ELK S – Edition 26
Proven technology, better than ever



Innovations for a **better world.**

BÜHLER

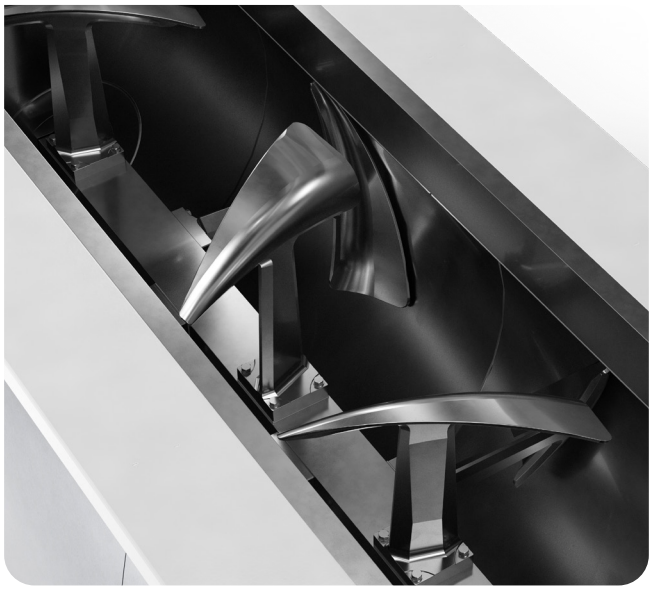
Chocolate processing solutions with conching
Flavor development, precisely controlled

Perfect chocolate is not created in a single step. It is the result of a precisely controlled process – dosing, mixing, refining, and conching. Bühler's DoMiReCo system brings these steps together into one integrated solution – ensuring efficiency, consistency, and full process control. The ELK S is where chocolate finds its character – developing flavor, texture, and the final product experience.

Bühler's patented ELK conching tools have set the benchmark for efficient flavor development and process performance. ELK S – Edition 26 takes this to the next level.

Unbeatable conching performance

The conching process enables de-agglomeration, fat release, removal of acids and volatiles, and moisture reduction, resulting in smoother taste and optimized viscosity.



Shorter conching, same taste

Patented conching tools enable shorter and more efficient conching cycles. This reduces energy consumption by up to 30%, and increases throughput without compromising taste and quality.

Reproducible product quality

Controlled conching ensures perfect flavor, texture and rheology, batch after batch.

Lifetime service and support

Global support for long-term performance.

Save money by reducing cocoa butter usage

Efficient fat release, enabled by patented conching tools and high shearing and kneading forces reduces total fat demand by up to 2%, helping minimize required fat content while maintaining taste and texture.



Market trends and industry drivers
Why ELK S – Edition 26

1

Rising cost pressure

Volatile cocoa and energy prices increase pressure on recipes and margins.
Efficient refining and conching help minimize the required fat content while maintaining taste and texture.

2

Operational excellence

Stricter hygiene standards and workforce challenges require easy-to-operate, safe, and reliable solutions.

3

Consistent taste and quality

Consumers expect stable flavor and texture across all products. Reproducible processes ensure consistent results, batch after batch.

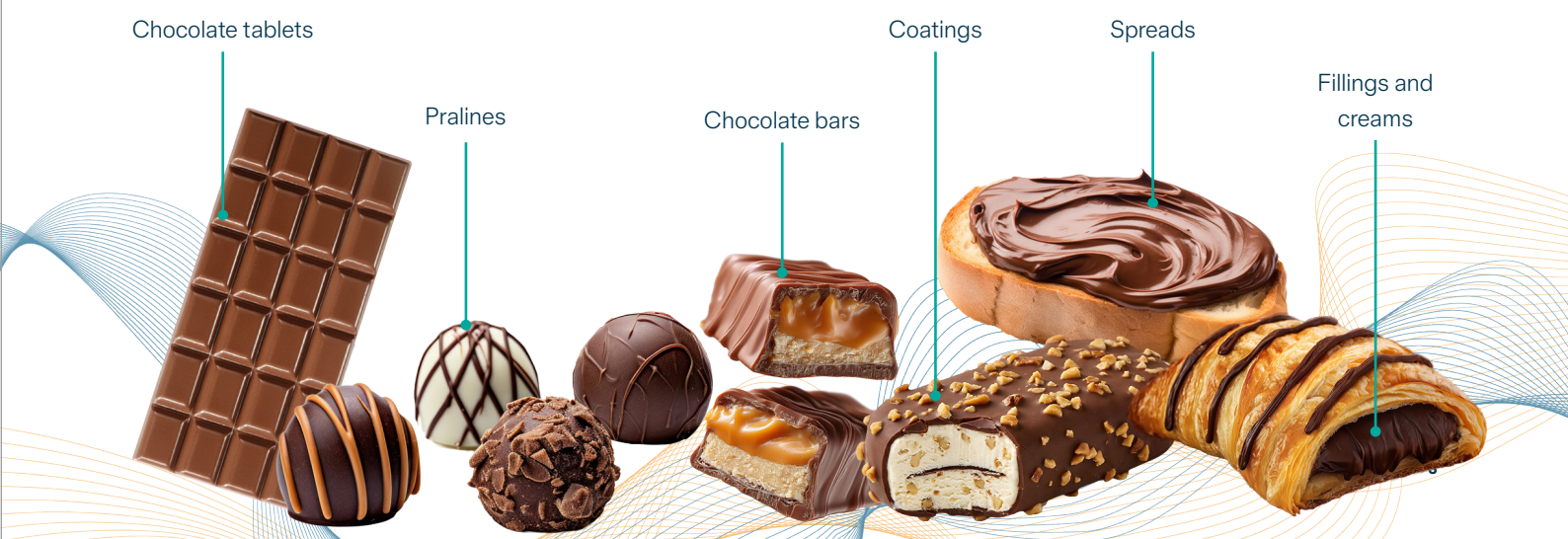
4

Decades of expertise

Built on decades of customer feedback and hands-on process expertise.

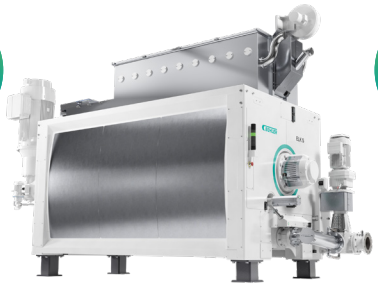
The ELK S – Edition 26 ensures optimal flavor development, removal of unwanted volatiles, and precise control of viscosity, transforming refined mass into perfect chocolate.

One machine, multiple applications



One system, full control
Smart automation with traceability built in

Fully integrated automation architecture, from hardware to connectivity.



Hardware
PLC and decentralized IOs in central cabinet; IO-Link sensors for faster maintenance

Data charts monitoring
Visualize and analyze all process parameters for easier diagnostics

User interface
Intuitive, user-friendly interface; 15” touch-screen

Easy recipe management
Individual recipe settings with all process-related parameters

Software
Full process control and visibility

Walk-Away-Screen
See most important KPI from a distance

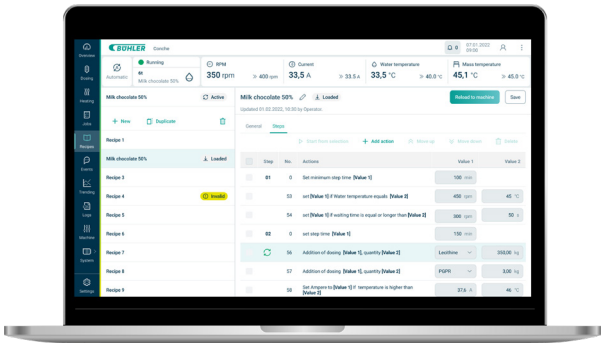
Connectivity and integration
Ready to connect with Bühler Insights (option)

User management for full access control
User rights allow individual control levels

Playone automation concept

Train operators in less than one hour with less dependency on skilled staff. Faster diagnostics and centralized, remote access make daily operation simpler and reduce system complexity.

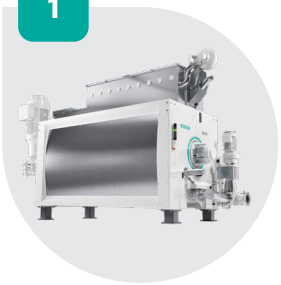




ELK S – Edition 26
Designed for flavor, efficiency, and control

The ELK S conch transforms refined mass into perfect chocolate, unlocking flavor, removing unwanted volatiles, and achieving the ideal texture and viscosity.

1



Modern hygienic design and enhanced safety

Modern hygienic design improves cleanability and accessibility for safe operation. Stainless steel pumps and materials ensure the highest safety.

2



Intuitive and easy operation

Playone Web-UI enables easy operation and fast onboarding in less than one hour.

3



Energy efficient and improved reliability

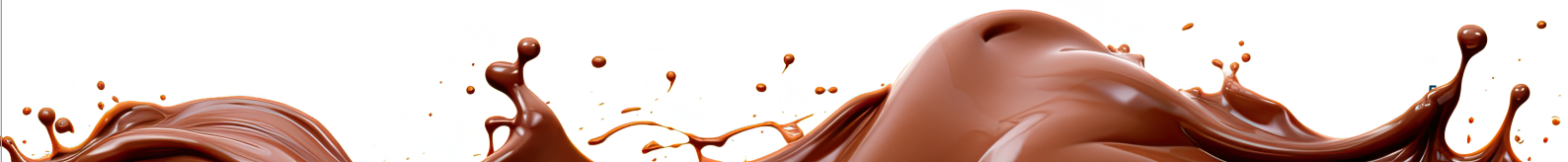
Up to 3% energy savings and reduced CO_2 footprint by new-generation IE5 drives. More rigid and stable machine design thanks to a new frame concept.

4



Faster maintenance and diagnostics

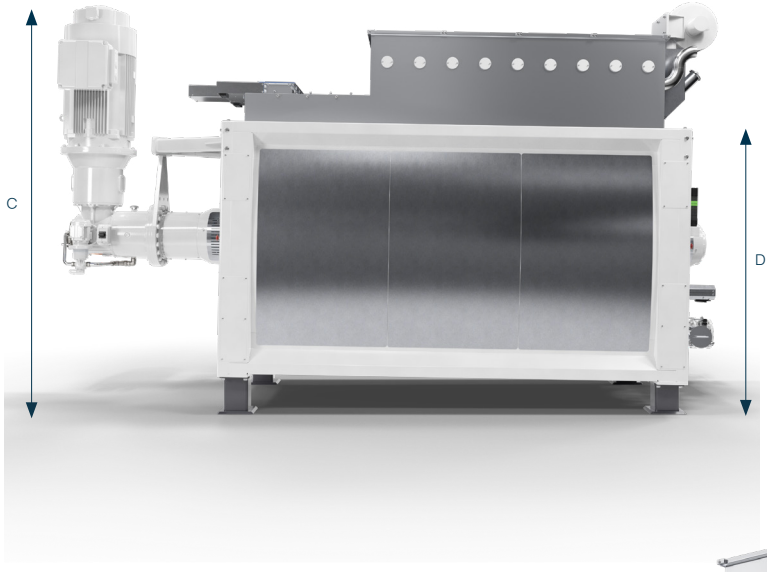
Up to 30% faster diagnostics with IO-Link sensors, simplified maintenance and wiring, and electrical product sampler.



ELK S – Edition 26
Technical information

Machine dimensions

Model	Capacity	Motor	A	B	C	D
	t	kW	mm	mm	mm	mm
ELK 3	3	90	4,800	1,880	3,235	3,035
ELK 4.5	4.5	132	5,285	2,050	3,495	3,185
ELK 6	6	160	6,185	2,050	3,510	3,200
ELK 9	9	259	6,535	2,550	3,995	3,700





Research and training centers
Our main offerings

Product innovation is a fundamental part of Bühler. With our global setup of research and training centers, you can develop new recipes, try new processes, test different machine settings and configurations, compare different technologies, and analyze the influence of raw materials on finished products with our experienced process technologists.



Experience ELK S-Edition 26 first hand at our Research and Training Center in Uzwil, Switzerland.



Recipe creation

Use our state-of-the-art equipment and collaborate with our experts to work on new products or improve your existing brands. Compare different processes and optimize production in an industrial setup.



Machine trials

Experience the full potential of Bühler before you commit. Discover the complete portfolio of machines, services, digital solutions, and automation.

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