

# STARCH PASTING. PASTEURISING. CONTINUOUS.





# TAKING LOW-FAT SAUCES TO THE NEXT LEVEL.

From cold batch processing to a fast and efficient continuous line: Designed as a clever extension for an existing FrymaKoruma MaxxD<sup>®</sup> or a similar processing unit, the new Terlet CuliFlex takes your sauce production to the next level.

With a growing appetite for fast food worldwide, the demand for condiments like dips and mayonnaise is on the rise. Interestingly, this trend coincides with a tendency towards a leaner and cleaner diet, making low-fat and vegan sauces a popular product in traditional as well as new markets. ProXES helps you tap this potential – with the new Terlet CuliFlex for continuous culi preparation.

### A SMART ADDITION TO BATCH SYSTEMS

With the Terlet CuliFlex for example, mayonnaise manufacturers can transform their cold batch processing into a continuous line. While full-fat mayonnaise is processed in the existing FrymaKoruma MaxxD® or a similar unit, the new CuliFlex prepares the culi using hot-swell starch and/or native starch. Subsequently both products are gently mixed to obtain a high-quality low-fat mayonnaise – at continuous outputs that vary from 2.5 to 6 t/h. The use of less expensive hot-swell starch and native starch does not only provide a cost advantage, but also meets the increased interest in clean label products, since native starch is not considered an additive. Additionally, the heating of the starch phase comes with a secondary benefit: The heat applied for starch gelling is basically a pasteurisation process which leads to higher food safety. Let's talk about how the CuliFlex can help step up your production!

### **KEY BENEFITS**

- Cost saving up to 1,000,000 Euro per year per unit
- Clean label and higher food safety
- Increased flexibility due to a wider product range
- Excellent product quality
- Stand-alone line for processing cooked sauces, both hot and cold fill

MAYONNAISE KETCHUP BBQ SAUCE SALSA VEGAN TRENDS DIPS



# GENTLE HEAT TRANSFER FOR HIGHEST QUALITY.

At the heart of the new CuliFlex is Terlet's proven Terlotherm<sup>®</sup>. The popular scraped surface heat exchanger is known for its gentle heat transfer that reliably prevents product damage.

Since native starches tend to be more shear and heat sensitive, the ProXES engineers paid particular attention to designing a module which processes the culi with extra care. With low pressure, low shear and quick heating and cooling cycles the new CuliFlex minimises thermal and mechanical impact on the culi and thus facilitates a high-viscous product without break-down.

### **FLEXIBLE CONFIGURATIONS**

The CuliFlex is a compact module with a reasonably small footprint. Standard modules are available up to a culi capacity of 5.000 kg/hr. Or modularly built to your target production capacity.

Module	Max. production capacity	Footprint (l x w) m²	Saturated steam 3,5 - 4 barg*	Chilled water 4°C
CuliFlex 1800	1800 kg/h	5.4 x 3.2	210 kg/h	25 m³/h
CuliFlex 2800	2800 kg/h	5.9 x 3.6	330 kg/h	25 m³/h
CuliFlex 5000	5000 kg/h	8.1 x 3.6	590 kg/h	50 m³/h

\* utilities required

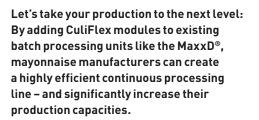


# COMPACT HYGIENIC FLEXIBLE EFFICIENT



Disclaimer: Illustrative purposes only. Actual machine construction may vary by specification.

# MADE FOR EACH OTHER: CULIFLEX AND MAXX D®



CuliFlex and MaxxD<sup>®</sup> work hand in hand: While the CuliFlex prepares the starch paste following the process steps of pre-mixing (water, starch, sugar and salt), buffering, heating, holding, cooling and buffering, the MaxxD<sup>®</sup> mixes and emulsifies vinegar, egg yolk, oil and the water phase to produce a full-fat mayonnaise. Finally, the culi from the CuliFlex and the full-fat mayonnaise made by the MaxxD<sup>®</sup> are gently mixed together to create a smooth low-fat mayonnaise.

### MORE FLEXIBILITY, MORE VARIETY

In addition to the simultaneous processing of culi and full-fat mayonnaise, the CuliFlex can also be used as a stand-alone module, for the production of a wide variety of sauces like ketchup or other cooked sauces. This flexibility makes it possible to considerably expand the existing product range and reach a higher total sauce production capacity.



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# AND WHAT ABOUT DRESSINGS?

Mayonnaise, ketchup, salad dressings, hummus or cheese sauce – if you want to produce it, ProXES can deliver. Our versatile processing systems are designed to prepare a wide range of sauces. Ask our experts about modular extensions customised to your requirements!



# **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 capitalise 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 substituting meat and dairy for plant-based proteins.

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 label' 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 stabilisers 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!



### WE ACCELERATE YOUR IDEAS

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 industrialisation and empower them to bring their ideas to life. Together we set trends: Through sustainable and innovative solutions we drive our customers' success today and help them shape future markets.

In addition to the standalone FrymaKoruma, Stephan and Terlet products, ProXES combines their technologies to create modern process lines. By using the most advanced automation and service concepts, ProXES facilitates competitive advantages for customers in the food, pharmaceutical, cosmetics and chemical industries. How can we help your business?

#### **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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