Level | Pressure | Flow | Temperature | Liquid Analysis | Registration | Systems Components | Services | Solutions

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Global Product Marketing and Multiple Product Certification

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Endress+Hauser

People for Process Automation

The Endress+Hauser Group- People for process automa

- Holding company in Reinach, Switzerland
- 19 production facilities in 11 countries
- Sales centers in more than 40 countries
- Representatives in over 70 other countries
- 8400 Employees worldwide
- 1,1 Billion Euro Turnover in 2009

Endress+Hauser

Our customers

Endress+Hauser provides safe and reliable instrumentation for many industries

Chemicals
We make
processes safe

Food & Beverages
We ensure
absolute hygiene

Environmental
We take care
of our environment

Life Science
We observe
the highest standards

Oil & Gas
We guarantee
high accuracy

Power & Energy
We help to use
resources efficiently

Primaries & Metal
We provide
robust solutions

Renewable Energies
We focus on
sustainable development

Pulp & Paper
We support with
modern techniques

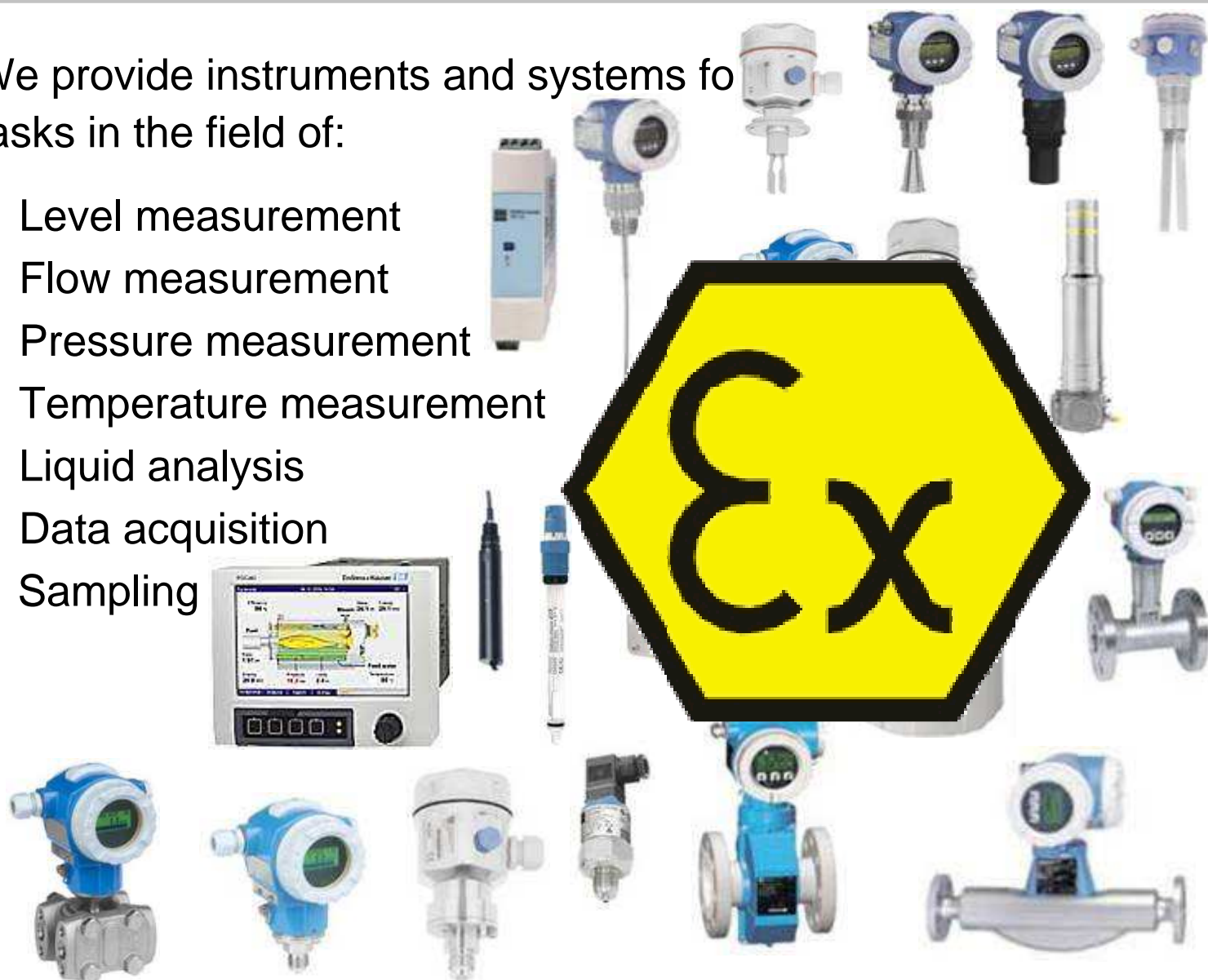**Marine Business**
We combine tradition
with innovation

We speak the language of our customers!

Endress+Hauser

Process Instrumentation

We provide instruments and systems fo
tasks in the field of:

- Level measurement
- Flow measurement
- Pressure measurement
- Temperature measurement
- Liquid analysis
- Data acquisition
- Sampling

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Global product approvals for Process Instrumentation

Markets / Approvals	Europe	USA	Canada	Japan	Russia	China	Australia
Electromagnetic compatibility	EMC (CE-mark) Manufacturer	UL	CSA				C-Tick
Electrical Safety	LVD (CE-mark) Manufacturer	FM, UL	CSA	Manu-facturer	GOSST	CCC	Manufact.
Explosion Safety	ATEX (CE-mark) PTB, Exam, TÜV ... KEMA, LCIE, BASEEFA, FTZU	NRTLs e.g. FM,UL	CSA, FM, UL	TIIS	GOSST	NEPSI	IEC Ex Testsafe
Metrology	MED (CE-mark) PTB, NMI				GOSST	PAC	
Radio Equipment	RTTE (CE-mark) RegTP, SEE, Senton	FCC	I C Canada				
Pressure vessels	PED (CE-mark) TÜV		CRN				
Nuclear Power Plants	National Regulations (e.g. TÜV, EDF…)						
Food Equipment	EHEDG Weihenstefan,TNO, ...	3A-San. Standard					
Functional safety IEC 61508/61511	e.g. TÜV, Exida, UL, FM						
Marine Equipment	GL, LR,DNV, BV, RINA	ABS		NK			

Others: India, South-Korea, Singapore, Brazil, South-Africa …
In total 2700 current product certificates

Self-assessment   Third party approval

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Current Situation for Endress+Hauser

Endress+Hauser serves the global market - consequences:

- For global sales national certificates for many countries/regions
  required (e.g. Europe, North America, China, Japan ….)

- Several surveillence systems with many factory audits
  (approx. 8-10 Ex-audits per year and factory location!)

- Extensive costs and long time to market!

  - >100.000 Euro certification fees per product

  - 1..2 years delay to global market

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The IEC Ex System – a short track to the global market

- Scope of the IEC Ex System

- Current situation for a manufacturer of Ex equipment

- Experience with the IEC Ex system

- Expectations and Vision

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Scope of the IEC Ex System

■ The IECEx Certified Equipment Scheme

■ The IECEx Certified Service Facilities Scheme

■ The IECEx Conformity Mark Licensing System

■ The IECEx Certification of
   Personnel Competencies (CoPC)

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Global Ex-certificates

Market	Europe (ATEX)	USA	CAN	China	Japan	Australia (IEC Ex)	others	Total
Market share	57 %	8 %	3 %	8,5 %	3,2%	< 2%	18,3%	100%
No. Certificates	282	178	190	120	193	91	246	1300
No. Audits p.a.	**1**	4	4	-	-	**1**	~1	~ 10

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Experience with the IEC Ex system

Acceptance of IEC Ex certificate (CoC)

- ■ CoC legally acknowledged in Australia and New Zealand ☺
  - no national Certificate required ☺
  - direct trade with IEC Ex certified equipment (Group II) ☺

- ■ CoC legally not accepted in other global countries ☹

Acceptance of IEC Ex Testreport (ExTR)

- ■ Ex TR accepted in over 30 IEC Ex member states ☺

- ■ National Certificates issued based on ExTR ☺

Acceptance of IEC Ex Quality Assessment:

- ■ QAR of any ExCB accepted internally in the IEC Ex system

- ■ **QAR for national certification not accepted** ☹

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IEC Ex System – our expectation

- globally accepted IEC Ex Testreport
- globally accepted IEC Ex Certificate
- globally accepted surveillance (QAR
- avoid multiple testing and audits!
- reduce time to market!

Only a vision ?