

Knowledge Base Article

Product Group: Software **Product:** CMSW7400 - @ptitude Analyst **Version:** 7.0 (2012)

Abstract

SKF @ptitude Analyst 2012 introduces a new feature that allows @ptitude Analyst data to be exported in Comma Separated Value (CSV) format which can be imported into Microsoft Excel as well as other applications. This article describes the feature and addresses some of the more commonly asked questions.

Overview

The frequently asked questions below provide information on CSV (Excel) export for SKF @ptitude Analyst.

What is it?

CSV Export is an export option that converts hierarchy, measurements, and notes into flat CSV files.

What version of Excel do I need to use this feature?

Excel 2007 or higher (16,384 columns) is required to view Phase, Spectra, and Time data. All other data can be viewed using any version of Excel.

Are there any other limitations to the data that can be read by Excel?

Yes – for high resolution time data (6400 lines / 16384 samples and 12,800 lines / 32,768 samples), Excel will only support the first 16,372 samples.

Can I import CSV files into @ptitude Analyst?

> No. This feature currently is export only.



How do I access this feature?

There is a new menu item under File > Export called Analyst Data (CSV), as well as a new toolbar button. When accessed, the standard Export Wizard will be launched.

Can I automate the CSV export?

> No. Currently, this feature is manually activated.

Does every user have access to this feature?

By default, all users of an Operator or above have the access right Export CSV data available. The system administrator can create custom accounts that disable this function.

What options do I have in defining what gets exported?

- The standard Export options available for MAB export are available for CSV export. These include:
 - Export Source
 - Destination folder
 - Export file name prefix
 - Specific POINTs / ROUTEs / Workspaces to export
 - Measurement range (all records; between two dates; last N records)
 - Which devices collected the data
 - What type of readings (BOV; FFT; Inspection; MCD; Overall; Phase; Time)

Can I select part of a ROUTE or part of a Workspace?

No. Only the ROUTE or Workspace name can be selected. All nodes of the selected ROUTE or Workspace are then exported.



What type of devices does this feature support?

> All @ptitude Analyst supported Data Acquisition Devices (DADs).

Do I need to create special POINTs or prepare the POINTs in any way?

No. Simply select the POINTs that are to be exported in the Export Wizard.

Is dynamic data rendered by column or by row?

Dynamic data (Phase, Spectra, and Time) is rendered one measurement per row. Data starts at column K (for Phase and Time) or column M (for spectra).

Is it possible to Export the data per column?

> No. The current functionality is limited to outputting the data per row.

How can I get the data to show up by column?

- Excel has a **Paste Special** function to **Transpose** the data. Once the data is in Excel, do the following:
 - On the keyboard, press **[Ctrl]** + **[A]** to select all the data.
 - Press [Ctrl] + [C] copy the data to the clipboard.
 - Right-click on the name of the tab in the lower left (ex: "Export_Spectra") and insert a new worksheet.
 - Right-click on cell A1 in the new worksheet, and go to Edit > Paste Special... In the lower right hand corner of the Paste Special option dialog is a Transpose check box. Select this option and press OK.
 - The data will then be rendered column-based.





How can I use this new CSV format?

- There are many uses for @ptitude Analyst data in CSV format. Some of those uses are:
 - Ability to export Spectra and/or Time data and feed it into Lab View or some other analysis program.
 - Ability to select a ROUTE (or Workspace) and get a list of all Machines and POINTs that are contained in that ROUTE (or Workspace).
 - Ability to take the Overall values and combine them using standard Excel functions.

@ptitude Analyst now exports CSV. I have a program that reads CSV. Does this mean that the CSV files that are output by @ptitude Analyst will automatically be read by my program?

Probably not. Even though both types of files are Comma Separated Value (CSV) files, the format your program is expecting is probably predefined by your program (certain data is required to be in certain columns). As @ptitude Analyst's feature was designed to make the data more human readable and not designed to match every (or any) program's specific CSV format, there is a very low chance that the file format produced by @ptitude Analyst will be readable without some sort of manual manipulation. In addition, there is no guarantee that all data required by the third party CSV import is included in the @ptitude Analyst CSV output.

Is this it, or will there be enhancements to this functionality?

SKF is interested in making @ptitude Analyst as useful as possible and we are always ready to take feedback in how we can make our application better. Forward your thoughts to your SKF Sales or Technical Services representative. Be advised, there is no timeline on if or when any particular enhancement request will be implemented.

I see that ARM has a CSV import feature. Will these files work with ARM?

No, @ptitude Analyst CSV export files are a different format than ARM's and therefore cannot be read by ARM.



I get a "File not loaded completely" error message when I try to read the Phase, Spectra or Time CSV file in Excel.

This is a common error when trying to read dynamic data with Excel 2003 or earlier. Try reloading the file using Excel 2007, 2010 or later. This error will also show up in all versions of Excel when trying to read 6400 or 12800 line time waveform data.

The Overall/Spectra values seem to be extremely large, reading in the thousands or millions when they should be in the teens.

- With the release of @ptitude Analyst 2012, all Overall, Spectra, Time, and Phase values are expressed using a period as a decimal place. With some regional settings that use a comma (or other character) as a decimal character, this will lead to the values being read incorrectly by Excel. To address this in Excel, go to Tools > Options > International tab and set the following options as shown in Figure 1.
 - **Decimal separator:** . (Period)

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Number handling Decimal separator:	Thousands separator: ,
Image Image Image Image Right-to-left Image Image </td <td>Cursor movement: Logical</td>	Cursor movement: Logical
Uie <u>w</u> current sheet right-to-left	Show control characters

• Use system separators: Unchecked

Figure 1. International > Number handling



What are the files, and what is in each of them?

- > When the export is run, the following files are created:
 - Hierarchy nodes
 - o Type (Hierarchy; Set; Machine; POINT)
 - Full path (Hierarchy \ Set \ Sub set \ Machine \ POINT)
 - o Name
 - o Description
 - o Units (for POINTs)
 - Inspection Measurements
 - POINT path (Hierarchy \ Set \ Sub set \ Machine \ POINT)
 - o Date and time of measurement
 - o Inspection Prompt
 - Each Inspection result (in text) selected for the measurement
 - MCD Measurements
 - POINT path (Hierarchy \ Set \ Sub set \ Machine \ POINT)
 - o Date and time of measurement
 - o Unit (of each channel)
 - Detection ('Peak' Velocity; 'Peak to Peak' Env. Acc; 'N/A' Temp)
 - Value (of each channel)
 - o Channel name (Velocity; Env. Acc.; Temperature)
 - Notes
 - Type (Hierarchy; Set; Machine; POINT)
 - o Full path (Hierarchy \ Set \ Sub set \ Machine \ POINT)
 - Date and time of note
 - o Note text
 - Overall Measurements
 - POINT path (Hierarchy \ Set \ Sub set \ Machine \ POINT)
 - Date and time of measurement
 - o Unit of measurement
 - o Detection (if applicable)
 - Value (of each channel)
 - Channel number (multi-channel POINTs are listed in sequential rows for each day and time.



- Phase Measurements
 - POINT path (Hierarchy \ Set \ Sub set \ Machine \ POINT)
 - o Date and time of measurement
 - o Unit of measurement
 - o Detection
 - o Channel number
 - o Number of lines
 - o End Frequency
 - o Speed (Hz)
 - o Process value
 - o Unit of process value
 - Data (in rows K to K + Number of lines)
- Spectra Measurements
 - POINT path (Hierarchy \ Set \ Sub set \ Machine \ POINT)
 - o Date and time of measurement
 - o Unit of measurement
 - o Detection
 - o Channel number
 - o Number of lines
 - o End Frequency
 - o Speed (Hz)
 - o Process value
 - o Unit of process value
 - o BOV / Gate
 - o Digital
 - Data (in rows M to M + Number of lines)
- Time Measurements
 - POINT path (Hierarchy \ Set \ Sub set \ Machine \ POINT)
 - o Date and time of measurement
 - o Unit of measurement
 - o Detection
 - o Channel number
 - Number of samples (lines * 2.56)
 - o Max Time
 - o Speed (Hz)
 - o Process value
 - o Unit of process value
 - Data (in rows K to K + Number of samples 1) Note: Excel
 2007 and 2010 will only support the first 16,372
 samples of 6400 and 12,800 line time waveform data.



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



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