HEIDENHAIN

GAGE-CHEK 2000
Addendum

Evaluation Unit

1 About these instructions

These instructions are an **Addendum** to the Operation Instructions for the product.

The Addendum

- supplements or supersedes the contents of the Operating Instructions and, if applicable, of the Installation Instructions.

All other contents of the Operating Instructions and, if applicable, of the Installation Instructions retain their validity.

This Addendum describes the possible ways to implement the data formats of the ND 1100 QUADRA-CHEK in the GAGE-CHEK 2000.

Data formats for measured value output

The data formats are used for the measured value output via RS-232. To enable this, the GAGE-CHEK 2000 offers the possibility to adapt the data formats flexibly to the respective requirements. To use the data formats, you have to create a definition file for every data format you wish to use. In the following, you will find the necessary supplements for the current Operating Instructions with document ID 1251621-00-A-xx.

Product designation	ID	Firmware version	Index
GAGE-CHEK 2000	1089181-xx	1248580.1.1.x	---

The ID label is provided on the back of the product.

Example:

1 Product designation
2 Index
3 Part number (ID)

2 Overview of ND 1100 QUADRA-CHEK data formats

The GAGE-CHEK 2000 allows you to create the following data formats of the ND 1100 QUADRA-CHEK:

Format	Description / Example	
Stf2	Axis values are output with 6 places before and 2 places after the decimal separator; additionally, the most recently sent axis value is displayed under the current axis value to define the probing direction	
	Data: X = 1.245 Y = -30.506 Z = 0.010	Format: N 0027+000001.25-000030.51+000000.01 N 0027+000001.20-000030.00+000000.01
Stf3	Axis values are output with 5 places before and 3 places after the decimal separator; additionally, the most recently sent axis value is displayed under the current axis value to define the probing direction	
	Data: X = 1.245 Y = -30.506 Z = 0.010	Format: N 0027+00001.245-00030.506+00000.010 N 0027+00001.200-00030.000+00000.010
MORA MORA-P Z-M	Axis values are output with 7 places without a decimal separator	
	Data: X = 1.245 Y = -30.506 Z = 0.010 Q = 25.401	Format: +0001245-0030506+0000010+0025401+0000013
MORA-C MORA-CP Z-C METRO-C	Axis values are output with 7 places without a decimal separator	
	Data: X = 1.245 Y = -30.506 Z = 0.010 Q = 25.401	Format: +0001245-0030506+0000010+0025401+0000017
FARO	Axis values are multiplied by 2000, converted to the Long data type and output in hexadecimal format	
	Data: X = -0.520 Y = 0.133 Z = 2.000	Format: N1Xfffffbf0Y10aZfa0I
FAROCont	Axis values are multiplied by 2000, converted to the Long data type and output in hexadecimal format	
	Data: X = -0.520 Y = 0.133 Z = 2.000	Format N1Xfffffbf0Y10aZfa0

3   Creating a data format of the ND 1100 QUADRA-CHEK

By assigning a data format to the functions for the measured value output in the GAGE-CHEK 2000, you specify the format in which the measured values will be sent to the computer. To implement a data format of the ND 1100 QUADRA-CHEK also with the GAGE-CHEK 2000, you have to create a file with the definition of the data format.

In the file management you will find a file that you can copy to a transfer medium and then adapt it individually on a computer. Then you can copy the new file to the file storage area of the product and assign it to a function.

Further information: "XML schemata of the data formats", Page 6.

- ▶ Tap **File management** in the main menu
- ▶ Open in the sequence
  - ■ **Internal**
  - ■ **User**
  - ■ **DataTransfer**
- > The folder contains the file **MyFormat1.xml**
- ▶ Copy the file **MyFormat1.xml** to a transfer medium
- ▶ Rename file
- ▶ Edit the file in an XML editor or the computer's text editor
- ▶ Copy the file from the transfer medium to the following folder of the product: **Internal** ▶ **User** ▶ **DataTransfer**

- ▶ Use the **Switch-off** menu to shut down the product and then restart it
- > The data format can be selected through the following path: **Settings** ▶ **Interfaces** ▶ **Data transfer**

ℹ   In order to prevent your data formats from being removed when the firmware is updated, save each file under a separate name.

When the firmware is updated, the **MyFormat1** file in the **DataTransfer** folder is reset to the status it had when shipped. The file is automatically recreated if it no longer exists. Other files in the **DataTransfer** folder are not affected by a firmware update.

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4 Basic structure of the XML schema

> ℹ️ To ensure that the definition file remains valid and can be processed by the device, you must not change the following basic structure of the XML schema.

```
<?xml version="1.0" encoding="UTF-8"?>
<configuration>
 <base id="Settings">
  <group id="General">
   <group id="Format">
```
Header

```
    <group id="Example">
```
Code of the data format

```
     <element id="General" .../>
```
General data format settings

```
     <element id="X" .../>
     <element id="Y" .../>
     <element id="Z" .../>
     <element id="Q" .../>
```
Settings of the axes

```
    </group>
```
End of the data format

```
   </group>
```
Footer

```
  </group>
 </base>
<base id="version" major="0" minor="0" build="0"/>
</configuration>
```
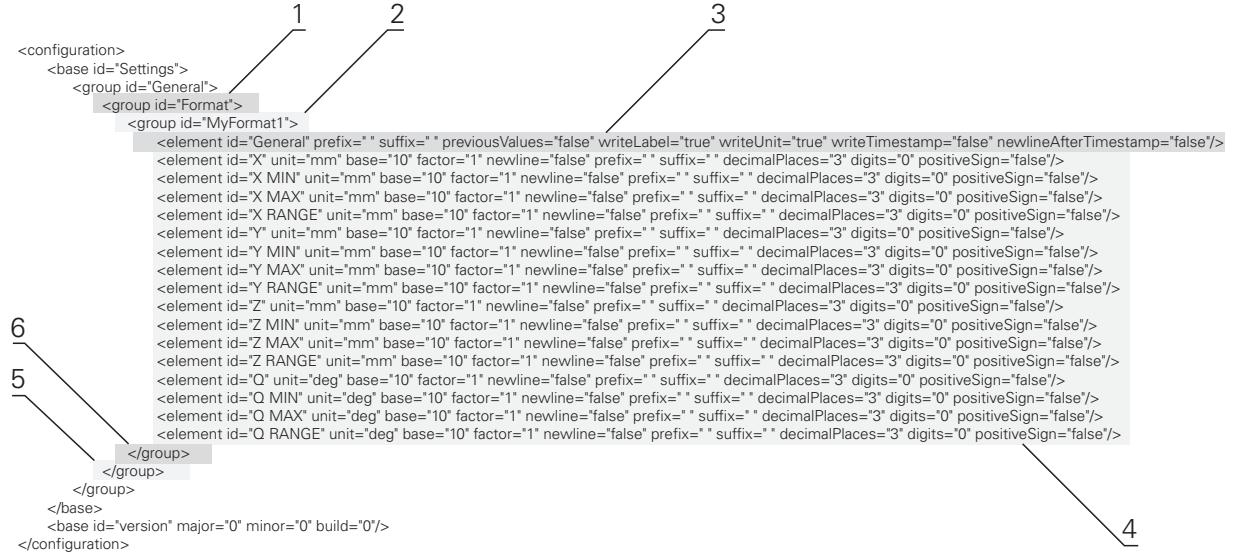

Figure 1: Data format **MyFormat1.xml**

1 Header
2 Name of the data format that appears in the **Settings** menu
3 General data format settings
4 Settings of the axes
5 Footer
6 End of the data format

5 XML schemata of the data formats

In the following, you will find the XML schemata for the definition of the individual data formats of the ND 1100 QUADRA-CHEK.

ℹ You can also transfer the following data format definitions of the ND 1100 QUADRA-CHEK directly to the file via the clipboard of the computer.

XML schema for Stf2

```
<?xml version="1.0" encoding="UTF-8"?>
<configuration>
<base id="Settings">
<group id="General">
<group id="Format">
<group id="Stf2">
<element id="General" prefix="N %04" suffix="" previousValues="true" writeLabel="false" writeUnit="false" writeTimestamp="false" newlineAfterTimestamp="false"/>
<element id="X" unit="" base="10" factor="1" newline="false" prefix="" suffix="" decimalPlaces="2" digits="6" positiveSign="true"/>
<element id="Y" unit="" base="10" factor="1" newline="false" prefix="" suffix="" decimalPlaces="2" digits="6" positiveSign="true"/>
<element id="Z" unit="" base="10" factor="1" newline="false" prefix="" suffix="" decimalPlaces="2" digits="6" positiveSign="true"/>
<element id="Q" unit="" base="10" factor="1" newline="false" prefix="" suffix="" decimalPlaces="2" digits="6" positiveSign="true"/>
</group>
</group>
</group>
</base>
<base id="version" major="0" minor="0" build="0"/>
</configuration>
```

XML schema for Stf3

```
<?xml version="1.0" encoding="UTF-8"?>
<configuration>
<base id="Settings">
<group id="General">
<group id="Format">
<group id="Stf3">
<element id="General" prefix="N %04" suffix="" previousValues="true" writeLabel="false" writeUnit="false" writeTimestamp="false" newlineAfterTimestamp="false"/>
<element id="X" unit="" base="10" factor="1" newline="false" prefix="" suffix="" decimalPlaces="3" digits="6" positiveSign="true"/>
<element id="Y" unit="" base="10" factor="1" newline="false" prefix="" suffix="" decimalPlaces="3" digits="6" positiveSign="true"/>
<element id="Z" unit="" base="10" factor="1" newline="false" prefix="" suffix="" decimalPlaces="3" digits="6" positiveSign="true"/>
<element id="Q" unit="" base="10" factor="1" newline="false" prefix="" suffix="" decimalPlaces="3" digits="6" positiveSign="true"/>
</group>
</group>
</group>
</base>
<base id="version" major="0" minor="0" build="0"/>
</configuration>
```

XML schema for MORA

```
<?xml version="1.0" encoding="UTF-8"?>
<configuration>
<base id="Settings">
<group id="General">
<group id="Format">

<group id="MORA">
<element id="General" prefix="" suffix="+0000013" previousValues="false" writeLabel="false" writeUnit="false" writeTimestamp="false" newlineAfterTimestamp="false"/>
<element id="X" unit="" base="10" factor="1000" newline="false" prefix="" suffix="" decimalPlaces="0" digits="7" positiveSign="true"/>
<element id="Z" unit="" base="10" factor="1000" newline="false" prefix="" suffix="" decimalPlaces="0" digits="7" positiveSign="true"/>
<element id="Q" unit="" base="10" factor="1000" newline="false" prefix="" suffix="" decimalPlaces="0" digits="7" positiveSign="true"/>
</group>

</group>
</group>
</base>
<base id="version" major="0" minor="0" build="0"/>
</configuration>
```

XML schema for MORA-P

```
<?xml version="1.0" encoding="UTF-8"?>
<configuration>
<base id="Settings">
<group id="General">
<group id="Format">

<group id="MORA-P">
<element id="General" prefix="" suffix="+0000013" previousValues="false" writeLabel="false" writeUnit="false" writeTimestamp="false" newlineAfterTimestamp="false"/>
<element id="X" unit="" base="10" factor="1000" newline="false" prefix="" suffix="" decimalPlaces="0" digits="7" positiveSign="true"/>
<element id="Y" unit="" base="10" factor="1000" newline="false" prefix="" suffix="" decimalPlaces="0" digits="7" positiveSign="true"/>
<element id="Z" unit="" base="10" factor="1000" newline="false" prefix="" suffix="" decimalPlaces="0" digits="7" positiveSign="true"/>
<element id="Q" unit="" base="10" factor="1000" newline="false" prefix="" suffix="" decimalPlaces="0" digits="7" positiveSign="true"/>
</group>

</group>
</group>
</base>
<base id="version" major="0" minor="0" build="0"/>
</configuration>
```

XML schema for Z-M

```
<?xml version="1.0" encoding="UTF-8"?>
<configuration>
<base id="Settings">
<group id="General">
<group id="Format">

<group id="Z-M">
<element id="General" prefix="" suffix="+0000013" previousValues="false" writeLabel="false" writeUnit="false" writeTimestamp="false" newlineAfterTimestamp="false"/>
<element id="X" unit="" base="10" factor="1000" newline="false" prefix="" suffix="" decimalPlaces="0" digits="7" positiveSign="true"/>
<element id="Y" unit="" base="10" factor="1000" newline="false" prefix="" suffix="" decimalPlaces="0" digits="7" positiveSign="true"/>
</group>
</group>
</group>
</base>
<base id="version" major="0" minor="0" build="0"/>
</configuration>
```

XML schema for MORA-C (also for MORA-CP and METRO-C)

```
<?xml version="1.0" encoding="UTF-8"?>
<configuration>
<base id="Settings">
<group id="General">
<group id="Format">
<group id="MORA-C">
<element id="General" prefix="" suffix="+0000017" previousValues="false" writeLabel="false" writeUnit="false" writeTimestamp="false" newlineAfterTimestamp="false"/>
<element id="X" unit="" base="10" factor="1000" newline="false" prefix="" suffix="" decimalPlaces="0" digits="7" positiveSign="true"/>
<element id="Y" unit="" base="10" factor="1000" newline="false" prefix="" suffix="" decimalPlaces="0" digits="7" positiveSign="true"/>
<element id="Z" unit="" base="10" factor="1000" newline="false" prefix="" suffix="" decimalPlaces="0" digits="7" positiveSign="true"/>
<element id="Q" unit="" base="10" factor="1000" newline="false" prefix="" suffix="" decimalPlaces="0" digits="7" positiveSign="true"/>
</group>
</group>
</group>
</base>
<base id="version" major="0" minor="0" build="0"/>
</configuration>
```

XML schema for Z-C

```
<?xml version="1.0" encoding="UTF-8"?>
<configuration>
<base id="Settings">
<group id="General">
<group id="Format">
<group id="Z-C">
<element id="General" prefix="" suffix="+0000017" previousValues="false" writeLabel="false" writeUnit="false" writeTimestamp="false" newlineAfterTimestamp="false"/>
<element id="X" unit="" base="10" factor="1000" newline="false" prefix="" suffix="" decimalPlaces="0" digits="7" positiveSign="true"/>
<element id="Y" unit="" base="10" factor="1000" newline="false" prefix="" suffix="" decimalPlaces="0" digits="7" positiveSign="true"/>
<element id="Z" unit="" base="10" factor="1000" newline="false" prefix="" suffix="" decimalPlaces="0" digits="7" positiveSign="true"/>
</group>
</group>
</group>
</base>
<base id="version" major="0" minor="0" build="0"/>
</configuration>
```

XML schema for FARO

```
<?xml version="1.0" encoding="UTF-8"?>
<configuration>
<base id="Settings">
<group id="General">
<group id="Format">
<group id="FARO">
<element id="General" prefix="N1" suffix="|" previousValues="false" writeLabel="false" writeUnit="false"
writeTimestamp="false" newlineAfterTimestamp="false"/>
<element id="X" unit="" base="16" factor="2000" newline="false" prefix="X" suffix="" decimalPlaces="0" digits="0" positiveSign="false"/>
<element id="Y" unit="" base="16" factor="2000" newline="false" prefix="Y" suffix="" decimalPlaces="0" digits="0" positiveSign="false"/>
<element id="Z" unit="" base="16" factor="2000" newline="false" prefix="Z" suffix="" decimalPlaces="0" digits="0" positiveSign="false"/>
</group>
</group>
</group>
</base>
<base id="version" major="0" minor="0" build="0"/>
</configuration>
```

XML schema for FARO-C

```
<?xml version="1.0" encoding="UTF-8"?>
<configuration>
<base id="Settings">
<group id="General">
<group id="Format">
<group id="FAROCont">
<element id="General" prefix="N1" suffix="" previousValues="false" writeLabel="false" writeUnit="false" writeTimestamp="false" newlineAfterTimestamp="false"/>
<element id="X" unit="" base="16" factor="2000" newline="false" prefix="X" suffix="" decimalPlaces="0" digits="0" positiveSign="false"/>
<element id="Y" unit="" base="16" factor="2000" newline="false" prefix="Y" suffix="" decimalPlaces="0" digits="0" positiveSign="false"/>
<element id="Z" unit="" base="16" factor="2000" newline="false" prefix="Z" suffix="" decimalPlaces="0" digits="0" positiveSign="false"/>
</group>
</group>
</group>
</base>
<base id="version" major="0" minor="0" build="0"/>
</configuration>
```

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