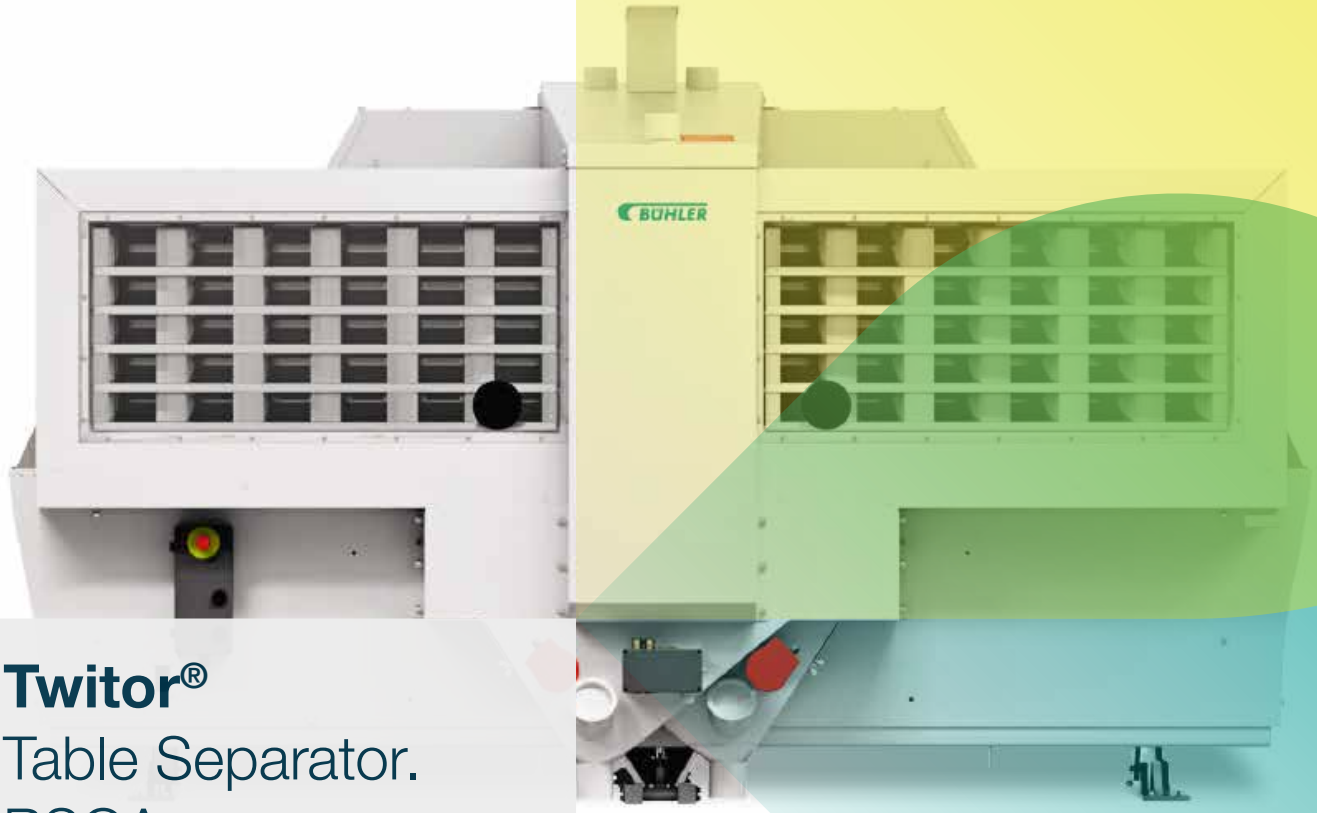


Twitor®
Table Separator.
BSOA.

Innovations for a **better world.**

BÜHLER

Dependable separation.
High operating reliability.

Twitor® table separator with servodrive.

The Twitor® table separator with its new servodrive improves operating reliability, cuts energy consumption and reduces maintenance costs.

The Twitor® table separator is the ideal solution for efficient hull separation in specialty mills. Due to its compact design, it requires less space than conventional machines. In the double-deck version, an entire building level or an additional conveyor can be eliminated from the process.

High precision.

The Twitor® table separator is mainly used for separating unhulled oats, spelt, and other grain varieties. The Twitor® is capable of separating grains of approximately the same shape and almost identical weight. The sliding and impacting characteristics of the product, plus the ability to sink to the bottom of the product bed based on density, are crucial criteria for successful sorting.

Ease of operation.

Various settings enable fast and easy adjustment to changes in product characteristics. The machine control system allows the frequency, stroke and inclination of the table separator to be adjusted during operation.

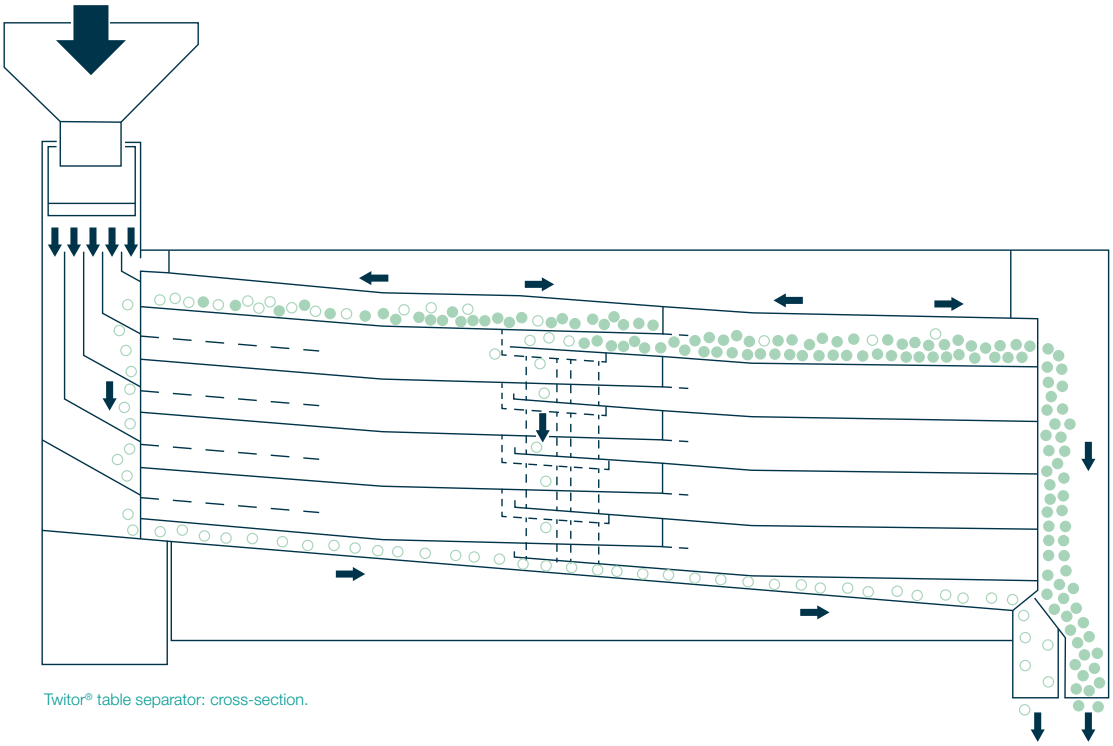
High efficiency.

A new drive concept with servomotor and gearing replaces the former drive. The servodrive only provides pulses for maintaining the oscillating motion. On average, this reduces the energy consumption of the machine by 50 % compared to the previous model.

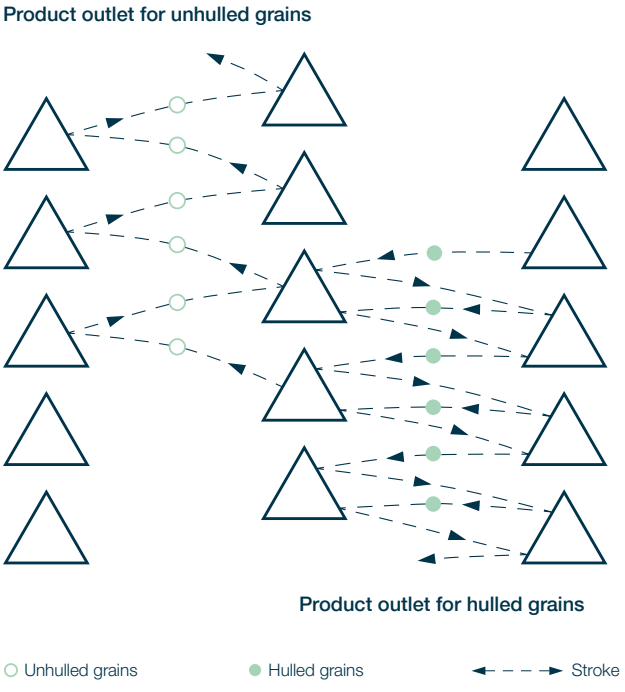
Benefits.

– High separating efficiency
– Low space requirement
– Minimized energy consumption
– Absorption of oscillations
– Automatic machine control

High separating efficiency.
Proven process – state-of-the-art technology.



Twitor® table separator: cross-section.



Twitor® table separator: separating principle.

Operating principle of the Twitor®.

The product is fed through a central feed pipe to the non-oscillating inlet. It is then spread across the two tables and the individual decks inside the machine.

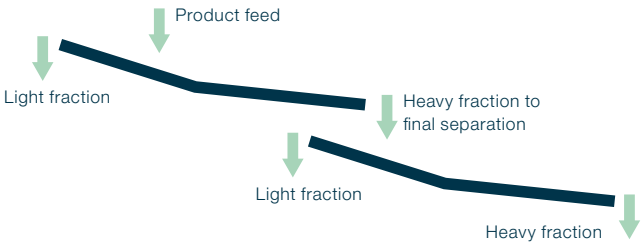
The product is stratified by the opposite action stroke motion of the separating units, which causes the unhulled grains to float on top of the bed of product.

As a result of the triangular geometry of the impact plates, the inclination setting, and the stroke, the floating particles are directed toward the light-fraction end, whereas the particles at the bottom of the stratified bed move toward the heavy-fraction end. Both fractions are discharged through collection channels and merged in one outlet each.

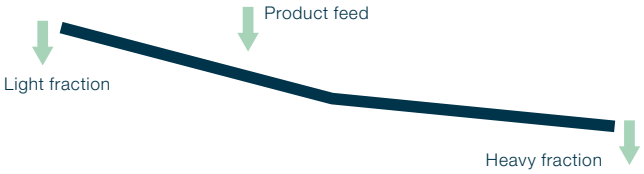
Design versions.
Single deck and double deck.

The Twitor® table separator is available in two design versions.

Double deck



Single deck



Twitor® design versions with single deck or double deck.

Double deck.

The combination of a preliminary and a final separation deck in a single machine produces outstanding separating efficiency. Another benefit of the double-deck version over the single-deck version is the elimination of an entire building level or an additional conveyor.

Single deck.

For applications requiring standard separating efficiency, a single-deck version is available. In this version, the throughput capacity is increased for a given machine size.

Unhulled oats.

Unhulled barley.

Unhulled spelt.

Hulled oats.

Hulled barley.

Hulled spelt.

Energy-efficient machine design.
New drive and low maintenance.

Servodrive.

The Twitor® is equipped with an entirely new drive concept. The servomotor and the gearing function as pulse generators for producing continuous oscillations.

Oscillating spring pack.

The new oscillating spring pack replaces the previous concept based on connecting rods. This solution is much more rugged, significantly increasing the uptime of the Twitor®.

Energy efficiency.

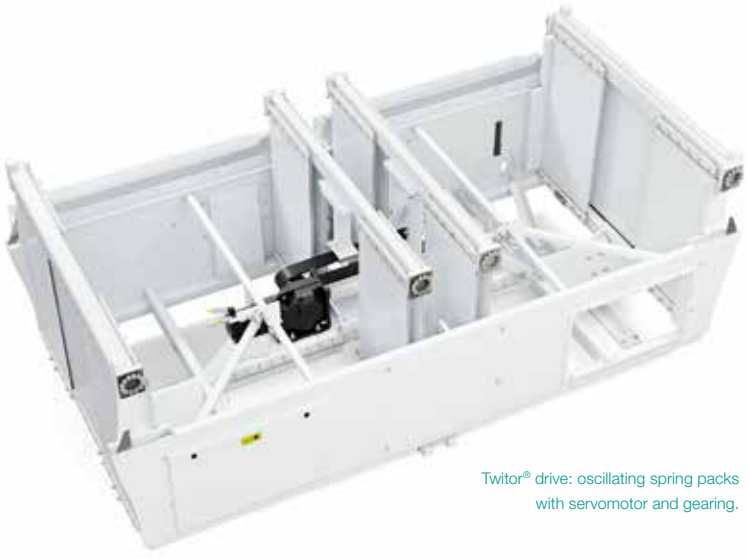
The new servomotor of the Twitor® is extremely quiet and energy efficient. In comparison to the previous drive using a three-phase motor, it consumes, on average, 50% less energy. The stroke and frequency can be automatically controlled as required.

Low oscillations.

Due to the principle of stroke motions of opposite action, oscillations and dynamic forces are absorbed by the Twitor® itself, and are therefore not transmitted to the building structure.

Low maintenance.

The new drive concept requires much less maintenance due to a significant reduction of the lubrication points. Two generously sized doors allow easy access to the inside of the machine.



Twitor® drive: oscillating spring packs with servomotor and gearing.

Complete range of services.
For maximum investment protection.

Tested process performance: Bühler Grain Innovation Center.

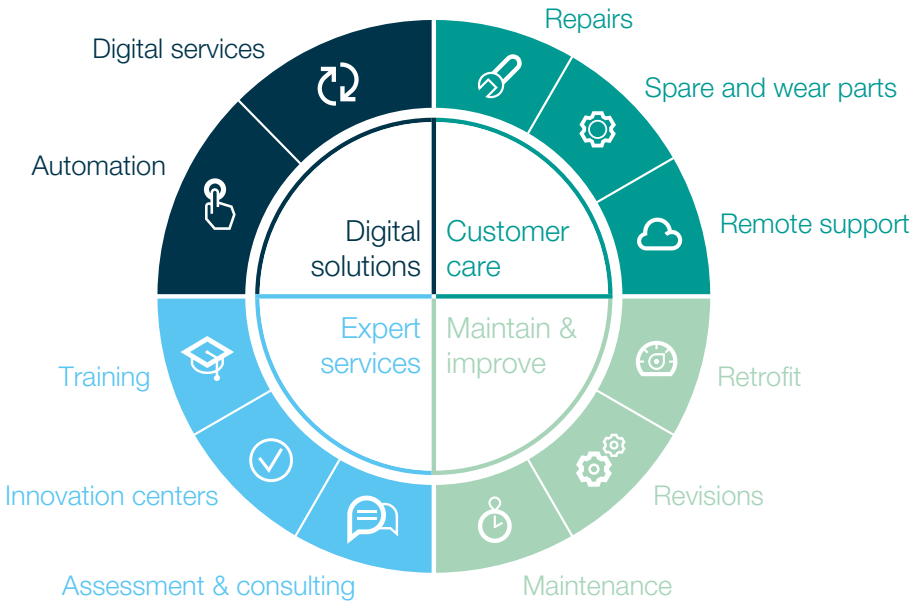
The Bühler Grain Innovation Center is one of the best-equipped development and test centers for industrial processing of grain and pulses. Here, processes such as storage, discharge, conveying, weighing, proportioning, separation, grinding, grading, mixing, pelleting, flaking and industrial-scale bagging are simulated. This means that our customers can rely on high-performance production systems and smooth overall processes even when making high-grade end products.

Top production systems and processes.

In order to operate production systems and run processes without interruption Bühler offers both individualized services and comprehensive total service solutions.

Bühler Service: Ready for service around the world and around the clock.

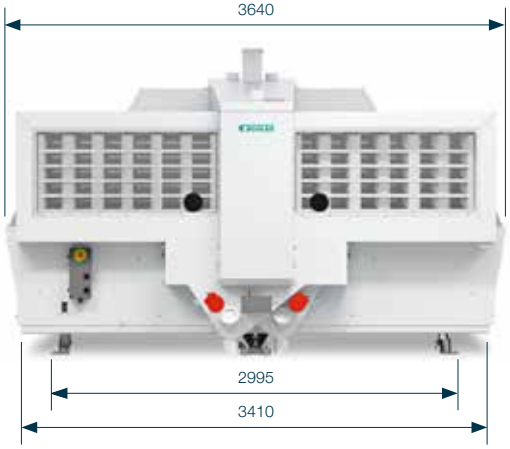
A selection of our services:

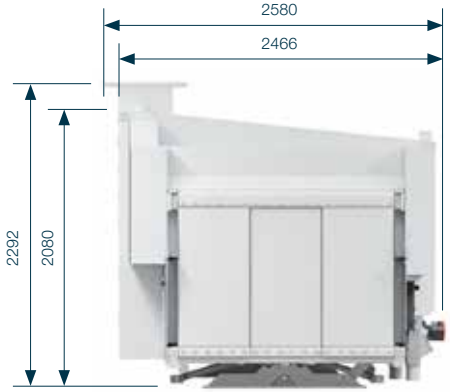


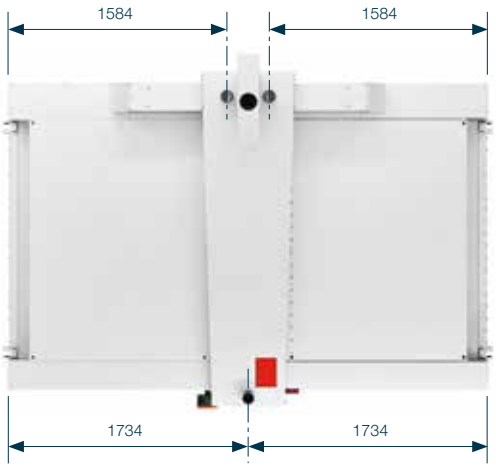
Twitor® specifications.
Dimensions and technical data.

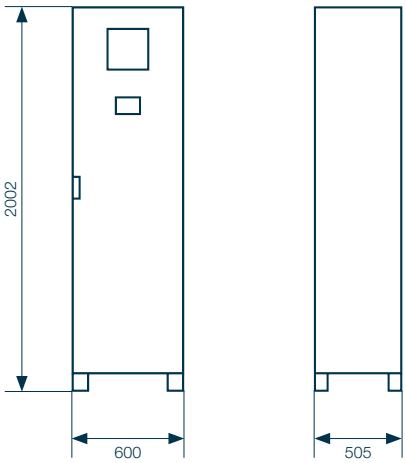
Technical data/dimensions

		Double deck	Single deck
Product throughput for oats[1]	kg/h	2500	5000
Air consumption	m^3/min	3x5	3x5
Weight	kg	3940	3940
Drive motor	kW	5.88	5.88









Flyer Twitor BSOA en 12/20

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