



# Home



File name



Part name



Revision number



Serial number



Current configuration file



Header data

ASCII  EXCEL

Always list all

Tot

## Characteristics

No.	<input checked="" type="checkbox"/>	Name
1	<input checked="" type="checkbox"/>	FCFLOC1.DF
2	<input checked="" type="checkbox"/>	FCFLOC1.X
3	<input checked="" type="checkbox"/>	FCFLOC1.Y
4	<input checked="" type="checkbox"/>	FCFLOC1.TP
5	<input checked="" type="checkbox"/>	LOC2.X
6	<input checked="" type="checkbox"/>	LOC2.Y
7	<input checked="" type="checkbox"/>	LOC2.D
	<input checked="" type="checkbox"/>	LOC3.X
	<input checked="" type="checkbox"/>	LOC3.Y



# HEXAGON

## HxGN Universal Converter

Product presentation

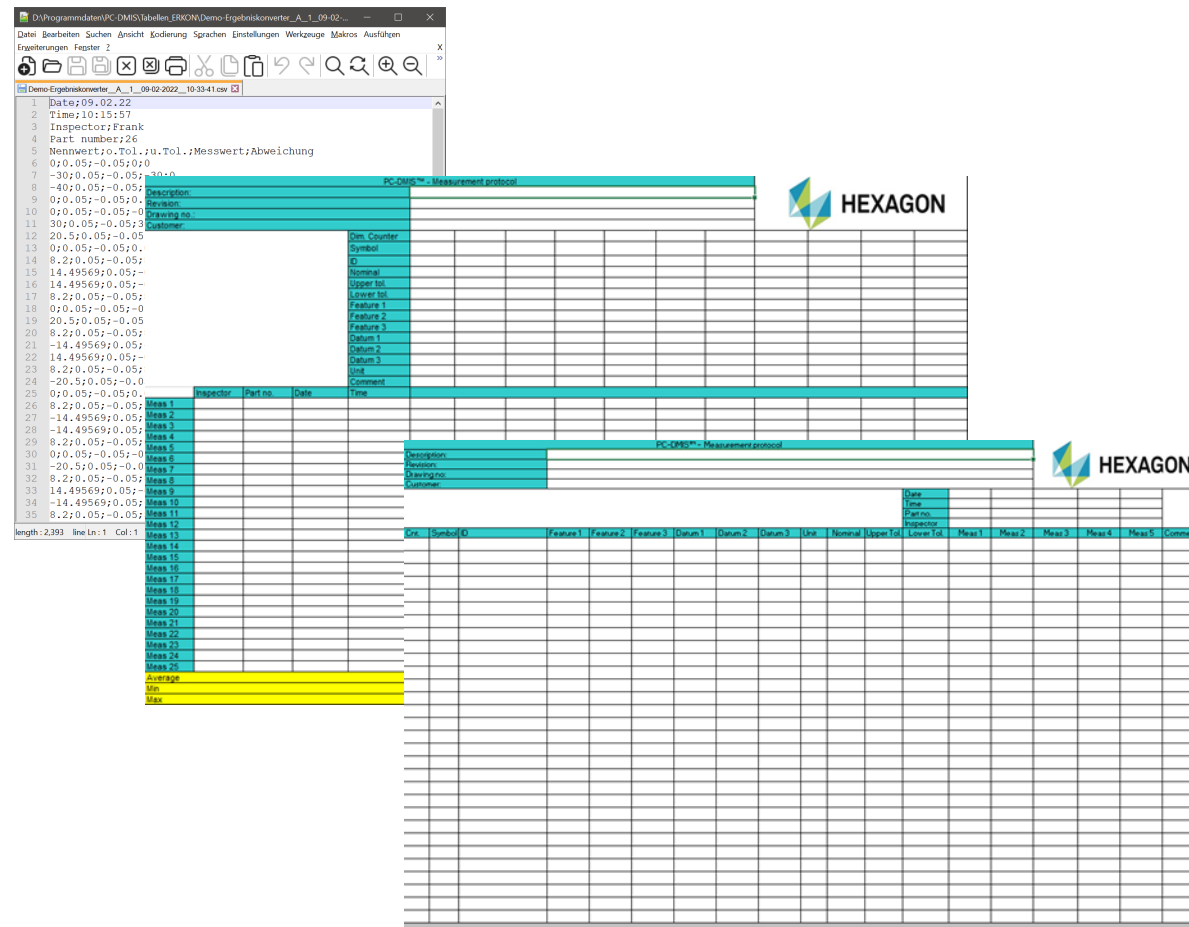
2025-01-13 Customer Solutions Wetzlar

# Introduction

The HxGN Universal Converter provides a flexible output interface for features and additional data from PC-DMIS or a Q-DAS ASCII file. The data can be output directly in a predefined Microsoft Excel 32bit and 64bit table as well as in ASCII files.

Are you familiar with the situation where a wide variety of table or file formats are required with the measurement results?

The HxGN Universal Converter was developed for this purpose. Be amazed by the flexibility of the software.



# Configuration of the Excel tables

**Settings**

**Excel**

Configuration file: C:\Factory\Excel\DefaultColumns.json

Type: Default

Filter: Both

Invalid value:

Connection:  Microsoft Excel Automation

Header data: Tracefield / K-Field / Pid

Characteristics in rows  
 Characteristics in columns

Name	Column	Row
Inspector	B	*
Part no.	C	*
Date	D	*
Time	E	*

Description	Column	Row
Characteristic counter		6
ID		8
Symbol		7
Unit		18
Date		
Time		
Characteristics	F-Z	
Nominal		9
Upper tolerance		10
Lower tolerance		11
Measured values		21-45
Deviation		
Out of tolerance		
Comment		19

- The different table templates can be configured in the report configuration.
- Desired header or additional data can also be defined here.
- An unlimited number of configurations can be created, saved and loaded and used at the desired time.

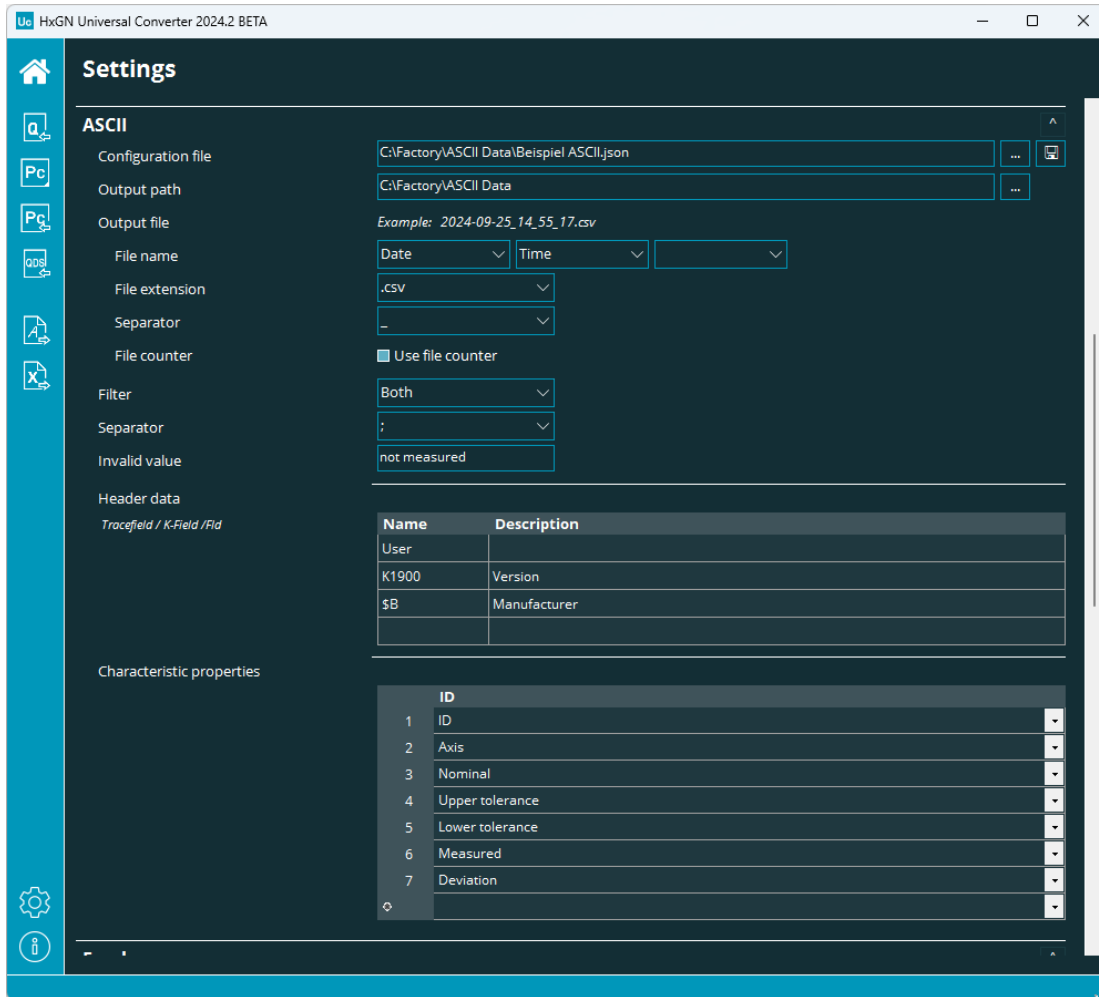
# Example of an Excel spreadsheet

The screenshot shows a Microsoft Excel spreadsheet with the following structure:

- Header data:** A section at the top containing fields for Description, Revision, Drawing no., and Customer.
- Characteristics:** A table with columns for Feature 1, Feature 2, Feature 3, Datum 1, Datum 2, Datum 3, and Unit. The values are numerical measurements in millimeters (MM).
- Measurements:** A table with columns for Meas No., Inspector, Part No., Date, Time, and numerical values. Some values are highlighted in red, indicating changes or errors.
- In template pre-defined calculations:** A section at the bottom with rows for Min, Max, and Average calculations.

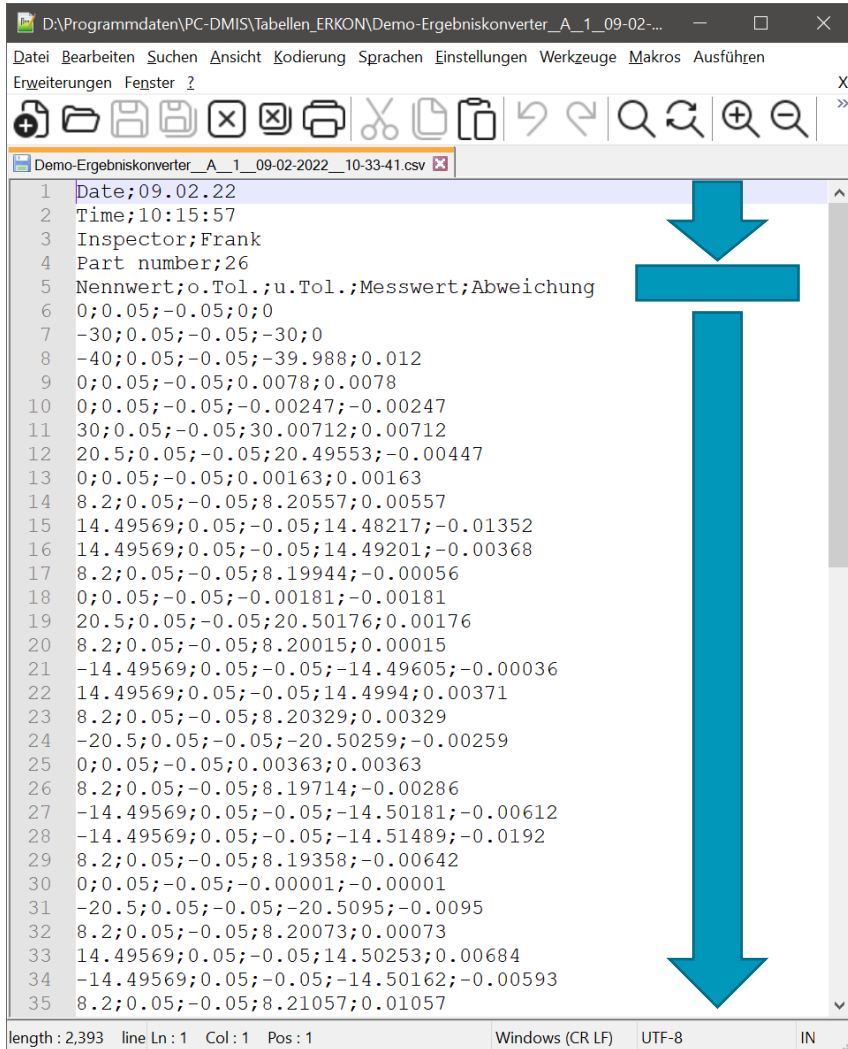
- A sample report in Microsoft Excel is shown in the image on the left. This report is limited to a size that can still be printed on an A4 format.
- If this area is not sufficient to display all characteristics, several tabs are automatically created on this page.
- Both the page and the report are incremented. Thus, the report can be considered unlimited.
- Each page is based on the template provided by the customer ("Master" tab).
- The "ID" tab is created automatically and is used to identify changes in the measurement routine.

# Configuration of the ASCII output



- In the ASCII setup it is determined which characteristic data is output per characteristic, in which order and with which separator.
- The ASCII file can be output in .csv or .txt format.

# Example of an ASCII file



The screenshot shows a text editor window with the following content:

```
1 Date;09.02.22
2 Time;10:15:57
3 Inspector;Frank
4 Part number;26
5 Nennwert;o.Tol.;u.Tol.;Messwert;Abweichung
6 0;0.05;-0.05;0;0
7 -30;0.05;-0.05;-30;0
8 -40;0.05;-0.05;-39.988;0.012
9 0;0.05;-0.05;0.0078;0.0078
10 0;0.05;-0.05;-0.00247;-0.00247
11 30;0.05;-0.05;30.00712;0.00712
12 20.5;0.05;-0.05;20.49553;-0.00447
13 0;0.05;-0.05;0.00163;0.00163
14 8.2;0.05;-0.05;8.20557;0.00557
15 14.49569;0.05;-0.05;14.48217;-0.01352
16 14.49569;0.05;-0.05;14.49201;-0.00368
17 8.2;0.05;-0.05;8.19944;-0.00056
18 0;0.05;-0.05;-0.00181;-0.00181
19 20.5;0.05;-0.05;20.50176;0.00176
20 8.2;0.05;-0.05;8.20015;0.00015
21 -14.49569;0.05;-0.05;-14.49605;-0.00036
22 14.49569;0.05;-0.05;14.4994;0.00371
23 8.2;0.05;-0.05;8.20329;0.00329
24 -20.5;0.05;-0.05;-20.50259;-0.00259
25 0;0.05;-0.05;0.00363;0.00363
26 8.2;0.05;-0.05;8.19714;-0.00286
27 -14.49569;0.05;-0.05;-14.50181;-0.00612
28 -14.49569;0.05;-0.05;-14.51489;-0.0192
29 8.2;0.05;-0.05;8.19358;-0.00642
30 0;0.05;-0.05;-0.00001;-0.00001
31 -20.5;0.05;-0.05;-20.5095;-0.0095
32 8.2;0.05;-0.05;8.20073;0.00073
33 14.49569;0.05;-0.05;14.50253;0.00684
34 -14.49569;0.05;-0.05;-14.50162;-0.00593
35 8.2;0.05;-0.05;8.21057;0.01057
```

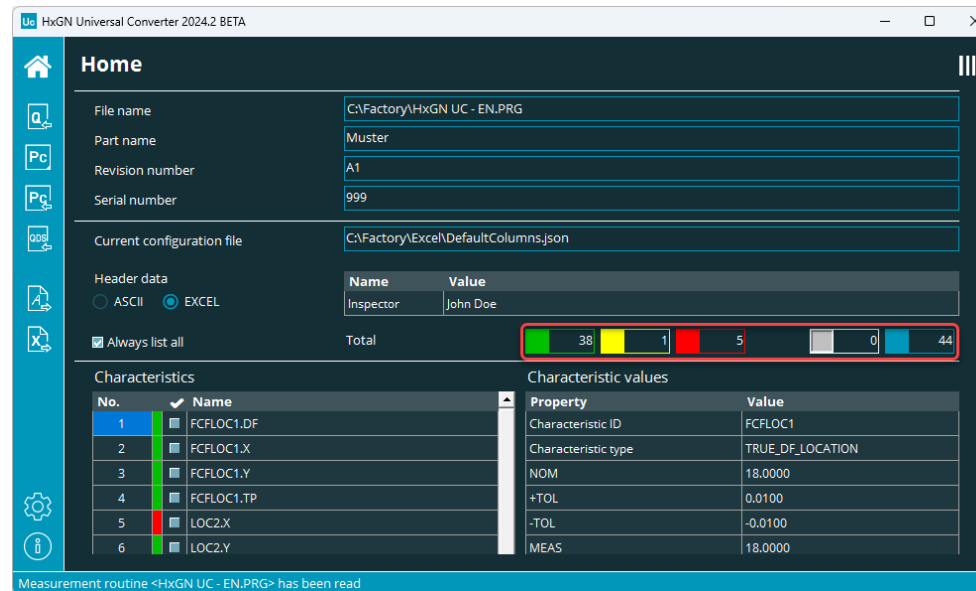
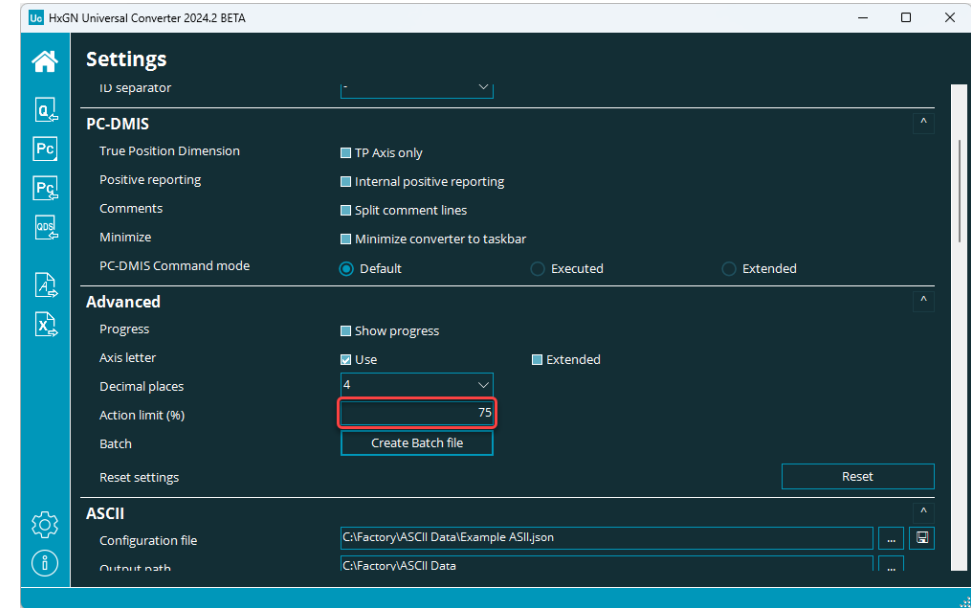
A blue arrow points to the header section (lines 1-5), and a larger blue arrow points to the main data section (lines 6-35).

The output file is divided into 3 areas:

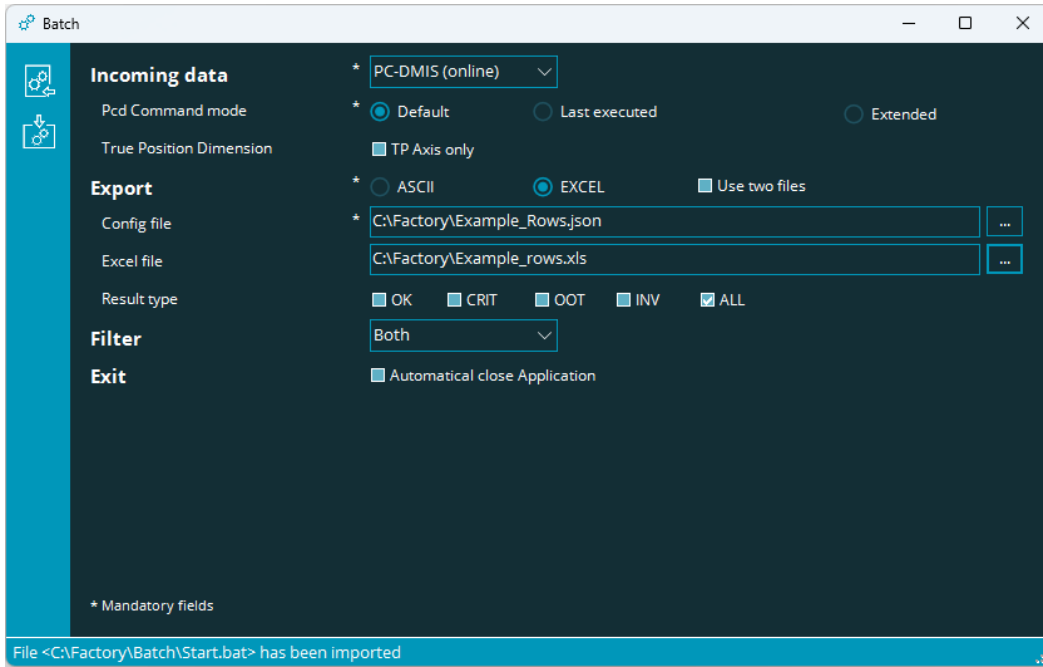
- Header data (fully configurable)
- Heading of the measured values (results from the configuration)
- Characteristic data (one line per characteristic)

# Control limits

- A control limit can be defined in % of the tolerance.
- The features are differentiated by color (within tolerance, within tolerance but violation of the action limit, outside of tolerance).
- A traffic light warns the operator if intervention or tolerance limits have been violated.



# Integration into the measurement routine



- The HxGN Universal Converter can be started directly from a measurement routine.
- For this purpose, a batch file can be generated via a dialog, which is then integrated into the measurement routine using an external command.
- The Excel file and the associated configuration are selected via the content of the batch file.
- This means that no operator intervention is required when using the measurement routine and there is nothing to prevent the use of the HxGN Universal Converter in an automated process.



# Have we piqued your interest?

Simply download the software from our server and apply for a non-binding demo license.

[https://downloads.ms.hexagonmi.com/PC-DMIS\\_Solution\\_Modules/HxGN\\_Universal\\_Converter](https://downloads.ms.hexagonmi.com/PC-DMIS_Solution_Modules/HxGN_Universal_Converter)