

Bühler launches Optical Sorter SPARK Pro to enhance yield in Southeast Asia's milling industry

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Bühler's latest optical sorter, SPARK Pro, is set to revolutionize cleaning in the milling industry, offering performance, reliability and ease of use to maximize yields in flour mills. SPARK Pro addresses the market need by combining cutting edge technology with user-friendly design to help millers achieve consistent quality yields no matter the changing market conditions.

SPARK Pro is Bühler's new generation optical sorter, combining solid performance, reliability and ease of use. Equipped with newly developed high-definition full colour cameras and a full spectrum LED lighting system, SPARK Pro detects even the slightest in colour variations and imperfections and sorts out the common defects and alkaloids in wheat. The advanced machine can detect and successfully eject all visible and invisible defects down to a size of only 0.0025mm².

The sorter adopts the Hue Saturation Value (HSV) color model, which is a way to describe and identify color accurately. Unlike the common RGB model, the HSV color model can represent all colors with three components:

1. Hue: Identifies the color, for example, red, blue, green.

2. Saturation: Measures how vibrant the color is. Highly saturated colors are bright and less saturated colors appear greyer.
3. Value: Defines how light or dark a color is. A high value means a bright colour and a low value indicates a darker color.

Using the HSV color model combined with the proprietary DynamoAI advanced sorting algorithms, SPARK Pro accurately recognizes defects to separate and assists the user with setting the machine up for optimum performance. Thanks to its intuitive design, SPARK Pro is 5X faster to set up in comparison to any other sorter. To meet different capacity requirements, the machine is available in all sizes ranging from 1 to 10 chutes.

Wheat consumption is growing in Asia – it has increased more than 30% over the past decade, as people diversified their diets to include foods such as bread, noodles. The need for quality and efficient wheat product has never been greater. Southeast Asia’s milling industry plays an important role to feed the growing appetite of the Asian population. As the region relies on wheat imports, millers here are subjected to fluctuating grain prices, inconsistent weather patterns affecting wheat quality.

For instance, heat stress can have irreversible physiological effects on wheat quality. With more extreme weather events happening around the world, this is one of few challenges that modern millers must tackle.

– With increasing grain supply chain volatility, defects such as ergot, diseased or immature grain and even foreign grains can become a headache to millers as it impacts their yield. Optical sorting is a proven solution to ensure consistent quality yield, rather than be swayed by market conditions. Choosing a reliable and efficient sorter becomes the crucial task. – comments Davide Bellemo, Regional Manager Optical Solutions, Bühler Southeast Asia.