



FrymaKoruma Stephan Terlet





A SMOOTH PROCESS. SWEET RESULTS.

Creating chocolate is an art. Whether you manufacture ganache, glaze, caramel, pralinés or chocolate spread, ProXES supplies you with the machinery and engineering solutions to make the magic happen.

Seductive glossiness, superior texture, a rich taste – with more than 30 years of experience, ProXES knows what chocolatiers are aiming for. Cooperating with Cacaolab, a spin-off of the University of Ghent, our team in the chocolate heart of Europe helps drive innovation in the industry.

The ProXES brands Stephan,
FrymaKoruma and Terlet are household names for small artisanal and
medium size manufacturers. Their
combined expertise allows us to take
your production to the next level – and
to large volumes. Count on ProXES
machines to upgrade your chocolate
processing, to save energy as well as
production cost and to ensure the
best treatment of your high quality
ingredients.

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ENGINEERING SENSORY DELIGHTS.

Behind the indulgence and sensuality of chocolate stands cool-headed engineering – from ProXES.

Dark, white, or orange zest? Ganache, spread or caramel? ProXES knows about the challenges of the different applications and supplies you with state-of-the-art machines as well as downstream and upstream equipment.

GANACHE: STRUCTURE AND GLOSS

Changing the ingredients from full-fat to skimmed or dairy to plant-based, while keeping the sensory properties can be tricky. Let's talk about how we can help with your production of vegan, low-fat, macaron or regular chocolate ganache. For example with our Stephan Universal Machine. Its unique bowl geometry, fast-running knives, the vacuum function and reverseacting scraper reduce processing time and create a product with a superior molecular structure, long shelf life, and great mouth feel.

GLAZE: FAST AND FLAVOURFUL

Cake glaze, donut glaze, éclair glaze – what's your recipe for success? Our Stephan Universal Machine and Combitherm ensure the best mirror glazes with endless possibilities for flavours and ingredients. The machinery does not only enhance structure, shelf life and mouth feel, but can also speed up your production to a throughput of 1.2 tons in 16 minutes.

CUTTING
CONCHING
MIXING
DISPERSING
EMULSIFYING
HEATING
COOLING



UM74
Perfect for small & medium batches



Combitherm
Flexible and batch processing

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KEEPING CRYSTALLIZATION UNDER CONTROL

Controlling crystallization processes is one of the most critical challenges of confectionery production. Here's the solution: the Terlet Terlotherm scraped surface heat exchanger expertly handles the complex phenomenon.

The hot product flows tangentially into the bottom of the Terlotherm and is cooled in counter flow along two heat-exchanging surfaces. The large heat-exchanging surface in combination with the scrapers, which 'keep clean' both the inner and outer jacket, ensure highly even cooling. It is this gradual cooling in particular that makes it possible to accurately reach and/or maintain the crystallization temperature.

Approaching, maintaining or exceeding this critical limit on purpose is of vital importance to a number of processes, such as:

- Crystallization in a fat mass with minimum variety in crystal-size
- Cooling down to below the crystallization temperature, while the stirring effect of the scrapers counteracts the formation of large crystals
- Production of a pre-crystallized, super cooled product in order to achieve spontaneous crystallization in the packaging.

Another possibility is to allow the product that has pre-crystallized in the Terlotherm to crystallize out on a cooling belt where the ultimate crystallization takes place.





COOKING COOLING CRYSTALLIZATION PASTEURIZATION

Continuous fast heat exchanger



Inline Melter – MI
Continuous melting of chocolate on demand

GRINDING MELTING REFINING



CoBall Mill – MS High energy grinding & dispersing

SHINY CHOCOLATE SPREADS

From the roasted nuts to a smooth, shiny product with the perfect mouthfeel: the process of producing chocolate spreads is the perfect example for how ingeniously ProXES machines work together. While the Stephan Universal Machines are packed with functionalities making them suitable for wide range of tasks, our FrymaKoruma mills are dedicated to perfecting the fineness of the spreads or fillings at a high efficiency.

YUMMY PRALINE AND NUT PASTES

With our FrymaKoruma Corundum Stone Mills the process of creating pralinés and nut pastes is far from the same old grind. From caramelising the hazelnuts to Praline à l'ancienne and further grinding to a fineness of less than 25 micron, the machinery creates a high quality product and offers you high flexibility in volumes and flavours.

MELTING CHOCOLATE DROPS

In addition to our expert machines for grinding nut and cocoa nibs or for chocolate refining, the ProXES team also developed a unique solution for the continuous melting of small to large chocolate drops: the Inline Melter. Its wide range of sizes helps you keep your flexibility on the highest level – especially if you want to melt large quantities on demand or are looking for an alternative to the timeconsuming production in a water heated vessel.





NEW FOOD TRENDS, NEW OPPORTUNITIES.

Food trends like living vegan, clean eating or gluten-free diets are on the rise, creating both new opportunities and challenges for the food industry. ProXES helps you capitalize on changing nutrition patterns and stay ahead of the competition.

Whether for health reasons, as part of a lifestyle or out of concern for animal welfare, more and more consumers are looking for products that use plant-based ingredients only.

Vegans, vegetarians and flexitarians are driving market growth: The global vegan food market size is projected to expand at a rate of almost 10% until 2025. 'Clean eating' is another booming trend. It focuses on food products with simple, natural ingredients, that are free from additives, preservatives or GMOs.

ADJUSTING PROCESSES AND RECIPES

While new food trends can initiate innovation and create opportunity for growth, they also confront food manufacturers with challenges. How can recipes be modified to be 'cleaner and greener' without compromising on product quality, taste and shelf-life? Which implications does the removal of stabilizers with E-numbers have on viscosity? Can your existing machinery handle plant-based substitutes like soy, rice, or nuts?

At ProXES, we're your partner in making your business future-proof.
Let's talk about how our solutions and machines can help your company benefit from the latest food trends!



EXCELLENCE IS A TEAM EFFORT

With three leading brands
FrymaKoruma, Stephan and Terlet
under one roof, ProXES combines
long-standing expertise with a
challenger mindset. As an agile partner,
we support our customers from first
product concept to the implementation
of a successful production process.

At ProXES, we believe in the power of co-creation: We're here to listen, learn and advise. In close collaboration with our customers, we merge their ideas and our technologies into innovative processes and tailor-made solutions that help them align the quality, energy efficiency and profit of their production.

With standalone machines, modern process lines, advanced automation and service concepts, ProXES drives the business of customers in the food, pharmaceutical, cosmetics and advanced materials industries.

What about you? Let's create value together – sustainably!

FROM INSPIRATION TO FEASIBILITY

Our process technology and training centre is a space to try out new ideas. Here you can develop or improve formulas in a professionally equipped laboratory, test any kind of machine, perform scale-ups and produce test batches. You will receive expert advice and support on all the capabilities of the technical equipment and modifications.

GET IN TOUCH WITH OUR EXPERTS



For a full list of our global subsidiaries and their contact details, please visit: **www.proxes.com**

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