





MMS7000 Profiler

&

EVOsoft Analysis Software

Release Notes

Document Version: 17.10.5
Applies To:

EVOsoft Version: v17.10.5.1 Profiler7000 Version: v17.9.18.1

COPYRIGHT 2016 © by Profiler Tech Limited. All rights reserved. No part of this document may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Profiler Tech Limited.

Contents

ntroduction	3
low to update EVOsoft Desktop Software	3
low to update Profiler7000 Handheld App	
Profiler7000 App Changes	
New Features:	
Issues Resolved:	6
VOsoft Changes	6
New Features:	
Issues Resolved:	8
Jser Reference Guide Changes	9
echnical Support	

Introduction

This document describes the changes that have been made to the Profiler7000 handheld app, EVOsoft desktop software and the User Reference Guide since the release of v17.6.14.1 of EVOsoft.

How to update EVOsoft Desktop Software

NOTE: While updating EVOsoft should not result in any loss of data, it is strongly recommended that you create a backup of your EVOsoft .sdf database files prior to an update, as described in Section 33 of the MMS7000 Profiler & EVOsoft Analysis Software Instrument and Software User Guide.

To install the new version of EVOsoft software:

- Download the installer for the latest version of EVOsoft by visiting
 http://www.profilertech.com/software-downloads and clicking on the relevant "EVOsoft Installer (x64)" link
- 2. Once you have downloaded and saved the .zip file, double-click on it to open it, extract the single Windows Installer .msi installer file it contains and save it somewhere on your PC e.g. on your Desktop.
- 3. Double-click this .msi file and follow the prompts to install the new version. **NOTE:** if you already have an older version of EVOsoft installed, there is no need to remove it first as it will be updated automatically as part of the install process.

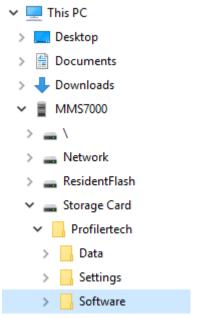


How to update Profiler7000 Handheld App

NOTE: While updating the Profiler7000 app should not result in any loss of data, it is strongly recommended that you import all data on the device into EVOsoft prior to an update.

To install the new version of the Profiler7000 App that runs on your MMS7000 handheld:

- Download the installer for the latest version of EVOsoft by visiting http://www.profilertech.com/software-downloads and clicking on the relevant "Profiler7000 App Installer" link
- 2. Once you have downloaded and saved the .zip file, double-click on it to open it, extract the single **Profilertech.Profiler7000.Setup.cab** device application installer file it contains and save it somewhere on your PC e.g. on your Desktop.
- 3. Connect your MMS7000 device so that you can browse its contents from your PC.
- 4. Extract the **Profilertech.Profiler7000.Setup.CAB** file above, and save it to your device in **\Storage Card\Profilertech\Software** e.g.



5. Perform a hard reset of the MMS7000 by pressing and holding both the power button and the corresponding button on the other side of the device for 3 seconds until the display turns completely white. Release the buttons and wait for the re-boot to complete:



6. The Profiler7000 app has now been upgraded and your MMS7000 is ready for use.



Profiler7000 App Changes

The following changes have been to the "Profiler7000" app that runs on the MMS7000 instrument:

New Features:

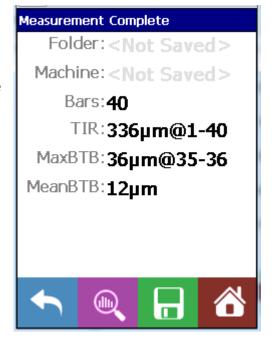
The layout & contents of the **Recording Review** screen that is displayed at the end of a recording (or when viewing a recording taken previously) has been changed, as shown to the right. The changes are to:

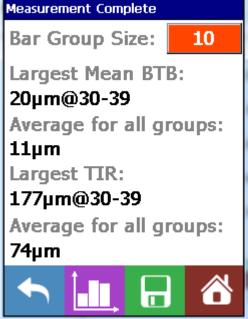
- Remove the existing Min and Max fields (which showed the highest and lowest displacement detected by the sensor during the recording). Feedback from users was that the specific values displayed in these two fields provided little value and rather only the difference between them was useful, which is already displayed as TIR (Total Indicated Runout).
- For Bar Recordings, added a new field MeanBTB (Mean Bar To Bar), showing the mean (average) difference between the height of each bar and the one following it.
- To avoid confusion with this new MeanBTB field, the existing MBTB (Maximum Bar To Bar) field has been renamed to MaxBTB.

When reviewing a Bar recording, the **Recording Review** screen now includes an additional Bar Statistics summary page that helps you evaluate the condition of the commutator by looking at groups of consecutive bars in the recording. To view this

page, tap the new Bar Statistics button to toggle to the display shown on the right:

- To set the bar group size, tap the **Bar Group Size** button and enter the desired size. In this example, the MMS7000 is analyzing each group of 10 consecutive bars (e.g. bars 1-10, then 2 -11, then 3-12 etc.)
- Largest Mean BTB identifies the group of consecutive bars with the largest Mean Bar To Bar displacement difference. In this example, the 10 bars from 30 to 39 have the largest Mean BTB at 20µm.
- For comparison, Average for all groups shows the average Mean BTB for all other groups of consecutive bars. In this example, each group of 10 consecutive has (on average) a
 Mean BTB of just 11μm, meaning the group from bars 30 to 39 is almost twice the average for this commutator.
- Largest TIR identifies the bar group with largest Runout i.e. largest difference between tallest and shortest bar. In this example, this is also bars 30 to 39 with a TIR of 177µm.
- Finally, **Average for all groups** shows the average TIR for all other groups of consecutive bars, which in this example is 74μm. This means that bars 30 to 39 have a runout almost 2.5 times higher than other groups.







Issues Resolved:

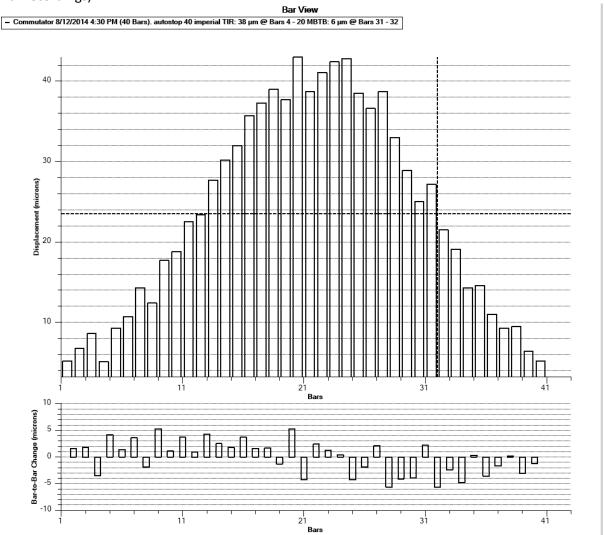
- When reviewing previous recordings, the MBTB value was always displayed as 0. This has been resolved.
- When retaking a recording, the initial sensor displacement is now correctly reset to 0 at the start
 of the new recording rather than remaining at the ending displacement of the previous
 recording.
- The Bar count fields on the Save Recording screen now only count complete bars and so no longer include the partial starting and ending bars.

EVOsoft Changes

The following changes have been to the "EVOsoft" desktop software:

New Features:

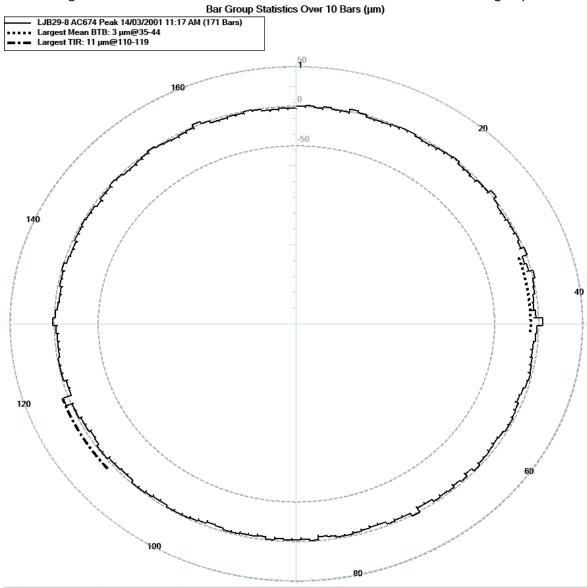
• The **Shape Plot** tab has been modified to include a new chart under the main plot that shows the Displacement Rate of Change (for Continuous/Shape recordings) or the Bar-to-Bar Change (for Bar recordings):



This new chart is intended to help identify areas of the rotor where the shape is changing in an abnormal manner e.g. unusually steep upwards or downwards slope, oscillating bar heights etc.

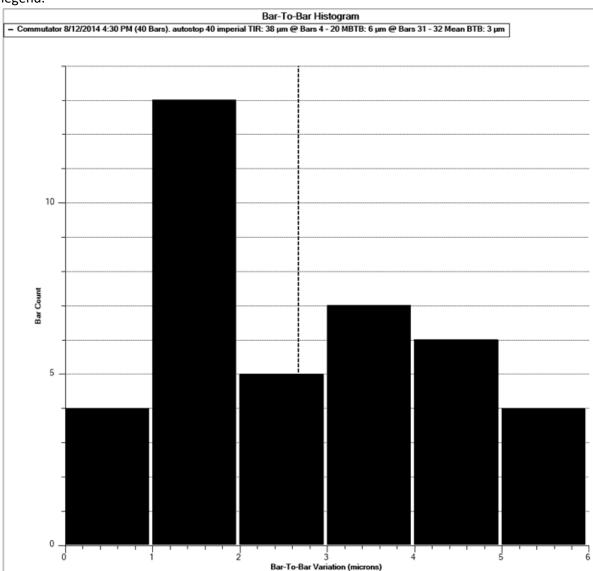


- A new Bar Group Stats tab has been added that allows you to view statistics about each group of
 consecutive bars in Bar Recordings. The number of bars in each group can be adjusted using the
 'Bar Group Size' field, and the plot will automatically update to show which group of such bars
 has:
 - o The largest Mean Bar-To-Bar height difference between consecutive bars in the group, and
 - The largest Total Indicated Runout between the tallest and shortest bar in the group.





 A new Bar-To-Bar Histogram tab has been added that summarizes the Bar-to-Bar height differences for all bars in a Bar Recording. The resolution of the histogram can be adjusted using the 'BTB Resolution' field and the plot will automatically update. A vertical dotted line indicates the exact Mean BTB difference, as opposed to the rounded Mean BTB value shown in the legend.



- To correspond with similar changes made in the Profiler7000 handheld app, the Recording Details section in the bottom right of EVOsoft has been changed to:
 - Remove the Min and Max (displacement) fields
 - Add a new Mean BTB field (for Bar recording only)
 - o Add a **Distance** field to show the total distance travelled by the sensor

Issues Resolved:

- Resolved an issue with the Shape Plot tab that meant that Bar recordings could no longer be rotated, and the MBTB indicator line was not positioned correctly.
- Resolved a problem that causes errors when displaying some recordings that were imported from Profiler MAS software.
- Resolved a problem with the Radial plot that was resulting in all recordings showing a vertical line back to 0 displacement at the 12 o'clock position.



User Reference Guide Changes

The EVOsoft Reference Guide has been extended to describe the changes to the **Shape Plot** tab, and the addition of the new **Bar Group Stats** and **Bar-to-Bar Histogram** tabs.

Technical Support

For technical support please contact

Support@profilertech.com

Or visit us on the web at

www.profilertech.com

