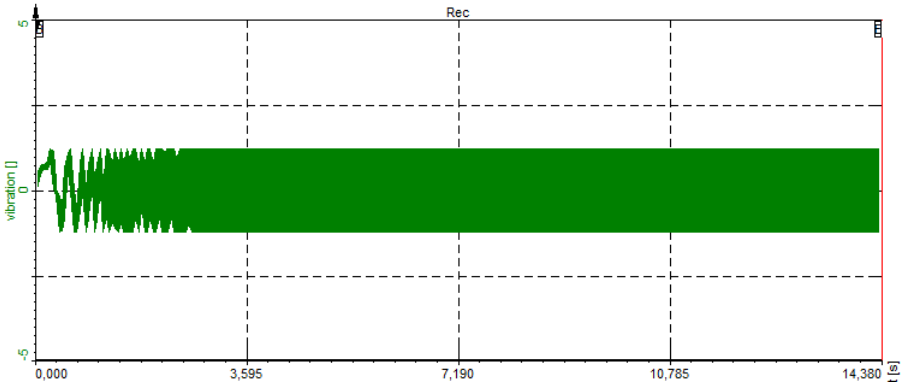
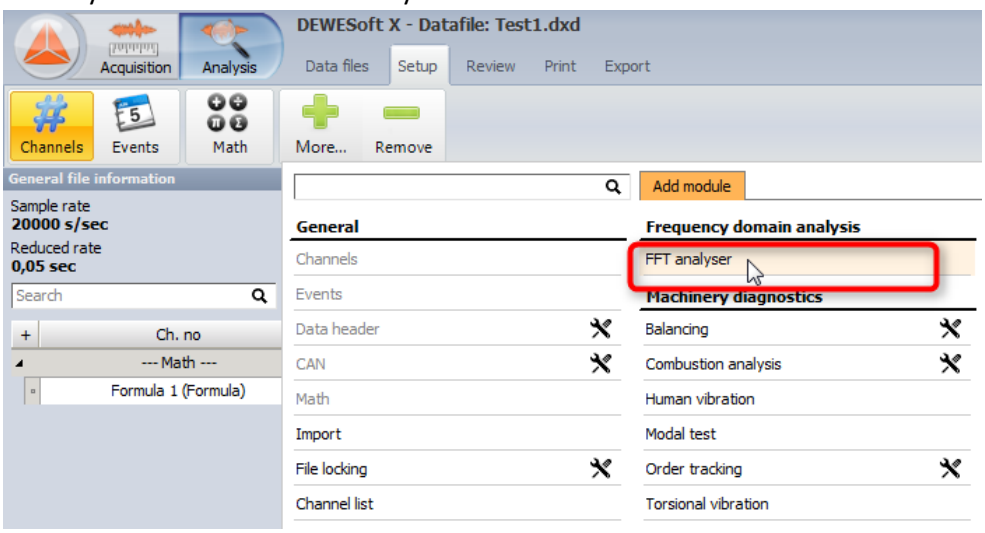
How to do Ordertracking without RPM signal

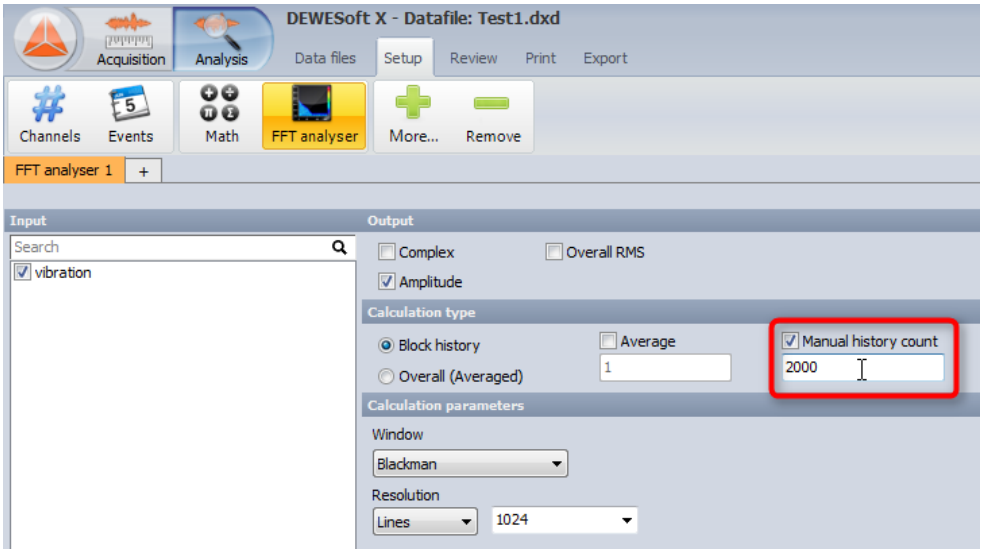
There was no possibility to measure the RPM signal, therefore the data file consists only of the vibration channel:



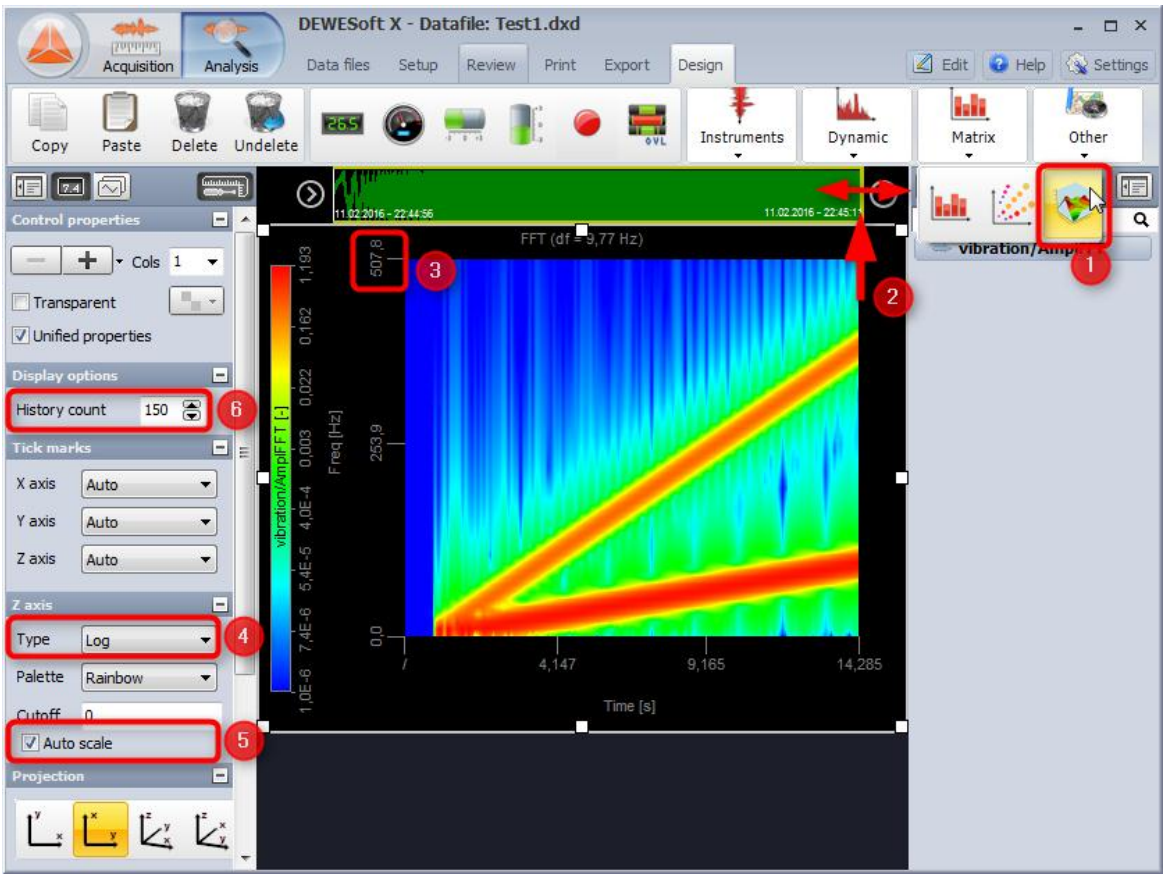
1. In Analysis mode add an FFT Analyser:



2. Set the history count to a high value, e.g. 2000:

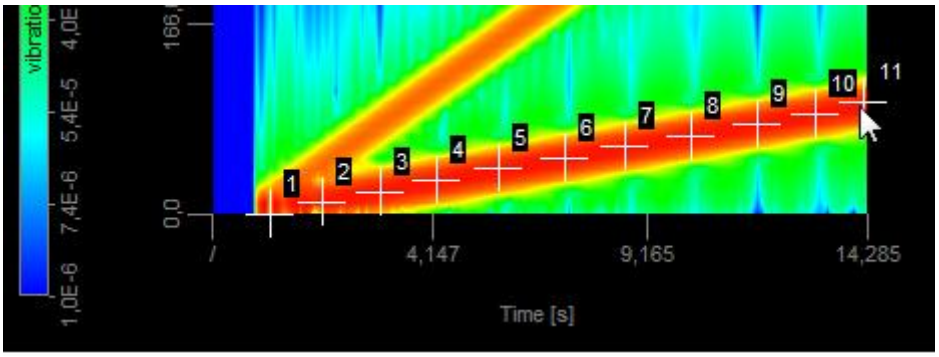


3. Go to Review -> Recalculate.
4. Add a 3D graph (1), then move the yellow cursor in the overview instrument on top to the right side to the end of the data file (2), then set the y axis scaling to a lower value e.g. 500 Hz to see the first order (3).
   Set the Z axis scaling to Log (4) and Autoscale (5).
   Play with the history count number (6) to be able to see the complete file in the graph.

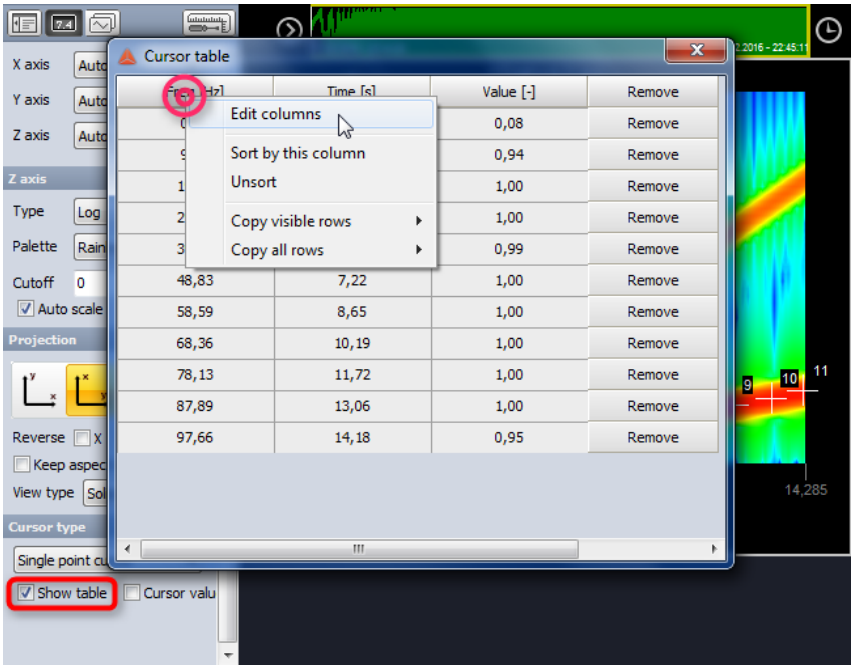


5. Exit the design mode.

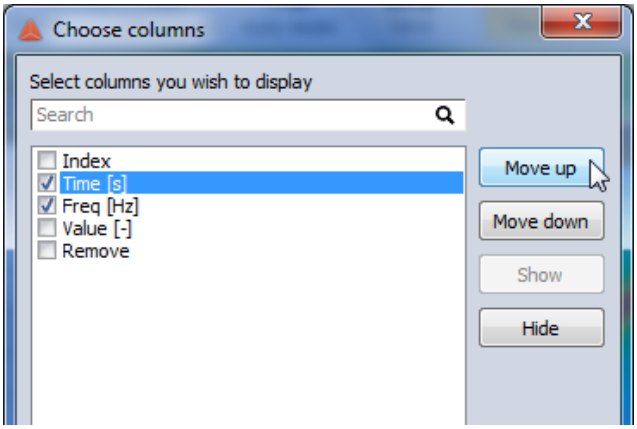
6. By clicking in the 3D graph add markers along the first order.



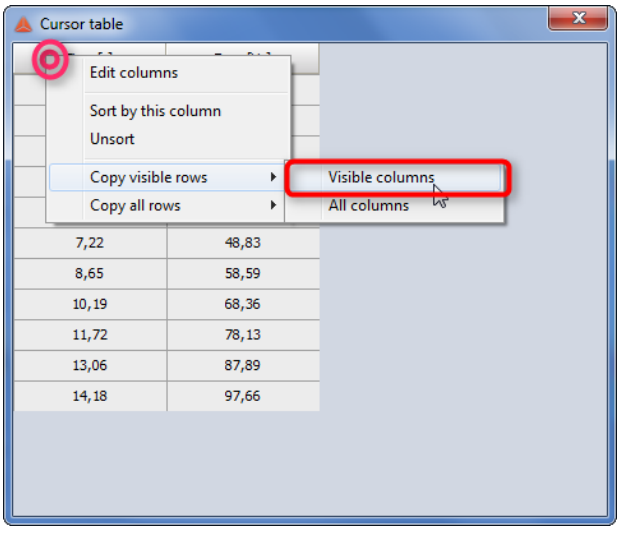
7. In the properties on the left click “Show table”, the table will pop up, then right-click on the column (e.g. on “Freq [Hz]”), and “Edit columns”.



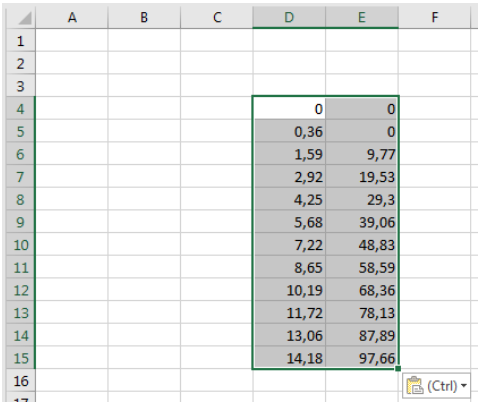
8. Select only Time and Frequency, and sort them that “Time[s]” is first. Exit with OK.



9. Right-click on the column and select “Copy visible rows” -> “Visible columns”



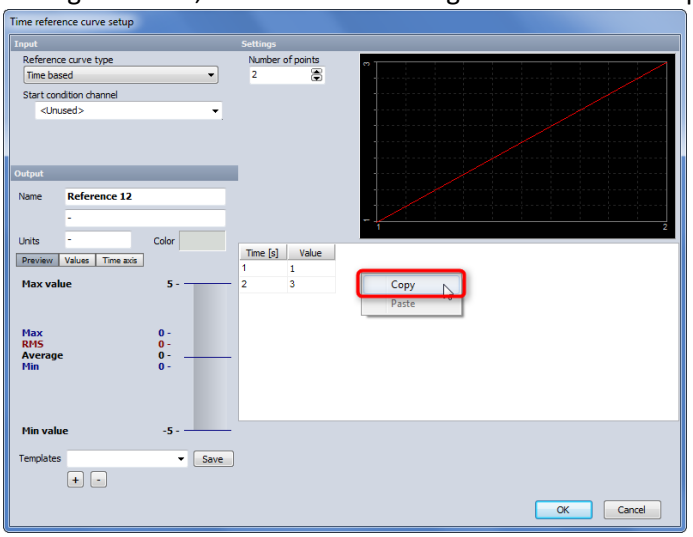
10. Paste the content into Excel:



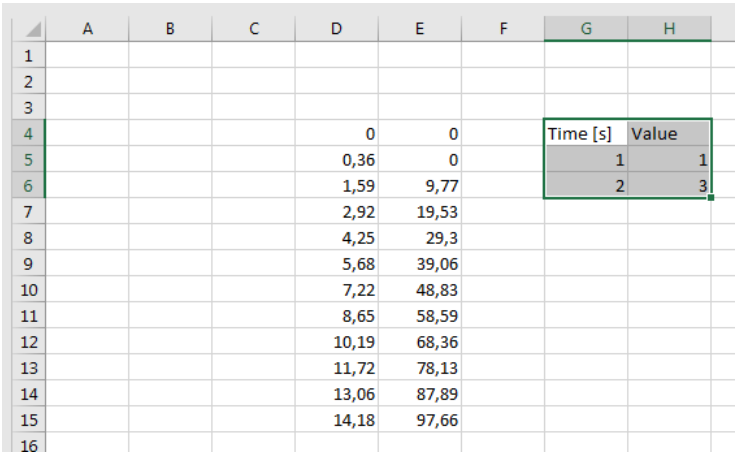
	A	B	C	D	E	F
1						
2						
3						
4				0	0	
5				0,36	0	
6				1,59	9,77	
7				2,92	19,53	
8				4,25	29,3	
9				5,68	39,06	
10				7,22	48,83	
11				8,65	58,59	
12				10,19	68,36	
13				11,72	78,13	
14				13,06	87,89	
15				14,18	97,66	
16						(Ctrl)

11. In DEWESoft switch from Review back to Setup, Math, Add math with the green plus: “Time reference curve”

12. In the “Time reference curve” Paste is greyed out, because our copied data does not have the right format, the header is missing. Therefore click copy first.

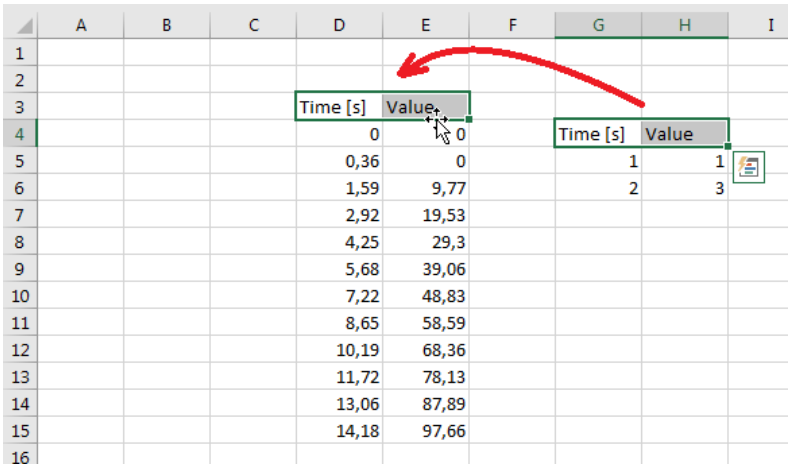


13. Go to Excel and paste. As you can see the header “Time[s]” and “Value” is needed.



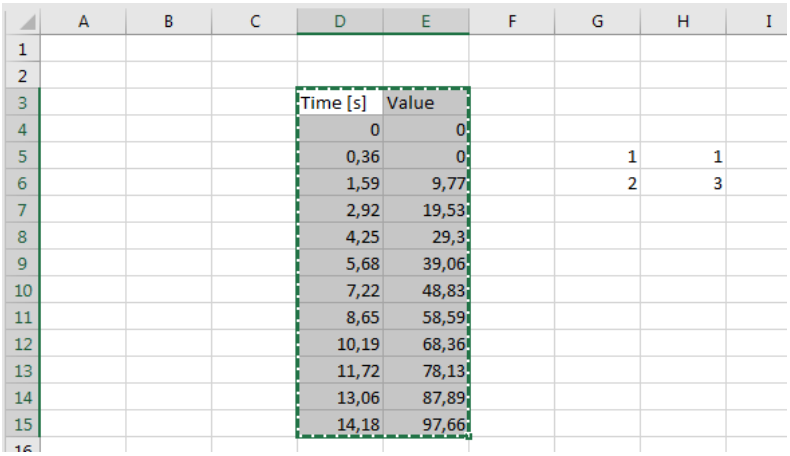
	D	E	G	H
4	0	0	Time [s]	Value
5	0,36	0	1	1
6	1,59	9,77	2	3
7	2,92	19,53		
8	4,25	29,3		
9	5,68	39,06		
10	7,22	48,83		
11	8,65	58,59		
12	10,19	68,36		
13	11,72	78,13		
14	13,06	87,89		
15	14,18	97,66		

14. Copy the two header cells on top of our extracted table.



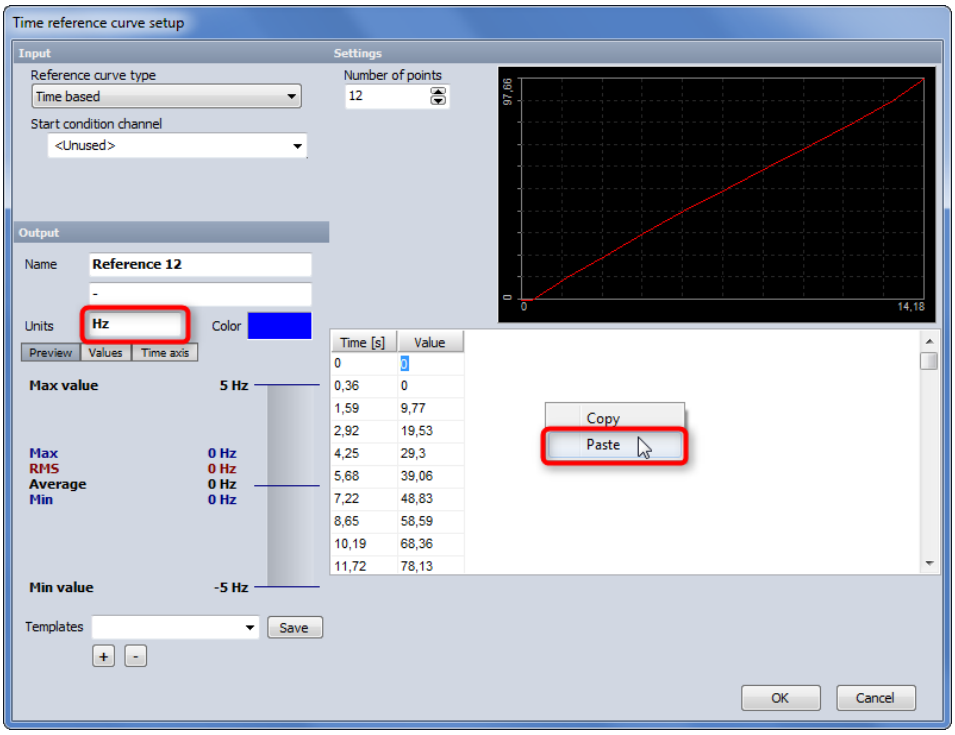
	D	E	G	H
3	Time [s]	Value		
4	0	0	Time [s]	Value
5	0,36	0	1	1
6	1,59	9,77	2	3
7	2,92	19,53		
8	4,25	29,3		
9	5,68	39,06		
10	7,22	48,83		
11	8,65	58,59		
12	10,19	68,36		
13	11,72	78,13		
14	13,06	87,89		
15	14,18	97,66		

15. Then copy the complete table with header:

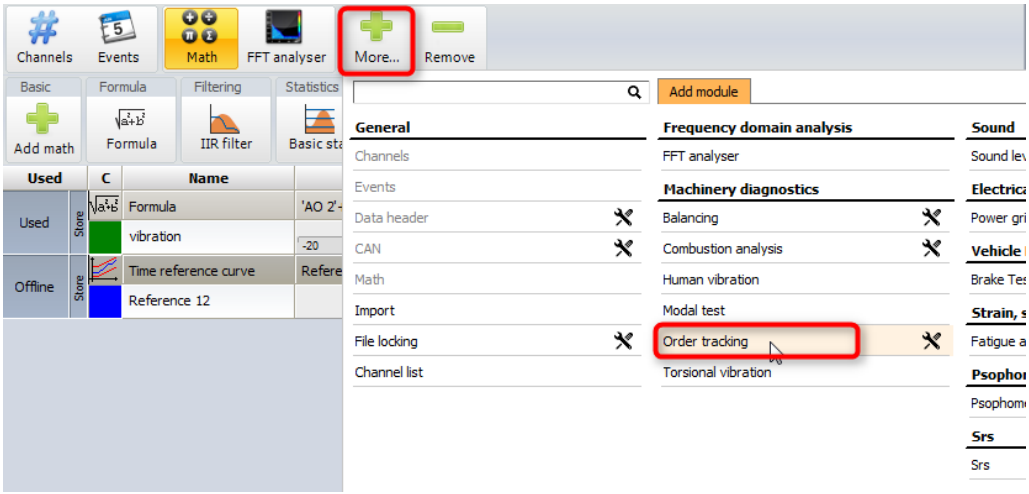


	D	E	G	H
3	Time [s]	Value		
4	0	0		
5	0,36	0	1	1
6	1,59	9,77	2	3
7	2,92	19,53		
8	4,25	29,3		
9	5,68	39,06		
10	7,22	48,83		
11	8,65	58,59		
12	10,19	68,36		
13	11,72	78,13		
14	13,06	87,89		
15	14,18	97,66		

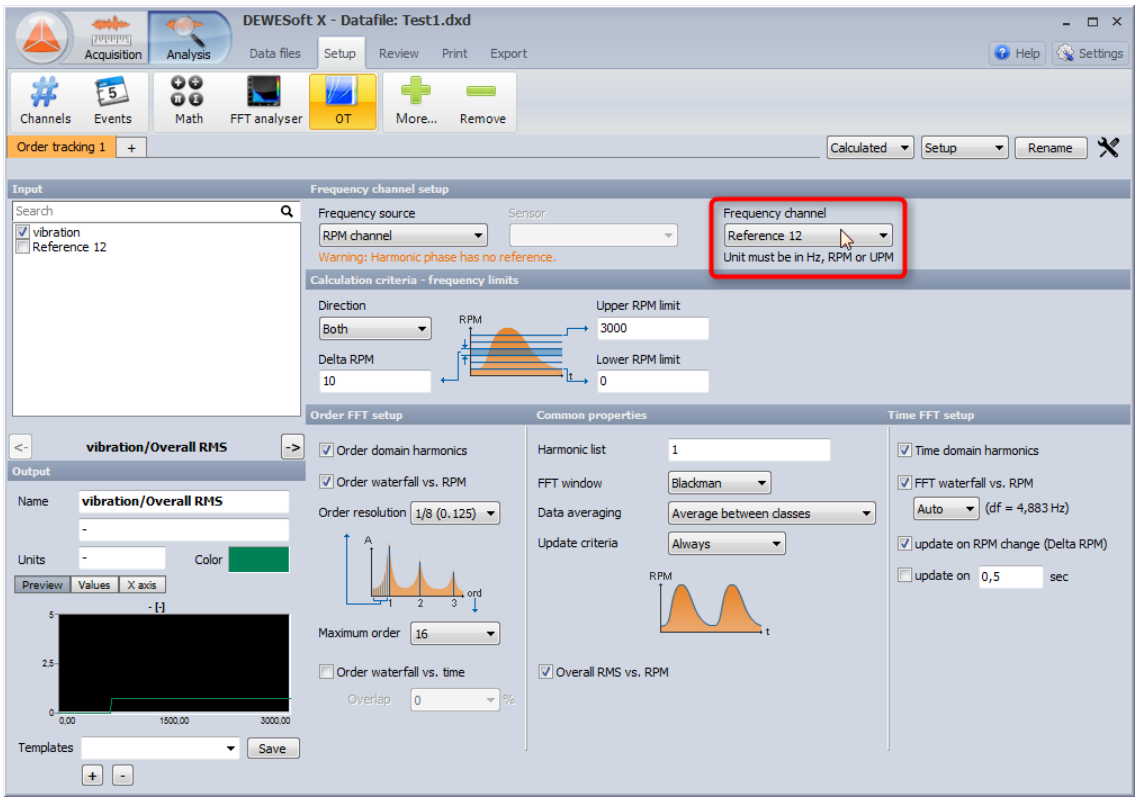
16. And paste into the Reference curve.
    Don’t forget to enter the unit in “Hz”!
    This is now our Frequency channel.



17. Now add an Ordertracking module.



18. Set the Frequency Source to “RPM channel” and the new Reference curve as “Frequency channel”.
    Then setup the ordertracking according to your wishes .



19. Review -> Recalculate -> Enjoy!