WHEN EVERY THING THE WORLD TAKES

THE WORLD TAKES
MEASUREMENTS WITH SICK.

Luis A. Rojo November 12, 2024 Madrid SICK
Solutions
for Cleaner
Industries

SICK at a glance

Key figures (fiscal year 2023)





380 SALES IN GERMANY (IN EUR MILLION) 823
SALES IN EMEA
(IN EUR MILLION)

545
SALES IN AMERICAS
(IN EUR MILLION)

559 SALES IN ASIA-PACIFIC (IN EUR MILLION)

12,185

EMPLOYEES





3,987

PATENTS



Presentation Title, Speaker, Location

Cleaner Industries key figures





~630 emloyees



12% CAGR



>110.000 installed base



9% R&D spend / year

(Sensors/Hardware/ Mechanics/Software)



>150 Patents

Cleaner Industries | V04/2023

Decarbonization and Digitalization – using technology for good

Our Vision for Cleaner Industries

"We create innovations for a sustainable future!
We remain true to our roots, and adapt to the
dynamism of our market environment, driven by
the decarbonization trend. We develop our
existing business, explore new markets and
technologies, as well as create completely new
solutions in co-creation with our partners."







Sustainability challenges

Sensors for the new trends

SICK ensor Intelligence.

The energy transition is creating **new**, changing **demands** that SICK is addressing with sensor solutions.



We support low-carbon combustion solutions while the market uses low-carbon fuels in the clean energy transition.

We strive for

decarbonization
We investigate in sensor
solutions for LNG to

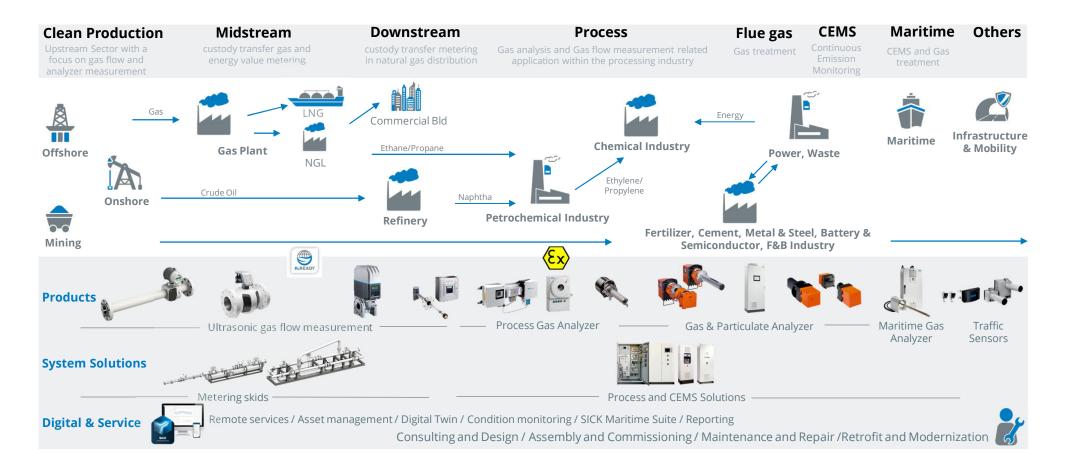
power,
hydrogen blending in
natural gas power plants,
co-firing power
plants, conversion from coal
to gas, CO2/GHG certificate
trading and or Carbon
capture.

Presentation Title, Speaker, Location

Solutions for Cleaner Industries

Markets, Products, System Solutions, Digital & Services



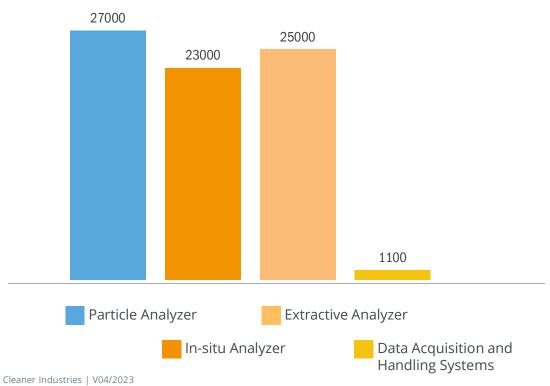


Presentation, Speaker, Location

Analyzer installed base

Snaphot 2021

Units installed





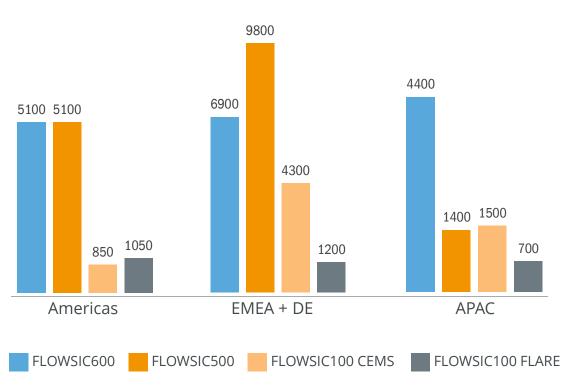


Flow Measurement installed base

Snapshot 2022

Units installed







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Portfolio for energy flow

Highlights





Flow meter FLOWSIC600-XT

OIML R 137 Class 1.0, Class 0.5 and AGA9

FLOWSIC600-XT includes i-diagnostics™, a function for intelligent application diagnostics, as well as PowerIn Technology™, which enables continuous measurement operation for up to three weeks in the event of a power failure.



Flow meter FLOWSIC500

Calibratable measurement in natural gas distribution.

State-of-the-art technology for maximum measurement reliability:

The FLOWSIC500 ultrasonic compact gas meter from SICK ensures highly accurate billing in natural gas distribution.



Flow meter FLOWSIC550

High-pressure gas flow meter for natural gas distribution.

The new FLOWSIC550 ultrasonic compact gas meter from SICK ensures highly accurate billing of low volume flows in high-pressure networks - a perfect complement to the FLOWSIC500.



Flow meter FLOWSIC100

Volumetric flow meters for continuous emission monitoring.

The FLOWSIC100 product family was developed for emission monitoring.

Presentation Title, Speaker, Location

100% H₂ custody transfer measurements



Fields of application

> Pure H₂ measurement

Benefits:

- No pressure loss
- Large turn down
- Permanent health check (diagnostics)
- Gas quality monitoring (speed of sound)
- Low flow and low pressure capability
- Ready for energy equivalent flow proven H2 flow performance up to 75m/s

4 path ≥ DN100 2+2 Path DN50/DN80

No. of path

Operating pressure

16...100 bar(a) Lower Pmin (8 bar) – by request

Operating temperature

-40...60 °C

Inlet piping requirements

≥10DN

Accuracy

0.5%

Meter size

DN50...DN600+

Flow rates

5m3/h (DN50) to...62 000+ m3/h (DN600)

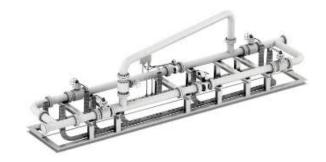
Does this meet your expectations? Let's talk....

H2 solutions - Confidential | February 2024

Carbon Capture Utilization and Storage (CCUS)









Flowmeters

Ultrasonic Flowmeters
 CO₂ in gas / supercritical phase

Integrated Measuring Systems

Metering skids

SICK has been supplying CO2 flow meters for more than 10 years

- > CO₂ concentration up to 100 vol%
- > Pipelines size DN80 DN600 (3 inch 24 inch)
- > 0 250 bar (0 3600 PSI)
- > Measuring accuracy: +/- 0,5 ... 1%

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