



# Valmet in North America



Valmet

## Valmet

Leading global developer and supplier of process technologies, automation and services for the pulp, paper and energy industries

# Process technology, services and automation

Valmet's unique offering differentiates the company from its competitors



# Our offering by business line

## Paper

- Recycled fiber lines
- Tailor-made board and paper machines
- Modularized board and paper machines
- Tissue production lines
- Modernizations and grade conversions
- Standalone products

## Pulp and Energy

- Complete pulp mills
- Sections and solutions for pulp production
- Multifuel boilers
- Biomass and waste gasification
- Emission control systems
- Biotechnology solutions e.g. for producing bio fuels

## Services

- Spare parts and consumables
- Paper machine clothing and filter fabrics
- Rolls and workshop services
- Mill and plant improvements
- Maintenance outsourcing
- Services energy and environmental solutions

## Automation

- Distributed control systems
- Quality control systems
- Analyzers and measurements
- Performance solutions
- Process simulators
- Safety solutions
- Industrial Internet solutions



Focus in customer benefits

# Continuous Investment in Research and Development

Y R&D specialists in each business

Y Pilot and research facilities

## Pulp

- Chemical, mechanical and recycled fiber pulping
- Bleaching
- Air systems

## Paper

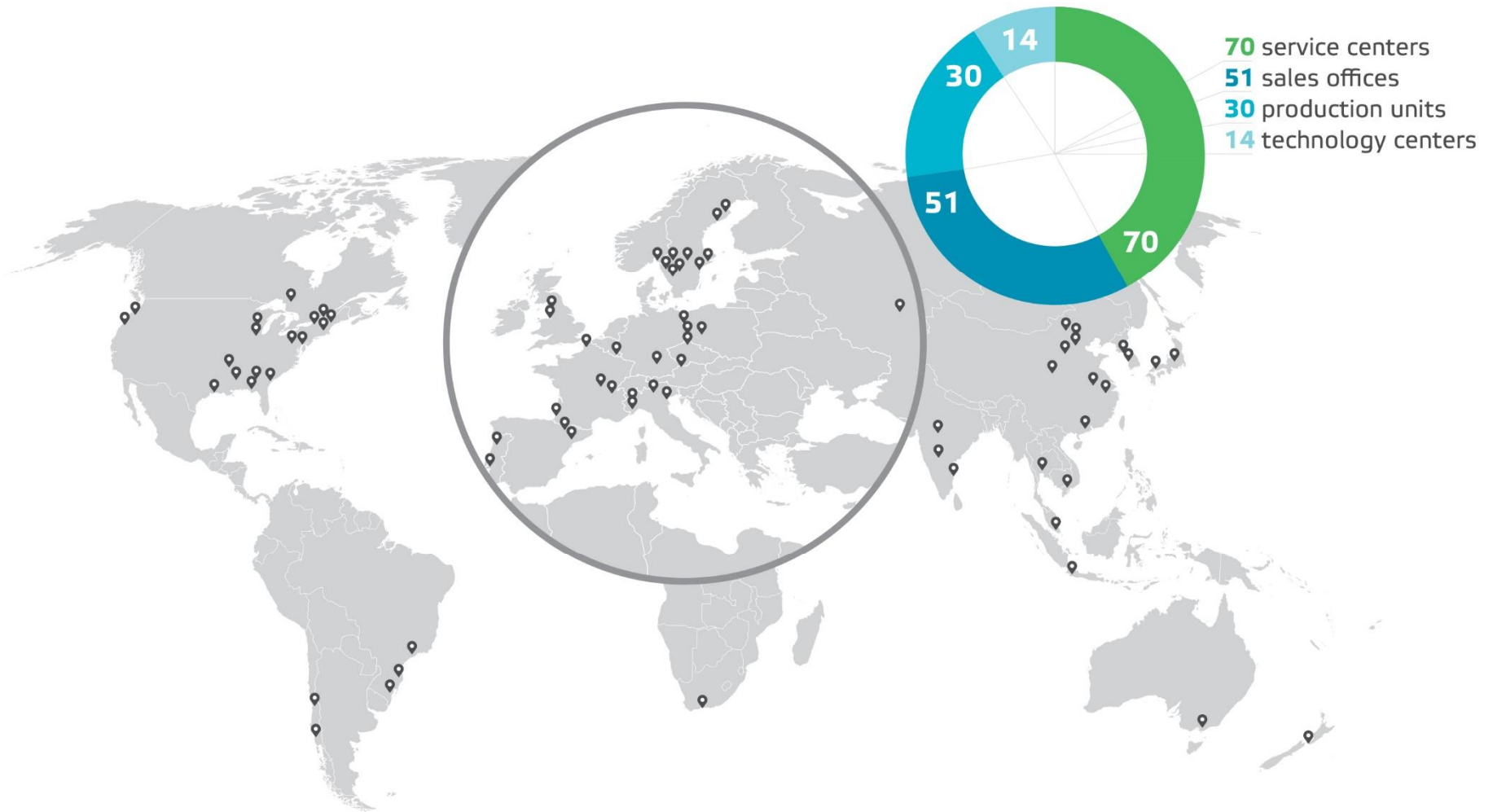
- Paper and board machines
- Tissue machines
- Coating, calendering and winding
- Air systems
- Printing with Forest Pilot Center

## Energy production



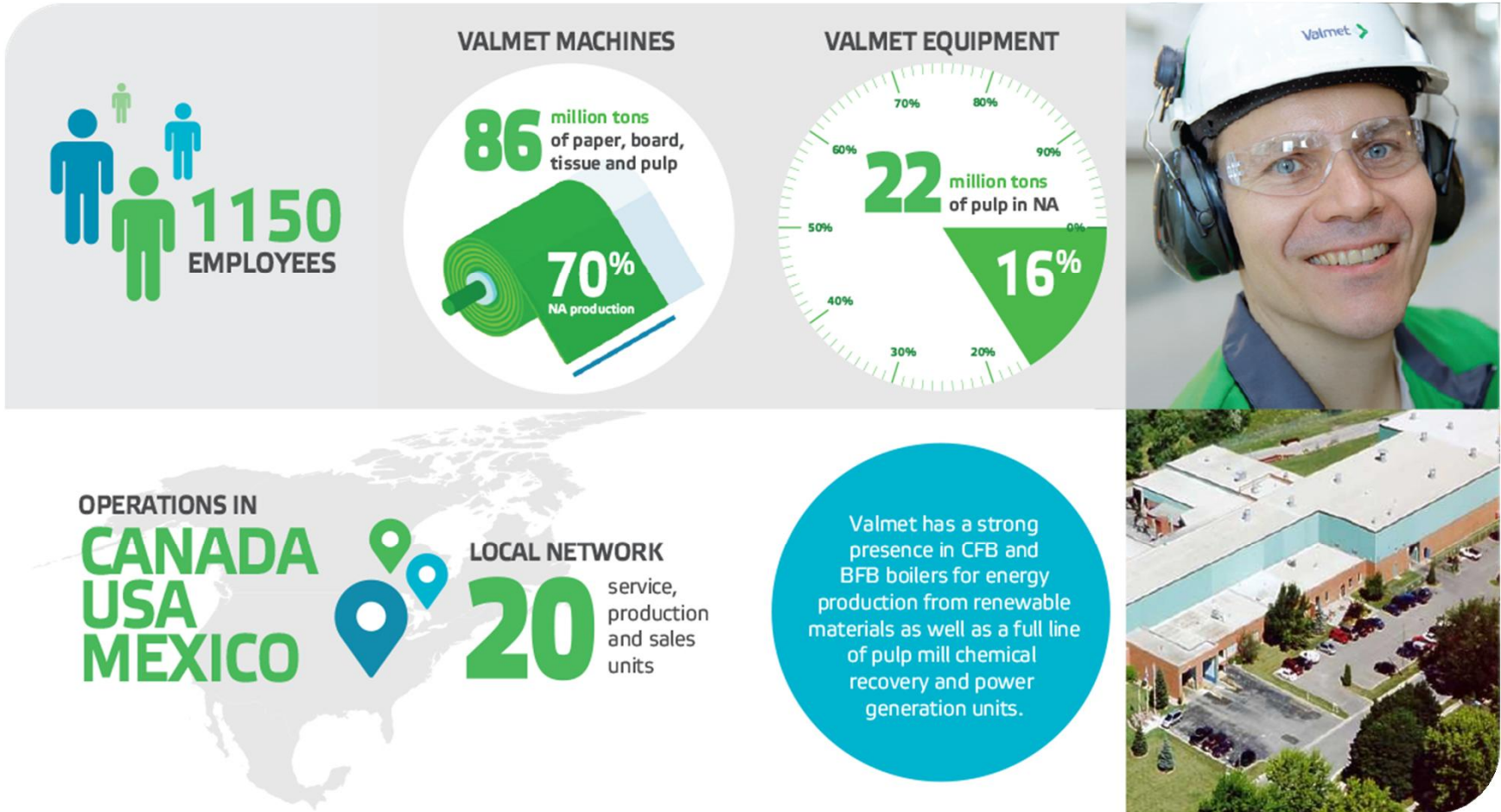
# Strong Global Presence Close to our Customers

Over 100 locations in 30 countries

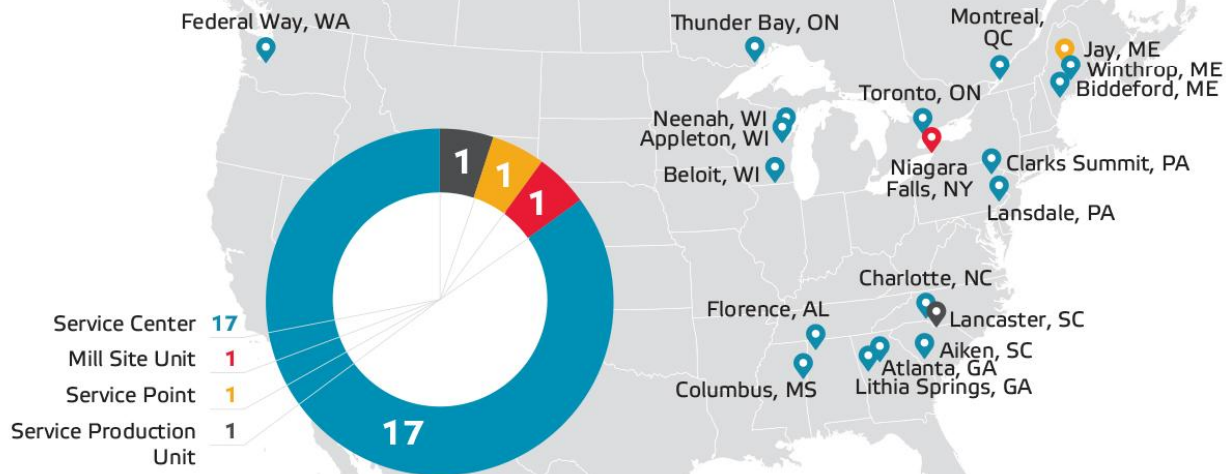


# Valmet in North America

Supporting pulp, paper and energy industries



# Strong Presence in North America

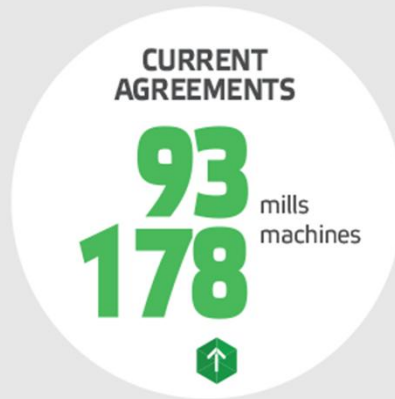
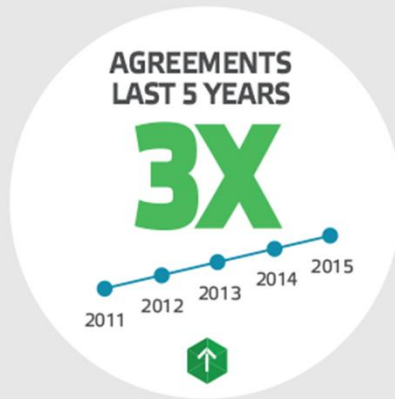




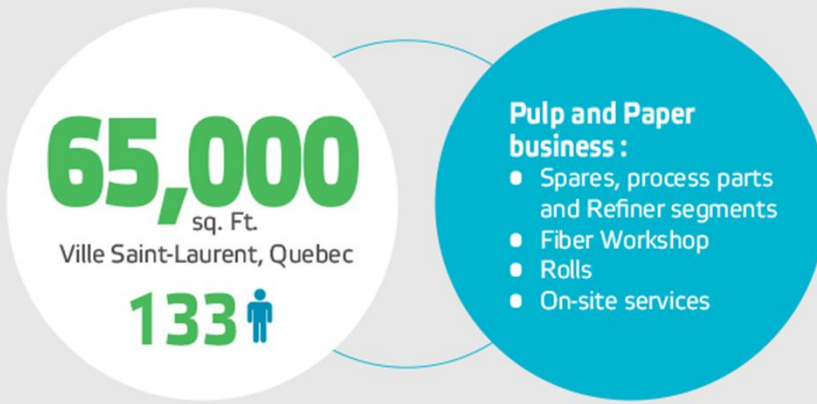
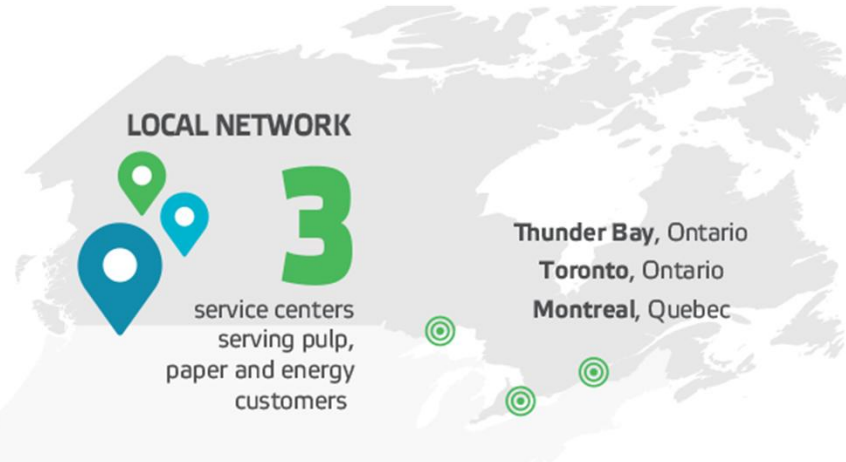
# Valmet in the U.S.A



Long term agreement business has become a norm in the U.S.A.



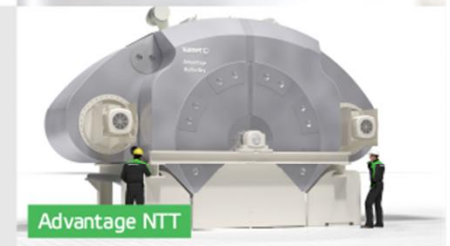
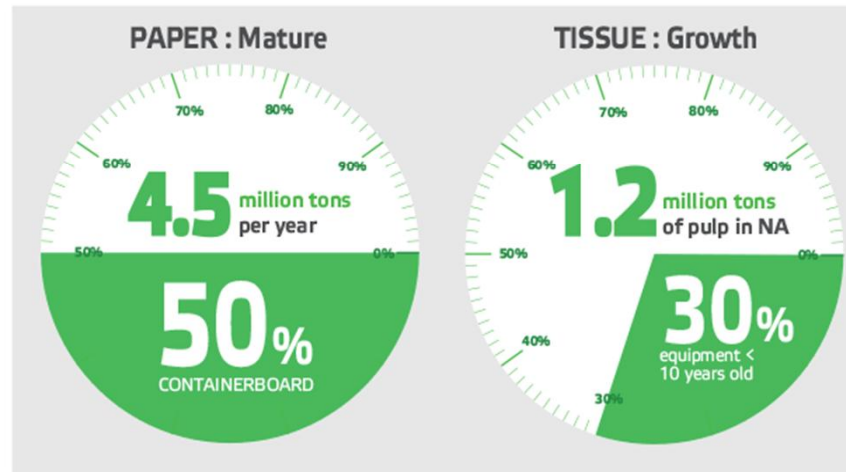
# Valmet in Canada



# Valmet in Mexico



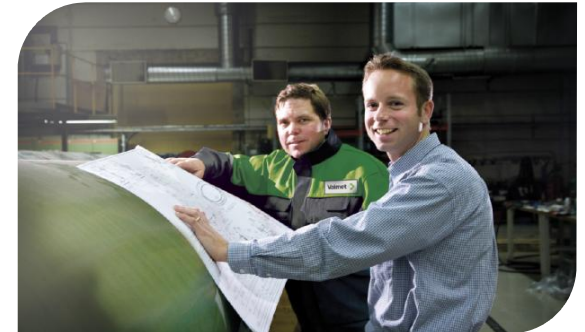
**24** mills have production equipment from Valmet





# Customer Base

# Strong Customer Base Across Pulp, Paper and Energy Industries



## Key customers



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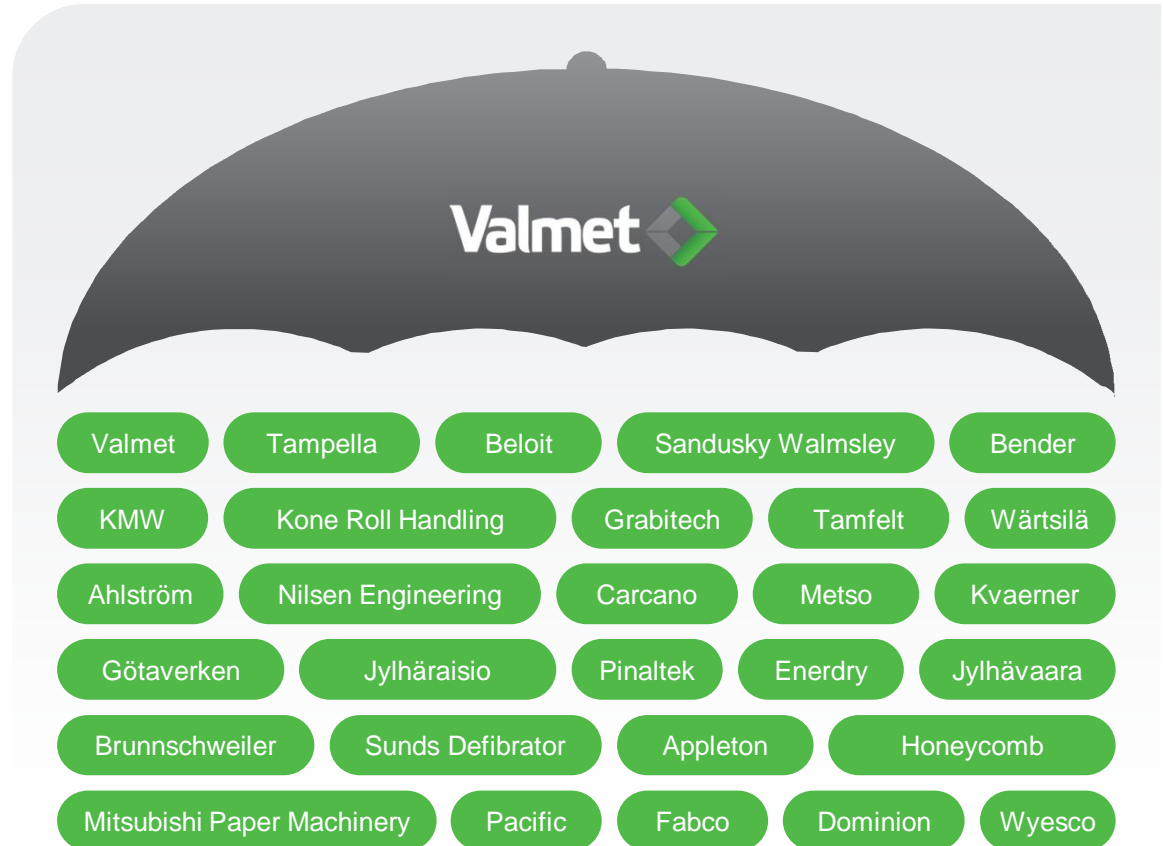
# Example of key customers in North America



# OEM Services to a Wide Machinery Base Worldwide

**Valmet** offers a full range of services regardless of the original supplier of the equipment

As a result of acquisitions and mergers, Valmet has a wide technology base to provide and develop OEM services further





# Services Offering



# Valmet Services

Leading technologies and expertise close to customers

Increased reliability

Improved performance

Reduced costs



Global presence with comprehensive offering

Local service shops and service experts

Permanent presence at customer sites

Long-term partnership with focus on quality and safety improvements

Products and components

Maintenance and repair programs

Process consumable programs

Maintenance outsourcing

Production improvement projects

Analysis & consulting, remote data management

# Performance Parts

for reliable production and improved process performance



- ÿ Leading technology in screen baskets, refiner and grinder segments and paper process wear parts (doctor blades, sizers etc.)
- ÿ Spare parts supplied from four logistic centers in three continents
- ÿ Consignment stock and other tailor-made agreements
- ÿ Exchange unit services
- ÿ Inventory management

## Facts

- ÿ 200 process parts agreements
- ÿ Over 100,000 item codes
- ÿ 4 logistic centers with 10,000 items in stock

## Results

- ÿ Improved process performance
- ÿ Easy access to local service and support
- ÿ Reliable spare parts deliveries

# Paper Machine Clothing and Filter Fabrics

Optimum design for all positions and needs



## Think of us as your personal tailor

- ÿ Forming fabrics for all former types
- ÿ Press felts and fabrics for efficient pressing
- ÿ Shoe press belts for long and trouble-free running
- ÿ Dryer fabrics for increased drying rate
- ÿ Filter fabrics for various demanding wet filtration applications in the pulp, paper, mining and chemical industries as well as dry filtration applications

## Facts

- ÿ 60 paper machine clothing agreements
- ÿ 350 paper machine clothing customers
- ÿ 800 filter fabric customers

## Results

- ÿ Top class clothing performance
- ÿ Improved overall efficiency
- ÿ High quality end product
- ÿ Energy savings

# Services for Energy and Environmental solutions



- ÿ Services for evaporation plants, power and recovery boilers and environmental equipment
- ÿ Safety focus in product development and offering
- ÿ Chemical recovery solutions for pulp mills
- ÿ Process support and optimization
- ÿ Inspections, maintenance and shut down services
- ÿ Training
- ÿ Long-term services agreements

## Facts

- ÿ Leading supplier of Recovery Island Solutions
- ÿ Recovery and power boiler services

## Results

- ÿ Safer operation of plant
- ÿ Increased production
- ÿ Lower operating costs
- ÿ Better environmental performance

# Rolls and Workshop Services

360° Rolls: Up with performance, down with costs



- ÿ Valmet has know-how on both the rolls and the papermaking process to apply on roll performance
- ÿ We ensure efficiency with comprehensive roll services and solutions with best fit to the purpose
- ÿ Roll service network with over 1000 roll service professionals and over 20 roll service centers for continuous support and collaboration with the mills
- ÿ Get better results with a 360° view of your rolls

24/7 Roll service

ÿ 100% commitment

Every year

ÿ 1000+ mills serviced

ÿ 10,000+ rolls serviced

Results

ÿ Improved efficiency

ÿ Less unscheduled shutdowns

ÿ Reliable spare parts deliveries

# Mill and Plant Improvements

Optimized production line performance throughout its life cycle



- ÿ Process improvement services
- ÿ Production support services and process development cooperation
- ÿ Maintenance services
- ÿ Maintenance outsourcing
- ÿ Relocation services for equipment and production lines
- ÿ Shutdown services

## Facts

- ÿ 5000 on-site projects annually
- ÿ 40 on-site service agreements
- ÿ Maintenance outsourcing agreements for 11 production lines

## Results

- ÿ More uptime
- ÿ Lower operating costs
- ÿ Energy savings
- ÿ Improved paper quality
- ÿ Improved efficiency through well-organized maintenance

# Valmet's Environmental Solutions

Consume less, save the environment, add profitability



Energy efficiency solutions



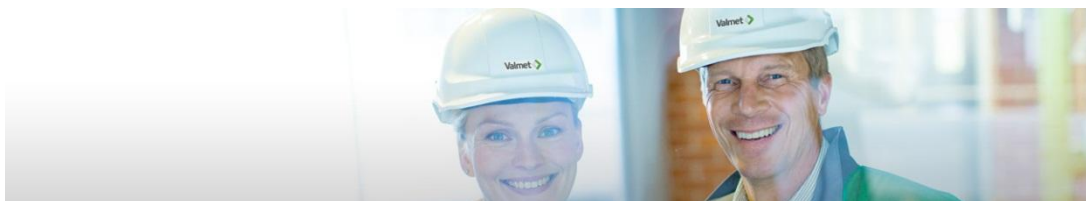
Water management



Material efficiency



Emissions reduction  
and control



Working environment  
improvements

# Some NA References



# Multi-Year Mill Maintenance Agreement

## The agreement includes:

- Recruitment of all maintenance personnel prior to start-up
- Establishment of Total Productive Maintenance (TPM) and condition-based maintenance procedures
- Full responsibility for mill maintenance operations for all production facilities
- Focus on improving reliability and maximizing availability
- Several additional long-term service agreements covering e.g. roll service and paper machine clothing

## Greenpac Mill

Niagara Falls, N.Y., USA  
Board Mill

Case



# LignoBoost at Domtar

World's First Commercial Installation

LignoBoost™ lignin separation process connected to pulp mill chemical recovery

- Lignin can be utilized as renewable fuel replacing fossil fuels and as new bio-material for many industries
- Increase of pulp production capacity by 5% and efficiency by off-loading the recovery boiler

LignoBoost at Domtar  
Plymouth, NC, USA

Case



# Tissue Line at Fabrica de Papel 1/2

World's First Advantage NTT

- ÿ The Advantage NTT concept is a new Valmet technology for producing premium quality textured tissue with high bulk and softness while using less energy and fiber
- ÿ The new tissue line will add another 30,000 tonnes per year of bathroom tissue, napkin and towel grades to Fabrica de Papel San Francisco's existing production

Advantage NTT tissue line  
Fabrica De Papel San Francisco, Mexico

Case



# Tissue Line at Fabrica de Papel 2/2

World's First Advantage NTT Fabrica De Papel San Francisco, Mexico

“We are very excited about the successful start-up, and the Advantage NTT technology has indeed met our high expectations. We strongly believe that this flexible concept will change the way tissue will be produced in the future. So far we have tested a large amount of different grades and basis weights, in both plain and textured mode, all with good result. We have actually set some production records with the new NTT concept.”

Dario Palma y Meza Espinoza  
Director of Operations

Advantage NTT Tissue Line  
Fabrica De Papel San Francisco, Mexico

Case



# Renewable Energy in Texas

## BFB Boiler at Nacogdoches

### Biomass fired power plant

- Bubbling fluidized bed (BFB) boiler plant fuelled by 100 percent non-merchantable wood

### Nacogdoches Generating Facility, Southern Company, Texas, USA

- Complete delivery with erected boiler island, flue gas cleaning system, automation and long-term service agreement

### Key benefit

- Renewable power to 70,000 homes in Texas helps to reduce CO<sub>2</sub> emissions

Largest biomass BFB boiler in the world

Case



