

# Release Notes – PREMET Viewer

## Version 4.03 (08.10.2024)

### New functions:

### Improvements:

### Bug fixes:

- Default file directory now in user My Documents
- Removed unnecessary update messages to improve UX

## Version 4.02 (02.10.2024)

### New functions:

- Checks for new update when started. User opt-out option. Also, manual option in help menu.

### Improvements:

- $W_{(eff)}$  is now calculated based on the decomposition curve

### Bug fixes:

- EULA encoding fixes
- Length of combustion recalculation
- Default request parameters are set for all records with old file versions.

## Version 4.01 (08.09.2024)

### New functions:

- Uses now the new engine library from PREMET Cloud.
- Allows customization for additional data to be entered as well as for engine characteristic.
- New file format (.epa) introduced to take on more additional data.
- New field for cylinder parameter, running hours and engine parameters.

### Improvements:

- Validity check for additional data
- EULA now needs to be confirmed before usage

### Bug fixes:

- None in this release

### **Version 3.76** (27.08.2023)

#### **New functions:**

- None in this release.

#### **Improvements:**

- None in this release.

#### **Bug fixes:**

- Upload Engine Library via Viewer to PREMETS M does now transmit firing order and IMO number correct.

### **Version 3.75** (07.07.2023)

#### **New functions:**

- None in this release.

#### **Improvements:**

- None in this release.

#### **Bug fixes:**

- Fixed problem where viewer was not finding PREMETS X HW 3.00 when reading/editing Engine Library

### **Version 3.74** (01.06.2023)

#### **New functions:**

#### **Improvements**

- Removed IMO check on Cloud Upload
- Allows to type in 01, 02, 03, .... 24 as engine ID for customers in power plants with more than 10 engines. Needs to be changed before Cloud upload. PREMETS X does not yet accept those numbers for FW 2.05 and lower.

#### **Bug fixes**

- Fixed typos in menu articles

### **Version 3.73** (03.04.2023)

#### **New functions:**

- PREMET Devices -> PREMET M -> Upload Engine Library into Device Memory:
- Uploads complete engine library to PREMET M device records as new blank records.
- TDC Barplot displays crankshaft twitting as measured according to the diagrams' compression curves and TDC sensor signal.

#### **Improvements**

- None in this release.

#### **Bug fixes**

- Table of results if reference engine is selected title bar values are from reference engine, instead of current engine.

### **Version 3.72** (06.01.2023)

#### **New functions:**

- Preferences allows to choose ISO correction for measured and calculated values.

#### **Improvements**

- Preferences allows to choose the coolant system for scavenge air.

#### **Bug fixes**

- Calculation of TDC angles when V-engine is selected.

### **Version 3.71** (14.10.2022)

#### **Bug fixes**

- Fixed clock synchronization on Premet M device which freezes the program and deletes embedded viewer on the device FLASH memory.

### **Version 3.70** (17.09.2021)

#### **New functions:**

- Import for IMES + IMES Trend files when software is licensed.
- Import for .mpd files from a "who must not be named" device when software is licensed.

#### **Improvements**

- None in this release.

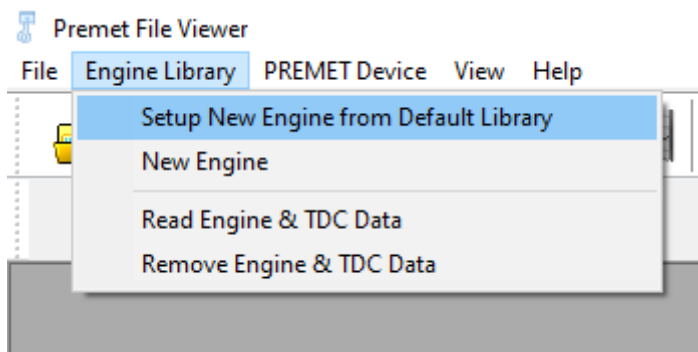
#### **Bug fixes**

- Fixed barplots when the parameters has 0 value
- Minor fixes

## Version 3.6.40 (06.05.2021)

### New functions:

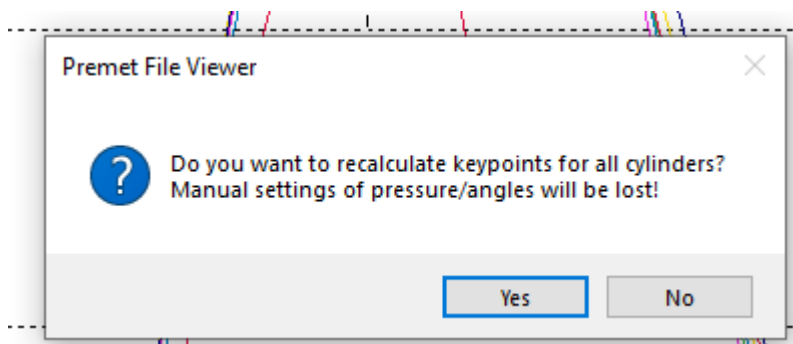
- New Engine data and TDC dialog – none modal (can stay open permanently), same page for Engine data and TDC correction angles.
- Engine library with ~ 160 predefined engines (con. rod length pre-set) now available:



- TDC deviation bar plot for analysis only (activated when Engine data view is on top with "Ctrl + Shift + B")

### Improvements

- Cylinder measurement properties at one table (time, SW revision, HW revision, Device type etc.). Activated when p-A diagram is on top "Ctrl + Shift + R".
- Auto TDC adjustment button now on toolbar.
- Online manual has been changed to match the offline manual.
- PREMETS M device uses now same data file as PREMETS X with extension .mipprp instead of .mip. All files are still compatible.
- Drawing acoustic emission diagram with lines instead of pixels.
- Question with warning on the "Engine Parameters & TDC adjustment" dialog exit.



### **Bug fixes**

- Read Reference file ver. 4.0 cylinder and acoustic diagrams are shifted.
- Time server reading fixed from domain name definition, instead of IP address.
- Minor fixes

## **Version 3.6.30** (not released)

## **Version 3.6.20** (22.10.2020)

### **New functions:**

- None in this release.

### **Improvements**

- When engine data are changed all cylinders will be recalculated automatically. A warning message will appear.
- License key starts now with "CL-" indication for a cloud license and with "FI-" indication for a file import license.
- Additional message for importing data from PREMETSW or HLV to use PREMETS Viewer Data Transfer Cable or to contact PREMETS support to get one.
- Removed expire date from Cloud Upload License window. It is no longer used. License is controlled via the PREMETS Cloud.

### **Bug fixes**

- Close read PREMETS X Data with CANCEL does not close the Viewer Software any more.
- Correct icon is now used also in Windows start menu.
- Calibration data are now read correctly from Electronic Indicator provided from Drew Marine ad DPA-MI mini indicator or CMT
- Minor fixes

## **Version 3.6.10** (not released)

## **Version 3.6.00** (17.04.2020)

### **New functions:**

- Can now read records direct from following devices when software is licensed:
  - PREMETS (1<sup>st</sup> and 2<sup>nd</sup> generation) made by LEMAG Lehmann & Michels,
  - DieselsCOPE, Diesel Indicator sold by Drew / Kittiwake
  - HLV made by Kistler or Beawert (all generations)
- Records from all above devices can be uploaded into the PREMETS Cloud by same procedure.

### Improvements

- Connection rod length is now fixed between 100 and 4000 mm avoiding problems with calculations at zero length.
- New value in table of results and as bar charts for:
  - Length of combustion  $l(\text{cmb}) = a(\text{end}) - a(\text{ign})$
- Showing now also device name and serial number of the device used to measure in hidden menu. Also shows sensitivity and coefficient from AE sensor if used.
- Message shown if conrod length is less than half stroke.

### Bug fixes

- Print Preview bug fixed when conrod length = 0.
- Minor fixes

## Version 3.5.00 (22.10.2019)

### New functions:

- Import of data from old PREMETS and HLV devices now require a license code.

### Improvements

- Can now import data from PREMETS SW (first generation) as well.
- Fuel Channel from PREMETS C and SW now also imported.

### Bug fixes

- Print Preview bug fixed.
- Minor fixes

## Version 3.4.00 (04.07.2019)

### New functions:

- A new symbol in the tool bar for *Engine Parameter*, *Cloud Access* and *Manual TDC Adjustment* was added.
- Engine Data in PREMETS device can now be changed straight from Viewer software.
- Manual TDC Adjustment in menu “Options”. All displayed diagrams can be moved with left and right arrow keys. Values are automatically recalculated.
- Manual TDC Adjustment mode shows first derivative curve from measured pressure curve (solid line) as well as from calculated compression curve (dotted line)
- For manual TDC adjustment the dialog box “Engine Parameters” in the Engine Library does not need to be closed. A new “Apply” button does shift the diagram to speed up manual correction.
- Mouse wheel can now be used to zoom and move in diagrams. To move vertical in zoomed diagrams just scroll the mouse wheel. To zoom in or out hold CTRL and scroll the mouse wheel and to move horizontal hold SHIFT and scroll the mouse wheel.
- HTML manual for viewer software now added under Help menu.

### Improvements

- AUTO TDC adjustment algorithm has been improved further.
- Decomposition curve is now calculated from the angle of ignition if the ignition starts before TDC .
- New icon in the main menu to access engine setting, TDC adjustment, Cloud file upload, and Cloud access.
- Icons and font optimized for 4k resolution
- The total indicated power is now shown on headline of the table of results.
- Going with the mouse over a curve in the diagram does now show cylinder number, angle and pressure at that point.
- Parameters for high pressure fuel sensor removed and new parameters added:
  - $a(\text{end})$  angle at which combustion ends.
  - $p(\text{pk}) / a(\text{pk})$  is the absolute maximum of the cylinder pressure and can be combustion or compression pressure.
- $p(\text{max}) / a(\text{max})$  replaced with “Maximum Combustion Pressure” –  $p(\text{mxc}) / a(\text{mxc})$
- Report changed: If over 12 cylinders table of results changed to landscape.
- Acoustic Emission signal can now be filtered. (Filtered if only AE signal is visible)

### Bug fixes

- 4k resolution problems solved
- Bug in scavenge air pressure calculation removed.

- File name is now show also with maximized window.
- Missing cylinder numbers in engine set up now visible.
- Minor fixes

### **Version 3.3.00** (not released)

### **Version 3.2.50** (01. February 2019)

#### **New functions:**

- Combustion decomposition curve now available in menu "*Option / Preferences*" (See manual page 20)

#### **Improvements**

- Menu "*Device / PREMETS / Set New Engine ...*" does save changes automatically in the device when leaving the Window with OK.
- Menu "*Device / PREMETS / Edit Engine ...*" can now also be used for Engines completely empty (new)?
- The option "Set New Engine Data into Device Record" is now also available when another Record is open.

#### **Bug fixes**

- Removed cut title in Table of Results for non-standard screen resolutions.
- ID "ME" in Engine Library can now also be used for PREMETS records.
- Minor fixes

### **Version 3.2.40** (25. January 2019)

#### **New functions:**

- Transparency for Tables can be set now in Menu "*Options / Preferences*" from 0 to 90%. This setting is used for all tables.
- Filtering now works for all selected cylinders together. Not selected cylinders are not filtered. After filtering the filtered cylinders are new calculated.
- Software now opens \*.mip and \*.miprp files as standard.
- New files are now opened with maximum scaling at maximum pressure.
- Menu *Options / Preferences* does now allow to preselect if user has to add additional parameters for cylinders, engine and vessel.



- Right click on the graph does now allow also to recalculate all cylinders and not only the active cylinder.

### **Improvements**

- When opening Software all Cylinders are initially selected. To select all cylinders again press and hold SHIFT and select any cylinder with the mouse.
- Table-View can not show up to 20 cylinders in one table so that no scrolling is needed. This gives a much better overview.
- CSV now exports data from Table-View and pressure data for all cylinders.
- Ballast/load condition parameter for vessel is added to additional information data. Mass flow meter logic is added to the same dialog.
- Selection Bar for cylinders is now easier to see whether selected / unselected.
- Selecting all cylinders is now possible with SHIFT and a mouse click on any cylinder.
- Automatic TDC Correction for import from PREMET M and X devices when no sensors where used.

### **Bug fixes**

- Scavenge air pressure is now used in calculation correctly.
- Closing software after CSV export
- Minor fixes