True-Trak 2020™ End of Shot Parameter Files

It is possible to write the parameter values to a file at the end of each shot. This is set up using entries in the **\V5\EXES\MONALL.INI** file. All entries are in the **[Config]** section of that file.

End of Shot Output File

There are two types of files that can be written to. For the first type of file, the End of Shot Output File, the program writes one line after each shot. If the file exists already then the new line is appended at the end of the file.

Path Name of the File

The name of the file is specified using the following line.

```
EosOutputFile=C:\V5\Exes\parameters.csv
```

This will write the lines of output to the **C:\V5\Exes\parameters.csv** file.

You can embed dynamic strings into the filename using tags. The following

```
EosOutputFile=C:\Parameter-Files\{m}-{p}-parameters.csv
```

will produce a file name of **C:\Parameter-Files\1250Ton-VE01224HEADER-parameters.csv** for machine 1250Ton and part VE01224HEADER.

See the details at [Dynamic File Names](#)

Delimiters

Each field in the output is separated by a character. The default character is a comma. You can change this. Three examples are shown below. The second sets the delimiter to a tab character. The last example, a backslash followed by a zero, tells the program to *use no delimiter between fields*.

```
EosComDelimitChar=;
EosComDelimitChar=\t
EosComDelimitChar=\0
```

Misc

The parameter values can be written with a fixed character width. Normally this is set to "None" as shown here.

```
EosFixedWidth=None
```

The following lines override the default good shot indicators: "A", "W", "G".

`EosHaveAlarmShot=Alarm`	Prints the word "Alarm" if at least one parameters is in alarm
`EosHaveWarningShot=Warning`	Prints the word "Warning" if there are no alarms but at least one parameter is in warning
`EosHaveGoodShot=Good`	Prints the word "Good" if there are no Warnings and no Alarms

End of Line Characters

If you are going to be writing the parameters from successive shots to the same file you need to set the end of line to be a carriage return and line feed with the following line.

```
EosComEol=\r\n
```

Creating a New File Every Shot

The default behavior is to create a new file every shot, deleting the previous file if it exists. If you want to append the parameters to the file after each shot so that there is one line per shot then you have to include the following line.

```
EosKillOutputFile=N
```

Output File Setup Line

The message that is output is controlled by the setup line. The setup line contains a list, in order, of the outputs desired.

Each outout is separated by a comma (except for the last). The outputs are:

Tags for Serial Output	
Axx	Alarm state indicator (alarm, warning, good) of parameter xx [0-119] e.g. A5,A24,
D	Date mm/dd/yyyy
D0	Date mmddyy
FI	Print the index (Parameter Number -1) of the first parameter in alarm. Print '*' if no alarm.
FN	Print the Parameter Number of the first parameter in alarm. Print '*' if no alarm.
FD	Print the Parameter Name of the first parameter in alarm. Print '*' if no alarm.
G	Prints an indicator for alarm, warning, or good shot
J	Julian Date, Jan 1 = 1, Dec 31 = 365.
J3	Julian Date, Jan 1 = 001, Dec 31 = 365.
L	Inserts a Line Feed (only works with ',' delimiter)
M	Machine Name
OA	Operator Name (First Last).
OF	Operator First Name
OL	Operator Last Name
ON	Operator Number
P	Part Name
PD	Plunger Diameter with optional length. Follow with a length, e.g. PD10, for fixed length.
Q	Insert text, use \1 for control character. "QV015," inserts "V015" into the line.
R	Inserts a Carriage Return (only works with ',' delimiter)
S6	Shot Number with optional length. No length, "S", means variable length (Shot 32 would be "32"), specified length, "S6", means left pad with zeros (Shot 32 would be "000032").
T	Time hh:mm:ss
T0	Time hhmmss
T1	Time hhmm

Y	Last Digit of the current year. 2009 = 9, 2010 = 0, etc.
Y2	Last 2 Digits of the current year. 2009 = 09
0	Parameter 1
1	Parameter 2
2	Parameter 3
...	...

For example, the following line

`EosOutputFileSetup=M,P,S6,D,T,1,2,3,4`

results in the following output (assuming ',' delemiter and no eol).

`M01,VISITRAK,000032,02/27/1998,12:34:53,28.9112,626.432,574.342,51.8590`

If you only wanted the shot number you would use the following line.

`EosOutputFileSetup=S`

This would give the following output for shot number 32

`32`

`EosOutputFileSetup=S6`

This would give the following output

`000032`

The parameters are shown below. Note that the parameter numbers shown here are one less than the parameter number that you see in the Part Setup. I apologize for this.

Visi-Trak Parameters			
0	Fill Time	18	Sleeve Full Velocity
1	Total Shot Time	19	Runner Full Velocity
2	Slow Shot Time	20	Average Fill Velocity
3	Fast Shot	21	User Velocity Pos One
4	Fast Shot Rise Time	22	User Velocity Pos Two
5	Cycle Time	23	User Velocity Pos Three
6	User Time Int One	24	User Velocity Pos Four
7	User Time Int Two	25	User Avg Vel Range One
8	User Time Int Three	26	User Avg Vel Range Two
9	User Time Int Four	27	User Avg Vel Range Three
10	User Time Int Five	28	User Avg Vel Range Four
11	Biscuit Size	29	Position P1
12	Calc Start Fast Shot	30	Position P2
13	Intensification Pressure	31	Position P3
14	Intensification Rise Time	32	Avg Slow Shot Velocity
15	Eff Peak Intensification	33	Avg Fast Show Velocity
16	Impact Pressure to Peak	34	Fast Shot Distance
17	Intens Squeeze Distance		

Shot and Parameter Alarm and Warning Indicators

Shot Goodness

The 'G' output tag tells the program to write an 'A', 'W', or 'G' to indicate the alarm state of the shot.

'A' indicates that at least one parameter had a value outside of the alarm limits.
'W' indicates that there were no parameters in alarm but at least one had a value outside the warning limits.
'G' indicates that all parameters were within the alarm and warning limits.

The symbols, 'A', 'W', and 'G' can be set to any string that you wish. This is done by editing the C:\V5\EXES\MONALL.INI file and changing the following lines (enter them in the [Config] section if they don't exist). In the examples below the single character symbols have been changed to words.

- EosHaveAlarmShot=Alarm
- EosHaveGoodShot=Good
- EosHaveWarningShot=Warning

Individual Parameter Goodness

The 'A' output tag tells the program to write an 'A', 'W', or 'G' to indicate the alarm state of a single parameter.

"A11", for example, tells the program to write the alarm state of the Biscuit Size parameter. "A12" would do the same for the Calculated Start of Fast Shot parameter.

As with the shot indicators, the symbols used for the parameter indicators can be set in the [Config] section of the C:\V5\EXES\MONALL.INI file. The following examples illustrate this.

- EosHaveAlarmParameter=Alarm
- EosHaveGoodParameter=Good
- EosHaveWarningParameter=Warning

End of Shot Parameter File

The second type of file you can create is the End of Shot Parameter File. This file differs from the End of Shot Output File in the following ways.

1. One file is created after each shot. Once the file has been created it is the responsibility of the customer to process and delete the file.
2. The name of the file is the shot name with a ".csv" extension.
3. The directory into which the file will be created can be specified as a dynamic file name but the name of the file itself cannot be changed.
4. The file contains one line per parameter. Each line can include the parameter number, parameter name, measured value, and units.
5. The first line of the file can, optionally, contain the part name, shot name, shot date, and shot time

Destination Directory

The destination directory is specified as follows

```
EosParamFileDir=c:\v7\shot-parameter-files
```

This is the name of the directory only. It is a dynamic name so you can imbed the same tags as you can with dynamic file names but you can only change the directory and not the name of the file itself.

Optional Information Line

You can, optionally, write an information line at the beginning of the file. You specify this line as follows.

```
EosParamFileInfoSetup={part name},{shot name},{shot date},{shot time}
```

If this line is missing no informational line will be written at the beginning of the file.

Tags for EOS Parameter File Information Line		
Tag	Description	Example
{part name}	Part Name	Header Assembly
{shot name}	Shot Name	1250Ton-Header Assembly0003435
{shot date}	Shot Date	03/27/2014
{shot time}	Shot Time	16:37:50

Parameter Line Setup

The setup for the parameter lines is as follows.

```
EosParamFileSetup={param number},{param name},{param value},{param units}
```

If this line is missing no file will be written.

Tags for EOS Parameter File Parameter Lines		
Tag	Description	Example
{param number}	Parameter Number	1,2,...,64
{param name}	Parameter Name	Slow Shot Velocity
{param value}	Parameter Value	36.3483
{param units}	Parameter Units	IN, IPS, etc.
{param high alarm}	High Alarm Level	Value
{param low alarm}	Low Alarm Level	Value
{param high warning}	High Warning Level	Value
{param low warning}	Low Warning Level	Value
{param goodness}	Alarm State	A if in Alarm, W if Warning, G if Good

Dynamic File Names

Tags can be inserted into the file name. These tags, shown below, will be replaced by the values they represent. The tags can be inserted into the file name itself or into the directory names.

An example for the End Of Shot Output file might be,

```
"C:\parameters\{yyyy}\{mm}\parameters-{dd}.csv"
```

would create a "parameters-07.csv file in the C:\parameters\2014\03" directory.

Dynamic File Name Tags		
Tag	Description	Example
{dd}	Day of the month	01,02,…,31
{mmm}	Month	JAN
{mm}	Month	01,02,…,12
{hh}	Hour	01,02,…,23
{mi}	Minutes	01,02,…,60
{m}	Machine	1250Ton
{p}	Part Name	Header Assembly
{yyyy}	Year	2016
{yy}	Year	16
{s}	Shift Number	1

If this is an End of Shot Parameter file you cannot specify the file name so the example for this might be,

`"C:\Parameters\{m}"`

`which would create a file name like`

`C:\Parameters\DCM 25\000143.csv`

Since the End of Shot Parameter file is normally deleted immediately after it is read this would probably be sufficient, though you might want to add the part name as well.

`C:\Parameters\{m}\{p}`

Giving a file name as shown below,

`C:\Parameters\DCM 25\Header Assembly\000143.csv`