PULP AND PAPER

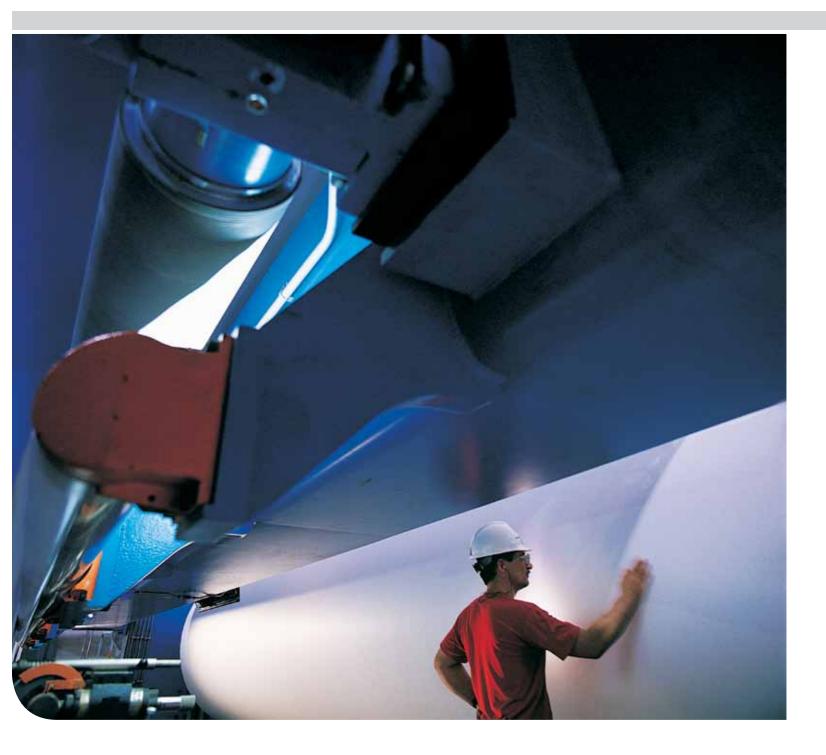
THE CHOICE OF SMOOTH PRODUCTIVITY

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DELIVERING BUSINESS-CRITICAL STRENGTH

No industry is as demanding as paper and pulp manufacturing when it comes to reliability and cost efficiency. When you need a single source for the best in positive displacement pump technologies - from components to pumps, turnkey systems to services - PCM is the partner of choice.

) PUMPS: A TRADITION OF RELIABILITY

For the past 80 years, PCM has been providing advanced pump technologies to a wide range of demanding industries. Our unmatched expertise is rooted in our origins: PCM was founded by René Moineau, the inventor of the progressing cavity pump. Today, we are one of the world's leading manufacturers of positive displacement pumps and fluidhandling equipment.



PROGRESSING CAVITY PUMPS: UNBEATABLE COMPETITIVENESS

Ideal for fragile, abrasive and viscous fluids, PCM Moineau[™] and EcoMoineau[™] progressing cavity pumps offer low Life Cycle Costs, thanks to their low energy consumption, inherent reliability and quick maintenance time.



> PERISTALTIC PUMPS: EASIEST MAINTENANCE

The gentle pumping action of PCM peristaltic or hose pumps is adapted to shear sensitive fluids. Their simplicity and robustness also make them ideal for medium flow, medium pressure pumping of abrasive, fragile and corrosive fluids. They are seal-less, easy to maintain, and their dry running ability enables unmanned container emptying.



> TURNKEY SYSTEMS: SIMPLIFYING PROCESS ENGINEERING

PCM turnkey solutions are an economical alternative to time-consuming on-site system installation. Plug and Play deployment eliminates the need to manage multiple suppliers and there are no hidden engineering costs. By installing standardized skid systems across your operations, you can reduce maintenance time and spare parts costs while maximizing operator safety.



YOUR PARTNER IN PULP AND PAPER MANUFACTURING

1 DE-INKING CHEMICAL APPLICATION

Chemicals additives used for de-inking lines, such as hydrogen peroxide, sodium hydroxide, sodium silicate, sodium hydrosulphite, sulphuric acid, soap, and coagulants are corrosive. PCM Chemskid combines dosing accuracy and operational safety: pumps and accessories are carefully selected and assembled in a customed turnkey solution.

2 STOCK PREPARATION

PCM Moineau[™] progressing cavity pumps with automated, controlled variable flow rates ensure the continuous feeding of the paper machine with the diluted paper pulp solution for the utmost process efficiency.

3 WET END CHEMICAL PREPARATION

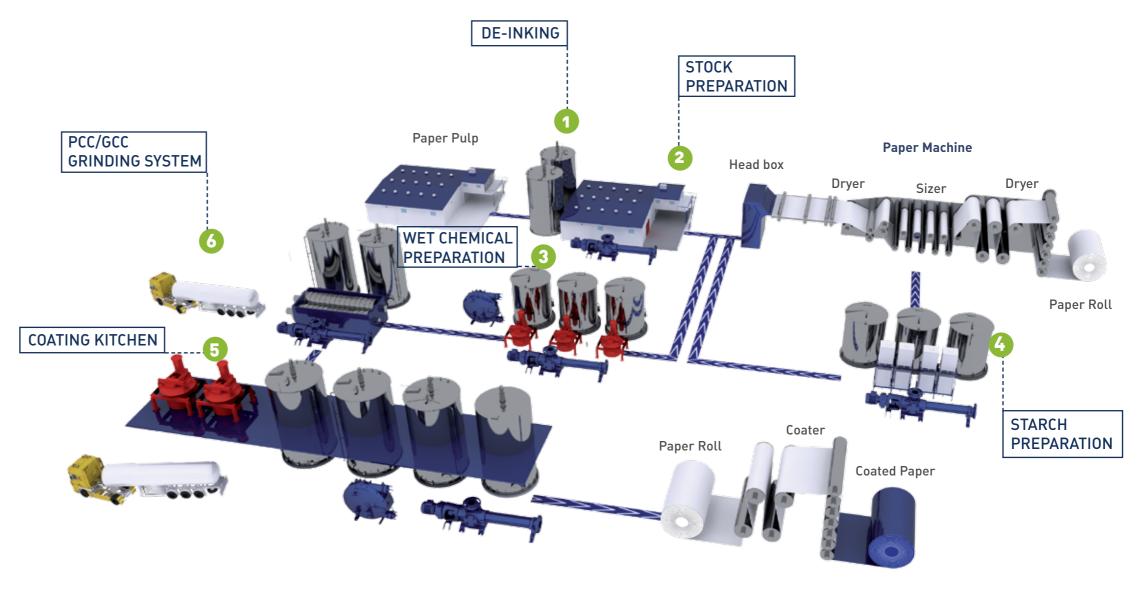
Product and process additives, such as fillers, cationic starch, sizing agents, dyes, PAC, OBA, fixing agents, defoamers, retention aids, PCC and AKD are metered and added to the stock. The PCM range of positive displacement pumps enables you to select the pump or system best suited to the type of additives, installation and safety requirements.

4 STARCH PREPARATION

Cationic or anionic starch is cooked, metered and continuously fed. The transfer to the head box or size press requires a solution that is able to perform at both high and ambient temperatures. PCM Moineau[™] pumps can handle fluids at temperatures over 95°C, thanks to proven elastomer knowledge and solution expertise.

O COATING COLOUR KITCHEN

Pigment slurries, latexes, starch, binders (PVA, CMC), biocides, and other additives are metered from storage tanks and containers for dispersion, mixing and cooking. They are handled in batches or in a continuous process, and are a key step in the preparation of the coating colour before the final station. PCM Moineau[™] progressing cavity pumps can cope with these abrasive fluids while delivering high dosing accuracy and pulsation-free pumping.



6 PCC/GCC SYSTEMS

Mineral pigment dispersing and mixing units rely on PCM Moineau[™] progressing cavity pumps. Preparing pigment slurries from calcium carbonate or clay requires heavyduty pumps capable of withstanding abrasive fluids and delivering unbeatable metering repeatability.

WASTE WATER AND SLUDGE DEWATERING

The treatment of liquid and dewatered sludge, flocculants and effluents relies on PCM EcoMoineau[™] progressing cavity pumps. Their patented design guarantees fast maintenance operations, limited wearing parts and a small footprint for easy integration.

PULP AND PAPER

THE KEY TO TROUBLE-FREE OPERATIONS

Why risk bringing your paper mill to a halt with inadequate pumping solutions? Decades of experience enable us to tailor high-availability solutions to your budget.

ACCURACY AND TROUBLE-FREE DOSING SOLUTIONS

PCM Chemskid is the perfect solution for combining dosing accuracy with operator safety.



Country	FRANCE
Customer product	Hydrogen Peroxide
Flow and Pressure	10 l/h - 2 bar
PCM Solution	CHEMSKID with 1 service pump and 1 stand-by pump

) RIGHT CHOICE FOR VARIABLE TEMPERATURE, VISCOSITY AND PRESSURE

When flexibility is required, PCM multi-stage pumps are well-suited to variable operating conditions.



) HIGH FLOW AND PULSATION-FREE

PCM Moineau[™] progressing cavity pumps deliver high and pulsation-free flow.



) EASE OF MAINTENANCE AND REDUCED FOOTPRINT

The smallest progressing cavity pumps on the market guarantee a reduced footprint and reduced maintenance costs.

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) METERING SOLUTION PUMPS

PCM metering progressing cavity pumps provide unbeatable repeatability.



Country	INDIA
Customer product	Retention aid
Flow and Pressure	0.7 to 3.5 m³/h – 8 bar
PCM Solution	PCM Moineau™ type 13l10

TRANSFERING AND EMPTYING

The PCM range of positive displacement allows you to pick the technology best-suited to your needs.



Country	CHINA
Customer product	Clay/GCC/PCC
Flow and Pressure	40 m³/h – 3 bar
PCM Solution	PCM Moineau™ type 90l5

Country	INDONESIA
Customer product	Starch (20 to 85°C)
Flow and Pressure	5 to 10 m³/h – 4 bar
PCM Solution	PCM EcoMoineau™ 25M12S

Country	SWEDEN
Customer product	Coating Colour
Flow and Pressure	32 to 160 m³/h
PCM Solution	PCM Moineau™ type 240ID5

Country	RUSSIA
Customer product	Latex
Flow and Pressure	12 m³/h – 2.5bar
PCM Solution	PCM EcoMoineau™ 40M6L

PCM PLUG AND PLAY SYSTEMS

Our plug and play pump systems simplify and accelerate the integration of PCM pumping solutions into your paper applications. They are available with safety modules to ensure error-free operation. We can also provide system installation and commissioning.

PCM CHEMSKID

PCM Chemskid with one or two diaphragm dosing pumps and one stand-by pump is the best choice for the injection of chemical solutions. Easy to maintain, PCM Chemskid guarantees reliable operating conditions and maximum operator safety.





) LIME SKID SYSTEM

The PCM Lime Skid system is a complete solution for monitoring the mixing, metering and the injection of lime. The compact and standardized design enables quick process integration.



Our plug and play systems may be tailor-made to your precise requirements.

) DYE-INJECTION SYSTEM

Customized to your requirements, the PCM Dye-injection skid is a fully automated system that enables the quick change over of dyes while greatly reducing maintenance time.



PCM SERVICES

To maximize the longevity of PCM solutions and control costs over the operational life of the system, we provide a wide range of lifecycle services, including energy efficiency optimization, installation, training, maintenance contracts, inventory management, refurbishment and system optimization.

Testing MAKING THE RIGHT CHOICE

To ensure the performance and lifespan of a pump or pump system, we provide viscosity, elastomer and abrasion testing.

Life Cycle services) EXTENDING LIFESPAN

We provide rotor and mechanical seal refurbishment to extend a pump's lifespan. We can also upgrade or recycle pumps in compliance with today's strict environmental regulations.

Installation

ENSURING TROUBLE-FREE OPERATION

Our installation services take the guesswork out of pump integration. We provide start-up assistance, system integration engineering and training for operators.

Optimization DELIVERING LOWEST OPERATING COST

Our system optimization services, such as Life Cycle Cost (LCC) audits, seal and motor upgrades and ATEX conformity ensure your pumps provide a lifetime of efficiency.

Servicing GUARANTEEING EFFICIENCY

To ensure your pump investment meets your expectations, we provide extended warranties, field maintenance for PCM and non-PCM pumps, repair services and wear and tear analysis.

Spare parts RAPID WORLDWIDE DISTRIBUTION

Available from our worldwide network of sales offices and distributors, PCM spare parts ensure that PCM products last as long as possible and benefit from warranty protection and EC marking.





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For over 80 years PCM has been delivering innovative pump solutions to customers around the globe. Today we are one of the world's leading manufacturers of positive displacement pumps and fluid-handling equipment.

PCM serves six highly demanding industrial markets: Environment, Mechanical Engineering, Chemicals, New energies, Minerals and Paper. While all of them share similar requirements in terms of reliability, cost effectiveness and productivity, each has special needs that PCM meets with perfectly adapted pumping systems.





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