Terminal and Tank Farm Automation
27th February
Klaipėda

Emerson Overview

Algirdas Čebatorius
Managing Director
Baltic Countries
Emerson At-A-Glance 2013

US $24.7 Billion in Sales

Headquarters in St. Louis, Missouri USA

Diversified global manufacturer and technology provider

Approximately 132,000 employees worldwide

Manufacturing and/or sales presence in more than 150 countries

230 manufacturing locations around the world

No. 123 on 2013 FORTUNE 500 list of America’s largest corporations

Founded in 1890

NYSE: EMR
Emerson Invests in New Technology Development to Meet Customer Needs

$841 million … Emerson’s investment in Engineering & Development during 2013

~9,000 … number of Engineering & Development personnel worldwide

1,765 … patents awarded in 2013 to Emerson businesses
Emerson Sales
Diversified Businesses & Global Scope

2013 Sales by Segment

- Commercial & Residential Solutions: 15%
- Process Management: 34%
- Network Power: 24%
- Climate Technologies: 19%
- Industrial Automation: 8%

2013 Sales by Geography

- United States and Canada: 44%
- Asia: 24%
- Europe: 20%
- Latin America: 6%
- Middle East/Africa: 6%
Emerson is a Global Technology Leader in Many Markets

#1 Compressors
#1 Controls
#1 Alternators
#1 Fluid Control
#1 Ultrasonic Welding
#1 Food Waste Disposer
#1 Plumbing Tools
#1 Wet/Dry Vacuums
#1 Integrated Mobile Point-of-Care Carts

#1 AC & DC Power Systems
#1 Thermal Management
#1 Access & Control (KVM)
#1 Power Switching & Controls
Emerson Process Management

The largest Emerson business segment… representing 34% of the total Emerson business.
Optimum Efficiency

*Emerson Process Management: Technologies & Services for Smarter Operations*

*Intelligent control systems, software, and measurement and control technologies that help process industries better manage their plants*

- PlantWeb™ Digital Plant Architecture
- Easy-to-Install Wireless Systems
- Process Control Valves & Actuators
- Measurement & Analytical
- Industry Solutions & Services
**FY13 Worldwide Process Automation Served Market**

<table>
<thead>
<tr>
<th>Company</th>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerson</td>
<td>19.5%</td>
</tr>
<tr>
<td>ABB</td>
<td>10.5%</td>
</tr>
<tr>
<td>Honeywell</td>
<td>6.9%</td>
</tr>
<tr>
<td>E+H</td>
<td>4.9%</td>
</tr>
<tr>
<td>Yokogawa</td>
<td>6.6%</td>
</tr>
<tr>
<td>Siemens</td>
<td>6.8%</td>
</tr>
<tr>
<td>Invensys</td>
<td>4.1%</td>
</tr>
<tr>
<td>Rockwell</td>
<td>1.7%</td>
</tr>
<tr>
<td>Flowserve</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

**2002 Participation**

14.7%

Sources: ARC, Western Research, Morgan Stanley Global Insights, Lehman Brothers, Internal Estimates

Notes: Re-aligned on Emerson fiscal year. Foreign currencies translated at constant exchange rates.
Emerson Process Management
2013 At-A-Glance

**Sales**

2013 Sales $8.6B

**Employees**

2013 Average ~36,000

**2013 Sales by Product**

- Final Control: 30%
- Measurement Devices: 45%
- Systems, Solutions & Services: 25%

**Customers Include**

Bayer, BP, Chevron, DOW, Fluor, GlaxoSmithKline, Lubrizol, Novartis, Petrobras, Reliance, Sasol, Shell, StatOil

**2013 Sales by Geography**

- United States and Canada: 37%
- Europe: 20%
- Asia: 25%
- Latin America: 10%
- Middle East/Africa: 8%
2013 Sales By Industry

- Oil & Gas: 42%
- Chemical: 15%
- Power: 14%
- Pulp & Paper: 9%
- Refining: 6%
- Life Sciences: 3%
- Metals & Mining: 3%
- Marine: 3%
- Food & Beverage: 2%
- Water & Waste: 1%
- Others: 3%
Emerson Process Management
Core Offerings & Key Brands

Taking on the industry’s toughest challenges, and bringing predictable success any time, any place

Measure & Analyze
The broadest range of measurement and analytical technologies for process clarity and insight

Operate & Manage
The systems and tools that provide the decision integrity to run your operation at its full potential

Final Control & Regulate
Highly reliable final control technologies to help you regulate and isolate your process with certainty

Solve & Support
Expertise and global resources to help you dependably define, execute and support a strategy throughout the lifecycle of your operation

DANIEL  ROXAR  AMS Suite  FISHER
ROSEMOUNT  Micro Motion  Ovation  BETTIS  DELTAV
Project Services: We’ve Added Over 3,000 Project Engineers Since 2005

- **Europe**: 15 Locations, 1,003 Personnel
- **Asia/Pacific**: 14 Locations, 2,243 Personnel
- **Middle East/Africa**: 9 Locations, 75 Personnel
- **Latin America**: 8 Locations, 321 Personnel
- **North America**: 40 Locations, 958 Personnel

86 Project Services Locations Worldwide
4,600 Project Services and Engineering Employees Worldwide
Lifecycle Services: We Are Adding Service Centers Around the World

North America
164 Service Centers
1,301 Personnel

Europe
56 Service Centers
637 Personnel

Asia/Pacific
101 Service Centers
506 Personnel

Latin America
39 Service Centers
171 Personnel

Middle East/Africa
30 Service Centers
78 Personnel

390 Service Centers
2693 Personnel

2014 Growth: 15 Emerson Service Centers
Emerson Process Management Poland & Baltic’s

OUR OFFER:

- Measurement and control devices, control systems
- Turn-key process automation projects
- Application design and start-up
- Consultancy
- After sales service
- Trainings

Head office:
Place: Warsaw
Founded: 1991

Baltic’s office:
Place: Klaipėda
Founded: 2013
Emerson Process Management
Baltic’s

Partners

- VALCON
- MTR Engineering
- INDEEL
- Emas

Customers

- Orlen Lietuva
- VKG
- Achema
- LIFOSA
- EASTMAN
- neogroup
- Vopak
- Ventspils Nafta Terminals
- Klaipėdos Nafta
- Latvenergo
- Eesti Energia

Service Partner
Human Centered Design Is The Key To Reduced Complexity

...to advance **safety, reliability and efficiency** for customers...the industry

- **Eliminate** unnecessary *work* processes
- **Remove** the *complexity* of using technology
- **Embed** specialized *knowledge*
Simplifying Project Engineering – I/O On Demand For Unprecedented Flexibility

Current DCS Systems

Work processes based on outdated DCS architecture model and technology
- Engineering, labor, and equipment intensive
- Interdependent and unforgiving

New DeltaV S-series

Unnecessary equipment and engineering replaced by Electronic Marshalling”
- Entire subsystems and their engineering eliminated
- Ultimate flexibility
Making Field Device Interfaces Easy-to-Use

Technology-centric

- Up to 20 tabs per DEVICE
- Over 1000 fields presented to ALL users
- Extensive training required
- Safety impact due to low user confidence

Human-centric

- Easy to use and understand
- 63% of tasks on first click and ‘at a glance’
- Intuitive, lowers training costs
- Improved confidence and safety
- 82% faster task times
Simplifying Subsea Maintenance For Improved Safety, Lower Cost

Current Subsea Maintenance

Subsea production assets are hauled to the surface for sensor replacement
- Up to $1M a day
- Risk of wellhead leak
- Minimal utilization of intelligence

ROV Based Retrieval

Remotely operated vehicle retrieves and replaces sensors
- No production loss...in-situ
- No increased safety risk
- A fraction of the cost
Improving Monitoring & Control Cost-Effectively With Wireless Technologies

Physical and economic obstacles often put additional field intelligence out of reach
- Extensive engineering
- Labor and materials
- I/O already at capacity

Extend networks with simple, easy installation without complex engineering
- 10% cost of wired installations
- Best in class reliability
- World-class security
Full solution provider

- Business Automation Network
- Logistics Automation Network
- Process Automation Network
- Field Device Network
- Wireless Network

- ERP Interface
- Logistics Database Server
- Plantwide Historian Server
- Operator Station
- Maintenance & Engineering
- Office Clients
