

A smart way to make
your weighing system
more efficient.



Bring your controller to the NEXT level!

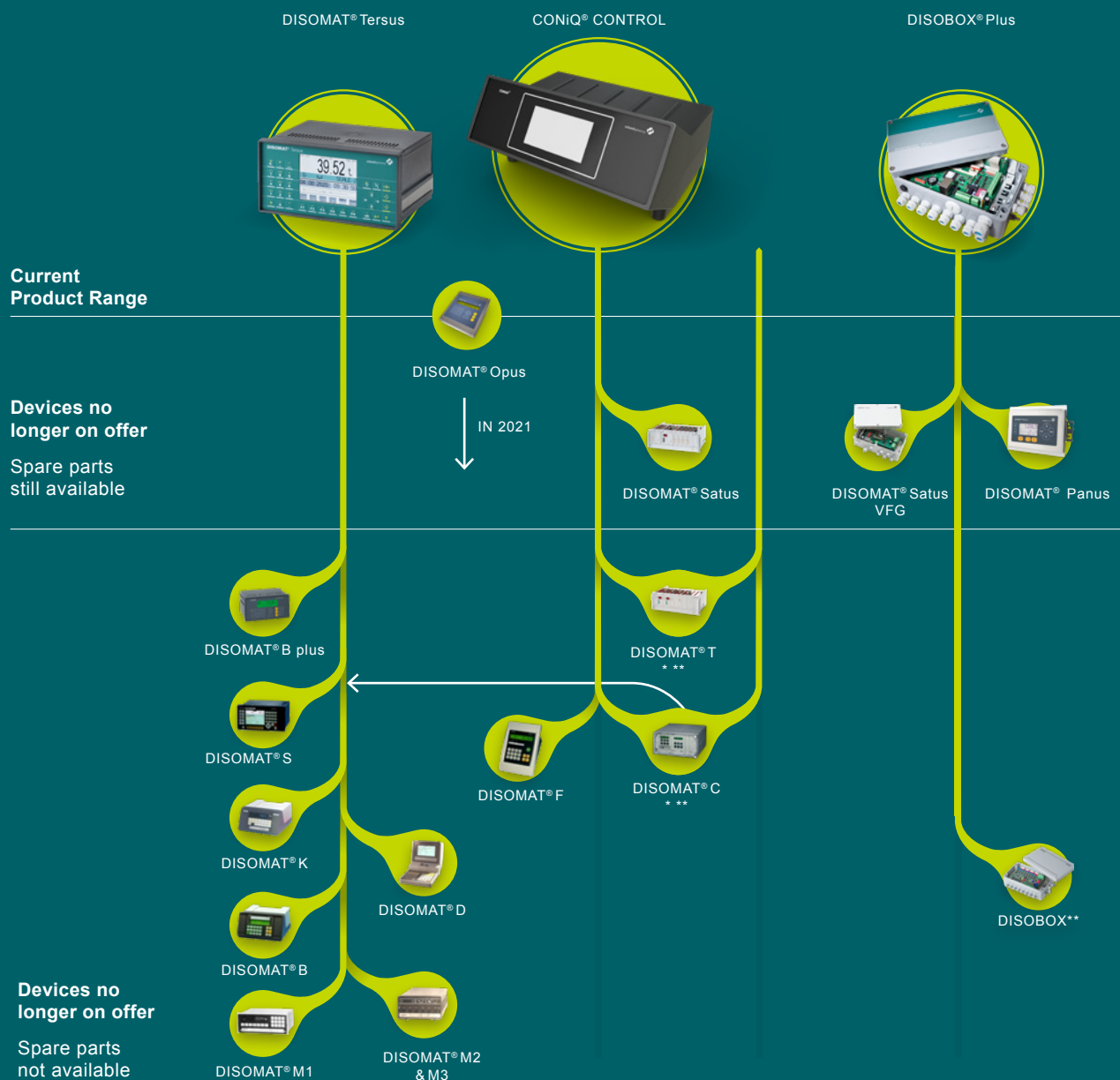


reddot award 2019
winner interface design

Let's be efficient – iQ your control

For your weighing applications, the electronic components may no longer be up to date in terms of performance, interfaces and usability. We have developed a next generation controller, which ensures fast and easy replacement of the old devices, gives a future proof solution and sets a new standard in weighing electronics.

CONiQ® Control is an innovative and flexible weighing control system for various industrial weighing applications and process controls. It provides a state-of-the-art user interface. This simplifies configuration and service work. That sounds exciting? Read on to learn how CONiQ® Control can improve your weighing process.



* partially replaced by CONiQ® Control ** Depending on Application

Advantages of CONiQ® Control

- Intuitive touch controls with graphical color capacitive touch display
- Web-based user interface requires no installation of additional software
- Wireless operation via WiFi
- Modular design allows for tailoring to the application
- Legal-for-trade according to EN 45501 OIML R51 / NTEP
- Legal-for-trade accuracy with up to 6000d
- High sensitivity of 0.3 $\mu\text{V/d}$
- Replacement of interfaces without need for legal for trade re-certification
- Simple system integration
- Easy extension of interface capabilities on site
- Multi-range/multi-interval scale, up to three ranges
- Powerful processor module with 10× more performance
- Optional mass storage for process data sampling

Upgrade your non automatic:

- Cargo scales
- Crane scales
- Truck scales
- Hopper scales



High ergonomics of human-system interaction



Operation via mobile devices



Functions are determined by software



Easy service access

Product overview

A modern design and intuitive operation are a matter of course for all everyday electronic devices. A positive user experience is crucial for the success of products from the consumer sector. We believe that this “familiar” user interface should also be found in enterprise solutions with their high requirements, and that it can be just as attractive and simple.

We improve our customer processes in terms of reliability, efficiency, and accuracy. Combining outstanding equipment and extensive process knowledge, we develop and manufacture innovative solutions for industrial weighing, feeding, conveying, pulverizing and classification, screening, mixing and blending and associated digital applications. We focus on the needs of our customers and support them through the whole lifecycle of a product.

CONiQ® Control is the unified controller family for the Schenck Process Group. It comprises several basic units allowing installation of interface modules tailored to the application. Same as the hardware, the software is based on some standard parts. Application specific software modules extend the basis functionality. This provides advantages in user experience and the availability of spare parts for our customers. With CONiQ® Control we have set a new standard for weighing control systems.

Step by step, the new family will replace the existing controllers for discontinuous and continuous weighing applications as well as for other control applications in the Schenck Process Group.

With the completely new capacitive touch user interface, CONiQ® Control provides a user experience as known from smartphones and tablets. The user interface received the RedDot design award in 2019. Based on standard communication procedures like HTML5, the user interface also runs on external standard web browsers and so provides a convenient access to the controller.

You want to **modernize** your weighing process?

You have planned a **recalibration**?

Upgrade your old systems **now.**

From efficient to smart efficiency



CONiQ® Control 4.3" Compact

The controller comprises a processor with 10× more performance, a 4.3" touch display and slots for up to 4 I/O-modules + 1 fieldbus module. It allows for communication to plant fieldbus networks via a suitable fieldbus interface installed in one dedicated slot. In addition, serial interfaces (RS232, RS485, USB, Ethernet) are available on the mainboard.

I/O-Interface modules

Interface modules plugged into the basic device allow for signal exchange via analog and digital signals between CONiQ® Control and the plant supervising system. Specific modules for the fieldbus available in the plant allow for seamless integration into the plant control system.

Fieldbus interface options







- Simple replacement of old electronic
- Prepared for high volume data processing
- Extensive process data sampling
- High accuracy with up to 6000 digits full scale in legal for trade applications
- High sensitivity of 0.3 µV per digit allows high resolution even with huge dead load
- Optional mass storage for process data sampling
- 1× Ethernet interface for service access, UDP and Modbus TCP
- 2× USB for external keyboard, mouse, printer and optional WIFI
- 1× serial interface RS232 for legacy communication and peripherals
- 1× serial interface RS485 for Modbus RTU and peripherals



Various Housings	Modular Structure	TFT-Touch Display	Web-Based HMI
IP 65 Glass Front Panel	Legal-for-Trade	Various up-to-date Interfaces	DISOMAT Opus Front Panel Dimensions

ENCLOSURE VARIANTS



PANEL MOUNTED



DESKTOP



WALL MOUNTED

Think smart. Perform better.

Intuitive operation

- Award-winning user interface
- Short learning time
- Shows just relevant functions for the operating context to reduce operator errors
- Clear text fault indication

The intelligent visual design and consistent interface layout provides easily understood navigation and takes the user through the functions smoothly. The award-winning user interface meets the highest standards of software ergonomics per **ISO 9241**. Not only for the operator but for service staff too, emphasis has been put on a very intuitive operation that requires very little training for commissioning, adjustments and diagnosis.

The operation is very simple and takes place via color TFT touch display on the device, with external keyboard or web-based (optionally wireless) via laptop, smartphone or tablet.

Graphical color capacitive TFT touch display

- High brightness of 400 cd/m²
- Anti-glare surface to avoid reflections
- High impact resistance
- 2 mm chemical hardened glass front
- IPS display with high viewing angles
- Immunity against water drops
- Ready for multi finger operation
- Operation with working gloves



Web-based user interface

- Easy service access
- Remote access
- No App or software installation required
- https encryption

Controller access via PC or Laptop can be by Ethernet or own WIFI-network for end-to-end connection. The web-based user interface enables fast service access via standard webbrowser without requiring additional configuration software installation like DISOPLAN and EasyServe. This makes downtimes much shorter. CONiQ® Control can also be conveniently controlled from mobile devices, all with the same operation principles.



CONiQ® Control is compatible with the following browsers in the actual version:

- Microsoft Edge
- Google Chrome
- Apple Safari
- Firefox

Modular design

- Functions determined by the software module used
- Three freely assignable slots for I/O expansion modules
- Connection of additional peripherals via USB
- Fieldbus interface for simple system integration
- No re-verification necessary when replacing mainboard or I/O modules
- Different enclosure variants

Maximum flexibility through all-modular design. Both the hardware and the software can be adapted to their environments and applications. The control functioning is defined by the software, the expansion modules that are added, and the parameter settings.

Key Applications at present (more to follow):

Non automatic weighing applications

- Cargo scale
- Truck scale
- Crane scale
- Hopper scale



General data 4.3" Compact device

Display technology	4.3" color TFT with capacitive touch control
Display size (W × H)	95 × 53.7 mm
Power Supply	100 ... 240 VAC (–15 %, +10 %) Alternatively: 24 VDC (–7 %, +12 %) Overvoltage category II
Power consumption	Max. 30 W
Ambient temperature	Operation: –30 ... 50 °C; up to 95 % relative humidity non-condensing Storage: –30 ... 80 °C; Humidity <95 %
Installation height	<= 2000 m
Date/time	Real-time clock, running time reserve without voltage: min. 7 days
Serial interfaces	1 × RS485 (2-wire) and 1 × RS232
Office bus interfaces	<ul style="list-style-type: none">• 2 × USB (master)• 1 × Ethernet (RJ45, 10/100BASE-T)
Fieldbus interface options (alternative)	<ul style="list-style-type: none">• Modbus-TCP• Modbus-RTU• PROFINET• PROFIBUS• DeviceNet• EtherNet/IP
Slots for input/output modules	4 (1 occupied as standard for load cell interface)
Certifications	<ul style="list-style-type: none">• CE (UKCA; EAC, UL, IECEx, ATEX in preparation)• EU type approval (NAWID) according to EN 45501• EU type approval (Catchweigher) according to OIML R51 / MID• US type approval according to NTEP

FAQ

www.schenckprocess.com/next/stories/digital-launch-event



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