Analysis and Reporting Module

Creating Balancing module reports

By Simon Innes • SKF

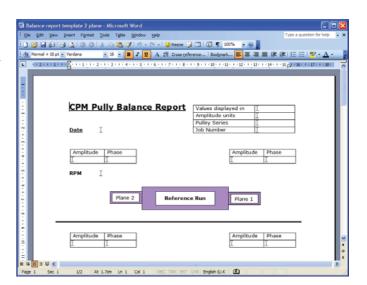
With SKF's Analysis and Reporting Module version 1.5, it is now possible to produce detailed and customized reports from your balance module results, using the Microsoft[®] Word Report Generator Expert. Field names in the balance report file are used to attach results to bookmarks defined in a Microsoft Word template (.dot) file, allowing you to produce balance reports using your company standard formats.

The balance report file as unloaded from your analyzer contains two columns of text information. The left column is the name of the parameter measured or set and the right column shows the value recorded:

Plane1-Type:	1 Fixed
Plane1-NoPositions:	3
Plane1-Offset:	0.000000
Plane1-Coupline:	0 X
Plane1-ICP:	1 Yes

The left column entries are listed by the Microsoft Word Report Generator Expert as fields supplying values for output. If you select one of these fields, for example, "Plane1-Type" and associate it with a bookmark in the Microsoft Word template, from the example above, a value of "Fixed" would be written to the report document.

A set of sample templates are shipped with the software, including two specifically for balance reports. Opening the template in Microsoft Word shows the bookmarks defined^[1]:



If you cannot see the bookmark symbols (shown as an I-beam symbol thus I), go to *Tools / Options* and check the *Bookmarks* control on the *View* tab.

You can use Microsoft Word to create a template for your reports containing any sort of information or layout you wish, including graphics like company logos. The full power of Microsoft Word is available for you to create the report as you like it.

Bookmarks are used to define locations where SKF Analysis and Reporting Module will be able to write out values when creating a document using this template. It is best if you name the bookmarks using the same field identifiers as used in the balance report.



For example, to define a bookmark to receive information on "Plane1-Type" as in the example above, select the position in the template where this information is to go and choose *Insert | Bookmark* from the menu. You can then enter the bookmark name in the *Bookmark* dialog^[1]:

Bookmark 🛛 🔀
Bookmark name:
Plane 1Type
Plane 11nitRun Image: Constraint of the set of the se
Sort by: Name Location
Hidden bookmarks
Add Delete Go To
Cancel

• Note that your bookmark names cannot include any spaces or hyphens.

When you click **Add**, the bookmark will be added to your template^[1]:

Balance report template 2 plane - Microsoft Word	
Ele Edit View Insert Figmat Tools Tigble Window Help	Type a question for help 🔹 🗙
E 🗅 😂 🖟 🕼 🕼 🕼 () . O . X . P.a 🖏 🛷 () • • • • ↓ 😫 Resce 🖟 🛄 () 1 () 1 () • • • • • • •	
🔥 Normal + Bold 🗸 Verdana 🔹 10 🔹 🖪 🖌 🖳 A 🛒 Cross-reference Boolgmark 🌉 🗮 🗐 🛒	運行日日 😰・五・ 📲
💼 - 1 - 2 - 1 - 2 - 1 - 2 - 2 - 2 - 2 - 2	15 50 - 16 - 1 - 17 - 1 - 18 - 📈
8	
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= a 0 3 0 K	
Page 1 Sec 1 1/2 At 4.4cm Ln 6 Col 6 REC TRK EXT OVR English (U.K. 20	

Once you have set up and saved your template file (make sure that you have opened it as a template rather than created a new document from it) you will be ready to set up a Microsoft Word Report in SKF Analysis and Reporting Module to use to create balance reports.

In the SKF Analysis and Reporting Module window, open or select a balance report (.bal) file – the contents will be shown in the right panel of the main window. There is some extended data that may be entered to supplement the information from the balance file – this data is entered using a special form in SKF Analysis and Reporting Module and is stored with the balance report in the .pds file.

To enter or edit the extra balance report data, go to *Edit | Enter balance report data*. This will open up the *Balance Report Information* dialog^[1]:

Balance Repo	ort Information		×
You can enter	operator, date and correction	n weight information for your	balance run here.
Operator:			
<u>D</u> ate:	12/01/2009	11:29:26	\$
Correction:	Correction Mass	Angle	
	1		
	2		
	3		
	4		
	5		
			? Help

The main information entered here is up to five pairs of correction weight data – you can enter both a mass and an angle for each. You may also put in a date and time and the operator name.

When you are ready to produce the report, choose *Reports | Microsoft Word Report Generator Expert*. On the welcome page, click *Next* to go to the page for selection or creation of reports^[1]:

Report Generator for Micros	oft Word® [SN 0011 BAL 1]	×
	Select report The following list shows all of the reports currently defining your setup; choose a report to edit, or click on the New button to create a new report. Peports: Five plots Two plane balance report CTC Table with graphs Non template balance report Three plots per page	
	<< Back Next >> X Close ? Help	

You can either create a new report or use one of the pre-defined ones. SKF Analysis and Reporting Module ships with a sample report that works with the two-plane balance report template. If you are using this template or a modified version of it, select that report, otherwise, you could create a new one by clicking the **New** button. Once you have made your selection, click on *Next* to go on with defining the report.

On the next page, you can edit the report name and choose the template^[1]:

Report Generator for Microsoft Word® [SN 0011 BAL 1]		×	
W	You must g possible for	on of report ive your report a name; this will make it you to select this report again when you we h some other data: Two plane balance report	ant
	which cont	lect a Word document template (.dot) file ains one or more bookmarks onto which you data values or a graph plot: C:\Documents and Settings\simon\My Do	
	C:\\Balar	nce Report Template 2 Plane.dot	
<< Back Next >> X Close ? Help			

The report is set up by assigning bookmarks in your template to these fields; for instance, to get the type of plane one in the report, you need to select the field called "Plane1-Type" and assign a bookmark to $it^{[1]}$:

Report Generator for Microsoft Word® [SN 0011 BAL 1]		
W	Selection of fields and bookmarks The list below shows all of the available record fields that you can place in your document; click on a field then choose a bookmark from the drop down list box below the field list. <u>Record fields</u> :	
	Record field Bookmark TriggerLevel AcceptableImbalanceL Planel-Ivpe Planel-NoPositions Planel-NoPositions Planel-Offset Planel-Coupling Planel-ICP Planel-Sensitivity V	
	Select bookmark:	

Make your selections and click on *Next*. The application will load the template specified and read its bookmarks^[1]:

Report Generator for Micro	osoft Word® [SN 0011 BAL 1] 🛛 🛛 🔀
W	Please wait
	Opening template Balance Report Template 2 Plane.dot
	< <u>B</u> ack <u>Next</u> →> X Close ? <u>H</u> elp

This leads to a page where you can choose the bookmarks from your template. In the list box on this page are listed the record fields that the software recognises as being available for a balance report. Use the *Select bookmark* drop-down list, which contains all of the bookmarks read from the template, to select the new bookmark we defined earlier called "Plane1Type"^[1]:

Report Generator for Microsoft Word® [SN 0011 BAL 1]			×
W	Selection of fie The list below shows a you can place in your choose a bookmark fr field list. <u>B</u> ecord fields:	all of the available reco document; click on a	ord fields that field then
	Record field TriggerLevel AcceptableImbalanc Plane1-Type Plane1-NoPositions Plane1-Outfset Plane1-Coupling Plane1-Sensitivity	Bookmark	
	Back Next > P P P P P	lane1 TrialRun2Phase lane1 TrimRunPhase lane1TimRunPhase lane1Type lane2InitRun lane2TrialRun1 lane2TrialRun1Phase lane2TrialRun1Phase	

You can now select this bookmark to be the place in the document where the value for Plane1-Type can be written^[1]:

Report Generator for Microsoft Word® [SN 0011 BAL 1]			×
W	you can place in your docu	the available record fields that	,)
	Record field	Bookmark	
	TriggerLevel AcceptableImbalanceL Planet-Type Planet-NoPositions Planet-Offset Planet-Coupling Planet-ICP Planet-Sensitivity	Plane1Type 🗾	
	Select bookmark: Plane	Туре 🔽]
	<u>B</u> ack <u>N</u> ext >>	X Close ? Help	

When you have selected all of the bookmarks you need, click **Next** to go to the page where you can choose where the file will be created and how it will be named^[1]:

Report Generator for Microsoft Word® [SN 0011 BAL 1]	
W	Select file output You may output your reports to Word documents named after the records in the data structure, or named using GUIDs (Globally Unique Identifiers) or with a custom name followed by a number.
	Use record name for file name
	◯ Use <u>G</u> UID for file name
	O Use custom name for file name
	Name:
	Output path:
	C:\Documents and Settings\simon\My Documents\
Вющее	
Click the Next button to run the report	
<< <u>B</u> ack Next >> X ⊆lose ? Help	

You can use the record name for the document, generate a unique GUID or enter a name manually. Duplicated file names will have a number added on creation to ensure nothing gets overwritten.

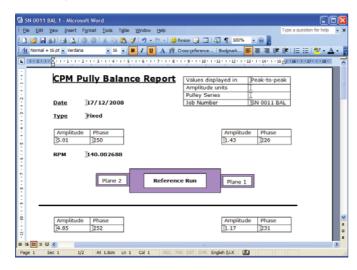
You can also choose the output path for the document – this defaults to your own personal documents path, but can be changed to any other path. This value is stored as part of the report set up, so you can have different reports writing files to different locations if required.

Click **Next** to generate the report document; a progress bar will show the report creation progress^[1]:

Report Generator for Micro	osoft Word® [SN 0011 BAL 1]
W	Please wait Generating documents using report Two plane balance report
	Generating report
	r ress cancer to naix the report
	<u>Back</u> <u>N</u> ext >> X <u>C</u> ancel ? <u>H</u> elp

Once complete, a summary page will be shown which includes a button you can click to view the actual file created in Microsoft Word^[1]:

Click the *View files* button to display your completed and saved balance report^[1]:



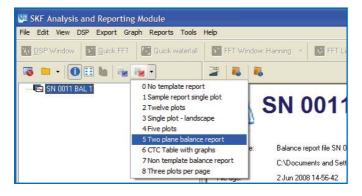
You can see the value of "Fixed" has been written to the "Plane1Type" bookmark that we defined earlier.

You may define any number of different reports in SKF Analysis and Reporting Module for creating Microsoft Word documents, using any templates that you create or modify. The software automatically saves any changes you make to your reports and there is a handy quick report function that you can call up to run the last selected report on your data and run it directly without having to go through any of the editing process:

File Edit View DSP Export Graph	Reports Tools I	Help			
DSP Window	Word® Report	t Generator Expert © report	ling -	FFT Lines: entire wave	form *
🐼 🖿 - 🚺 🗄 🕍	Select Word® report		0 No template report		
	Delete Word® report		1 Sa	1 Sample report single plot	
	Text Reporting Default text report Select report Delete text rep	port	3 Sin 4 Fiv ✓ 5 Tw	2 Twelve plots 3 Single plot - landscape 4 Five plots ✓ 5 Two plane balance report 6 CTC Table with graphs	
		Source type: Source:	7 No	n template balance report ree plots per page	suments

The **Default Word report** option will run the last report you used or you can choose **Select Word report** to run (without modifying) any other previously defined report. (The default report is shown with a tick).

You can also access these functions directly from the toolbar:



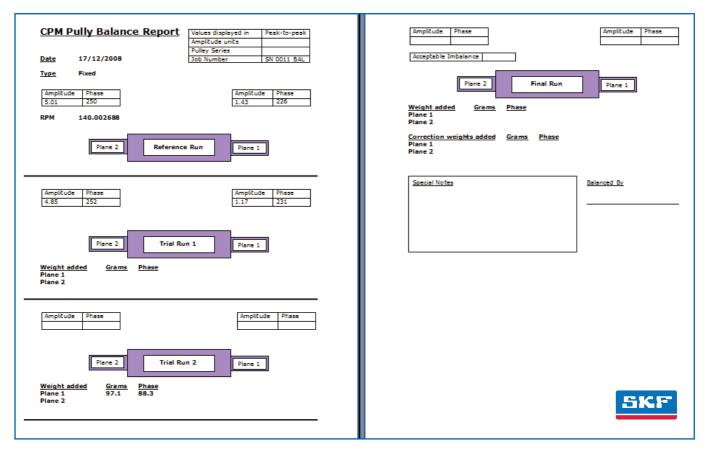
Once the report has been run, a message dialog will show you the results of the operation and allow you to view the document created:

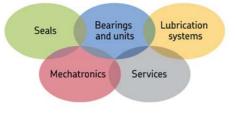
Informa	ation 🛛
i)	Output of records using Word Automation report 'Two plane balance report' on data structure 'SN 0011 BAL 1' completed. File created: SN 0011 BAL 1 #1.doc Number of files created: 1
	All files output to: C:\Documents and Settings\simon\My Documents\ Click Yes to view your documents in Word@, or No to return to the program main window.

Here is an example of a single plane balance report:

		_			
<u>СРМ Р</u>	ully Balanc	<u>e Report</u>	Values display		
			Amplitude uni	ts r	nm/s
			Pulley Series		
Date	12/01/2009		Job Number	1	1
				Amplitude	Phase
				0.0321	237
RPM	1778.387051				
	[Reference	Run	Plane 1]
RPM	0			Amplitude	Phase
					_
		Trial Ru	n 1	Plane 1]
				Plane 1	
<u>Weight a</u> Plane 1	dded <u>Grams</u>	Phase			
RPM	0		Acceptabl	Amplitude e Imbalanc	Phase
					1
		Final R	un	Plane 1	
<u>Weight a</u> Plane 1	dded Grams	Phase			
Correctio Plane 1	n weights added	<u>Grams</u> Phas	<u>se</u>		
			Balar	nced By	
Special N	otes				
Special N	otes				
Special N	otes		Joe i	Bloggs	
Special N	otes		Joe I	Bloggs	
Special N	otes		<u>Joe I</u>	Bloggs	

Here is an example of a two plane balance report:





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