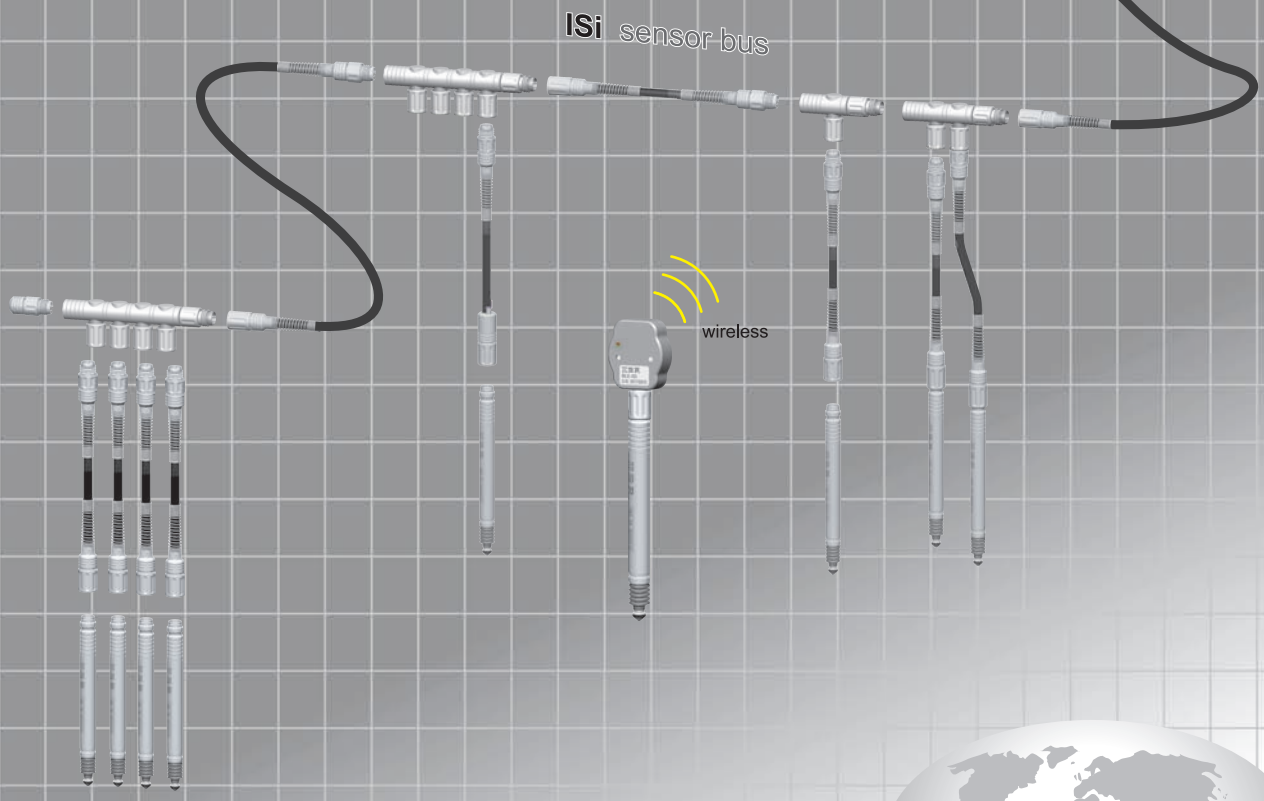
Messtechnik GmbH & Co. KG

IMS
measuring probes

CD43, CD70
computer displays

SD1
sensor display

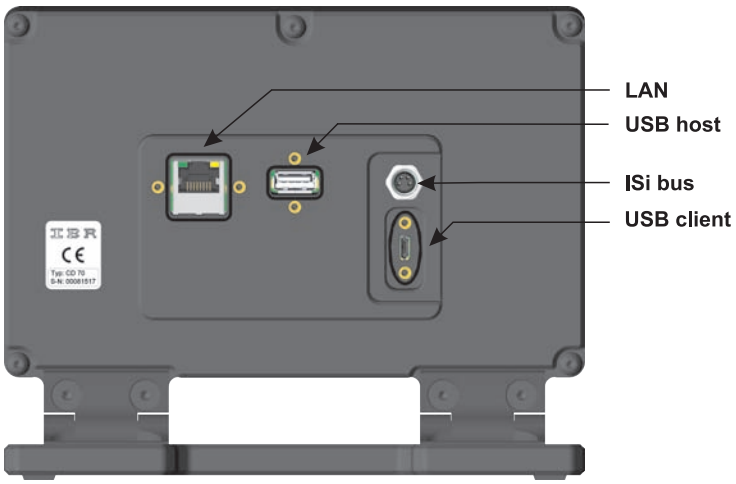


CD70 a computer display for industrial use

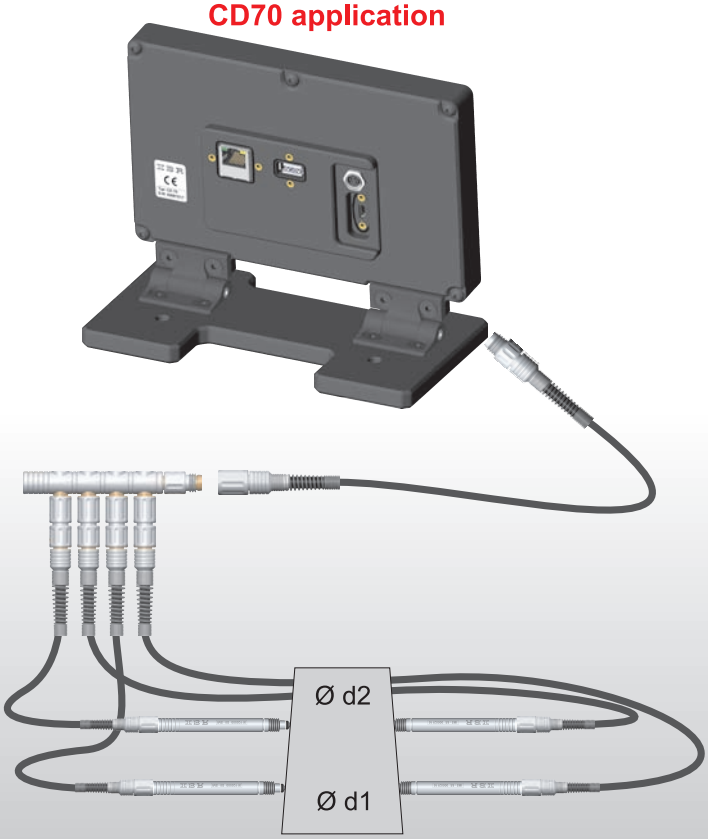
The computer display CD70 is a compact and powerful display unit for measuring applications, which cannot be simply solved by classic gauges like e.g. column gauges and digital gauges. The robust aluminium case as well as a high protection class allow usage in rough manufacturing environment. The new sensor interface ISi bus allows connection of up to 60 measuring probes, sensors, hand- and foot switches.
For fast and simple solving of measuring applications as well as for trend display of the production process, the CD70 is delivered with the user-friendly software ComGage Level 1. An upgrade to ComGage Level 2 is possible.

Features

- Compact and robust construction with solid, sealed metal case (incl. connector caps for IP64), passive cooling and 7.0" TFT-Display (800 x 480) with touch screen, adjustable angle of tilt.
- ISi sensor bus for connecting 1...60 IMS probes, sensors, hand / foot switches, tolerance adapters.
- USB host (mouse, keyboard, USB stick), USB client (data exchange with PC) and LAN connection.



CD70 application



Order information :

Computer display CD70	Art. No. F235 050

Technical data :

Mechanical characteristics	
Case with foot	Aluminium powder-coated
Dimensions / Weight	(WxHxD) 184 x 135 x 87.5 mm / 1.0kg
Protection class	Front side IP65, CEI / IEC 529
	Rear side IP64 with connector caps
Electrical characteristics	
External power supply	100 ... 240 VAC, 6 Watt
Max. power consumption	2.4 Watt (without sensors)
Computer characteristics	
Display	7.0" TFT, resolution 800 x 480 (adjustable angle of tilt)
Touch Screen	4-wire analogue resistive
CPU	Vybrid VF50, 400 MHz
Memory	128 MB RAM, 128 MB Flash
Operating system	Windows CE 6
Measuring software	ComGage Level 1 / ComGage Level 2
Connections	
Standard PC connections	1 x USB client, 1x USB host, 1x LAN
ISi interface	60 sensors / clients
Environmental conditions	
Operation / Storage temp.	+41 ... +113 °F / -4 ... +158 °F

ComGage Level 1 / Level 2

The software ComGage Level 1 / Level 2 are universal programmes for fast solving of measuring applications. The software is easy to handle and is optimized especially for the computer displays CD43 and CD70 with touch operation.

Features

	ComGage Level 1	ComGage Level 2
Number of characteristics / Number of measuring inputs	8 / 60	20 / 60
Measurement of characteristics in freely definable groups with additional input of operator instructions	✓	✓
Input of formula for probe mixing *(Support of all arithmetical and trigonometrical functions)*	✓	✓
Static measuring mode with live display, as well as dynamic measuring modes : Min, Max, TIR, Mean, ...	✓	✓
Input of measuring value by touch / keyboard	✓	✓
Export functions for collected measuring values	xls, csv	xls, csv, QDAS
Reference information data input together with measuring values *(Operator, Machine, ...)*		✓
Trend display for collected measuring values *(= run chart)*	✓	✓
Statistical analysis by control charts, histograms, Cp/Cpk		✓
Control tasks by digital inputs / outputs as well as measuring value output via RS232 / radio modules	simple	advanced
Compatible to ComGage Professional	✓	✓

Image : Programming of characteristics

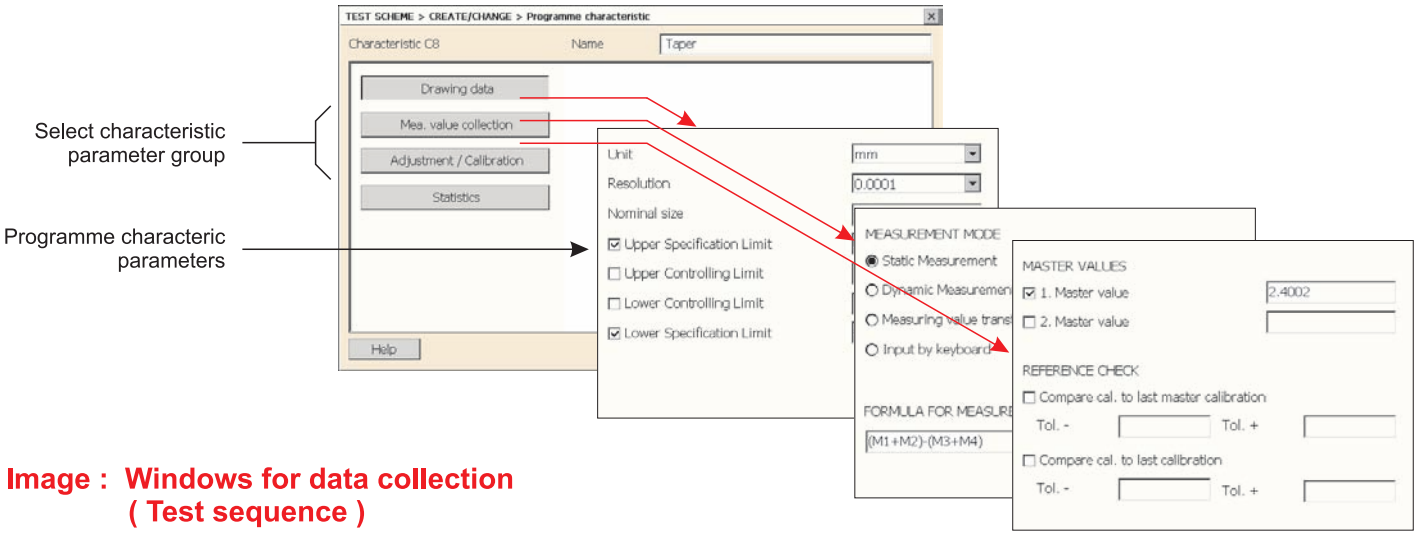
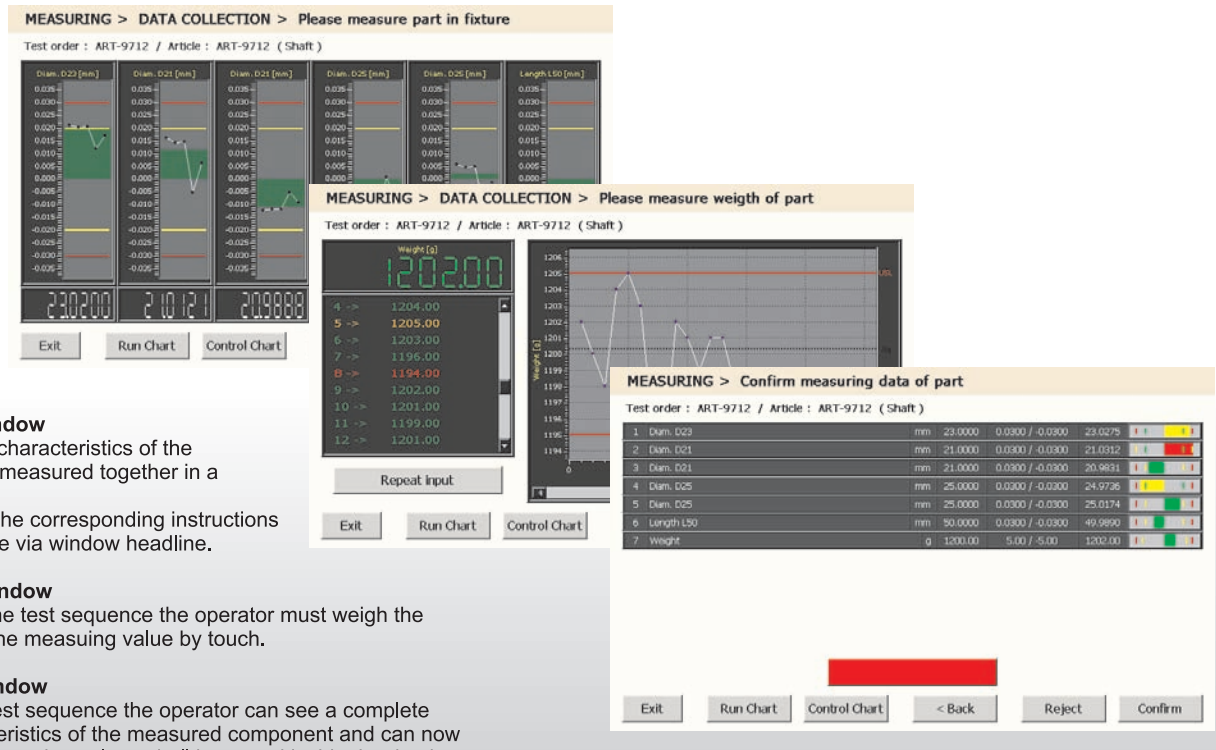


Image : Windows for data collection (Test sequence)



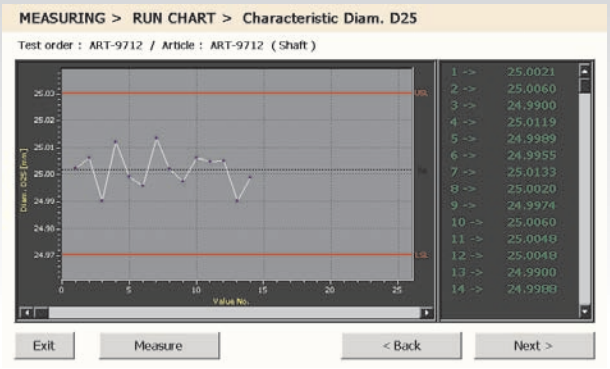
Description of 1st window
In the test sequence 6 characteristics of the component are initially measured together in a measuring fixture.
The operator receives the corresponding instructions for measuring sequence via window headline.

Description of 2nd window
In the second step of the test sequence the operator must weigh the component and enter the measuing value by touch.

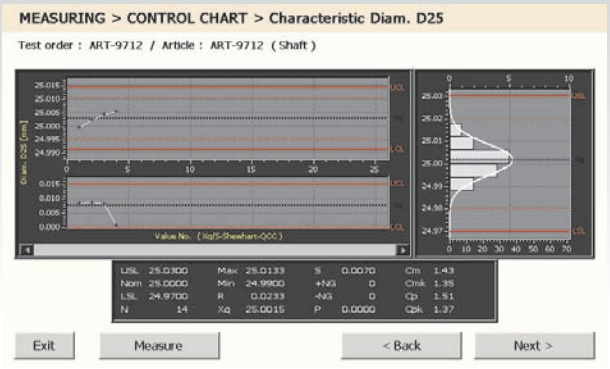
Description of 3rd window
In the last step of the test sequence the operator can see a complete summary of all characteristics of the measured component and can now decide, whether the measuring values shall be stored inside the database.

ComGage Level 1 / Level 2

Image : Online - SPC windows



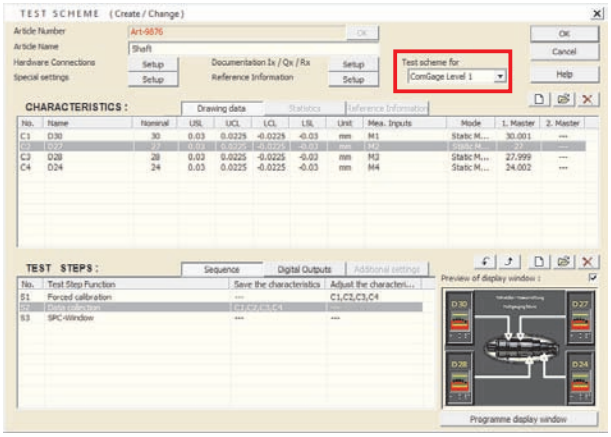
Run chart in ComGage Level 1 and Level 2



Control chart in ComGage Level 2

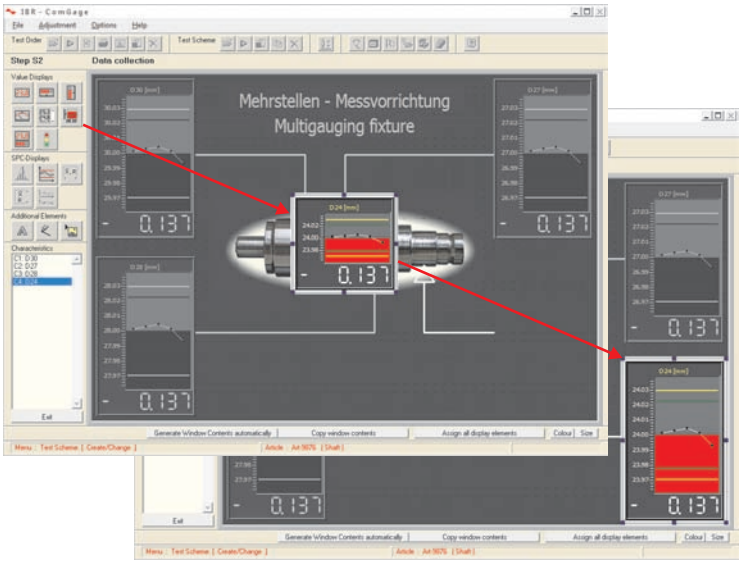
Further software support for CD43 / CD70 computer displays

Programming of test schemes using ComGage Professional on PC



The ComGage Professional menu for programming test schemes allows to specify, that the new test scheme shall be executable with ComGage Level 1.

In contrast to programming with ComGage Level 1 / 2, the programming menu of ComGage Professional allows programming of test steps with freely designable display windows and individual control of digital inputs / outputs.



For guiding the operator through the measuring sequence freely designable display windows can be created for ComGage Level 1 / 2.
These display windows can contain pictures, lines and texts.

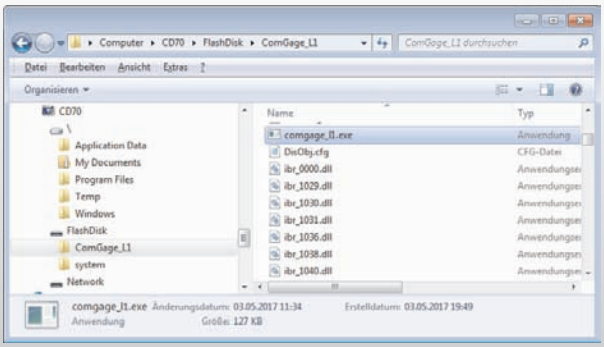
Administration, analysis and export of measured values by ComGage Professional

ComGage Professional allows creating test orders for test schemes created with ComGage Level 1 / 2.
The test orders allow storage of measured data separately for production orders, production lots, ... and can be filled with measured data using ComGage Level 1 / 2.

The measured values collected with ComGage Level 1 / 2 can be exported or analysed using ComGage Professional afterwards.

Access to flash memory of CD43 / CD70 computer displays via USB

On connection of a CD43 / CD70 via USB client connector (Micro-USB) to a Windows PC, the flash memory of the CD43 / CD70 computer display can be directly accessed via Windows Mobile Device Center Software.



Order information :

ComGage Level 1	Art. No. F722 010
ComGage Level 2	Art. No. F722 020