# Universal cleaning machine TAS. LAAB.

0

**BUHLER** TAS

P

BUHLER

## First class cleaning technology. For maximum product quality.

To be able to process different types of grain into high-quality products, high-end cleaning machines are required which also meet the growing requirements for hygiene, throughput, efficiency and economical operating costs. The TAS universal cleaning machine is synonymous with this.



#### The benefits at a glance:

- First-class cleaning and grading quality
- High throughput rate thanks to high screen density on a small footprint with integrated inlet and outlet aspiration
- Low operating costs due to intelligent air flow and optimized design
- Flexible configuration and valuable options

# High capacity and excellent cleaning quality in the smallest space.

The larger the sieve area, the more capacity and the better cleaning results can be achieved. The TAS universal cleaning machine sets the benchmark. With up to 48 m<sup>2</sup> sieve area on less than 12 m<sup>2</sup> footprint, precise cleaning results can be achieved with a simultaneously high throughput. The integrated dual aspiration in the inlet area as well as in the vertical sifter separates light impurities and dust from the product flow. This ensures a clean processing of the raw products, thus laying the foundation for the production of flawless and high quality food and feed. Many satisfied customers are the best proof for this excellent quality.

### Maximum flexibility. **To meet your requirements.**



»We use the TAS cleaners in our wheat intake but also in the maincleaning stage in our mills. In total we have more than 50 machines installed in our sites all over China and are very satisfied.«

Yang Yuegang, Wudeli Mills, China

# Flexible adjustment to spatial conditions.

Depending on the space conditions and requirements, all versions can also only be equipped with an outlet aspiration (vertical sifter), but without inlet aspiration (basic type TS). If there are restrictions in the spatial height, but the inlet aspiration unit should not be dispensed with, it is possible to connect the product inlet with the aspiration unit and the sieve box with a channel over two floors (basic type TS + AS).

# Valuable additional functions.

The optional lining with polyurethane plates in the inlet and outlet area as well as the product distribution offers optimal wear and noise protection for a maximum service life. All TAS machines for the intake cleaning can also be equipped with a screen changeover. This allows for a dual-grade operation without changing the sieves. This means major time savings, especially at plants with frequent product changes.

# Intelligent air flow and a convenient adjustment.

The use of fresh air for the aspiration of grain is preferred among others for reasons of food safety. The intelligent air flow of the TAS machines with dual use of the aspiration air for inlet and outlet suction nevertheless ensures low operating costs and maximum economic efficiency. The lightweight particles removed in the process are discharged via two separate discharge screws. The aspiration result can thus be easily checked and directly adapted at the machine via an adjustable air volume regulation.

### Bühler standard for all sieving machines. For maximum process efficiency and safety.

The Bühler sieving machines combine the two functions of aspiration and sieve cleaning compactly into one machine. The carefully thought-out design and Bühler's process knowledge ensure the quick and easy integration in your plant as well as stable operating conditions. The investment in grain cleaning is significantly optimized by merging two functions into one machine with the resulting high performance.

# Fresh air instead of recirculated air – for a pure end-product.

Food and feed safety is crucial today. Safe and clean raw products are the basis for this safety. Using fresh air for product aspiration ensures that your product is always aspirated with clean air. Other advantages that speak clearly in favor of an exhaust air system are the usability with very dusty or oily products, easier adjustability of the air volume and compliance with explosion protection.

#### Bühler sieve standard – excellent separation effect and change in no time.

The cleaning result significantly depends on the use of the correct sieve perforation. That is why we offer a very large selection of sieve perforations and sieve sizes as well as appropriate consultation if necessary. All sieves are attached to sturdy metal frames and are kept clear by proven rubber ball cleaning. The frontal access allows a quick and easy sieve replacement. If necessary, a sieve changing platform can be attached to all larger types of machines so that in case of product changes your machine is ready for use in no time.





### Well-conceived premium design. For high reliability and customer satisfaction.





- 1 **Product inlet with vibrating flap**: for the uniform and gentle distribution of the product across the entire machine width (not TS machines)
- 2 Inlet aspiration: removes lightweight particles and dust, which reduces the sieve load and increases the cleaning quality (not TS machines)
- 3 Sieve flaps: easiest access to all screen layers in no time
- 4 Preliminary sieve layers: reliable removal of coarse or bigger particles
- **5** Main sieve layers: precise separation in 1<sup>st</sup> grade (good product) and 2<sup>nd</sup> grade (brokens, sand, small grain, etc.)
- 6 Rubber ball sieve cleaning
- 7 Flywheel and brake motor: drive designed for continuous operation which ensures the gentle circular movement of the sieve box according to the proven plan sifter principle
- 8 Oscillation monitor: safety equipment that leads to the immediate shutdown of the sieving machine in case of iregular sievebox movement and thus ensures safe operation

- **9 Dust-proof rubber cover**: for quick and easy maintenance and accessibility to the interior of the machine
- **10 Polyamide rods**: safe suspension of the sieve box without the transmission of vibrations onto the sieve frame; with special shape for easy installation
- **11 Vertical sifter/Outlet aspiration**: integrated, easy to adjust and illuminated aspiration channel with large inspection windows for optimal adjustment of the air volume to the product
- 12 Separator with discharge screws: discharge of light material from inlet and outlet aspiration to reduce the filter load and to provide a perfect checking point for aspiration settings
- **13 Exhaust air connection**: guides the dusty air to the connected dedusting system to ensure clean air in the machine
- A 1<sup>st</sup> grade = good product
- **B** 2<sup>nd</sup> grade (e.g. brokens, sand, small grain etc.)
- C Coarse particles

# Reception / intake cleaning machines. Applicable in a large capacity range.



#### Intake cleaning.

The following four types of machines of the TAS series are especially recommended for an effective preliminary and main cleaning of grain and other bulk materials: **TAS 152A-2, TAS 154A-4, TAS 204A-4 and TAS 206A-6**.

The ratio of the preliminary and main sieve area is the same for all four types. The pre-screen area is particularly crucial for the use as a pre-cleaner as well as for rapeseed cleaning whereas enough main-screen area is important for precise separation into 1<sup>st</sup> and 2<sup>nd</sup> grade.

#### Technical data and capacities:

		TAS 152A-2	TAS 154A-4	TAS 204A-4	TAS 206A-6
Max. product capacities					
Wheat (0.75 t/m³, 18 % H <sub>2</sub> O) PS: D 8 mm, MS: 2.25 x 23 mm	t/h	60	120	160	250
Feed Barley (0.65 t/m³, 18 % H <sub>2</sub> O) PS: D 8 mm, MS: 2.25 x 23 mm	t/h	50	100	130	210
Corn (dry) (0.75 t/m³, 15 % H₂O) PS: D 13 mm, MS: D 5 mm	t/h	60	120	160	250
Corn (wet) (0.75 t/m³, 35 % H <sub>2</sub> O) PS: D 13 mm, MS: blind	t/h	30	60	80	120
Canola (0.60 t/m³, 14 % H₂O) PS: D 3.5 mm, MS: 1 x 23 mm	t/h	45	90	120	180
Soybeans (0.75 t/m³, 18 % H <sub>2</sub> O) PS: D 13 mm, MS: 2.55 x 23 mm	t/h	65	130	180	270
Operating width	mm	1,500	1,500	2,000	2,000
<b>Screen area</b> Pre-screen area Main-screen area	m²	12 6 6	24 12 12	32 16 16	48 24 24
<b>Motor power</b> Screen box Others	kW	2.2 0.75	3.0 0.75	3.0 0.75	3.0 0.75
<b>Aspiration connection</b> Exhaust air (at 900 Pa) Screen box (at 300 Pa)	m³/min	140 12	195 12	260 12	390 12
Total weight	kg	~ 4,800	~ 6,600	~ 7,800	~ 10,300
<b>Dimensions</b> (L $\times$ W $\times$ H)	m	3.30 x 2.63 x 2.50	3.42 x 2.63 x 3.30	3.42 x 3.14 x 3.30	3.70 x 3.17 x 4.35

PS = pre-screen; MS = main screen

### Processing machines. Grading at its best.



#### Processing.

When it comes to the reliable and precise grading of grain, especially brewing barley, these five installation sizes of the TAS processing machine series have a great reputation:

### TAS 153A-1, TAS 156A-1, TAS 206A-2, TAS 210A-1 and TAS 200A-III.

Due to the significantly larger main-screen area compared to the preliminary sieve, the grain can be processed very precisely and sorted into two grades. Thanks to an additional postsieve area, the type TAS 200A-III is used for the three-grade sorting. The TAS processing machines are therefore indispensable especially in malting and grain processing plants.

#### Technical data and capacities:

		TAS 153A-1	TAS 156A-1	TAS 206A-2	TAS 210A-1	TAS 200A-III
Max. product capacities						
Brewing barley (Main cleaning)	t/h	20	30	60	50	40
Operating width	m	1.5	1.5	2.0	2.0	2.0
Screen area						
pre-screen area	m <sup>2</sup>	3	3	8	4	4
main-screen area	m <sup>2</sup>	9	18	24	40	28
post-screen area	m²					8
Dimensions (L x W x H)	m	3.30 x 2.63 x 2.50	3.42 x 2.63 x 3.04	3.42 x 3.14 x 3.57	3.42 x 3.14 x 3.57	3.42 x 3.14 x 3.57
Motor power	kW	2.2 + 0.75	3.0 + 0.75	3.0 + 0.75	3.0 + 0.75	3.0 + 0.75
Aspiration connection	m³/min	152	152	272	152	152

PS = pre-screen; MS = main screen

#### Bühler GmbH

Grain Quality and Supply DE-92339 Beilngries Germany

T +49 8641 701 0 F +49 8641 701 133

grain-quality-supply@buhlergroup.com buhlergroup.com

GQ\_AB\_Universal\_cleaning\_machine\_TAS\_EN\_14202\_01