



Innovative solutions for the flour milling industry.

November, 2018

Innovations for a **better** world.

 **BUHLER**

The background image shows a complex industrial machine, likely a roller mill, with various rollers, pipes, and structural components. A large, semi-transparent circular graphic is overlaid on the left side of the image, divided into four quadrants of different colors: light blue, teal, yellow, and light green. The text is positioned on the right side of the image, within a white rounded rectangle.

**Four- and Eight-Roller Mill
Diorit – new generation 2019.**

Four- and Eight-Roller Mill Diorit MDDY/MDDZ. New 2019 Generation.

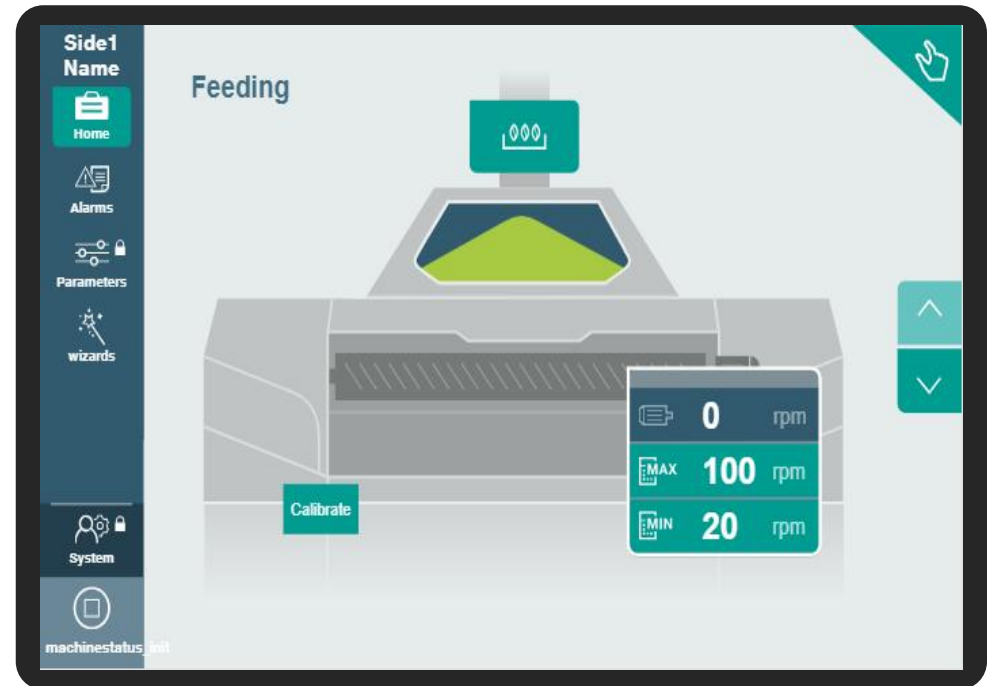


What's new?

- IoT ready machine control system
- Touch screen user interface
- Integrated sensors
- Improved space for product sampling

Diorit 2019 Roller Mill MDDY/MDDZ.

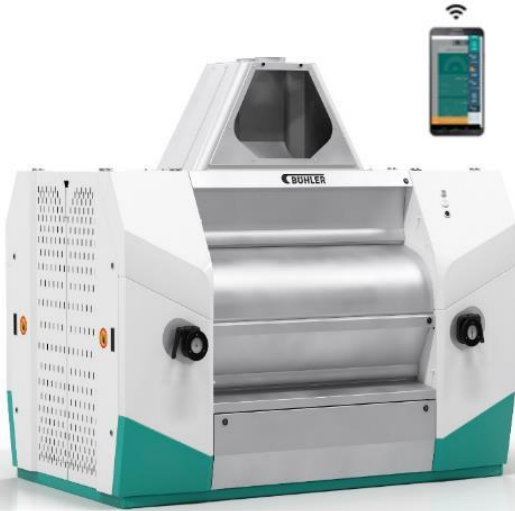
Touch screen user interface.



Three different operation variants!

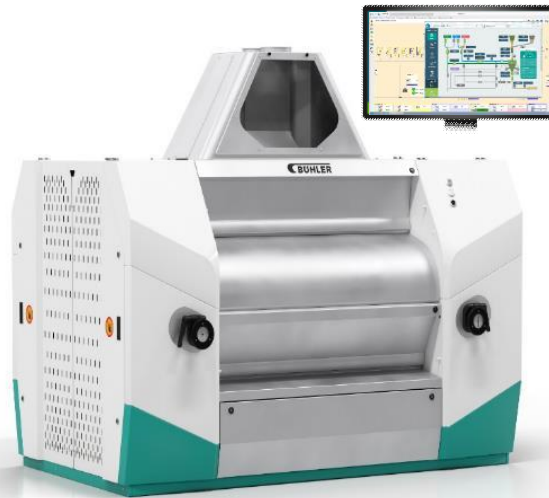
Compatible with smartphones, tables and PC.

Wireless plant connection



Wireless access through
smartphone and tablet

Remote connection



Access through plant computer

Local connection



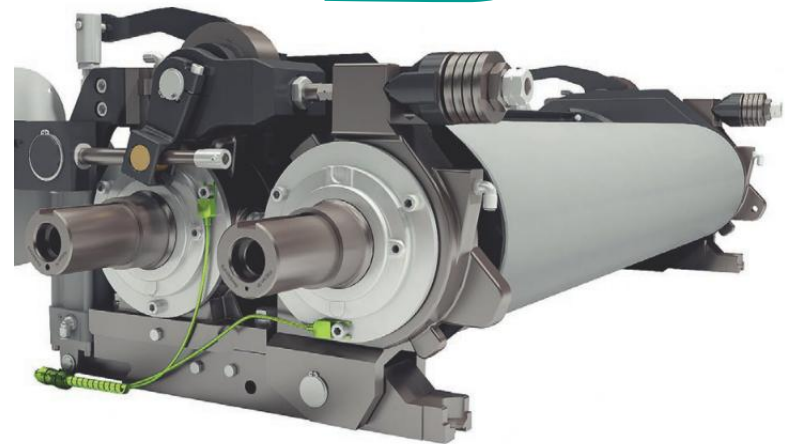
Two integrated touch panels

Diorit 2019 Roller Mill MDDY/MDDZ. Sensor Technology.

Roll
temperature
sensor



Roll bearing
temperature
sensor

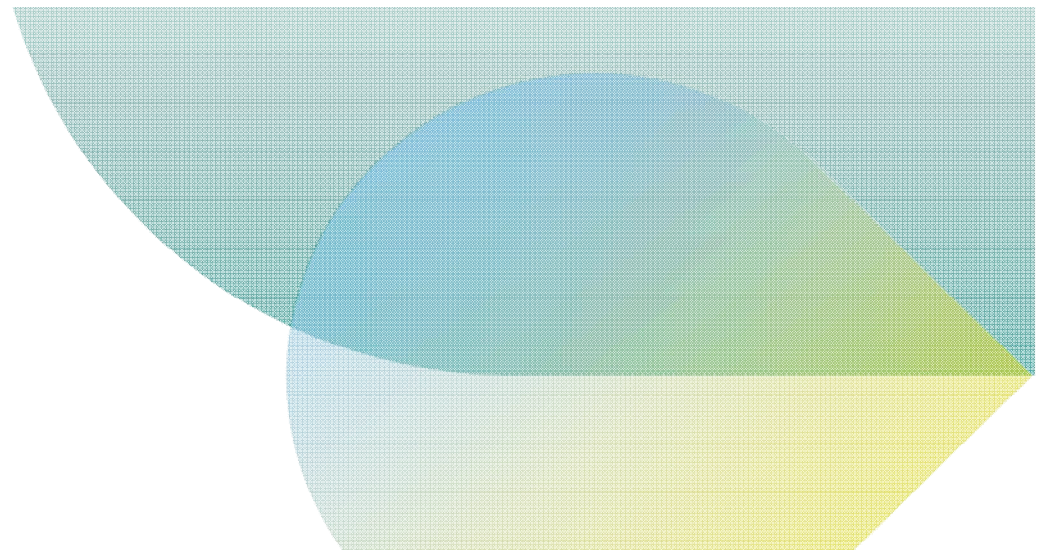




Innovations for a **better world.**

High capacity cost-effective grain sorting

Bühler W



CEBUHLE

Bühler W

Cost effective grain sorting

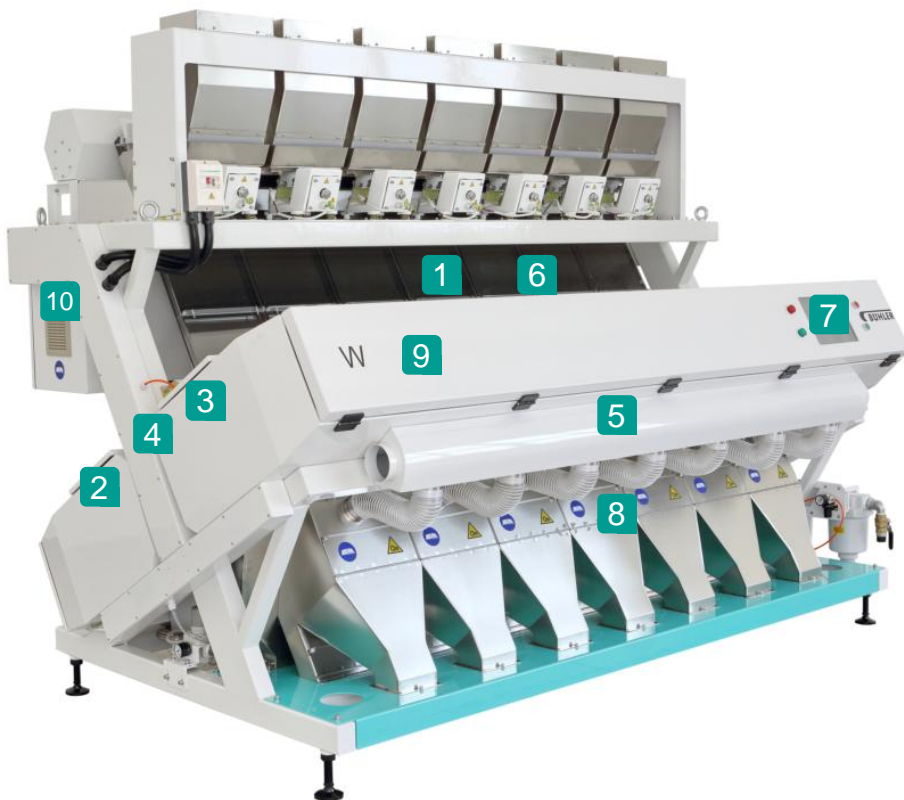
Offering up to seven chutes for high processing capabilities of up to 30 tonnes per hour. Features Bühler developed processing software, custom-built cameras and LED illumination system, the Bühler W offers processors entry into Bühler's optical sorting technology and processing expertise for a reliable, cost-effective performance.

- High processing capacity
- Consistent product quality
- Trusted Bühler design and reliability
- Ease of operation
- Balanced and stable performance



Bühler W

At a glance



- | | |
|--|---|
| <p>1 High Processing capacity
Available with up to seven chutes to deliver 30 tonnes per hour</p> <p>2 LED illumination
Enhance defect recognition through long-life LED solid state illumination</p> <p>3 Custom-built cameras
Front and rear high resolution CCD visible cameras to detect all common defect types</p> <p>4 Auto-Calibration
Automatically reviews and adjusts the sorter set-up on start-up, removing the need for laborious manual set-up</p> <p>5 Automatic Product Tracking
Consistently scans and automatically adjusts to changes in the incoming product</p> | <p>6 Balanced and stable performance
Consistent accept quality and minimised product re-circulation reduces wear</p> <p>7 Product modes
Stores up to 100 pre-defined sorting modes</p> <p>8 Long-life powerful ejectors
64 powerful, high speed ejectors per chute for accurate rejection of defects and high quality</p> <p>9 Fixed background
Static background ensures that all vibration is minimised</p> <p>10 Bühler robust design quality
Designed and constructed to Bühler's high quality standards</p> |
|--|---|

Bühler W

High processing capacity

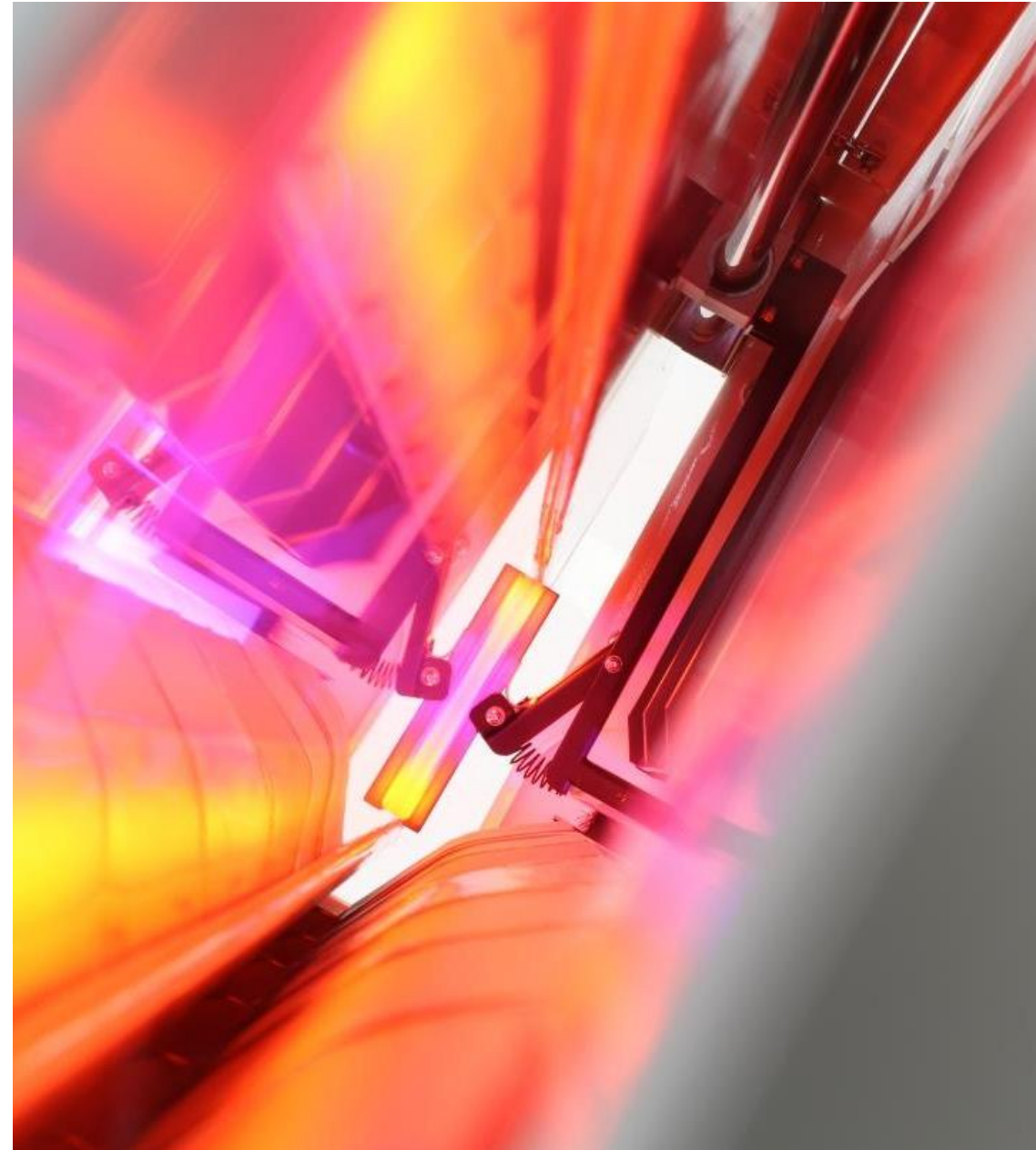
- Available with four and seven modules
- Integrated feed control ensures a balanced and stable sorting performance while minimizing operator adjustments
- Flexible configuration for primary sorting applications and with resort
- Bühler custom-built cameras detect obvious defects including immature, diseased, discoloured grain as well as foreign materials.



Bühler W

Trusted Bühler design & reliability

- Proprietary technology and robust machine design built to Bühler's strict manufacturing standards
- Durable solid state LED lighting and long-life ejectors ensures the Bühler W operates at peak performance over a longer period of time
- LED lights adjust as lighting levels vary to maintain consistency of sort



Bühler W

Ease of operation

- Access to Bühler proprietary operating software via the graphical user interface (GUI)
- Stores up to 100 pre-defined sorting modes
- Fast product changeover
- Alerts and performance monitoring





Intelligent process optimization with sensor technology.

MYRG / MYTA / MYHB

Innovations for a better world.

 **BÜHLER**

Intelligent sensors

NIR Multi Online Analyzer

- Real Time NIR Analysis of raw and final products
- Precise measurement of:
 - Moisture
 - Protein
 - Ash content
- Trend monitoring of:
 - Wet gluten
 - Water absorption
 - Starch damage

**Consistent
product quality**



Intelligent sensors

NIR Multi Online Analyzer

- Precise product data monitoring in real time
- Immediate corrective measures during operation
- Up to 6 measuring points on spectrometer

**Consistent
product quality**



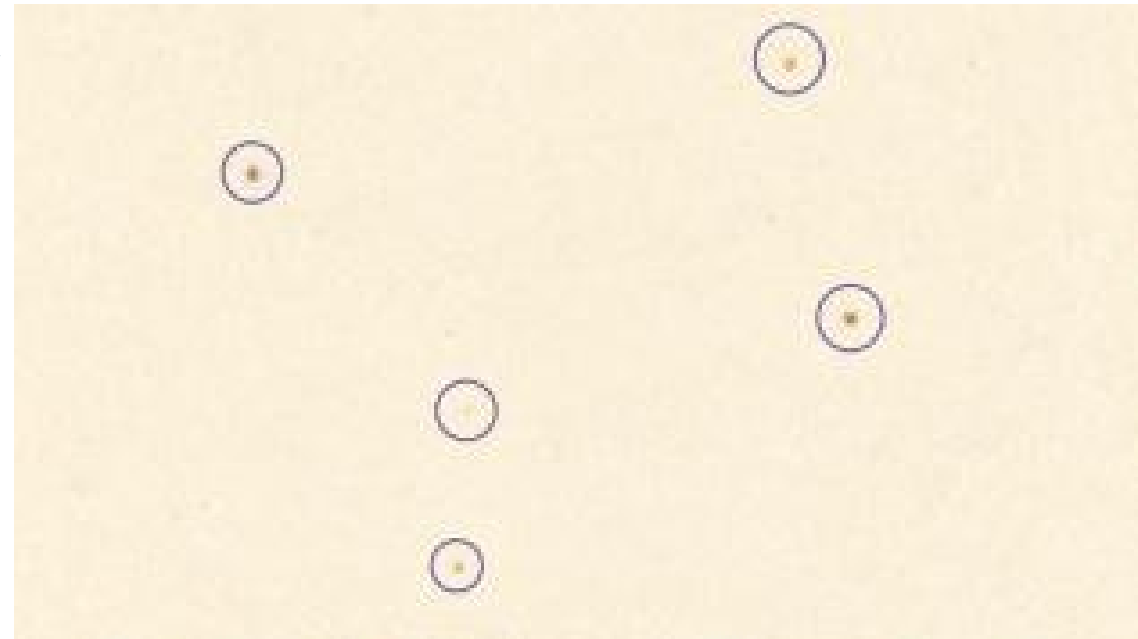
Intelligent sensors

Online Color and Specks Measurement Unit

- Precise monitoring of color and specks in real time
- Immediate corrective measures can be undertaken during the ongoing production process.
- Replaces subjective test methods such as the Pekar test or the manual counting of specks.
- Classification of brown as well as black specks according to their size.



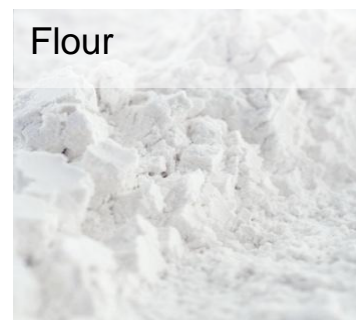
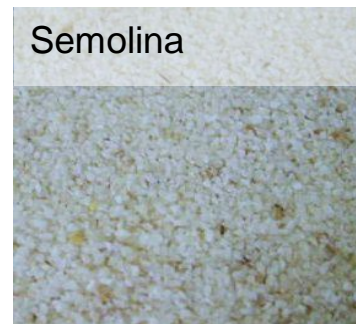
Online color and
speck analysis



Intelligent sensors

Online particle size measurement

- Online information about granulation
- Measurement range 10 - 5'000 microns
- Continuous process monitoring and traceability.
- Deviations from the target granulation
- Enabling fast response, high process stability



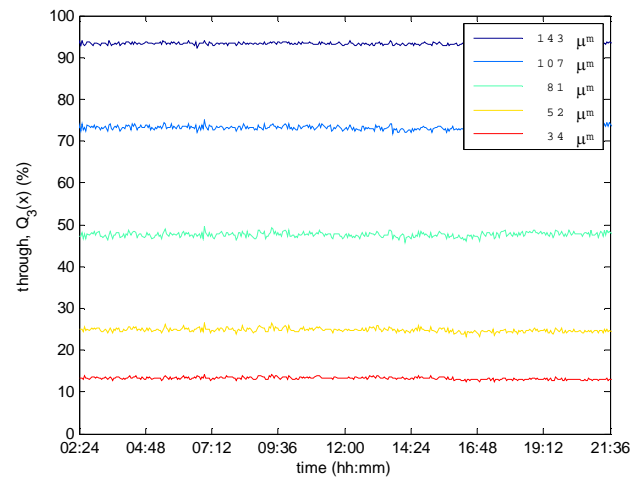
**Real-time
particle size
measurement
control**



Intelligent sensors

Mobile particle size measurement unit

- Measurement of the particle size distribution on the spot
- Presentation of the measurement results directly on a screen on the system



The background is a dark blue field filled with a complex network of glowing blue nodes and connecting lines, resembling a digital or neural network. In the center-left, there is a large, semi-transparent globe. The globe is divided into two main color sections: a light blue upper half and a yellow-green lower half. The globe is overlaid with the same network pattern, with lines and nodes appearing to wrap around its surface. The overall effect is one of high-tech connectivity and digital transformation.

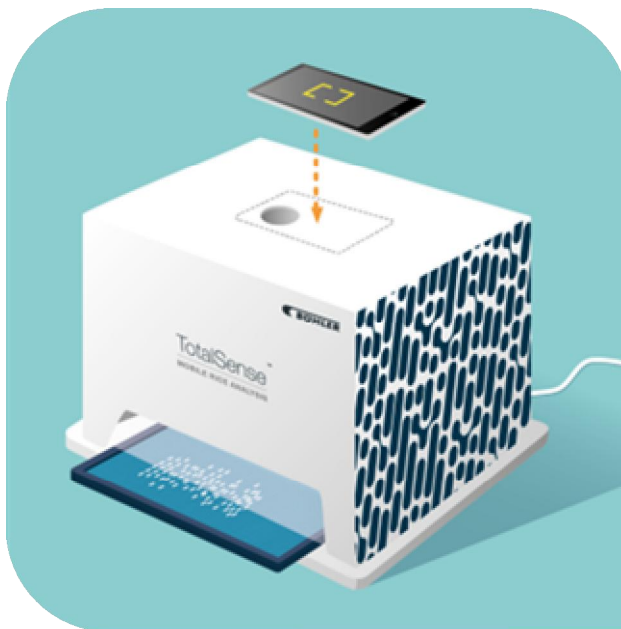
Digitalization in the flour milling industry.

Innovations for a better world.

 **BUHLER**

TotalSense™.

Application for grains and seeds.



Safefood.ai.

Food safety early warnings.

What?

The latest recalls, alerts and warnings

Where?

From official sources, the web and social media

When?

In real-time

How?

In a single place (Web dashboard)

