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# ABB Instrument & Analys

## Vi gör det enkelt att mäta och analysera !

# How ABB is organized

## Five global divisions



### ABB's portfolio covers:

- 
- Electricals, automation, controls and instrumentation for power generation and industrial processes
  - Power transmission
  - Distribution solutions
  - Low-voltage products
  - Motors and drives
  - Intelligent building systems
  - Robots and robot systems
  - Services to improve customers productivity and reliability

(2011 revenues, consolidated; including Thomas & Betts revenue for LP division)

# ABB Measurement Products

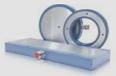
## Key Facts



- About 4500 employees in 50 countries
- 24 focused factories in 8 countries
- Market-leading products and services
- R&D and new product focus in both power & automation:
  - Energy efficiency
  - Flexibility and productivity
  - Environmental sustainability

# ABB Measurement Products

## Unrivalled scope and application expertise

				
Force Measurement	Analytical Measurement	Flow Measurement	Field Instruments & Devices	Service
 Flatness  Rolling Mill	 Continuous Gas  Combustion Gas	 Electromagnetic  Coriolis Mass	 Pressure  Level	 <b>Start-up:</b> <ul style="list-style-type: none"> <li>• Dimensioning</li> <li>• Installation</li> <li>• Commissioning</li> </ul>
 Dimension  Web Tension	 Gas Chromatograph  Remote Sensing	 Variable Area  Vortex	 Temperature  Valve Positioners	 <b>Operate &amp; maintain:</b> <ul style="list-style-type: none"> <li>• Maintenance</li> <li>• Calibration</li> <li>• Spare parts &amp; Repairs</li> <li>• Support &amp; Remote Services</li> <li>• Training &amp; eLearning</li> </ul>
 Cylmate  Torque	 Spectroscopy  pH & Conductivity	 Differential Pressure  Thermal Mass	 Actuators  Recorders	 <b>Rebuild or replace:</b> <ul style="list-style-type: none"> <li>• Retrofits</li> <li>• Upgrades, migration planning</li> <li>• Replace &amp; recycling</li> </ul>
 Weighing  Tools	 Municipal Water  Power Generation Water	 Gas Flow  Flow computers & RTUs	 Controllers  Asset Management	 

# Advance Optima – Continuous Gas Analyzers

Chemical &  
Petrochemical

Power & Steam

Oil & Gas

Water &  
Wastewater

Pharmaceutical

Food & Beverage

Metals & Mining

Pulp & Paper



## Features

- Integrated system concept with standardized analyzer modules
- Multi-analyzer system with up to 4 analyzer modules
- Distributed analyzers, connected to one central unit
- Broadest selection of different analyzer technologies
- Measures simultaneously up to 6 gas components
- Automatic calibration without test gas cylinders for most applications
- Digital interfaces for DCS and maintenance
- Ethernet for integration with PC and maintenance network, Profibus and Modbus fieldbus coupling, OPC-Interface for direct integration to DCS
- Full Remote Control for worldwide access on Ethernet
- Available for hazardous locations Category II2G, II3G
- International certifications according ATEX Europe, CSA US/Canada, GOST Russia

## Benefits

- Advanced and reliable technology
- Integrated system solutions – for added flexibility
- Multi-analyzer systems – ( up to four analyzer modules)
- Unlimited connectivity
- Integrated control and monitoring
- Simple, user-friendly operation
- "Packaging" that fits right in
- Reliable and powerful
- Always the right analyzer for the job. whatever the measuring task!

# ACX– Analyzer System for the extractive continuous gas analysis

Chemical &  
Petrochemical

Power & Steam

Oil & Gas

Water &  
Wastewater

Metals & Mining



## Features

- Continuous measurement of a maximum of six sample components
- Up to four analyzers including IR/UV photometer, paramagnetic/ or electrochemical O2 analyzer and FID analyzer
- Appropriate gas sampling and gas conditioning included
- Operation via the operator panel in the front door
- available in sheet steel or glass-fiber cabinet or on a mounting plate
- Automatic calibration without test gas cylinders using internal calibration cells
- Integrated diagnosis functions for continuous self-control from probe to analysis
- Worldwide access for remote service possible
- AnalyzeIT Explorer visualization software for continuous monitoring and maintenance via Ethernet
- Modbus, PROFIBUS or Ethernet for networking with PC, OPC connection to PLC and Process control system or for integration in Windows applications.
- Gas ports and digital interfaces are accessible from the outside

## Benefits

- ACX – the complete system
- Always the right analyzers with proven and reliable measuring technology
- Convenient external operation
- Compact and innovative standardized design
- Self diagnosis for easy service and maintenance
- Process industry interfaces

# CoriolisMaster

Chemical &  
Petrochemical

Oil & Gas

Water &  
Wastewater

Food & Beverage

Metals & Mining

Pulp & Paper



## Features

- Wide meter size range: 1.5 ... 150mm (1/16..6")
- High accuracy for liquid flow and density of 0.1%
- High accuracy for gasflow of 0.5%
- Simple to use transmitter with common look & feel and sensor memory
- Hygienic approved version available
- Special material (HC4) available

## Benefits

- Save cost by making several measurements with one device
- Reduce flowmeter maintenance by up to 90%
- No mechanical wear and minimize installation issues
- Save up to 25 % on pump power through low pressure drop
- Save critical installation space by using one of the most compact meters on the market

Power and productivity  
for a better world™

