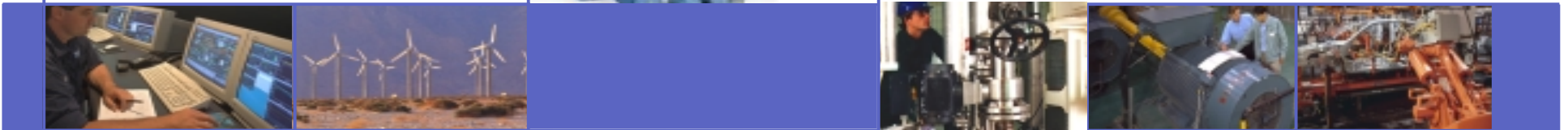


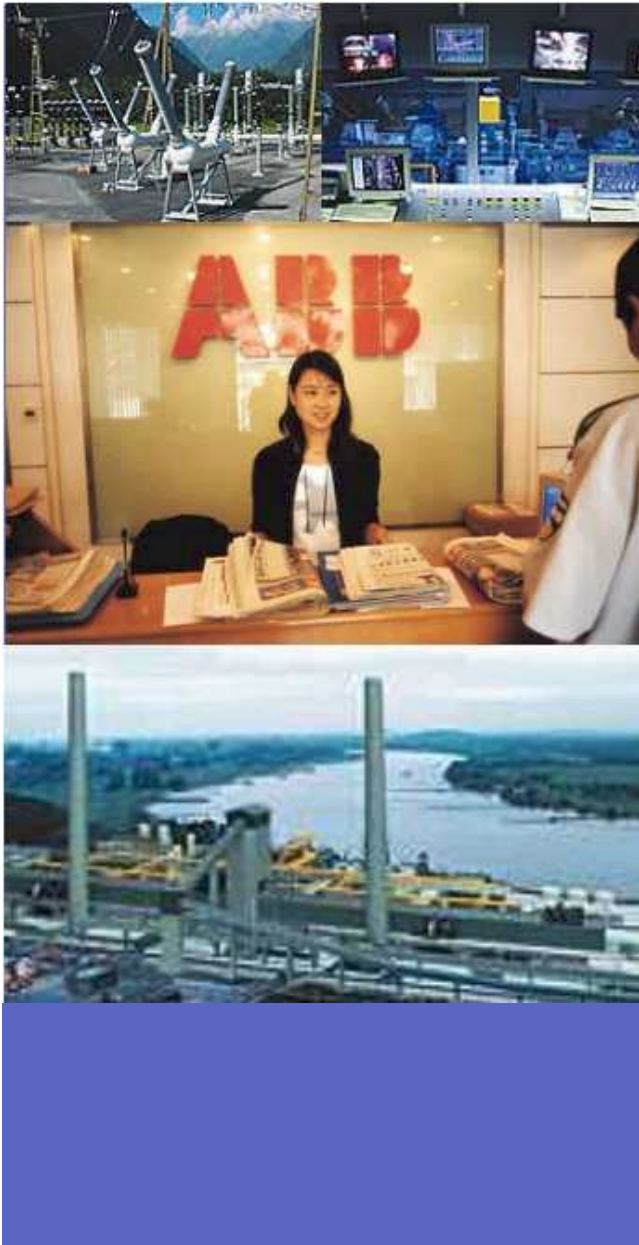
Dinesh C. Paliwal



**ABB Finland:  
A technology and  
strategy leader**



# Key facts: ABB Group



- Two core divisions
  - Automation Technologies
  - Power Technologies
- About 133,000 employees in some 100 countries worldwide
- 2002 Revenues: US\$ 18.3 billion
- Headquarters: Zurich, Switzerland; Listed on stock exchanges in London/Zurich, Stockholm, Frankfurt and New York



# Key facts: ABB Automation Technologies



- About 56,000 employees in more than 100 countries
- 150 manufacturing, software and application centers
- 2002 Revenues: US\$ 8.6 billion
- Market-leading products, services, and systems
- Over 100 BUSD Automation Technologies installed base worldwide



# Automation business areas and market position



**Drives, Motors and Power Electronics**

**#1**



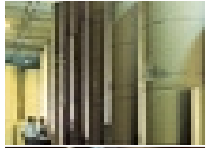
**Control Platform & Enterprise Products**

**#1**



**Low-Voltage Products & Instruments**

**#2 - 3**



**Paper, Minerals, Marine, & Turbocharging**

**#1**



**Robotics, Automotive & Manufacturing**

**#1 - 2**



**Petroleum, Chemical, & Consumer Products**

**#2 - 3**

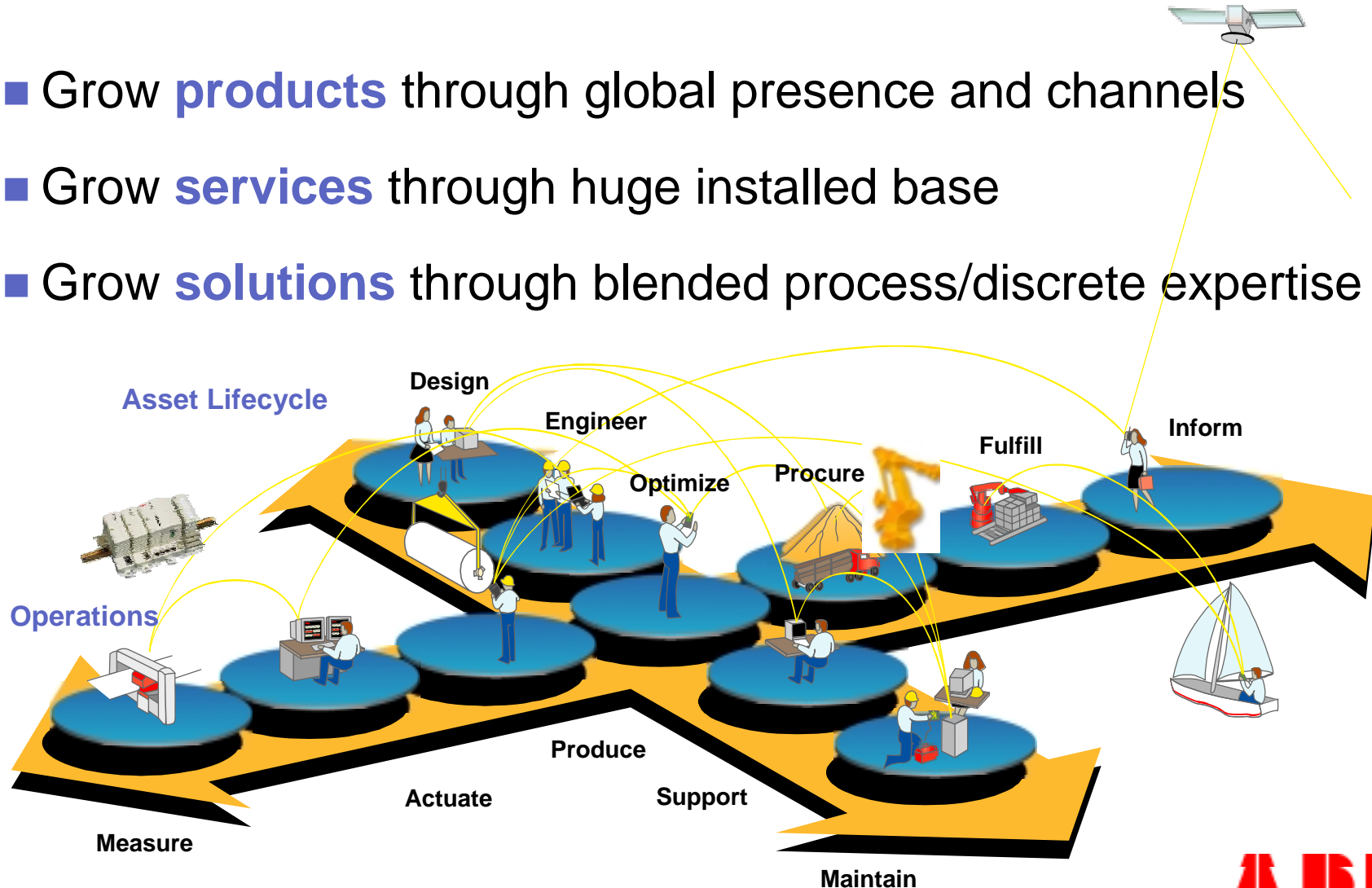
# Automation strategic priorities

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- Optimizing the business
  - Reduce cost structure (Step Change)
  - Portfolio (Rationalize overlapping products and processes)
  - Productivity (Fewer focused engineering centers)
- Building on a strong base
  - Penetration (Account and channel management)
  - Double-digit service growth
- Expansion and innovation
  - Products through Industrial IT
  - Services through performance-based offerings
  - Systems through value-chain penetration

# Automation technology priorities

- Grow **products** through global presence and channels
- Grow **services** through huge installed base
- Grow **solutions** through blended process/discrete expertise



# Automation performance and targets

<i>(MUS\$)</i> <i>Nominal Currencies</i>	<b>H1 2003</b>	<b>H1 2002</b>	<b><i>Change</i></b>
Orders	4,967	4,486	+ 11%
Revenues	4,693	4,032	+ 16%
EBIT	360	270	+ 33%
EBIT margin	7.7%	6.7%	

	<b>2002A</b>	<b>2003</b>	<b>2005</b>
Revenue growth	-0.3%	3.0%	3.3%*
EBIT margin	6.1%	7.1%	10.7%

\* – CAGR 2002-2005



# Automation Technologies Outlook

## ■ Regions



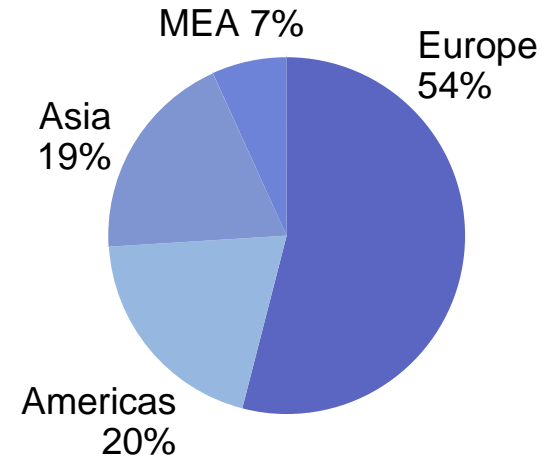
Europe flat

Americas slightly up

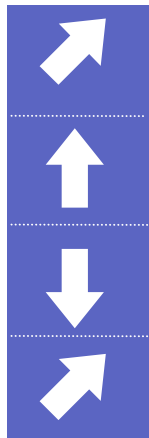
Asia continued growth

Middle East/Africa uncertain

2002 Orders by destination



## ■ Industries



Automotive

Chemicals and life sciences

Marine, minerals and paper

General industry





# The focus for your Helsinki visit



## Key Deliverables:

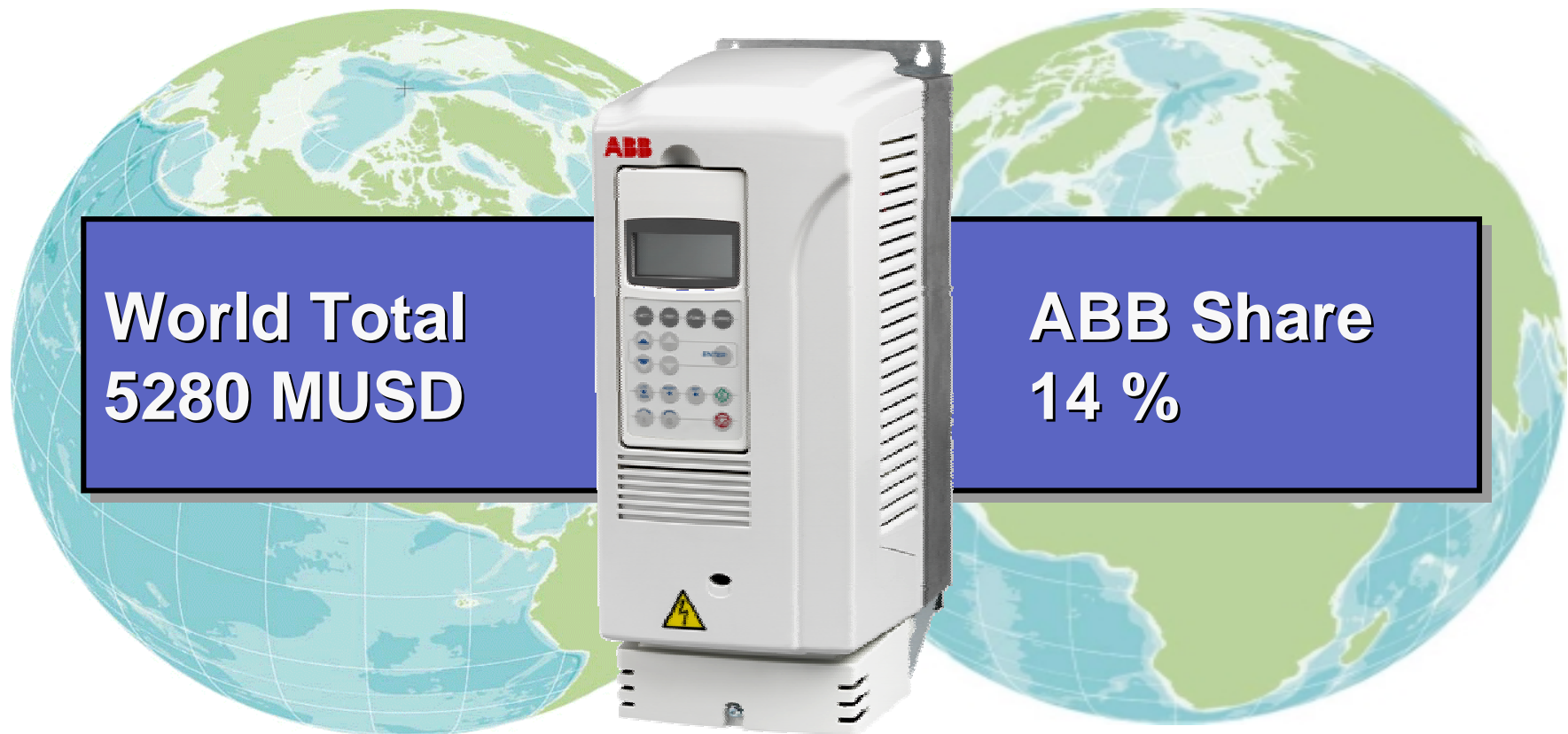
- Low/Medium Voltage Drives (ATDM)
- Low/High Voltage Motors and Generators (ATDM)
- Azipod propulsion systems (ATPM)

## Customers Served:

- Drives and Motors: OEMs, distributors and end users within building automation, marine, power, transportation, manufacturing and process industries
- Azipod propulsion: Cruise, ferry and oil and gas vessels
- Together, these account for some 1.5 BUSD in ABB turnover



# ABB is the world leader in low-voltage drives



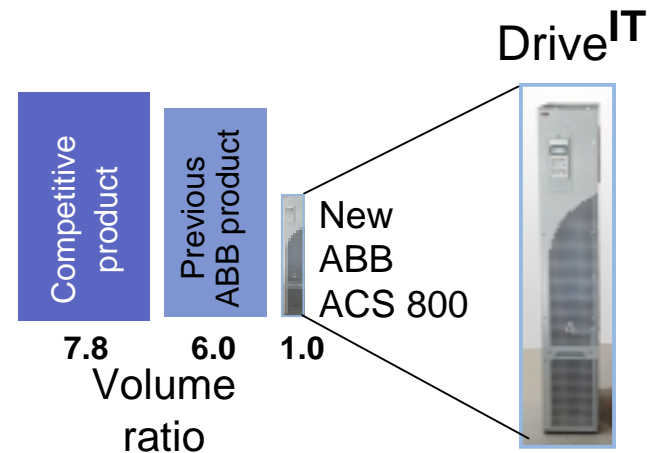
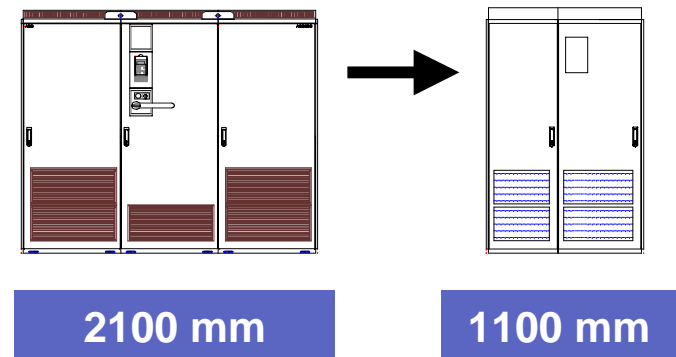
Source: ARC Advisory Group



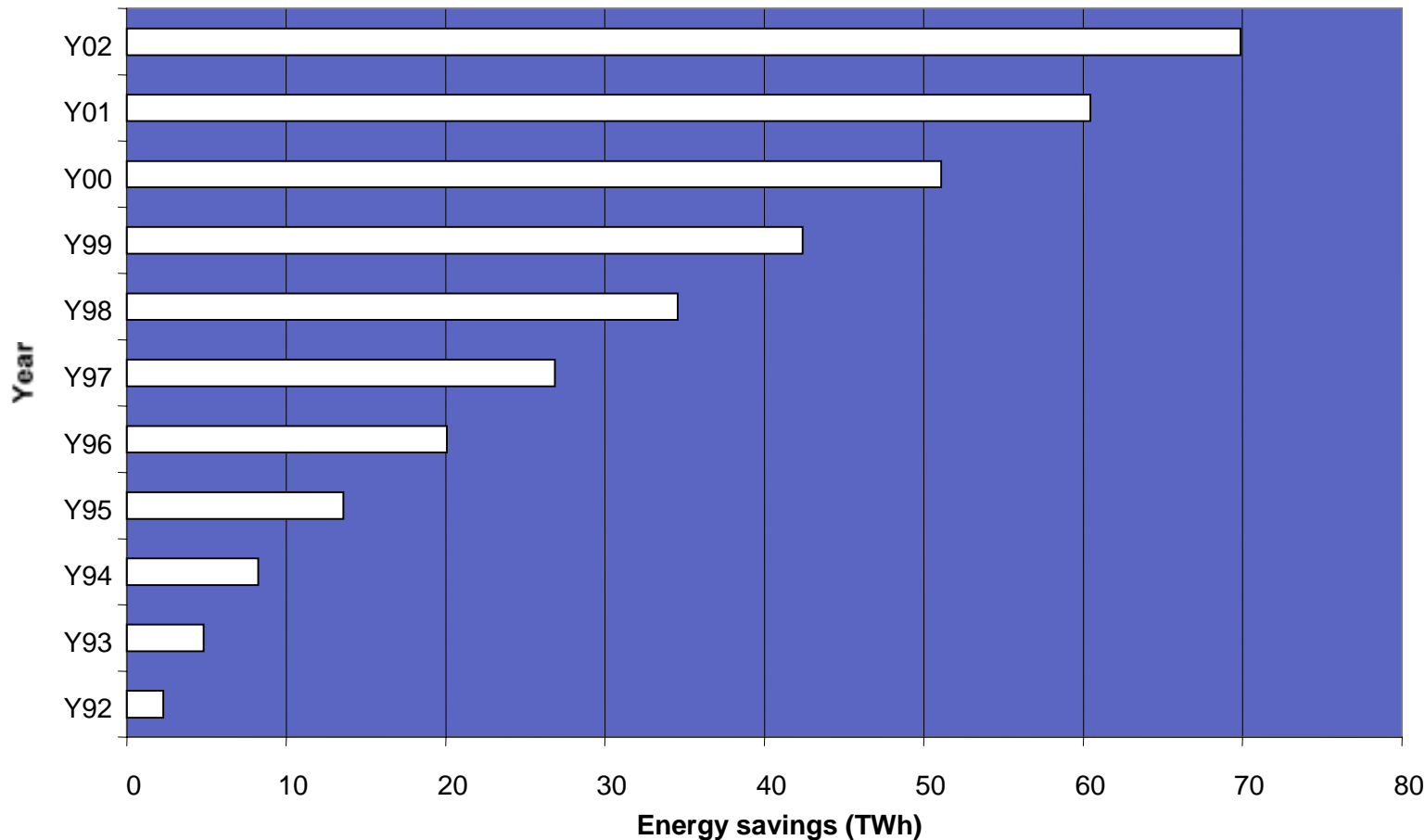
# Drives technology: Smaller, simpler, more powerful

(New ACS 800 range)

- 75% fewer components
- 50% smaller in size
- 45% Reduction in Cycle Time  
(18 to 10 days)
- Size reduced by a factor of six for high Horse Power range
- Industrial<sup>IT</sup> certified



# Cumulative energy savings from ABB drives



- ABB drives have saved 70 TWh in little more than a decade
- ABB drives have reduced CO<sub>2</sub> emissions by 59 million tons

Source: ABB Calculations



# Dramatic drives opportunities remain

- Even today only 5% of electrical motors are controlled by a variable speed drive
- Our R&D and marketing efforts focus on increasing the penetration rate
  - by making drives easier to use
  - by making drives smaller
  - by making drives more cost-effective



# Motors and generators: Best in class



- Market leader: **Number 1** in high voltage and low voltage motors
- Strong position both in standard and engineered-to-order motors and generators
- Best logistics system on the market for stocked motors
- Modular construction of engineered motors ensure short delivery times
- Global sales and service network

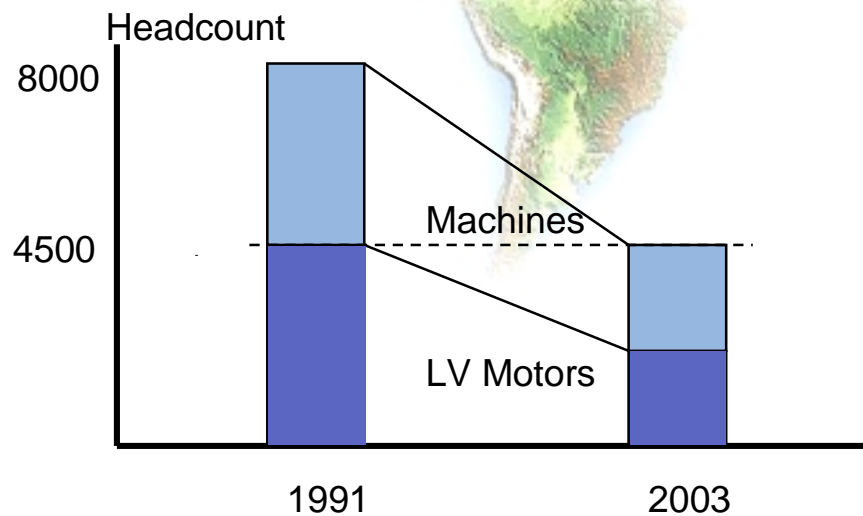




# Motors and generators: Focused factory leadership

Manufacturing focused in **High Productivity** countries

■ ES	Motors
■ CN	Motors
■ IN	Motors
■ FR	Machines
■ ZA	Machines
■ FI	Motors and Machines
■ SE	Motors and Machines
■ IT	Motors and Machines



- Closed or divested 10 high-cost, low productivity factories
- Revenue per employee: 90 → 160 KUSD



# Motors and generators: Success stories 2003

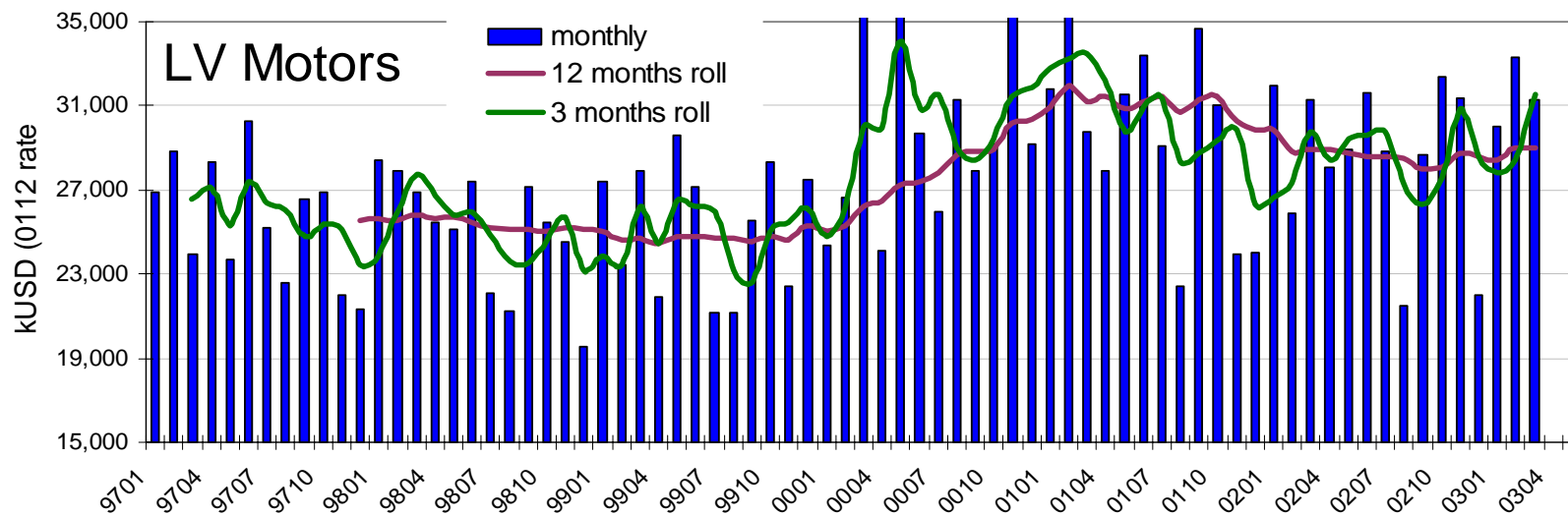
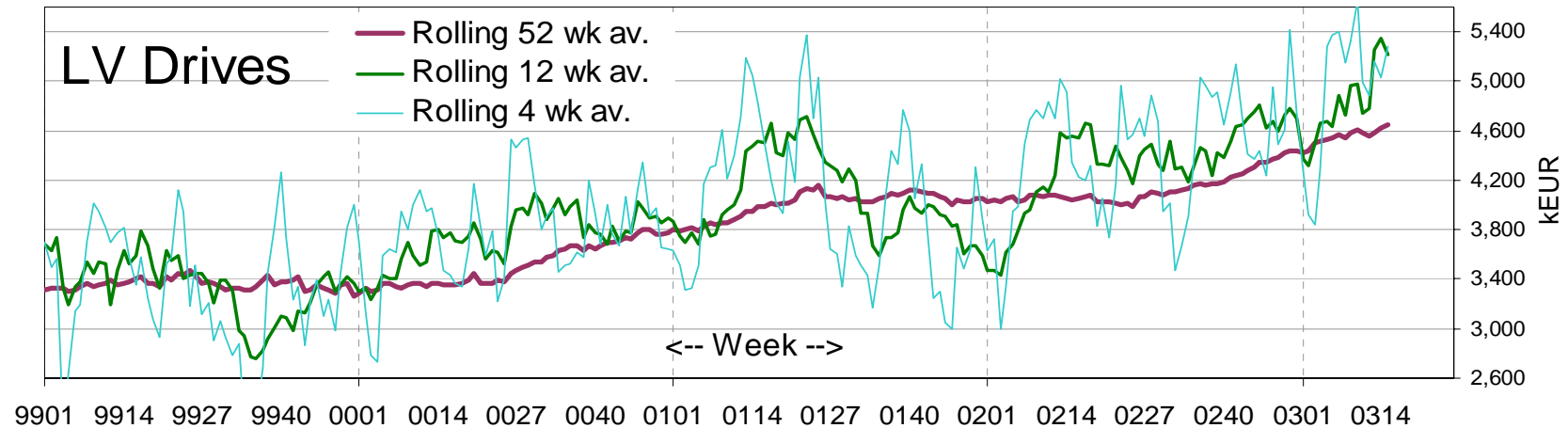


- World's biggest synchronous motor for pulp & paper industry in Canada
- World's biggest synchronous compressor motor for oil & gas industry
- Permanent magnet motors delivered to Direct Drives
- ATEX certified motors for hazardous areas
- Wind turbine generators; and generator and drives packages for wind power

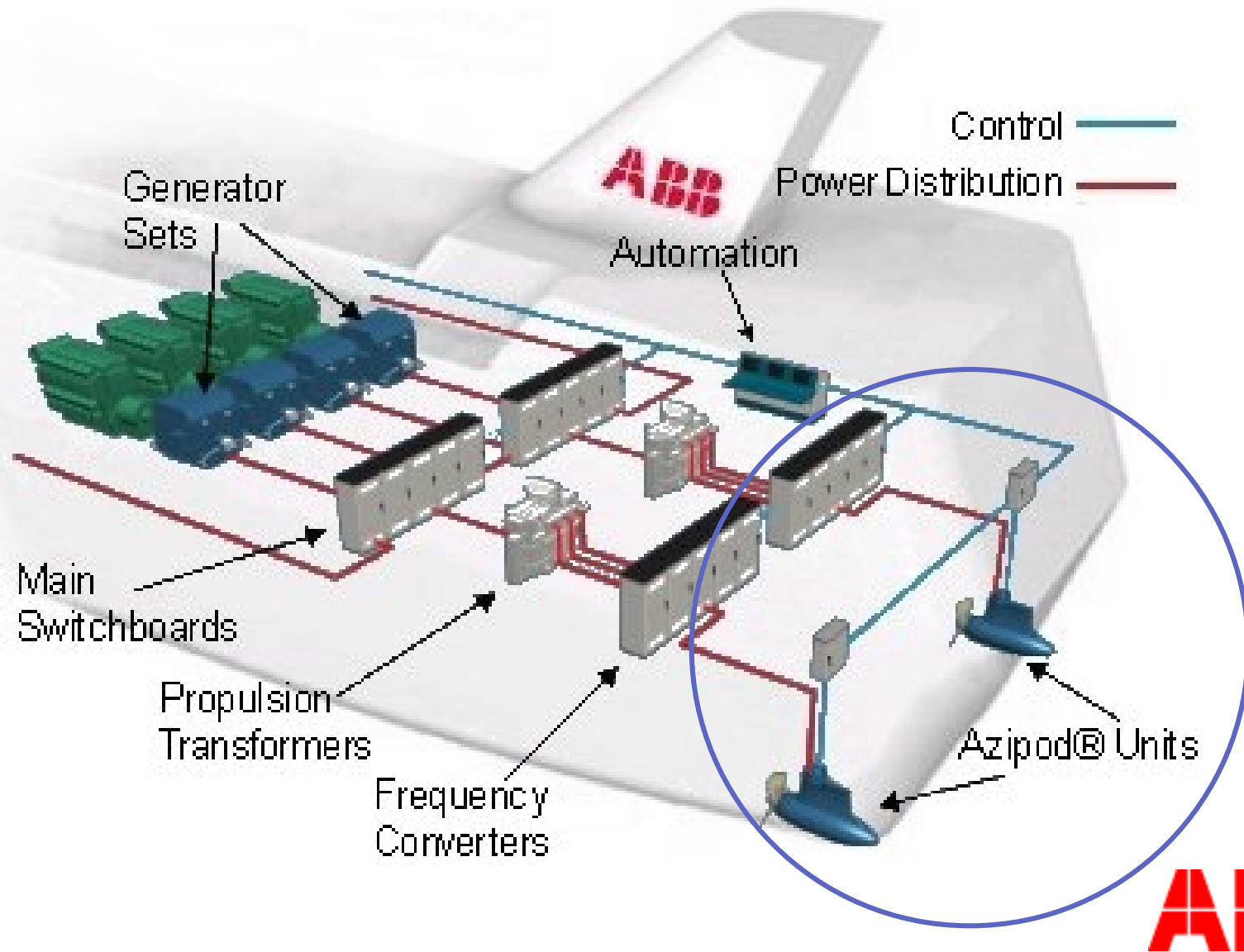
**ABB**



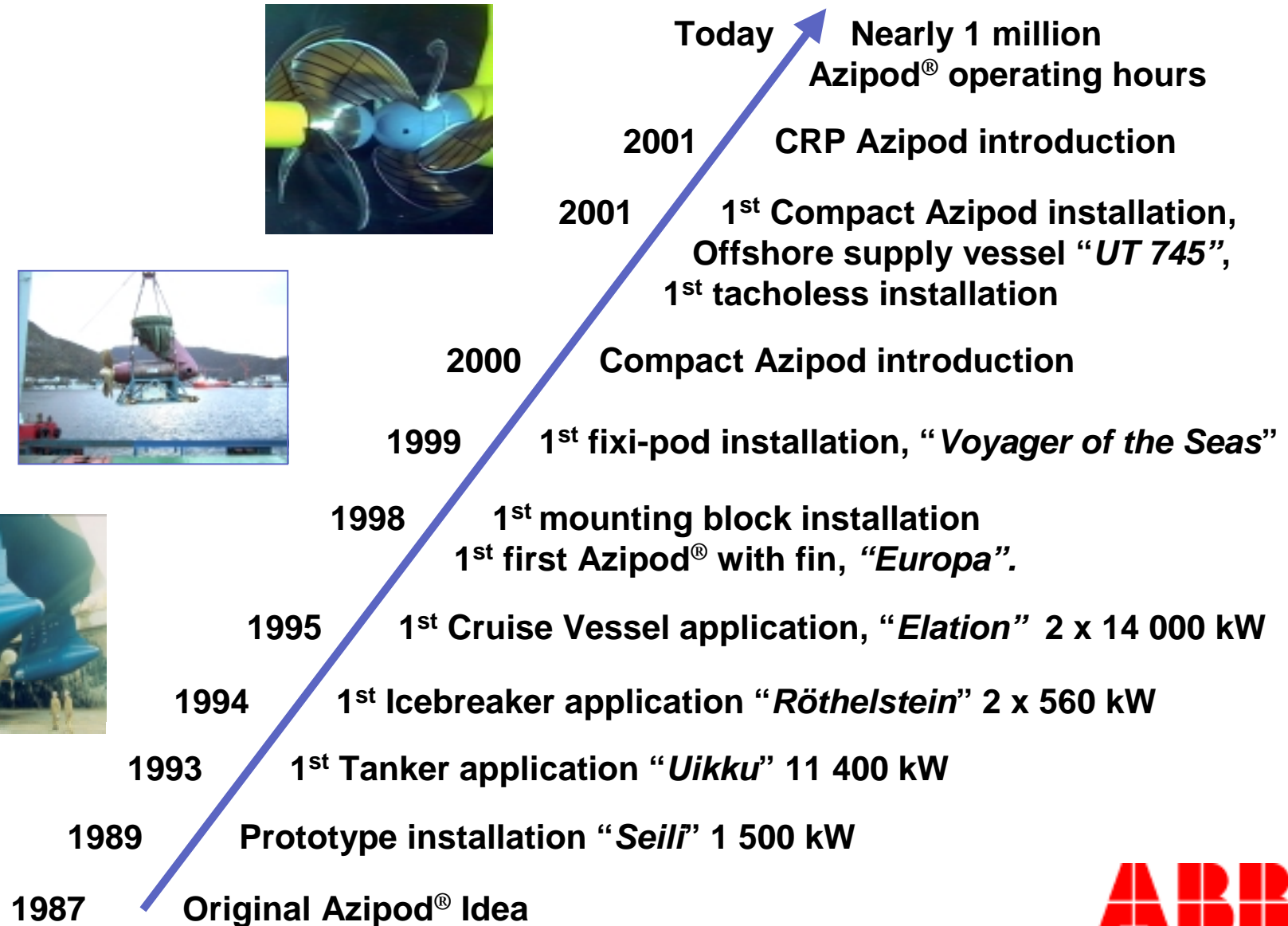
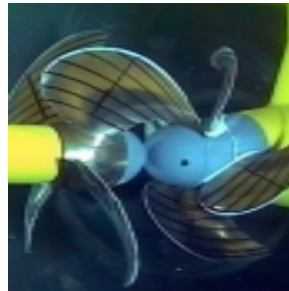
# Strong order development: 1999 - 2003



# Drives and motors come together in marine

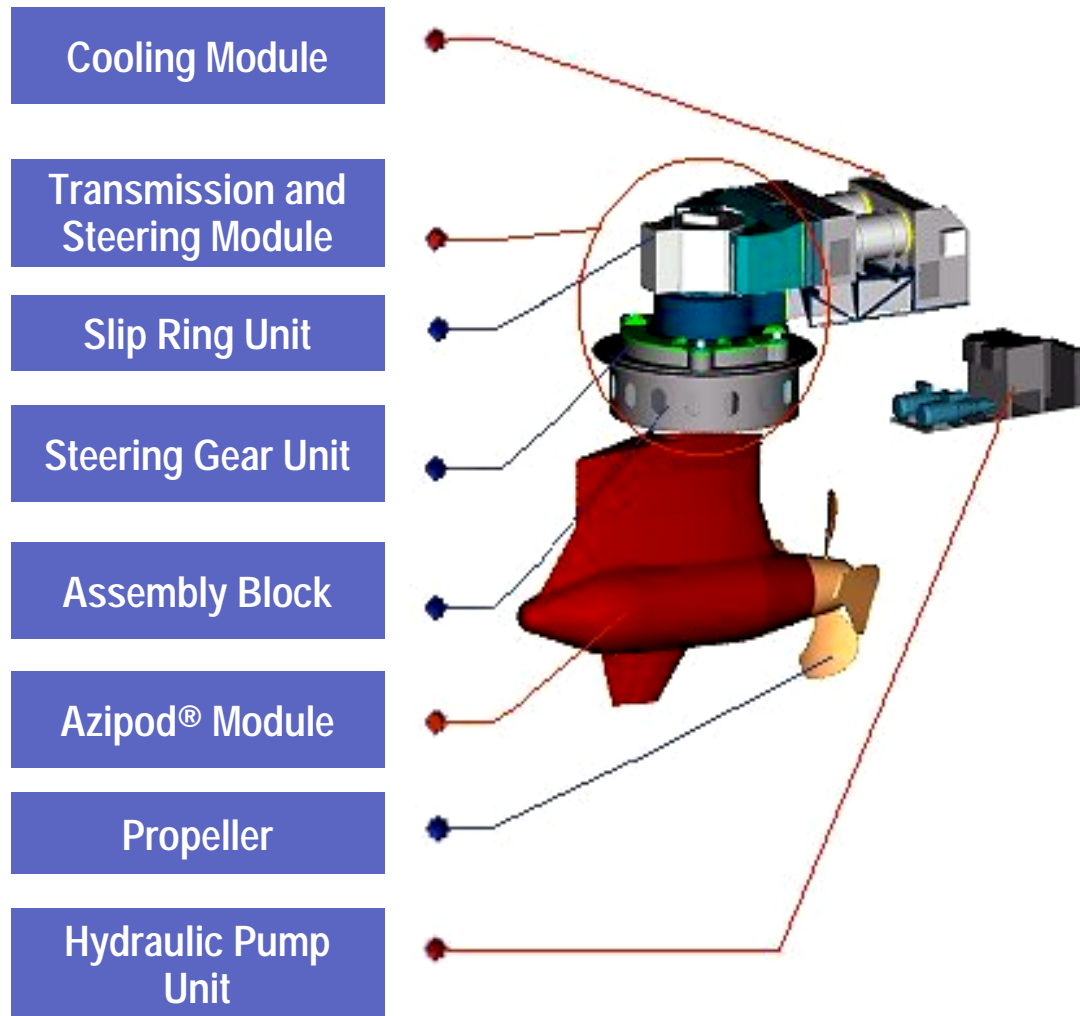


# Azipod propulsion: A rich history



# Azipod propulsion: All-in-one simplicity

- Saves fuel
- Saves space
- Improves maneuverability



# ABB in Finland

- A world hub for drives, motors, and Azipod propulsion
- High technology; High productivity; High performance!

