



SIEMENS

PROCESS INSTRUMENTATION

SITRANS FC430 guarantees the greatest accuracy in the denaturing of alcohol

www.usa.siemens.com/coriolis

The SITRANS FC430 Coriolis flow meter impresses with the best measurement results and convenient operation.

The customer

The family-owned Donau Chemie Group is a leader in the chemical industry. One of their key points of focus is the development and production of industrial chemicals such as sulphuric acid, electrolysis products and calcium carbide in three Austrian production facilities – in Pischeldorf, Brückl and Landeck. In the environmental technology sector the Donau Chemie Group produces activated carbon as well as precipitants and flocculants for water treatment.

The Consumer Products business unit develops and manufactures liquid and paste-form products in the fields of cosmetics, household goods and technology for branded and trademarked goods.

Donau Chemie Group employs approximately 900 staff in 11 countries.

"We are very pleased.

The SITRANS FC430 is currently the most technologically advanced product on the market and offers optimum price and performance."

Erwin Haizinger

*Donau Chemie Group
measuring and control technology*



Erwin Haizinger working successfully with the SITRANS FC430.

The task

The neighboring bioethanol producer in Pischeldorf processes agricultural products to bioethanol. This biofuel has an alcohol content of at least 99 percent.

For customs and financial reasons this alcohol must be denatured for further processing. The denaturing process makes the alcohol undrinkable. This is achieved using additives, which must be continuously and exactly metered.

The process is performed in the Donau Chemie Group plant in Pischeldorf bei Tulln. The denatured alcohol is then processed further in the factory for cleaning and antifreeze products.

The solution

The non-denatured alcohol is delivered to the Donau Chemie plant by railway wagon. The denaturing process takes place as the alcohol is pumped into a second wagon.

The measuring system developed by Siemens measures the mass flow of the alcohol delivered, the correct dosing of the necessary denaturing additives and finally the finished denatured alcohol. In the process the mass flow rate, the density and the temperature of the medium are also measured. The release of gas bubbles, which is an important factor for the start of the denaturing process, is performed by density measurement via the SITRANS FC430.

The objective

The objective is to integrate the measurement of the final product in a calibrated measuring system, the heart of which is the Coriolis measurement with the SITRANS FC430.

The partnership

The Donau Chemie Group has purchased its magnetic-inductive flow meters from Siemens since 2000. The company had used Coriolis meters from Siemens in the past and the SITRANS FC430 was first used in the fall of 2012.

Erwin Haizinger is responsible for measuring and control technology in the Pischeldorf plant. The long-serving employee, who can look back on over 40 years of experience at Donau Chemie, is highly enthusiastic about the SITRANS FC430:

"We are very pleased with the SITRANS FC430. It is currently the technically best developed product on the market, and the price and performance are optimal," says the measuring and control technology professional.

Mr. Haizinger explains further: "All measurements run very satisfactorily. The balance of the measurement results matches exactly. In particular, we are very impressed by the support provided by Siemens. We received excellent support from commissioning up until the first results. Also both the training and ongoing assistance can be described as exemplary."

"We were especially impressed with the NAMUR compliant outputs that ensured easy integration into the control system. The very easy to understand SITRANS FC430 menu navigation makes working with this device a breeze," reported Mr. Haizinger regarding the extremely high level of user-friendliness.

SITRANS FC430:

The most compact Coriolis flow meter on the market is appreciated all over the world for its excellent performance, safety and ease of use.

Process optimization has never been more simple and innovative.



The new Siemens SITRANS FC430 Coriolis flow meter in use at the Donau Chemie Group.

The SITRANS FC430 is perfect for all applications in the process industry.

Digital technology

Analog was yesterday. The SITRANS FC430 is highly impressive with its superior digital technology. Greatly reduced interference is assured because each signal is immediately digitized. Internal high-speed signal processing provides fast and reliable process parameters, which are provided on the output side with a refresh rate of 100 Hz.

Extremely compact

One of the most compact flow meters on the market, the SITRANS FC430 enables space and money-saving installation in any position. The world's shortest installation length allows multiple devices to be installed in the tightest of spaces. The simple wiring using Wago® terminals including tool, enables safe and time-efficient installation.

Excellent measuring results

With a mass flow rate accuracy of 0.1% and a maximum reproducibility error of 0.05%, the SITRANS FC430 meets even the most stringent demands. Just as impressive is the excellent density measurement performance with an accuracy of 1 kg/m³. This performance makes the SITRANS FC430 suitable for use in all applications and industries.

Comprehensive system certification

The SITRANS FC430 is one of the first Coriolis meters to be certified under SIL 3 (software and systems). This is a guarantee of unsurpassed safety and reliability. The SITRANS FC430 is also ATEX certified and can be used in hazardous areas up to Zone 0. An evaluation certificate is available for the integration into calibrated measurement equipment in compliance with OIML R117.

Unrivalled user-friendliness

The SITRANS FC430 is operated with only four navigation keys. It has a fully graphics-capable display. A wide variety of menu levels can be customized and it is possible to simultaneously display multiple parameters. The help text integrated in the self-explanatory menu navigation enables rapid orientation with the product.



SITRANS FC430:

This digital flow meter also impresses with its very high measurement accuracy of 0.1%, low pressure loss, very stable zero point, and first-class data update with faster 100 Hz signal transmission.



The SITRANS FC430 measuring the correct dosage of the additives as well as the denatured alcohol.

Innovative technology

With SITRANS FC430 it is possible to directly access all relevant data via SensorFlash® and USB interface.

SensorFlash®: this is a memory module in the form of a MicroSD card. SensorFlash® stores all system-relevant data from calibration through to the customer-specific parameters. It simplifies unit startup and backup of the system data. In addition the calibration certificate and all other certificates requested by the customer such as material certificate, factory certificate, etc. are filed and can also be traced.

USB interface: This standardized interface allows SensorFlash® reading, the creation of in-house product documentation, and the quick and easy update of measurement software.

Pioneering support tool

Each SITRANS FC430 has a special QR code that can be scanned with any conventional smartphone. The QR code gives every user direct access to the Siemens quick support website PIA Life Cycle Portal. This access makes all measurement-specific certificates available online.

Legal Manufacturer

Siemens Industry, Inc.
100 Technology Drive
Alpharetta, GA 30005
United States of America
Telephone: +1 (800) 365-8766
usa.siemens.com/pi
Order No. PICS-00166-0721

This document contains a general description of available technical options only, and its effectiveness will be subject to specific variables including field conditions and project parameters. Siemens does not make representations, warranties, or assurances as to the accuracy or completeness of the content contained herein. Siemens reserves the right to modify the technology and product specifications in its sole discretion without advance notice.