

Automation business line offering



Distributed Control Systems (DCS)

- DCS for process and plant controls
- Condition monitoring
- Information management
- APC (advanced process control)
- · Industrial Internet applications



Quality Management Systems (QMS)

- QCS (quality control systems)
- Profilers
- Web inspection and web break analysis systems



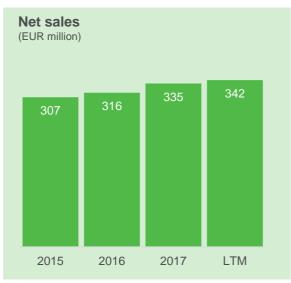
Analyzers and measurements

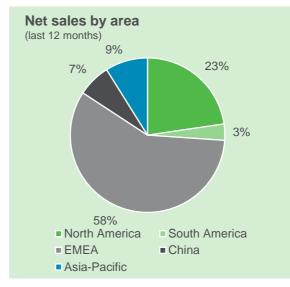
- Paper analyzers
- Pulp analyzers
- Pulp consistency measurements
- Conductivity measurements
- Power analyzers

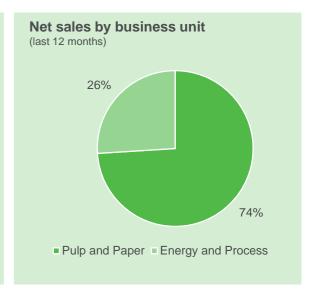


Automation key figures at a glance









Market drivers



Ageing machines and installed automation systems



Investments in new pulp and paper machines and power plants



Demand for raw material savings, process efficiencies and sustainability



Demand for Industrial Internet based solutions

Pulp and Paper	Market position #1-2	Market share ~20%	Estimated market size	Long-term market growth ~1%
Energy and Process	Market position #2-4	Market share ~10%	Estimated market size	Long-term market growth ~1%

2017 financials have been restated following the adoption of IFRS 15. LTM = Last 12 months, refers to the period July 1, 2017 - June 30, 2018



Recent development

Recent development

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- · Valmet package sales all-time high
- Progress in new business areas: marine, converting and LNG
- Continuous installed base growth
- Good progress in R&D and product renewal 55% of sales from products commercialized within five years
- · Strong development funnel to strengthen our technology leadership in core segments
- Solid operations performance in response to business growth
- Continued profitable growth
- Further strengthened our service capability in new regions
- Investment into sales & operations development through global training programs

New products and applications

- Renewed QCS product family: launched also to converting
- New analyzers launched
- · Integrated operations application launched and delivered for LNG terminals and distribution management
- · Industrial Internet: Performance Center. Customer Portal, Performance applications





Actions to grow and improve profitability

Actions to grow and improve profitability

<u>Sustome</u>

logy

Technology

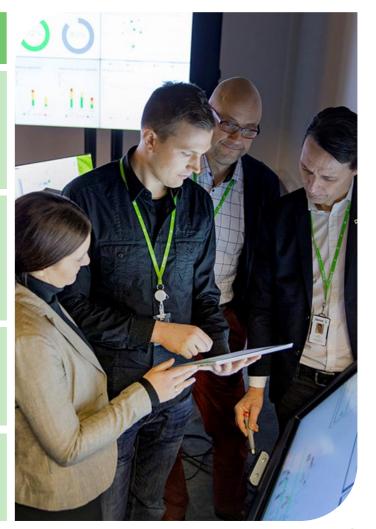
Process

People

- Grow market share through competitor installed base replacements
- Enforce Valmet synergies to key customer segments
- · Grow through new industries: marine, converting, LNG and biogas
- · Grow automation services through footprint, capability and winning installed base

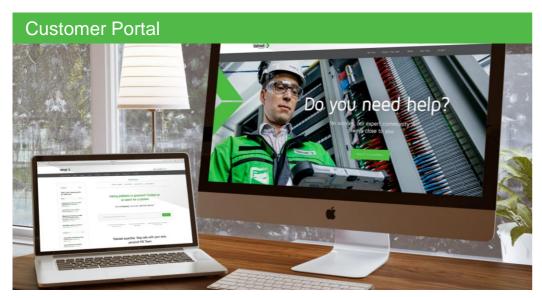
Keep market leadership in Pulp and Paper including Industrial Internet

- Technology renewal and development: continue new product releases for converting and process
- Continue development of performance and operations software solutions like integrated operations
- Leap forward in efficiency through new ERP and streamlined operations
- Utilize Industrial Internet opportunities in deliveries and customer agreements
- Develop services capability through further recruitment, onboarding and training close to customers
- Manage performance in sales and delivery processes

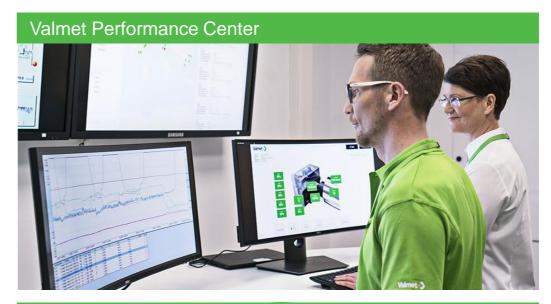




Growth accelerator: Industrial Internet and digitalization





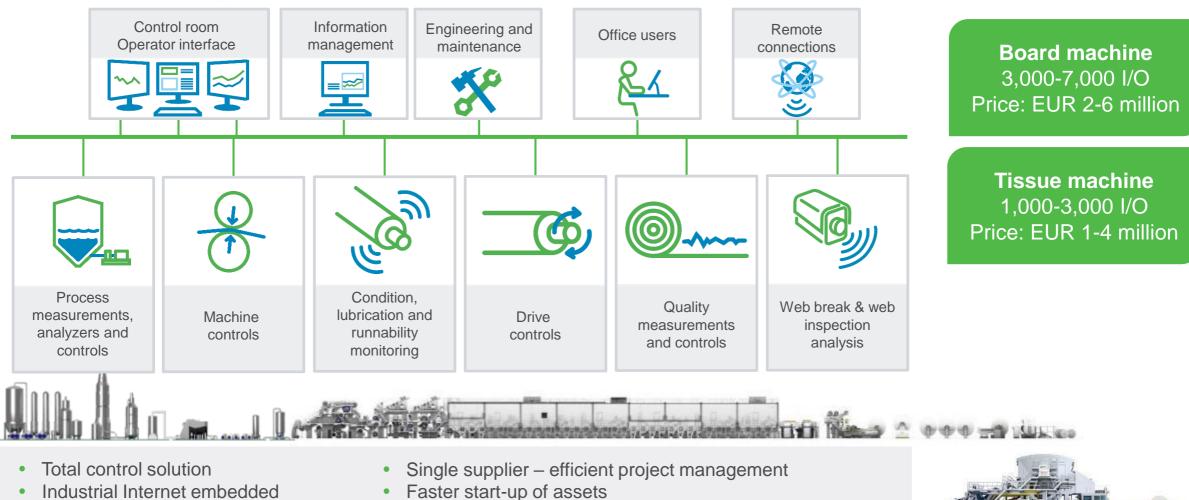






Automation projects and services: Board and Tissue machines

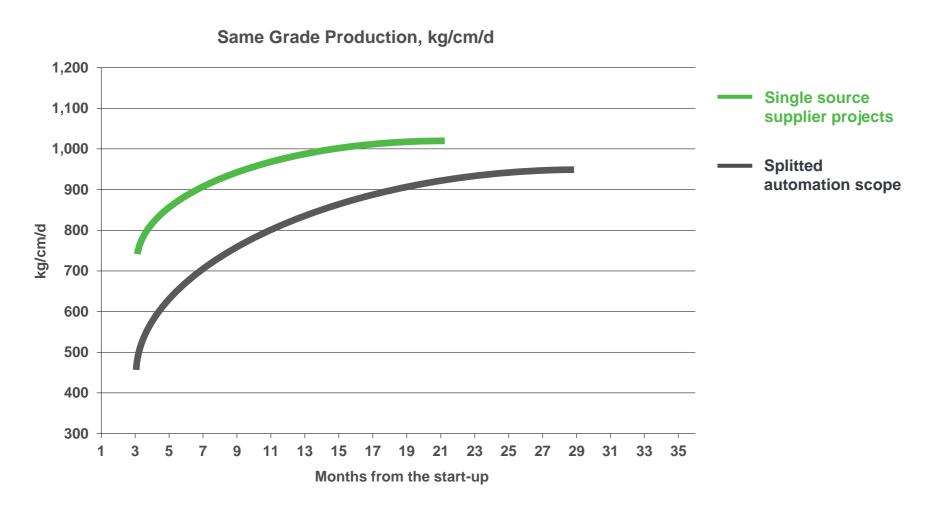
Automation delivery content and service scope





Single source supplier makes the difference

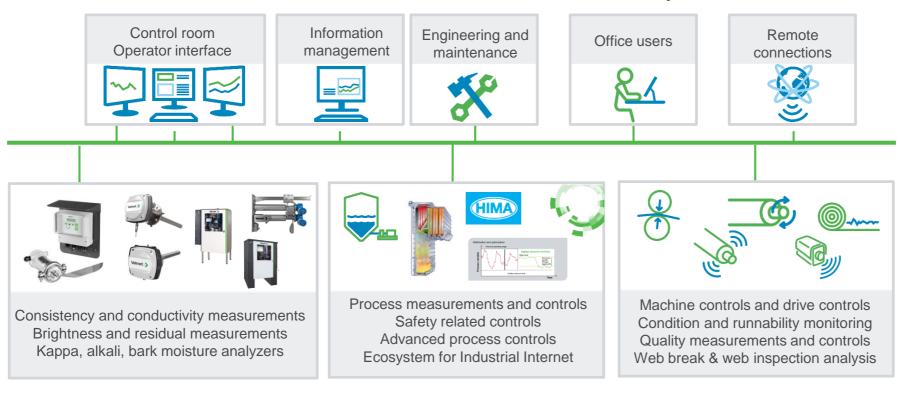
Faster start-up and more sellable production





Common automation platform for Pulp mill

Valmet DNA is scalable from MCS to QCS to DCS and beyond



Pulp mill 30,000 I/O

Price: EUR 13 million

- Common operator interface
- Common data collection
- One common engineering tool

- Help pages for interlocks
- No links needed between systems
- Valmet Industrial Internet solutions



Main growth from expanding installed base

Competitor replacements since 2015



Replacing competitors' installed base (DCS)

- > 200 DCS systems replaced in Pulp & Paper
- 16% market share in new cruise ships
- Successful entry into marine retrofits
- Individual project from few k€ to 5M€



Replacing competitors' installed base (QCS)

- > 300 QCS systems replaced in Pulp & Paper
- New installed base generated in converting
- Individual project delivery from 100k€ to 1M€



Analyzers and measurements

- 60 competitor analyzers replaced
- > 300 own analyzers retrofitted
- Individual order from few k€ to 1M€



