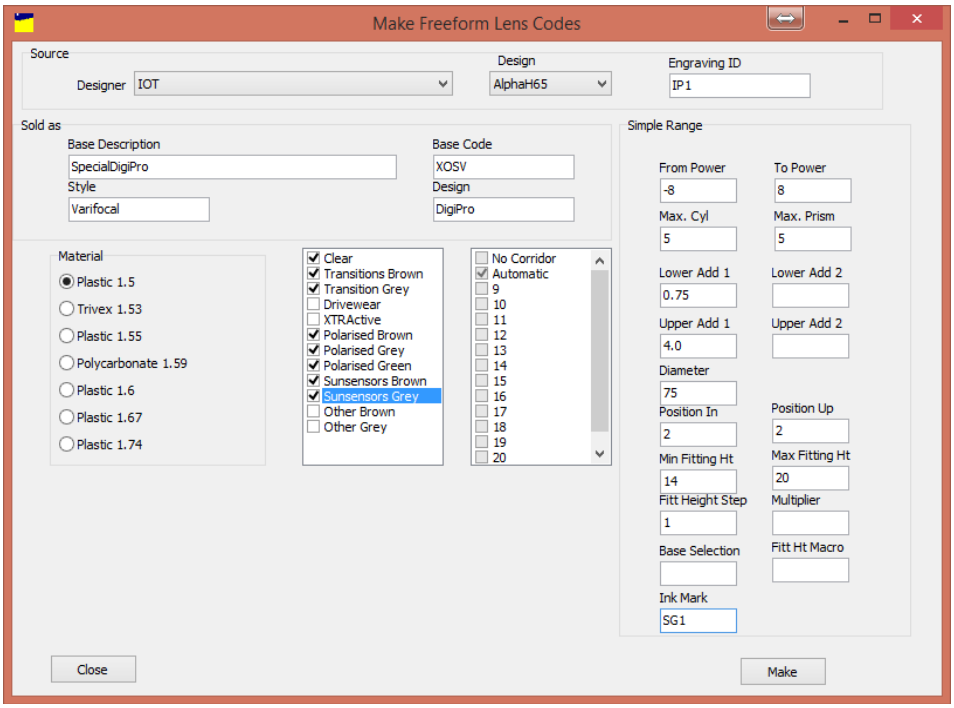
The calculation engine will then be able to process the files and allow the product to be produced.

Free form set up (Wizard method)

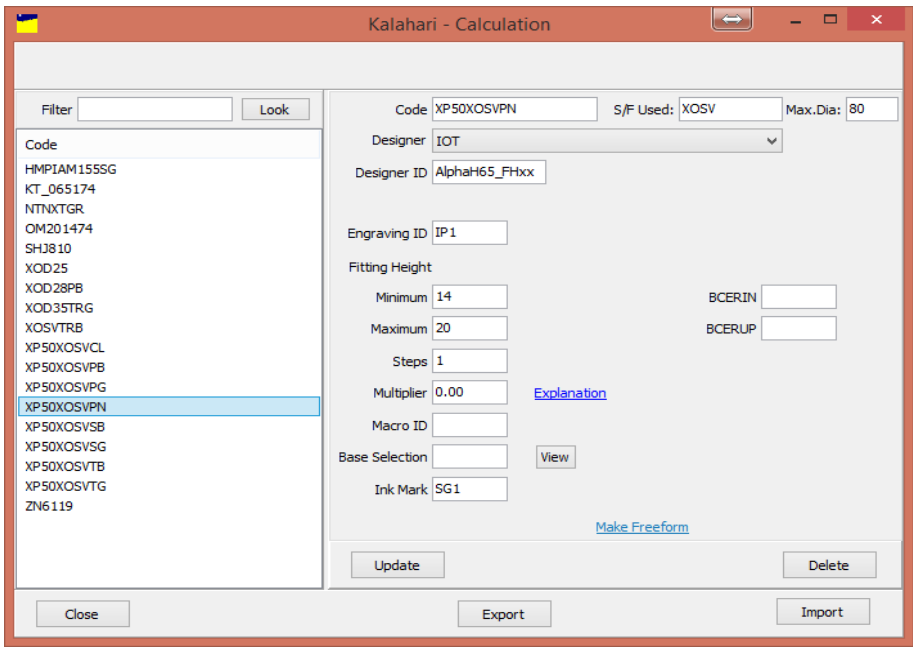
On the Free form screen, there is a link 'Make Freeform' in blue. Click this and you see the screen :



Fill in the screen as below. You process one index at a time for a design but multiple colours.



The process creates multiple codes for Annapurna for each colour combination (and corridor length if multiple ones specified) and multiple entries in the freeform table to allow mapping of the Annapurna code to a S/F code.



You can set only one S/F code at a time. These can be modified later by the standard freeform data screen.

If you require further information please call 01608 670053.