

Bühler in wheat & rye

From intake to packing and outload

Bühler is a leading global supplier of optical sorters as well as a complete solution provider for millers (i.e. grain handling, mechanical cleaning, conditioning, milling, finished product storage & blending, flour packing & outload, and bran packing & outload). Our ability to provide complete solutions combined with in-depth industry experience gained over multiple decades allows us to offer the best solution to each of our customers.

Our comprehensive know-how in the field of flour milling, combined with an innovative solution portfolio, offers millers the most advanced technology in wheat & rye processing. Millers can be confident of world-class performance when placing Bühler's optical sorters in their processing line.





Aligning ourselves

to the market requirements

Yield improvements

A growing population combined with volatile wheat pricing has brought unprecedented challenges to agricultural processing. As one of the world's most important crops, wheat is grown worldwide to provide sufficient quantities of food. At Bühler, we rise to the challenge, offering a portfolio of sorters with the best reject concentration and extraction rate on the market.

Quality improvements

Achieve allergen-free flour and high-quality product. In this mycotoxin volatile climate, chemical additive restrictions and the increased health awareness of consumers have made high-quality sorting more important than ever. With alkaloids, since the concentration of ergot alkaloids can vary considerably in ergot sclerotia, the ergot infestation and the alkaloid content do not necessarily correlate, and differentiation of the maximum levels is necessary. As a result, baking properties are vastly improved due to a color sorter.

Flexibility

Climate change, stricter pesticide regulations, and increasing health awareness are key catalysts for change in the food industry. However, there is uncertainty as to what these changes will encompass and how quickly they will be able to challenge today's food infrastructure. As such, flexibility is vital to ensure success and survival. By having a sophisticated color sorter in the process, you can open new economic opportunities. The best preparation for tomorrow lies in doing our best today.

Digitalization

In this digital age, people expect high levels of usability. In order to optimize your mill, it is vital to have full control of your production cycle at all times. We will help you achieve this by integrating your SORTEX machine into a local automation system. Make data-driven decisions by leveraging the power of valuable upstream insights and long-range trend analysis retrieved from your sorter's raw data. Track the sorting statistics, wear statuses, and capacities of your sorting machines to have full control of your product.

2

Sorting **Applications**

"The Bühler team provided us with extensive insight into the details and particulars of the calculation, so that the subsequent evaluations were always comprehensible and transparent for us as non-experts in this field. This enables us even today to answer our customers questions about our results with ease."



Jan Cordesmeyer
CEO of Hemelter Mühle

1. Conventional wheat sorting

Removing defects such as discolored grains (dark grains and dark seeds), rye, soy, foreign grains, discolored seeds, broken kernels, unthreshed grains, and allergens. SORTEX optical sorters work brilliantly for different types of wheat.

Input



Accept



Reject



Typical defects

- Straw, broken, chaff, barley, stones, oats, discolored seeds, discolored grains, wood sticks and sticks.
- Alkaloids like black ergot and white ergot

2. Coventional rye sorting

Removing defects such as ergot, discolored grains (dark grains and dark seeds), discolored grains, discolored seeds, unthreshed grains, allergens, straw, oats, barley, and foreign material in different types of rye.

Input



Accept



Reject



Typical defects

 Ergot, discolored grains, discolored seeds, unthreshed grains, allergens, straw, oats, barley and foreign material.

Sorting **Applications**

3. Vomitoxin removal (VOM/DON)

Removing toxins such as VOMITOXIN (VOM/DON). SORTEX optical sorters work brilliantly in various toxin removal applications.

Input



Accept



Reject



Typical defects

Vomitoxin (VOM/DON)

4. Allergen removal

With unique detection algorithms, SORTEX optical sorters reduce allergens beyond regulation standards.

Input



Accept



Reje



Typical defects

- Straw, broken
- Soya, lupins, peanuts, mustard seeds and sesame seeds

Optical sorting product solutions For the W&R industry

Flexible solutions

Contact your local representative for a full list of product features and specifications.

SORTEX H SpectraVision

SORTEX J SpectraVision



SPARK Pro

SCRIEGO DE LA CONTRACTOR DE LA CONTRACTO

Chutes / widths	1 - 7 (300mm)	1 - 7 (300mm)	1 - 10 (300mm)
Inspection system	RGB, Enhanced InGaAs, LED & Xenon lighting, Shape	RGB, Standard InGaAs, LED & Xenon lighting	RGB, HSV
Recommended application	Best in class Toxin, Allergens, Gluten reduction (Oats) and Foreign material (straws, unthreshed, stones, foreign grains and seeds)	Advanced removal of Toxin, Allergens, Gluten (Oats) and Foreign material (straws, unthreshed, stones, foreign grains and seeds)	Standard color sort for typical light and dark defects
Certification	CE, NRTL*, ATEX*, HAZLOC*	CE, NRTL*, NR-12*	CE
Digital Solutions**	SORTEX Monitoring System, OPC-Connect	SORTEX Monitoring System, OPC-Connect	-

^{*}All sizes in 5 chute frame



Transparent insights

With Bühler's digital solutions

SORTEX Monitoring System

Spot it. State it. Sorted.

SORTEX Monitoring System provides an overview of the key performance indicators of your Bühler SORTEX machines and delivers actionable insights to increase your productivity, yield, and efficiency. Transform your plant digitally in line with Industry 4.0 standards and make informed decisions from anywhere.

SORTEX Data Integration and Control

Control your sorters, shape your business.

SORTEX integration service enable customers to fully integrate the SORTEX with either Mercury MES, Pluto, WINCos or with their local automation system (external PLC, SCADA, MES system) or preferred data analytics platform."



Increase productivity & reduce waste:

Monitor the sorter's performance closely to optimize product quality and yield.



Act fast & save money: Spend less time supervising and get notified by real-time alarms.



No technical skills required: Take advantage of historical data to benchmark across batches, shifts, suppliers, and multiple production sites.

6

^{**}Optional

