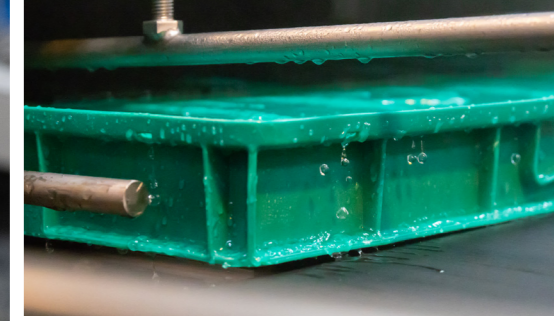


FOR A **SUSTAINABLE** WORLD

Improved **sustainability** with Brüel Systems

Brüel
SYSTEMS

FOR A **SUSTAINABLE** WORLD

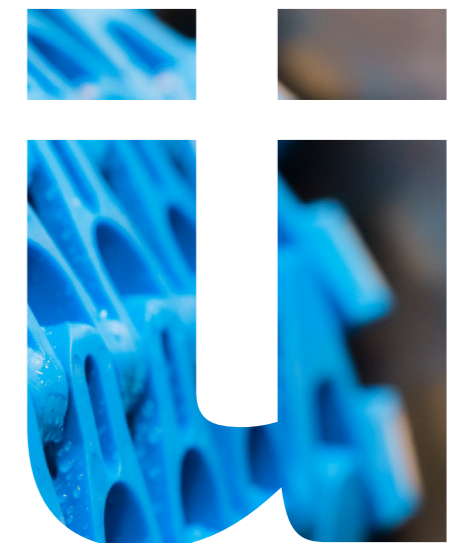


A QUESTION OF MACHINE DESIGN - AND MORE

As the world is taking action to combat climate change, sustainability is high on the agenda for many businesses and organisations. At Brüel Systems, we contribute to this development by offering solutions designed for energy efficiency, optimal resource utilisation, and effective operation, and we offer optional features that can further improve sustainability – while also, in many cases, reducing operating costs.

Sustainability is not just a question of machine design. Many factors influence the overall climate and environmental impact of a given facility. Not all of these factors can be directly influenced by the equipment owner, but how you use your equipment is a very important factor in optimising your production and achieving sustainable operation.

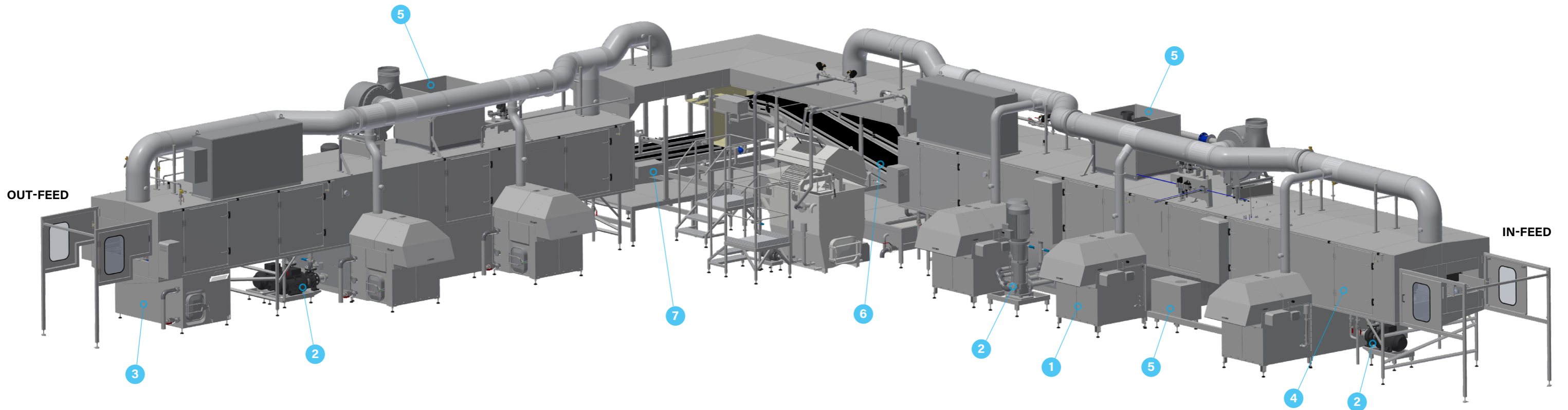
In this folder, we will discuss your options for improving sustainability with Brüel Systems by fully utilising the features of our machines, and by optimising your processes.



EFFICIENT PRODUCT DESIGN

Benefit from our decades of experience

Since we built our first washing machine almost 50 years ago, we have constantly worked to improve our solution designs to improve efficiency and lower environmental impact. All machines from Brüel Systems use high-grade components that use as little electricity, water, air, heating energy, and detergent as possible. In short, they are designed for energy efficiency and sustainability.



1 All our machines recover process water, filtering it for recycling in washing processes. This significantly lowers the need for mains water.

2 The pumps used in our washing systems have IE3 classified motors, delivering the required pressure at premium energy efficiency.

3 Our optimised tank with flattened heating tubes reduces heat energy loss at low water levels. The tank is self-rinsing, removing mineral deposits and requiring less water-intensive cleaning.

4 We have optimised all nozzle positions, enabling our machines to produce satisfactory results at lower pump pressure and using less water.

5 In machines that use gas for water heating*, the gas burner system transfers heat to liquid at 80-85% efficiency and lowers exhaust temperatures to 180-200°C.

6 On machines with two lanes, one lane can be shut down if not needed. This allows you to adjust machine capacity according to demand and reduce energy consumption by approx. 25%.

7 The motors used in our conveyor belt drive systems are IE4 classified, converting a very high percentage of the input power to mechanical energy.

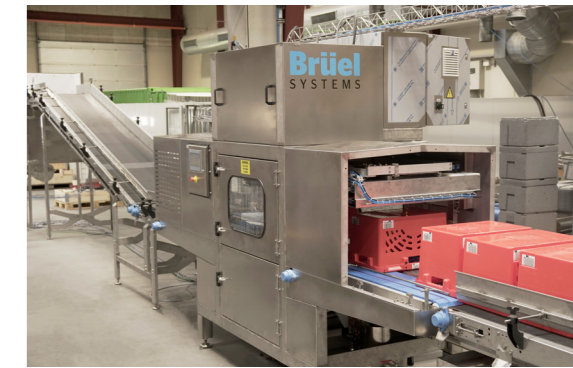
* Other water heating options are available

OPTIONS FOR IMPROVING EFFICIENCY

Specify a more sustainable and efficient solution

All Brüel Systems machines can be specified with optional features that further improve their energy efficiency, lowering the climate impact of your operations and improving sustainability. Many of these features also reduce operating costs by improving resource utilisation at your facility.

- Pump motors up to 30kW can be upgraded from IE3 to IE4 or IE5 energy efficiency, significantly reducing their energy consumption.
- Washing machines can be specified with extra water self-cleaning filters that allow you to increase water recycling, reducing the need for mains water
- Washing machine housings can be insulated, reducing heat losses from the machine, lowering the need for heating, and improving health & safety for facility staff.
- You can specify vapour extraction systems and re-use the hot vapour for heating applications. This can lower overall energy consumption for your site, and it improves health & safety.
- All machines can be supplied with DIAP monitoring systems that let you assess overall equipment effectiveness (OEE) to see if you are utilising your equipment optimally. You can also see if your processes consume more power or water than they should, indicating potential equipment problems.



SYSTEM AND PROCESS DESIGN

Look beyond the machines

Sustainable operation is also very much a question of how you use your equipment. By optimising your use of Brüel Systems equipment, you optimise sustainable operation at your site.

OPTIMISE YOUR WASHING PROCESSES

Cleaning to the required standard is your first priority, but there could be more sustainable ways to reach that goal. If you lower the nozzle pressure, for example, the pump consumes less energy. And by lowering the washing water temperature you can significantly reduce energy consumption.

SELECT ENERGY-EFFICIENT SOLUTIONS

Some processes and machines consume more energy than others. For example, you can reduce energy consumption in your drying process by using a crate spin dryer which only consumes approx. 10% of the energy of a blower. It is highly recommended to carefully evaluate your processes to see if there could be a more energy-efficient way of getting better results.

FINE-TUNE YOUR EQUIPMENT TO YOUR APPLICATION

All Brüel machines are customised to your application on delivery, and we can help you fine-tune them as needed if your requirements change. We always estimate the energy consumption of our equipment in your specific application when you get a quotation from Brüel Systems, allowing you to compare with your existing solution.

CONTACT US FOR MORE INFORMATION

There are many ways to improve sustainability and reduce climate impact.
If you need advice, want to discuss your options, or need energy
consumption figures for our machines, do not hesitate to contact us.

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