



HEXAGON

Protocol of additional data General Settings

FAQ
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Document History

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1 "Protocol additional data on loading" - Functionality

The option "Protocol additional data on loading" provides for the additional data saved in the data set to be listed internally, in other words, to be logged. The information of this variation of additional data can be used as a summary display as well as in many other different positions in the application. This option is now active in the standard delivery.

For example, this is used to display the effective evaluation period in the reports.

HEXAGON		Process Capability Analysis		Date	29.11.2021	Page	1 / 1
Op.Name.	NN	Evaluation	from	07.05.1992 13:43:08	to	07.05.1992 13:53:40	
Part no.	1	OP no.				Drw.No.	
Part descr.	Test 4	Mach.Descr.				CNC M/c Centre	

But also, for listing the ordinal characteristics in solara.MP.

Form sheet - Design 3		Evaluation category
Number of reference parts	= 100	5 / Not okay 6 / Very good 7 / Good 8 / Marginal 9 / Bad
Number of operators	= 5	
Number of trials per operator	= 5	
Number of reference measurement	= 1	
Kappa _{PI} = K _{PI} = -0.6667		



The option "Protocol additional data on loading" has a negative effect on the loading performance.

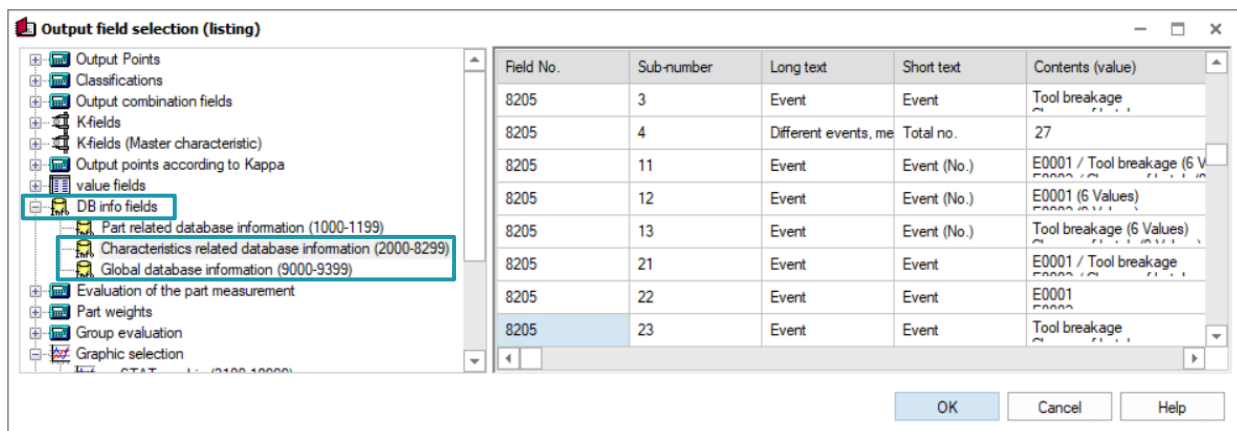
Deactivating the option for performance reasons should be considered, also considering the fields in the report templates of the standard delivery, which have to be adapted in case of deactivation!

2 Variation of additional data - contents

If this option is activated, an internal list of the additional data saved in the data set is generated when the data is loaded. This internal list, the variation of additional data, can be used in various output points as well as in the graphics "Characteristic of additional data".

2.1 Variation of additional data in the output points

The variation of additional data in the output points can be found in the dialogue "Output point selection (list)" in the "DB info fields".



For different contents of variation of additional data, different output points are offered. Similar contents are grouped as output point ranges. The corresponding output point ranges have the same output point number (field no.) and differ in the sub-number. The sub-number "0" and "1" are always identical. Therefore, sub-numbers "0" are not explained in this document.

An example of the variation of additional data for the field "Machine". Each sub-number contains a varying content.

Field No.	Sub-number	Long text	Short text	Contents (value)
8210	1	Machine	Machine	M001 / Machine 1
8210	2	Machine number	Machine	M001
8210	3	Machine	Machine	Machine 1
8210	11	Machine	Machine (No.)	M001 / Machine 1 (667 Values)
8210	12	Machine number	Machine (No.)	M001 (667 Values)
8210	13	Machine	Machine (No.)	Machine 1 (667 Values)

Different output point ranges are available for the variation of additional data per characteristic and over all characteristics. For example, the range of output points 82xx contains the variations for each characteristic, while the range 93xx contains the variations of additional data for all characteristics.

The content of the output points is different for alphanumeric and catalogue-based additional data.

Below are a few examples.

Alphanumeric additional data fields (using the batch number as an example)

Field No. / Subpoint	Description
8206 / 1	List of variations per characteristic Batch 01 Batch 02
8206 / 11	List of variations per characteristic with number of values Batch 01 (5 Values) Batch 02 (5 Values)
9306/1	Listing of the variations for the loaded data pool Batch 01 Batch 02 Batch 03 Batch 04
9306/11	Listing of the variations for the loaded data pool with number of values Batch 01 (10 Values) Batch 02 (10 Values) Batch 03 (5 Values) Batch 04 (5 Values) The total number over all characteristics is counted, regardless of the duplicate content in the characteristics.





Catalogue-based additional data fields (using the machine number as an example)

Field No. / Subpoint	Description
8210/1	List of the variations per characteristic with number and description from the catalogue. M001 / Machine 1 M002 / Machine 2
8210/2	Listing of the variations per characteristic with number from the catalogue. M001 M002
8210/3	Listing of the variations per characteristic with description from the catalogue. Machine 1 Machine 2
8210/11 8210/12 8210/13	Listing of the variations per characteristic with number and description from the catalogue with number of values M001 / Machine 1 (5 Values) M002 / Machine 2 (5 Values) Subnumbers 12 and 13 analogous to the output without values.
9310/1	Listing of the variations of the loaded data M001 / Machine 1 M002 / Machine 2 M003 / Machine 3 M004 / Machine 4
9310/11	Listing of the variations of the loaded data with number of values M001 / Machine 1 (10 Values) M002 / Machine 2 (10 Values) M003 / Machine 3 (5 Values) M004 / Machine 4 (5 Values) The total number over all characteristics is counted, regardless of the duplicate content in the characteristics.

2.2 Report template for the variations of additional data

Various report templates are included in the delivery as examples. The standard report "0002_Parts_Additional_Data" is included to get a first impression of the characteristics specific additional data.

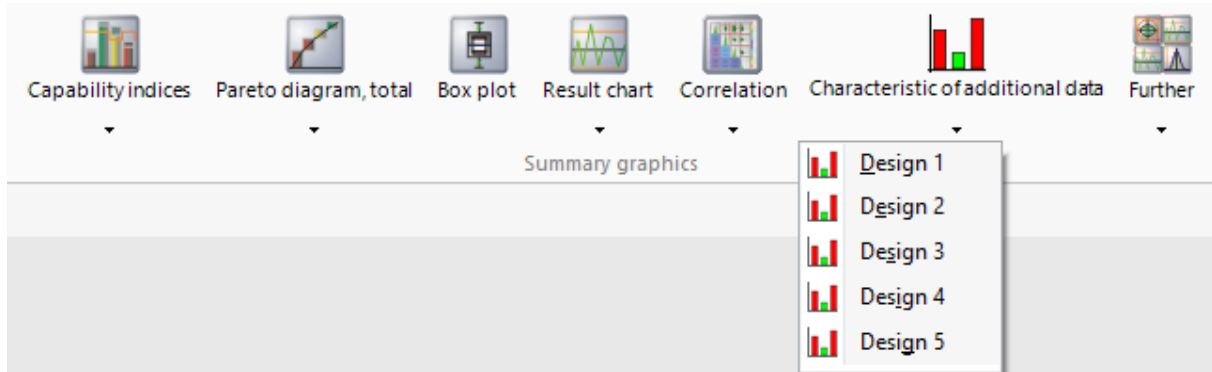
 Report preview - 0002_Parts_Additional_Data_Landscape

 HEXAGON		Additional data input		Datum	01.11.2021	Page	1 / 3
Op. Name.	NN	Department	NN	Shop fl.	NN		
Sector	NN	Cost ctr.	NN				
<p style="color: red; font-size: small;">Dieser Bericht dient dazu die vielfältige Möglichkeit der Zusatzdatendarstellung zu zeigen. Aus diesem Grund kann es vorkommen, dass mangels Platz die Inhalte abgeschnitten werden. This report illustrates the multitude of options available to show additional data. This is the reason why some contents are truncated due to a lack of space.</p>							
Batch		Cavity		Operator			
Batch 01 (5 Values) Batch 02 (5 Values)		---		---			
Text		Machine		Gage			
---		M001 / Machine 1 (5 Values) M002 / Machine 2 (5 Values)		---			

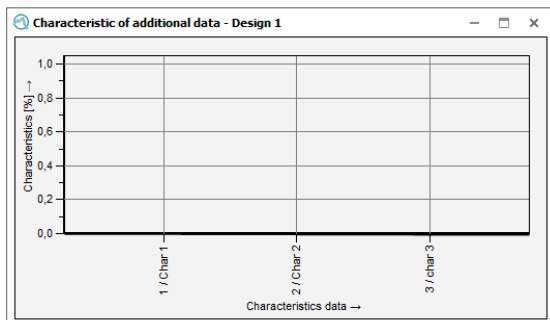
2.3 Graphic "Characteristic of additional data"

If the additional data is logged during loading, since version 13 the variation of additional data can also be displayed in the graphics. This is called up via the "Graphics" tab in the ribbon bar.

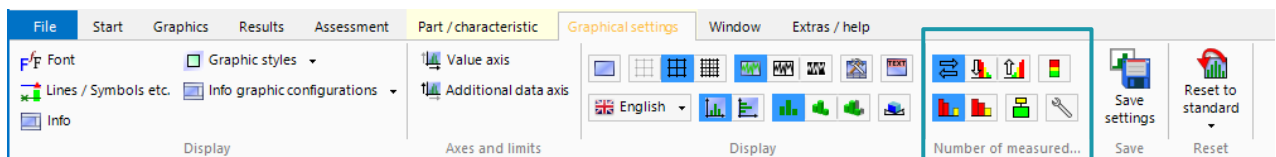
Five graphics are available for the individual configuration "Characteristic of additional data".



In the standard delivery, the additional data field "Attribute" is preconfigured for all five graphics. Thus, in most cases, the graphics do not show any content.

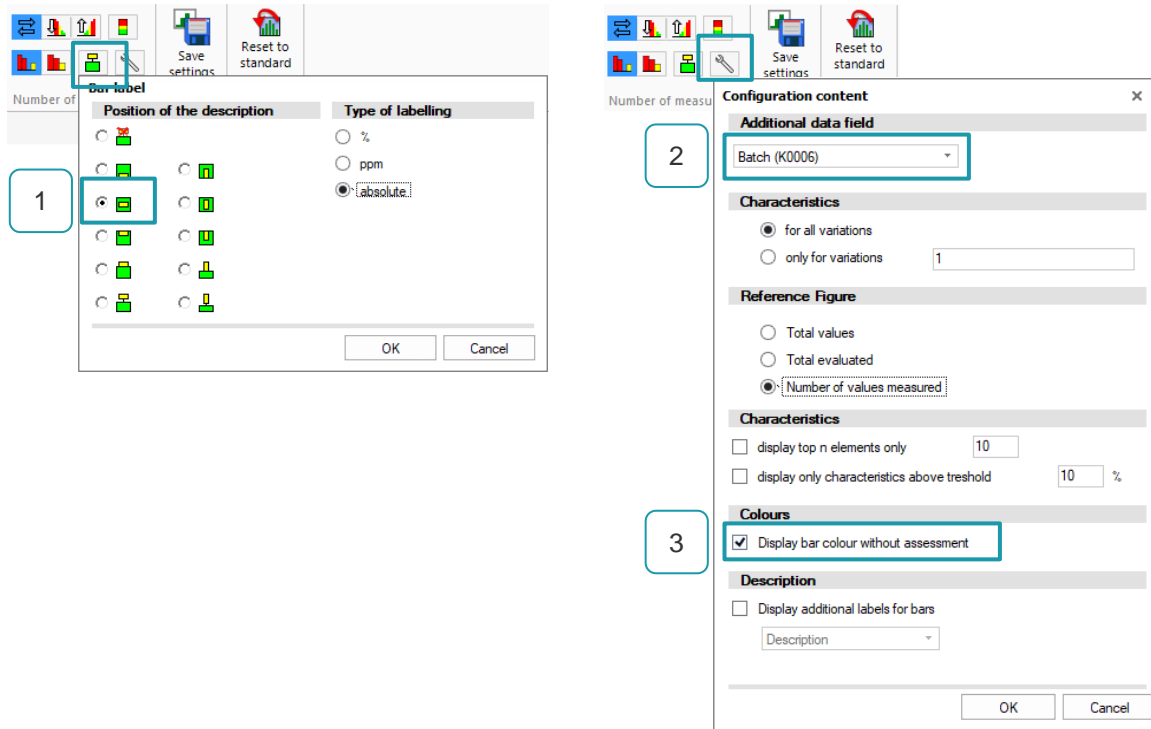


The graphics are configured via the "Graphics settings" tab in the ribbon when a graphic is activated.

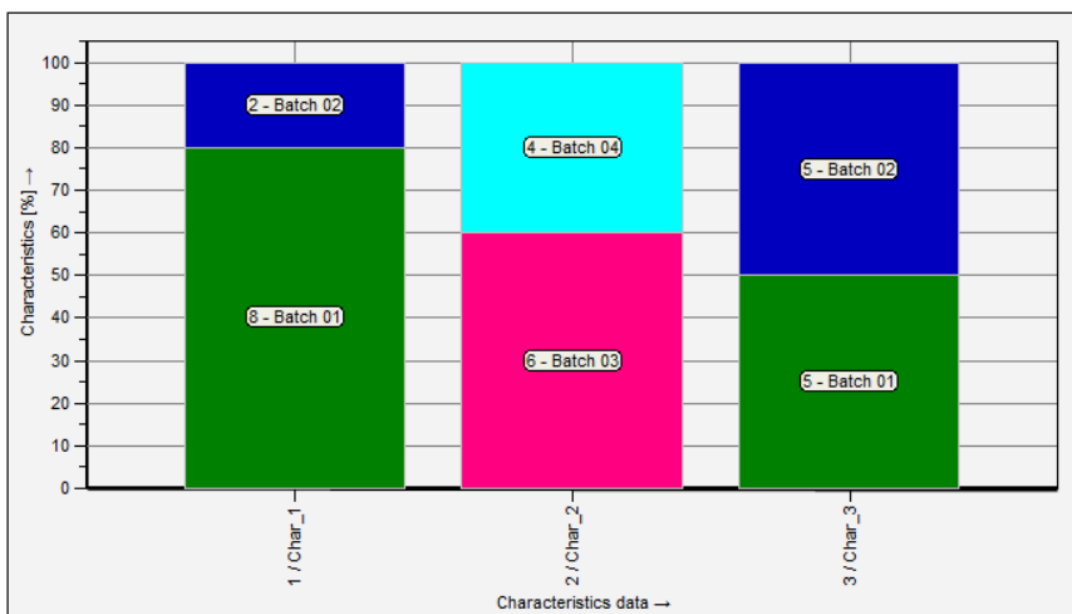


Here is an example of the graphical configuration to achieve the following goals

- Display the bar heading centred in the bar (1).
- Show the variation of the field "Batch" in the graphic (2).
- For better clarity, the batch variations are classified by colour (3). The colour is selected per batch across all characteristics.



The result of the graphic configuration looks like this:



3 Variation of additional data - Configuration

The logging of additional data during loading is done by setting the option "Protocol additional data on loading (for summary display)" under *File | Configuration | General Setting | General Settings 2*.

Protocol additional data on loading (for summary display)

Maximum number of records

Combinations additional data

3.1 Option "Maximum number of records" (extended option for "Protocol additional data on loading")

Activating the option "Maximum number of records" is only to be used in combination with the option "Protocol additional data on loading (for summary display)". By activating both options and specifying a number, the maximum number of listed characteristics can be determined.

Protocol additional data on loading (for summary display)

Maximum number of records

Combinations additional data



When using this option, the expressions with the highest numbers are NOT used. This option uses the first listed variation of additional data.

Activating the option should therefore be carefully considered!

3.2 Option "Combinations additional data" (extended option to "Protocol additional data on loading")

Since version 13, this option has made it possible to use combinations of different additional data fields for logging.

Activating the option "Combinations additional data" is only to be used in combination with the option "Protocol additional data on loading (for summary display)". By activating both options and specifying a pattern, the content for the output points can be combined from different additional data fields.

Protocol additional data on loading (for summary display)

Maximum number of records

Combinations additional data

A maximum of three patterns with each of two additional data fields can be specified. The K-field number of the additional data field is used to specify a combination of additional data. Within a pattern, the additional data fields are separated by commas, e.g., "6,10;" for batch number and machine number. If several patterns are specified, they are separated by semicolons, e.g., "6,10;7,9;"

In the dialogue "Output point selection (list)" in the window area "DB info fields", the output points with the content of the additional data combinations can be found from the output point "8290". Here, for example, the number, the configured additional data combination, as well as the date/time of the first/last occurrence are provided.

Here an extraction of the output points as well as the subvariants for the combinations of the variation of additional data.

8290 ff	Results for the 1st combination selected (characteristic-related) Batch 01 M001 Batch 02 M002
8290/21 ff	Date / time of the first / last occurrence of the combination Batch 01 M001 01.11.2021 10:54:37 01.11.2021 10:54:38 Batch 02 M002 01.11.2021 10:54:39 01.11.2021 10:54:41
8291 ff	Results for the 2nd selected combination (characteristic-related)
8292 ff	Results for the 3rd combination selected (characteristic-based)
9390 ff	Results for the 1st selected combination (loaded data pool) Batch 01 M001 / Machine 1 Batch 02 M002 / Machine 2 Batch 03 M003 / Machine 3 Batch 04 M004 / Machine 4
9390/21 ff	Date / time of the first / last occurrence of the combination Batch 01 M001 / Machine 1 01.11.2021 10:54:37 01.11.2021 10:54:52 Batch 02 M002 / Machine 2 01.11.2021 10:54:39 01.11.2021 10:54:54 Batch 03 M003 / Machine 3 01.11.2021 10:54:45 01.11.2021 10:54:46 Batch 04 M004 / Machine 4 01.11.2021 10:54:46 01.11.2021 10:54:48
9391 ff	Results for the 2nd selected combination (loaded data pool)
9392 ff	Results for the 3rd combination selected (loaded data pool)

4 Variation of additional data - example

In the following, there is a data set with three characteristics. The data set contains different versions of the batch number and the machine number. For the explanation of different output points, the characteristics "1" and "3" contain the same additional data.

	Char 1	Batch number	Machine number	Char 2	Batch number	Machine number	char 3	Batch number	Machine number
1	1,000	Batch 01	Machine 1	2,000	Batch 03	Machine 3	3,000	Batch 01	Machine 1
2	1,000	Batch 01	Machine 1	2,000	Batch 03	Machine 3	3,000	Batch 01	Machine 1
3	1,000	Batch 01	Machine 1	2,000	Batch 03	Machine 3	3,000	Batch 01	Machine 1
4	1,000	Batch 01	Machine 1	2,000	Batch 03	Machine 3	3,000	Batch 01	Machine 1
5	1,000	Batch 01	Machine 1	2,000	Batch 03	Machine 3	3,000	Batch 01	Machine 1
6	1,000	Batch 02	Machine 2	2,000	Batch 04	Machine 4	3,000	Batch 02	Machine 2
7	1,000	Batch 02	Machine 2	2,000	Batch 04	Machine 4	3,000	Batch 02	Machine 2
8	1,000	Batch 02	Machine 2	2,000	Batch 04	Machine 4	3,000	Batch 02	Machine 2
9	1,000	Batch 02	Machine 2	2,000	Batch 04	Machine 4	3,000	Batch 02	Machine 2
10	1,000	Batch 02	Machine 2	2,000	Batch 04	Machine 4	3,000	Batch 02	Machine 2

The activated option "Protocol additional data on loading (for summary display)" first lists these characteristics internally.

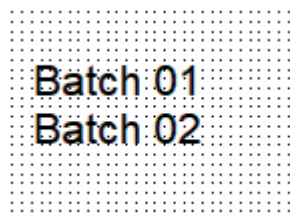
The output points, e.g., for output in the reports or form sheets, can be found in the dialogue "Output point selection (list)" in the output points "DB info fields".

Variation of additional data per characteristic

For the combination of the output point range 82xx and for the additional data field "Batch" (K0006), these would be the output points 8206/ff.

8206	ff	Causes (number)	Use. (No.)	---
8206	0	Batch	Batch	Batch 01
8206	1	Batch	Batch	Batch 01
8206	11	Batch	Batch (No.)	Batch 01 (5 Values)

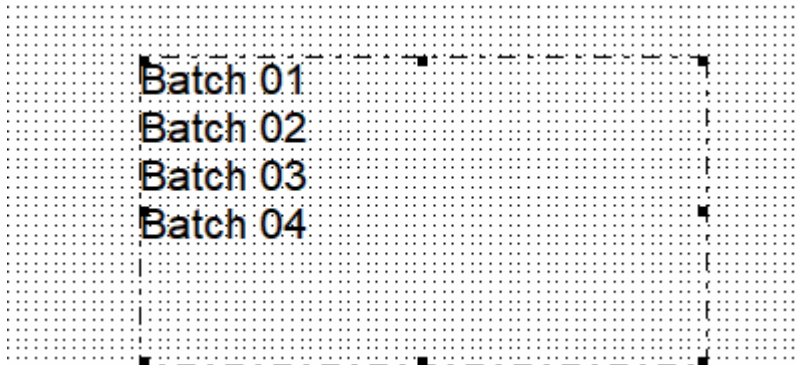
The range of output points 82xx contains the variation of additional data per characteristic.



Variation of additional data over all characteristics

If the output points of the 93xx range are used, all variations of additional data over all characteristics are used.

DB info fields	9306	0	Batch	Batch	Batch 01
Part related database information (1000-119)	9306	1	Batch	Batch	Batch 01
Characteristics related database information	9306	11	Batch	Batch (No.)	Batch 01 (10 Values)
Global database information (9000-9399)	9307	0	Cavity	Cavity	---
Evaluation of the part measurement					
Part weights					



The size of the fields for listing the logged additional data are static. It may well happen that content is truncated due to lack of space. Whether in the report, or in the graphics, an estimate of the expected content is needed to configure the field size.

Display of the additional data field "Batch" in the graphic "Characteristic of additional data".

