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Knowledge Base Article

Product Group: Microlog
Product: CMXA44, CMXA45, CMXA48, CMXA70, CMXA75, CMXA80
Version: N/A

Abstract

This document describes the procedure for creating non-animated mode shapes from FRF data imported into SKF Analysis and Reporting Module (ARM) software.

Overview

The procedure below is based on the first measurement point being named **1"X"** (where "X" denotes the direction of freedom).

1. Import the FRF data from the Microlog using Mobile Device Viewer (**File > Mobile Device Viewer**). Ensure **FRF files** are selected as the source (Internal memory and SD card). [Figure 1]

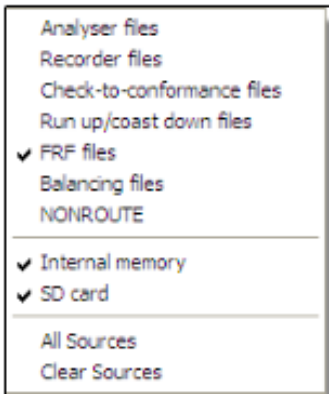

Figure 1. Importing FRF data

2. Highlight all the files for import, then select **Next >>**. [Figure 2]

Figure 2. Selecting files for import

3. All of the selected files will be transferred to the ARM view window. [Figure 3]

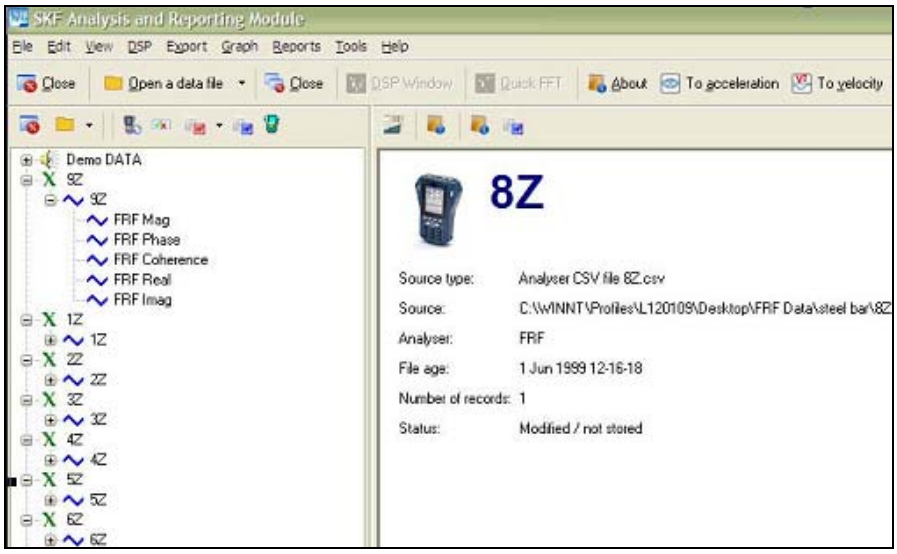

Figure 3. Imported files shown in ARM view

4. Select trace **1"X"** and drag the **FRF Imag** spectrum onto a clear space of the data file window to create a new data file. [Figure 4]

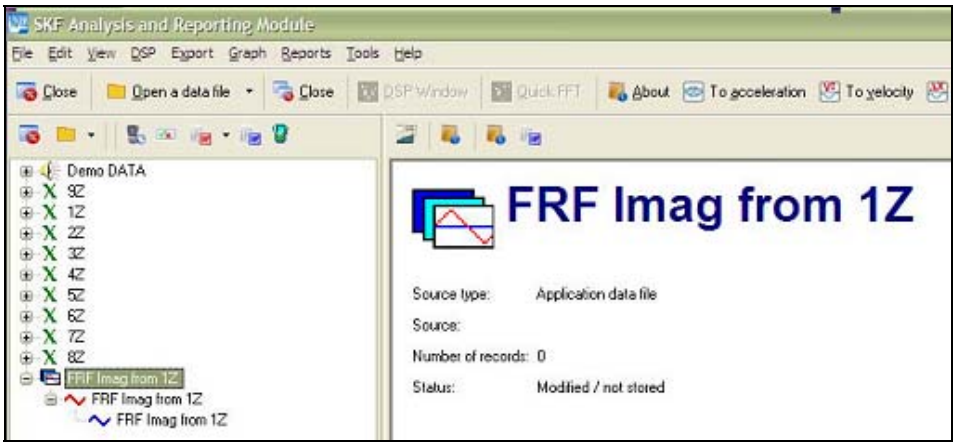

Figure 4. FRF Imag

5. Copy all of the other FRF Imag spectra from the individual files into the FRF Image from 1"X" to create a group of spectra. [Figure 5]

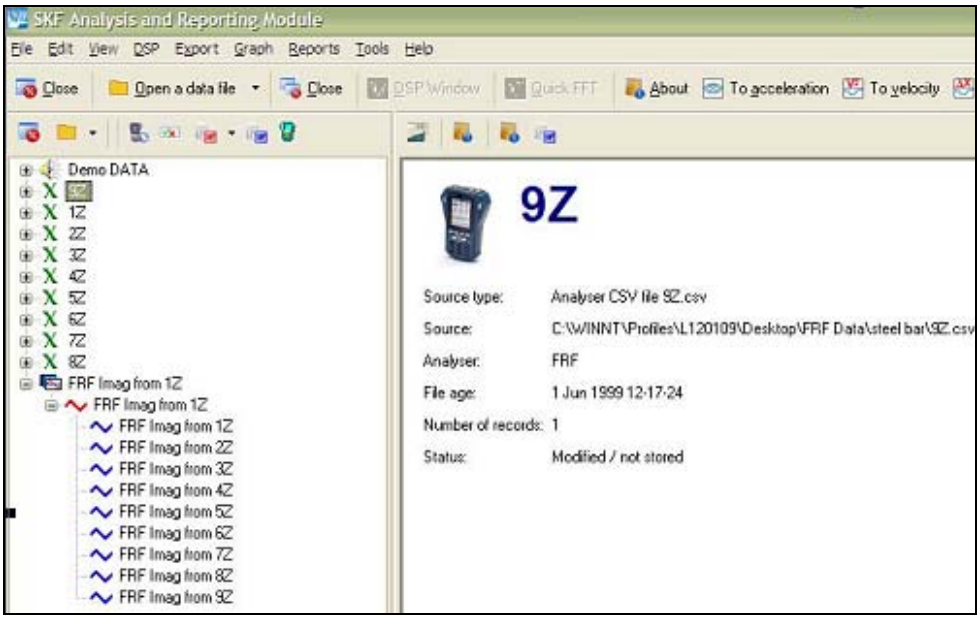

Figure 5. Creating a group of spectra

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6. Select the second level of the group to select and view all traces.

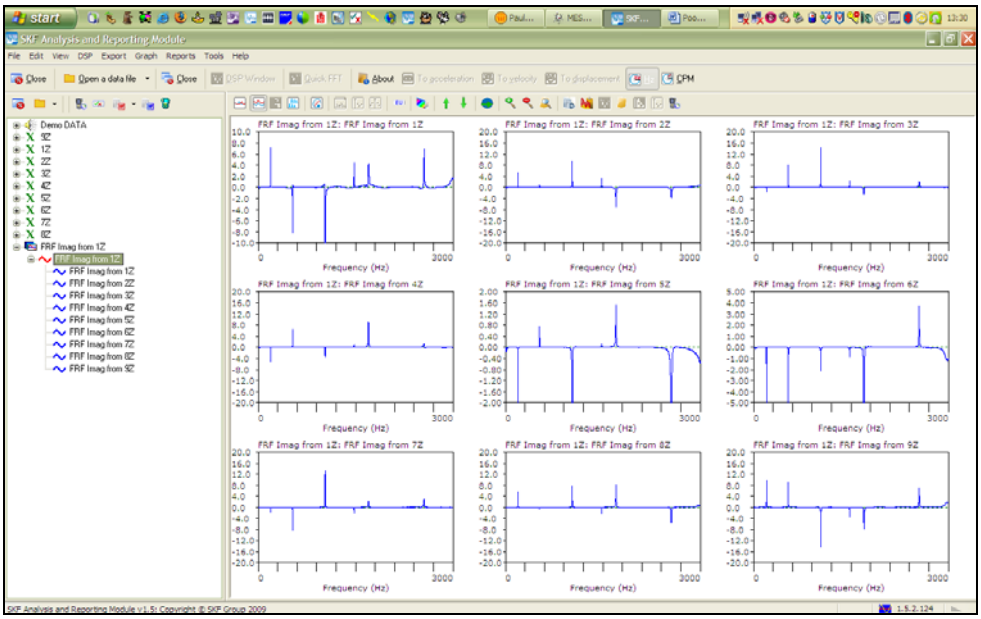

Figure 6. Viewing all traces

7. Use the waterfall icon or else select **Graph > Change plot type > Waterfall** to change the plot type to a waterfall view. [Figure 7]

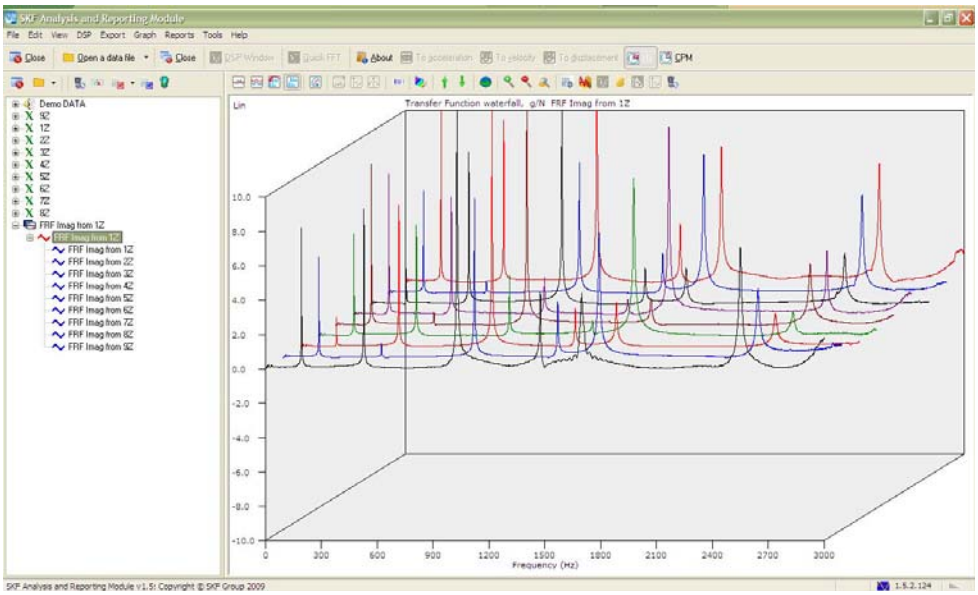

Figure 7. Waterfall graph

8. Select **Graph > Y axis > Scale > Imaginary** to revert the plot to imaginary data. [Figure 8]

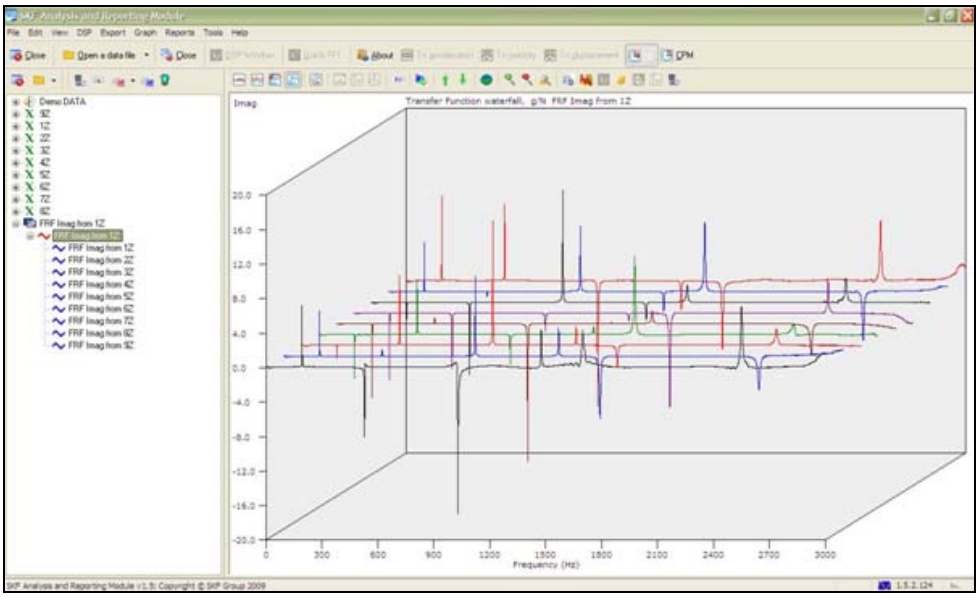

Figure 8. Imaginary data

9. Move the cursor over the frequency of interest, then right-click and select **Waterfall slice**. [Figure 9]

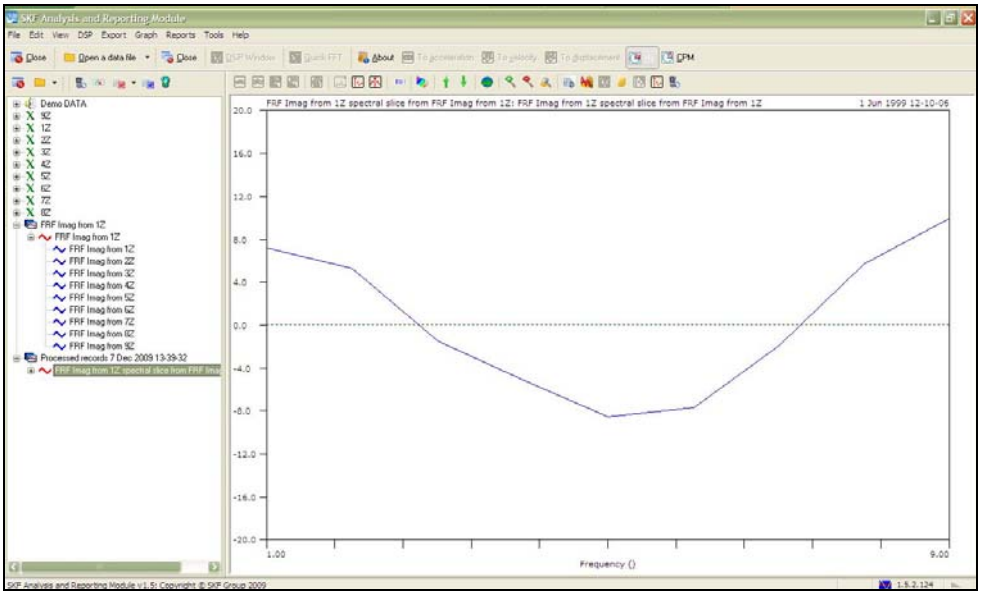

Figure 9. Waterfall slice

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10. A new data window will display the mode shape of the selected frequency.

    Note: *This procedure will not show any torsional mode shapes, as these can only be shown in MEScope.*

For further assistance, please contact the Technical Support Group by phone at 1-800-523-7514 option 8, or by email at TSG-Americas@skf.com.