

1. Introduction

With the ComGage Special measuring mode *Receive measuring value over COM/TCP port* measuring values can be received from measuring instruments which are connected via a COM port or a TCP/IP connection. A compatible driver for the measuring instrument must be present in the IBR driver library (IMB-SM1.DRV).

This also allows the connection of measuring instruments that use a virtual COM port for the output of the measuring values, too.

Important notes :

- For this Special measuring mode the software license 74 is required.
- A driver compatible to the measuring instrument has to be used. There may be additional costs for the development of a compatible driver.
- The IBR driver library (IMB-SM1.DRV) must be present in the ComGage programme directory.

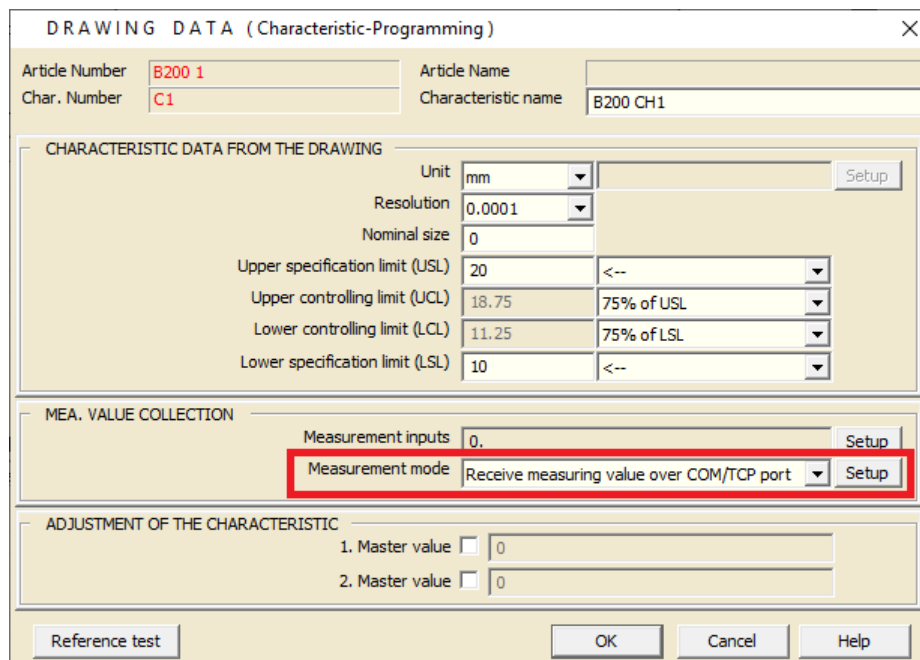
The test step function SFct071 (Send command to measuring instrument) can be used to send an Initialisation command / control command / ... to a measuring instrument that is used by a characteristic with the ComGage Special measuring mode wgl029 (Receive measuring value over COM/TCP port).

Additional information can be found in the documentation of the SFct071 (Send command to measuring instrument).

2. Configuration

If no IBR hardware is connected, the simulation mode for IMBus hardware has to be activated (see ComGage instruction manual, chapter “Programming the hardware settings” for more information).

First you have to select the Special measuring mode for your characteristic in the drawing data :



The settings for the Measuring inputs are ignored. But for performance reasons we recommend to use a constant, for example 0.

This Special measuring mode has to be selected as *Measurement mode* in the drawing data of the used ComGage characteristic.

By pressing the *Setup* button it can be configured with the following dialogue :



In the setup dialogue of the Special measuring mode the following settings can be made :

- **Gauge Manufacturer**
Selection of the gauge manufacturer (from driver database IMB-SM1.DRV)
- **Gauge Type**
Selection of the gauge type (from driver database IMB-SM1.DRV)
- **Channel**
Selection of the channel (1...8), the number of supported channels depends on the gauge type.
- **Measuring mode**
Static measurement = live display of the measuring value
Gauge Triggering = update of the measuring value on data transmission from the gauge
- **COM port**
Used COM port or TCP/IP connection
- **TCP mode (only for TCP/IP connection)**
Server = At the start of the measurement a TCP server is started, to which the measuring instrument can connect.
Client = At the start of the measurement the Special measuring mode establishes a connection to the configured remote station (host / port).
- **Hostname / IP address (only for TCP/IP connection)**
Hostname of the remote station for the TCP-Client connection
- **Port (only for TCP/IP connection)**
Server = Locally provided port for the TCP/IP connection
Client = TCP port of the remote station
- **Reconnect (only for TCP/IP connection)**
Interval for new connection to the remote station after disconnection
- **Control register to query measurement value by keyboard input (only for Gauge Triggering)**
For the measuring mode *Gauge Triggering* you can alternatively select a register. When the value of this register is set to 1, the measuring value has to be entered by keyboard in an input dialogue. After the measuring value has been entered, the register is automatically reset to 0.
- **Use communication channel for additional commands**
Allows the use of the test step function *Send command to measuring instrument* (SFct071) for the transmission of additional commands to the measuring instrument. In this way, e.g. initialisation commands can be sent.



3. Notes for the use of the measuring mode *Gauge Triggering*

To save measuring values automatically when the measuring mode *Gauge Triggering* is used, the following functions have to be added in the respective test step (Example for the use of register R1 for the transmission of the measuring value) :

LIST OF CREATED FUNCTIONS						
No.	Function	Function key	Hand/Foots...	Dig. Input	Event	FP
X1	Save measured values : C1	---	---	---	Formula : R1=1	6
X2	Setting register(s) : R1=0	---	---	---	Formula : R1>0.	11