



# MeltLab Reporting Text, CSV or Excel

Graphic Statistical Process Control  
by MeltLab Systems

844-MeltLab

[www.meltlab.com](http://www.meltlab.com)

Fast • Accurate • Comprehensive

# Setting up MeltLab Reporting for ASCII

ASCII reporting is when we generate a text based file of MeltLab Results. There are several different formats to choose from: text, csv, or Excel. Your choice will depend on how the file is to be used. If the file is to be absorbed into a data base, your data base application will have preferences and handle some of the different formats better than others.

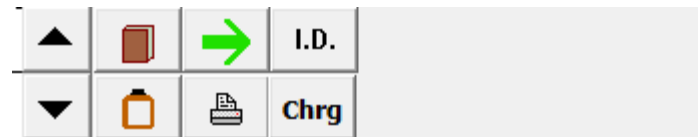
So lets get started.

# Getting to the reporting format

- Within the MeltLab program, bring up the tool bar by clicking on the screen. You want the red curve button:

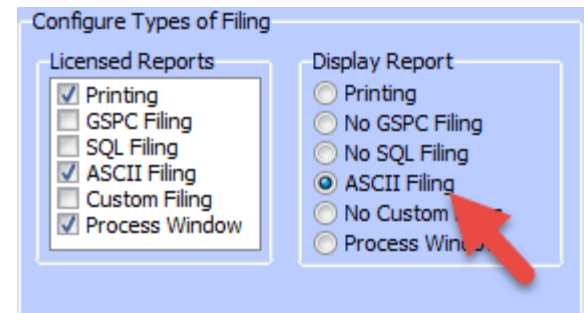
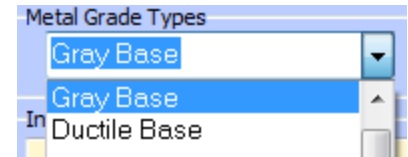
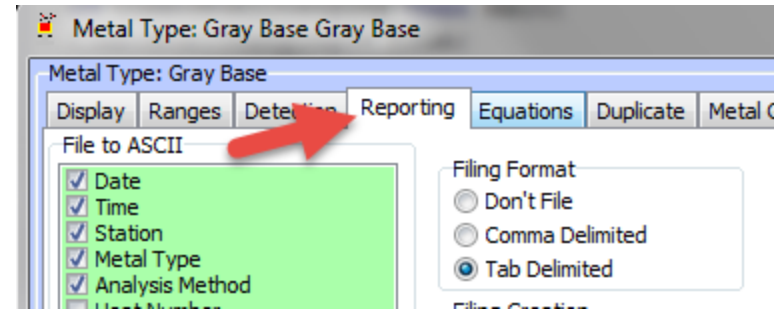


- If the red curve is not on the tool bar, you may need to go through the security log on to get the necessary permissions. The tool bar below has the curve button hidden by the security level.

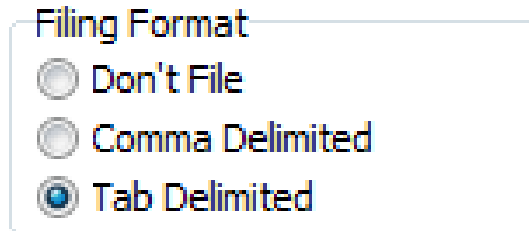


# Choose Reporting tab

- Click on the Reporting Tab
- Set the Metal Type to what you want to set up.
- Select ASCII as the reporting type.
- Note ASCII reporting is included with the basic MeltLab License.



# File Format



Filing Format

Don't File

Comma Delimited

Tab Delimited

- Don't file obviously turns off filing.
- Comma delimited inserts commas between fields
- Tab delimited inserts tabs between fields

Note: if the report is to include human entered data, and the human types a comma, then the comma delimited format will be messed up. That is why I generally prefer a tab delimited format. Humans can't enter tabs: the tab key means move to next field, not enter the tab key into the field.

# Frequency of File Creation

Filing Creation

Once a year

Once a month

Once a week

Once a day

- If you create a file, how much information do you want it to contain? Like the storybook says: too little or too much can be a problem.
- Higher production shops may opt for once a day, and lower production shops for a weekly or a monthly report.

# Choosing a file type

Extension to use

txt

csv

xls

- The file type controls the extension on the file. The extension gives your application a hint on how to treat the data inside of the file, and what application to use to open the file.
- For example, if the extension is “txt”, your computer will look for text handling programs and offer to open it in Word or Notepad. If the extension is “xls” your computer will open it in Excel.

# Column Headers

Include column Header

- No  
 Yes

- Each test will generate one line of data in the report.
- And the data will be separated into columns.
- This option determines if the columns will include a description of the data in that column.
- In most cases do choose the header option. Only if you have a database import program that doesn't want a header would you turn this option off.
- The header is only generated at the start of a new file.



# Keeping separate files

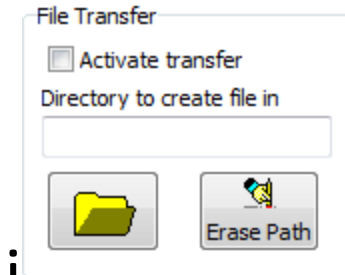
Seperate Files by Metal Type

No

Yes

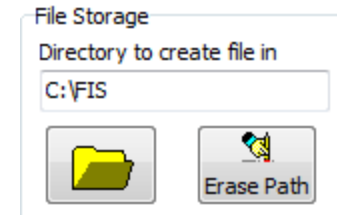
- There are two ways of keeping your metal types separate: by using different folders and by adding the name of the metal type into the file name.
- This controls adding the metal type name into the file name.
- **IMPORTANT:** if you choose to include the metal type name in the file name **DO NOT** include letters in the file name that will cause problems. These letters include “/”, “\”, “|”, and any other letter not allowed in a file name. The operating system will refuse to create the file.

# File Transfer



- At the end of each day (Midnight), this option will take the report file and move it to another location.
- This provides a way of archiving the file, and can also prevent sharing problems that will be discussed later.
- To activate it you will need to do three things:
  - Check the Active Transfer box.
  - Set up a folder for the file to be transferred too with the folder button.
  - Have the MeltLab program running at midnight.

# File Storage folder



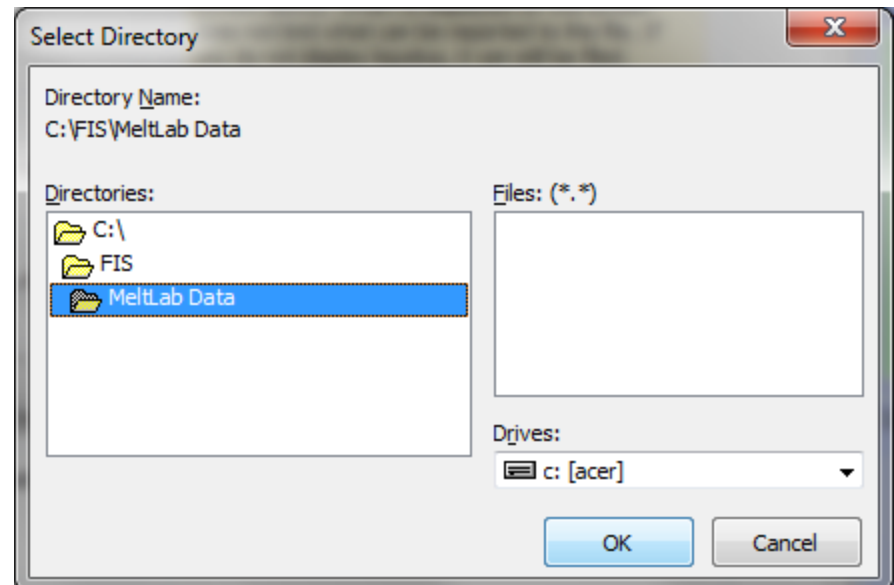
- Before you set this option, you will need to have created the folder that you want to store the files in. Tab out of the MeltLab program and create the necessary folder(s).
  - If you try to quit the MeltLab program you will find that you need to first save the configuration changes before the program will allow you to quit.
- Now return to the MeltLab program and click on the yellow folder.
- Select the drive and find the folder that you want to use (see next slide).

# File Storage folder continued

- To select the folder, **DOUBLE CLICK** the folder. A single click doesn't work (thanks Microsoft).
- Once the Drive and the folder have been selected, click OK.
- When you return to the report screen, you should see the correct file name.

Directory to create file in

C:\FIS\MeltLab Data

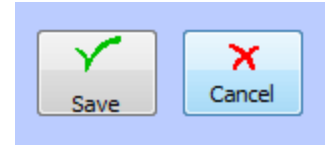


# ASCII File Name Field

ASCII file name Today's File name 20140717.csv	ASCII file name Today's File name 20140717 Gray Base.csv
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- This field tells you the proposed name of the file to be formed.
- It starts with Year-Month-Day for daily files or
- Year – week for weekly files or
- Year – month for monthly files or
- Year for yearly files
- The metal type may be appended to the date if you have selected to separate files by metal type.

## Now would be a good time to Save



- Every time you make a configuration change in the Report section, the computer will lock the program from leaving the metal grade until you choose to either save or cancel your changes.
- This means you cannot change metal grades, and you cannot leave the Curve Editor. You cannot even close the program.
- So choose to save or cancel before you forget. The buttons are in the lower right corner of the screen.

# Selecting what to report

File to ASCII

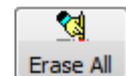
<input checked="" type="checkbox"/>	Date
<input checked="" type="checkbox"/>	Time
<input checked="" type="checkbox"/>	Station
<input checked="" type="checkbox"/>	Metal Type
<input checked="" type="checkbox"/>	Analysis Method
<input type="checkbox"/>	Heat Number
<input type="checkbox"/>	Alloy Name

- The green field is the sample identification items that tell us when, where, the metal grade and the method being used (chemistry, microstructure, etc.).
- Heat Number and Alloy name are descriptions that can optionally be added through the ID command in MeltLab.
- The first 5 items cannot be unselected. They are always added back in to make sure we know where, how and when the test was taken.

# Selecting the tests to report

- The items checked will be those reported.
- There are quick commands at the bottom that will select all, or erase all.
- If you are importing the data into another Program, it might be easier to only select those values you need.
- But if that is not the case, then memory is cheap, and you might consider saving all.

<input type="checkbox"/>	MaxTemp
<input checked="" type="checkbox"/>	Liquidus
<input checked="" type="checkbox"/>	Eutectic
<input type="checkbox"/>	End of Freezing
<input type="checkbox"/>	Solidus
<input checked="" type="checkbox"/>	Carbon Equivalent
<input checked="" type="checkbox"/>	Carbon %
<input type="checkbox"/>	Saturated Carbon
<input checked="" type="checkbox"/>	Si AFS %
<input type="checkbox"/>	Si BCIRA %
<input type="checkbox"/>	Metal Weight
<input type="checkbox"/>	Carbon Addition
<input type="checkbox"/>	Silicon Addition
<input type="checkbox"/>	Steel Addition
<input type="checkbox"/>	Lance Temp
<input type="checkbox"/>	Est Chill
<input type="checkbox"/>	Super Heat
<input type="checkbox"/>	Sample Quality
<input type="checkbox"/>	Oxide Index
<input type="checkbox"/>	Tramp Index
<input type="checkbox"/>	Eut Gas
<input type="checkbox"/>	Shrinkage
<input type="checkbox"/>	Eut Freezing
<input type="checkbox"/>	Tot Freezing





## How it works (under the hood)

- A thermal analysis sample terminates when one of three conditions is met: the temperature falls below the stop temperature, the cup is removed, or the curve reaches the right side of the screen.
- Then the report file is opened and read into the program. If it doesn't exist, then the file is created and a header line is optionally added.
- The results from the current test are then appended on to the end of the report file, it is written back to the storage device, and the file is closed and released.
- This all happens in a fraction of a second.

# What can go wrong

- Most programs written by our friends at Microsoft open files in “exclusive” mode. That means that no one else can have them.
- If you open today’s report file with Word or Excel then additional data cannot be written to the file until you close and release the file. So the next MeltLab sample may not be included in the report.
- There is never a problem opening a file from yesterday or before, only with today’s file.
- Solution: Copy today’s file someplace else, then open it.

# Testing the Report configuration

- When you are ready to test, and you have saved your changes, go back to the main screen and do the following:
- Recall a curve on the screen from today.
- Right click the screen. A menu will open and then choose the “Refile curve” command.
- This should cause a report file to be created and a line to be added from this test.
- Tab outside of the program and look at the file.
- If it isn't right, then delete the report file so that new headers will be written, and make further changes and repeat the process until you are satisfied.

## Final Notes:

- The CSV option is new, and if you need that ending, you will need to get the latest version of MeltLab.
- If you need something that is not in this reporting setup, please talk to us. We are willing to customize.