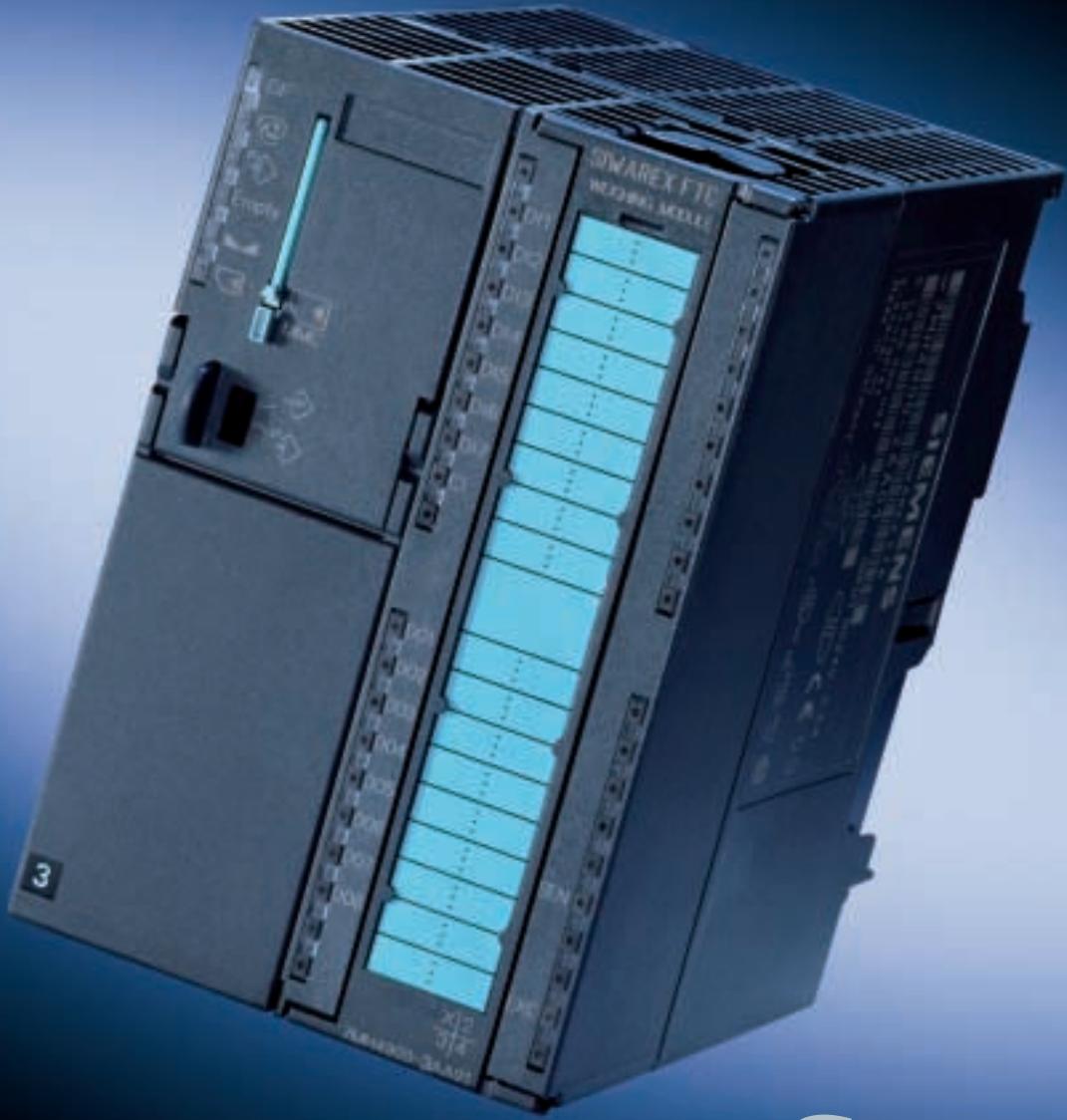


SIWAREX FTC
The belt scales in SIMATIC
More than just standard



siwarex ftc



SIEMENS

The electronic weighing system for belt scales – compact, fast, precise and flexible

High quality and competitive prices are the recipe for market success. In weighing processes this means extreme precision in the process along with optimal productivity for the plant. In other words, total reliability coupled with ultimate production speed. A demand that calls for competence and comprehensive expertise in both categories: automation engineering and weighing systems. Siemens has been a pioneer in both fields for decades – worldwide! This practical and engineering knowledge was systematically applied in the development of SIWAREX FTC (Flexible Technology, Continuous Weighing). The result is a multifaceted and flexible weighing module for belt scales.



SIWAREX FTC – more than just standard?

Yes – because this function module is perfectly tuned to the globally proven SIMATIC programmable controller system and the SIMATIC PCS 7 process control system by Siemens. Extensive diagnostics functions provide reliable process monitoring and make a substantial contribution to quality assurance in the production process. New commissioning and service tools support users in performing their tasks, make work easier, and also enhance quality assurance.

When innovations are released, the existing SIWAREX FTC module can be updated at any time! Free upgrades are easy, just load new firmware – saving

time and money and securing your return on investment.

The SIWAREX FTC weighing module is the optimal solution wherever heavy demands are made of the belt scales.

Typical application areas:

- Acquisition of belt load
- Acquisition of flow rate
- Acquisition of conveyed quantity
- Loading of material

The flow rates of the material can be regulated using the closed-loop control functions integrated into SIMATIC.

SIWAREX FTC – flexible technology

You can implement different scales using just one device, making it easier for your operating personnel to learn and saving you time in planning and implementing your plant. An additional benefit is service support based on the use of tools from the SIMATIC programmable controller system. This allows you to implement your own weighing system ideas.

Surprisingly precise!

400 measurements per second with a resolution of 16 million increments – at full precision! Thanks to these outstanding measuring features, weights can be measured in up to three measuring ranges with high accuracy. In the case of force measurement, bi-directional acquisition of the measured value is possible.

And of course, it features admissibility for verification with EU type approval!

SIWAREX FTC – 3 scales in one:

- Nonautomatic weighing instrument
- Force measurement
- Belt scales



Process reliability – performance power that counts

Thanks to comprehensive new diagnostic functions, SIWAREX FTC enables users to permanently monitor and optimize the weighing process. That means SIWAREX FTC makes a valuable contribution to quality assurance of the production process!

New functions at a glance:

- **Protocol memory** on an optional Micro Memory Card (MMC). Enables fast and safe archiving of data that is then accessible at any time.
- **Event recorder** with time stamp for recording the progress and status of weighing. A crucial tool for plant conceptualization and optimization of the plant – and also for analyzing unusual events.
- **Diagnostics buffer** for the last 100 messages in plaintext.
- **Permanent monitoring** of load cells and cables – predictive diagnosis for preventing troublesome, extended and expensive plant downtimes, for example.
- **Simulation of the belt** without the need for additional equipment.

Thanks to the integration of SIWAREX FTC into SIMATIC, these functions are an ideal complement for evaluation and diagnosis of process data with SIMATIC tools.

Doing our best for the environment!

- Retentive data memory – without batteries.
- Environmentally friendly material and design are a matter of course.

Use of the Internet

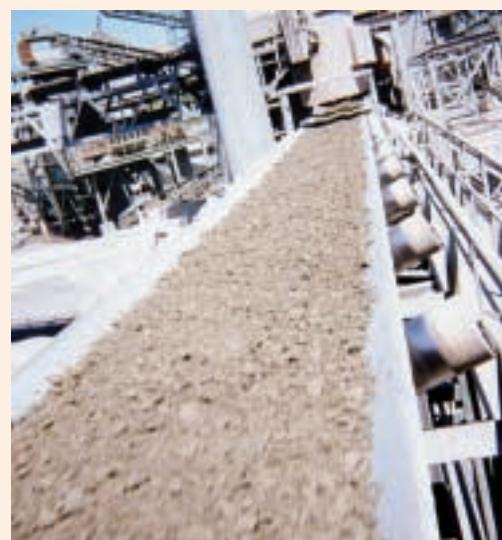
Last but not least, the Internet too can be used effectively today to contact our specialists about a wide range of issues – for the safety of your plant.

• During commissioning

For plant optimization, for example, you can transmit the setting data for the scale quickly, reliably and completely to a specialist for joint evaluation.

• In the event of a malfunction

The recorded data, including setting data for the scale, is simply sent over the Internet to specialists – such as the mechanical equipment manufacturer. That enables an analysis of the problem and diagnosis independently of time and place. No need for specialists to travel to the machine location, so they can provide assistance faster. And saving time ultimately means saving money!



Parameter	Value
Standard belt speed	1.50 m/s
Speed measuring time	2000 ms
Pulses per length unit	400.00 1/m
Constant speed	0.00 m/s
Minimum belt speed	50.0 %
Maximum belt speed	110.0 %

Commissioning and service – it's as easy as this ...



Ready to operate in no time

The handy SIWAREX FTC modules can be installed or replaced in a matter of seconds and they are already calibrated in the test department. That means there is no need for recalibration after components have been replaced.

SIWATOOL FTC – the commissioning and service tool for Windows

This easy and convenient program lets users put the scale into operation themselves!

The Windows interface and intuitive menus of SIWATOOL FTC make configuration fast and reliable and prevent invalid entries. Data can even be changed and displayed during live operation.

SIWATOOL FTC lets you:

- Configure and adjust the scale
- Save and print out scale data
- Test scale data
- Record and analyze the weighing process

With SIWAREX FTC and SIWATOOL

FTC, users can even start-up the scale without any prior knowledge of automation engineering.

For service, scale technicians can analyze and test the processes in the scale using a PC.

Complete service from a single source

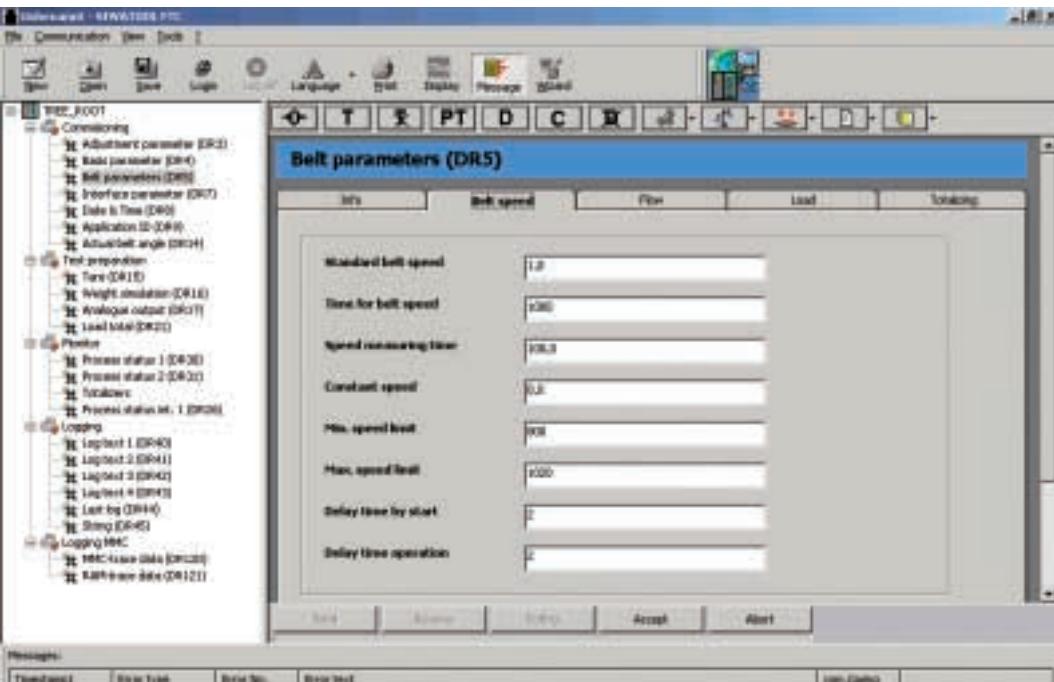
Bringing our many years of experience in weighing systems to bear, we are well-qualified to provide support in solving your individual automation problem. Our specialists with comprehensive knowledge of automation and weighing systems can provide support in many countries – or anywhere in the world over the Internet.

A gapless system

Weighing electronics, automation system, connection accessories, power supply and more – we offer you an optimally tuned complete system! We're sure to have the right solution for your requirements, too.

SIWAREX FTC at a glance

- Uniform design and integrated communications thanks to integration into SIMATIC S7 and SIMATIC PCS
- Uniform configuration with SIMATIC
- Direct use in SIMATIC programmable controller systems
- Use in distributed plant concepts by connecting to PROFIBUS DP via ET 200M
- Can also be used without SIMATIC
- Measurement of weight and/or force with high resolution of 16 million increments
- High precision 3 x 6000 d
- Can be calibrated in accordance with OIML R-76
- Display with SIMATIC standard operator panels
- Parameterizable inputs and outputs
- Flexible adaptation to different requirements
- Easy parameterization with the SIWATOOL FTC program
- Replacement of module without recalibration of the scale
- Recording of the weighing process
- 8 accumulator memories
- Can be used for ex applications

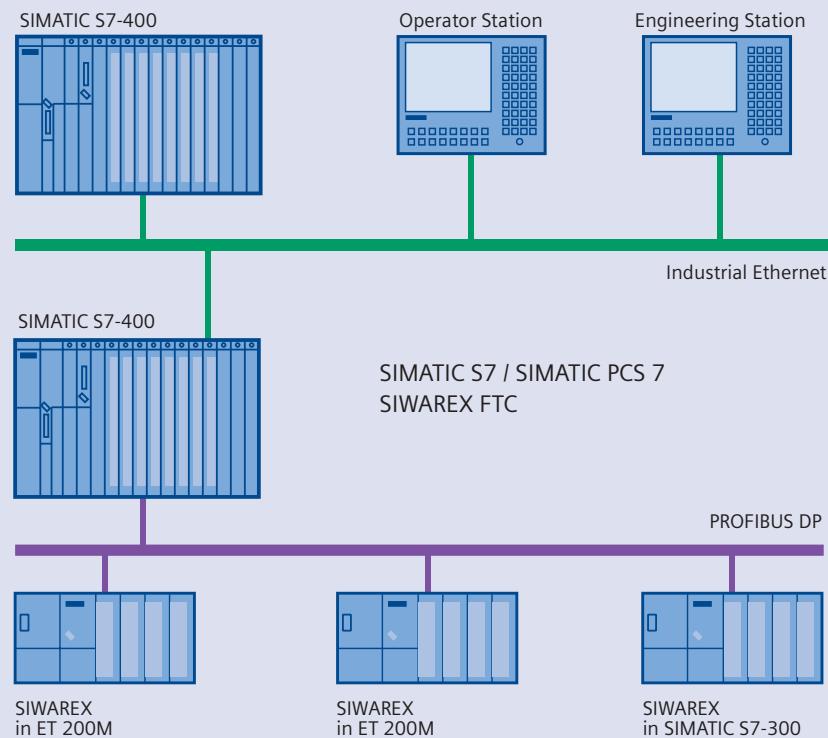


SIWAREX FTC integrated into SIMATIC

Open and flexible

Today's scales feature much more than just precision weighing – that should be a given! The capability for integrating into an automation infrastructure is just as important!

SIWAREX FTC represents a whole new generation of scales. It is perfectly integrated into the SIMATIC S7 programmable controller system and the SIMATIC PCS 7 process control system. Users can freely configure their automation solution – including the scale application. That makes it possible to create optimal solutions for small-, medium-, and large-scale plants.



The configuration package and the off-the-shelf application software can be used for the easy implementation of customized and industry-specific solutions.

That means users get a freely programmable weighing and proportioning system that they can adapt to internal operational requirements as they see fit.

Thanks to integration into SIMATIC, SIWAREX FTC is also part of Totally Integrated Automation (TIA).

With TIA, Siemens is the only solution provider to offer a gapless range of integrated hardware and software products, systems and solutions for all industries – from incoming goods to dispatch, from the field level to the process control level, to link with the management execution level.

Ready in a snap

Implementing system integration is as easy as 1-2-3: SIWAREX FTC is snapped either directly onto the SIMATIC S7-300 or, in a distributed configuration, to the ET 200M backplane bus and is then automatically integrated via PROFIBUS DP.

Expandable

A number of scales can be connected to the SIMATIC system – centrally or in a distributed configuration.

That means you can set up a multiscale system quickly and easily at minimal expense. Operator process communication is handled centrally from the MES level – covering distances of up to several kilometers – or on location using an operator panel from the SIMATIC HMI family.



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