



Feeling good  
about grain cleaning.  
**High quality  
processing  
equipment and  
solutions.**

# Feeling good about grain cleaning. **High quality processing equipment and solutions.**

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## Grain cleaning and grading. **The best basis for clean finished products and a sustainable value-added chain.**

Product-friendly cleaning of grain and other bulk materials is essential in any processing operation. The goal is to improve the storage life and quality of the product as well as a safe production process.

The proverbial separation of the chaff from the wheat, whereby the good grain is freed from impurities, also counteracts grain diseases such as the formation of toxins. Furthermore Bühler processing equipment ensures that the required product quality is met.

Therefore, our grain cleaners and processing machines are used in a wide range of industries such as collection points and reception facilities, mills, malting and rice processing plants, grain terminals and seed processing plants.

Overall, by using Bühler cleaning equipment you can reduce grain losses during processing and storage and thereby contribute to a sustainable value-added chain.

### **Why** grain cleaning?

Make your product storable.

Ensure a safe process.

Prevent diseases and the formation of toxins.

Improve the product quality for further processing.

**Reduce grain losses and contribute to a sustainable value-added chain.**

# Integrated solutions for grain cleaning. **Expertise on a broad basis for the entire value-added chain.**

## Coarse cleaning



### **LAKA / RCDA Drum sieve – machine protection at high capacities**

- 4 installation sizes, 200-800 t/h\*
- Efficient coarse cleaning for a high reception capacity
- Reliable protection of downstream machines for high plant uptime
- Long service life and easy maintenance thanks to robust and optimized design



### **LAIA Air Cleaner ASU / ASA – efficient removal of dust and light particles**

- 3 installation sizes, 165-220 t/h\*
- Economical operation
- Minimized dust emissions in the following process steps
- Easy operation and a high level of flexibility due to adjustable vertical sifter
- Separate discharge of dust and light particles

## Pre/main cleaning



### **LAGA GrainPlus – the screening machine for small capacities**

- 3 installation sizes, 12-50 t/h\*
- Flexible configuration for multifunctional applications and the desired separation effect
- Minimum cleaning effort and high sanitation standard
- Compact design at investor-friendly prices

\* for wheat



corn



wheat



rapeseed



white rice



beans



peas



lentils

## Grading equipment



### LACB SMA – the specialist for oilseed cleaning

- 2 installation sizes, 110-220 t/h\*
- Consistently high cleaning quality, even at high throughput rates
- Easy accessibility for maintenance and cleaning
- Optimal price-performance ratio



### LAAB Universal cleaning machine TAS – for highest product quality

- 9 installation sizes, 20-250 t/h\*
- First-class cleaning and grading quality
- High throughput rate thanks to high screen density on small footprint
- Low operating costs due to intelligent air flow and optimized design
- Flexible configuration and valuable options



### LADB Ultratrieur – grading at the highest level of precision

- 80 installation sizes, 1-48 t/h\*
- Precise grading results
- Flexible application area thanks to modular design
- Proven technology and optimized design result in low investment and low maintenance costs



paddy



sunflowers



oats



barley



cocoa



coffee



soybeans

# LAKA / RCDA Drum sieve.

## Machine protection and coarse cleaning for high reception capacities.

Coarse cleaning of grain and other bulk materials reduces wear to the downstream equipment in the production process. Bühler's drum sieve machine reliably eliminates coarse particles, lumps, wood chips or corncobs. Therefore, the machine is essential in the reception of products in silos, storage facilities and grain terminals.

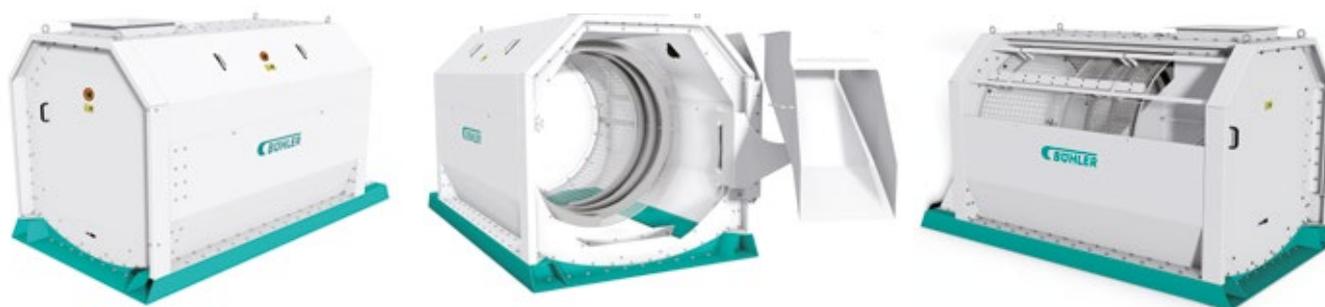
### Reliable removal of coarse particles for optimal machine protection.

The material to be cleaned is guided through the inlet channel into the interior of the screening drum and is turned over there. The grain falls through the screen perforations while the coarse impurities are reliably directed to the outlet by a guided screw. The coarse impurities are thus efficiently separated and the operational safety of the entire production system is increased. Safety covers above all moving machine components also offer effective protection for operating personnel.

### Advantages at a glance:

- Efficient coarse cleaning for high reception capacities
- Reliable protection of downstream machines for high plant uptime
- Long service life and easy maintenance thanks to robust and optimized design.





## Flexible configuration and long service life.

The robust screen drum is divided into an inlet and outlet cylinder. A large number of combination possibilities gives the necessary freedom and flexibility to select perforation based on the product and the coarse particles. The machine service life is increased further by using the optional wear protection (polyurethane plates) in the product inlet area, the product inlet channel and the outlet hoppers.

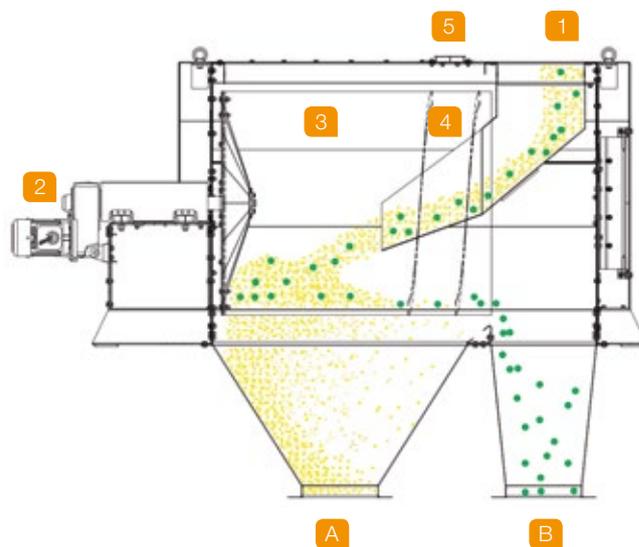
## Easy access for maintenance and cleaning.

The big front door as well as removable covers on both sides of the machine assure an easy access to the screen drum. The drum can be changed quickly and easily due to the overhung position. Thanks to the integrated guided screw, it is also highly self-cleaning. The self-cleaning effect is additionally supported by a scraper brush.

Two options help to make access and maintenance even more convenient: the product inlet channel can be swiveled outwards thanks to the integrated swivel device. With the permanently installed crane trolley, the drum can be suspended on it and taken out in no time.

"Why did we invest in two Bühler drum sieves? As a big terminal, we receive 450,000 tons/year from all over the world. The Bühler drum sieves remove big foreign particles without any problems and are very rugged in design. Thus all subsequent machines are reliably protected."

**Álvaro Barrio Pérez, Director TASA Santander, Spain**



- 1 Product inlet
- 2 Motor
- 3 Inlet cylinder
- 4 Outlet cylinder
- 5 Dedusting connection
- A Good product with guided screw
- B Coarse particles

### Technical data and capacities

	LAKA 200		LAKA 400		RCDA 600		RCDA 800		
	30/20	40/20	30/20	40/20	30/20	40/20	30/20	40/20	
<b>Throughput rate</b>									
Wheat, rye, soybeans	t/h	180	200	360	400	540	600	720	800
Pellets, corn	t/h	165	180	330	360	490	540	650	720
Oats, malt, rapeseed	t/h	105	120	210	240	320	360	430	480
<b>Dimensions (L x W x H)</b>	m	2.67 x 1.20 x 1.26		3.34 x 1.60 x 1.67		4.14 x 2.10 x 2.26		4.79 x 2.10 x 2.26	
<b>Engine output</b>	kW	0.55		1.5		3.0		3.0	
<b>Dedusting connection</b>	m <sup>3</sup> /min	12		20		32		43	

# LAIA Air Cleaners ASU and ASA. Efficient removal of dust and light particles.

The air cleaners ASU and ASA are employed primarily to remove dust and lightweight particles out of the product flow. This significantly improves the efficiency of the subsequent process machines as well as the protection of the entire system.

## Economical operation and minimized dust emissions.

Both the exhaust air and the recirculated air cleaner systems enable extremely cost-effective coarse cleaning of products with low space requirements at the same time. The air cleaners minimize dust emissions in all subsequent process steps, which helps to reduce the risk of dust explosions and increases the efficiency of following processing equipment.

## Ease of use and maximum flexibility for a wide range of applications.

The variably adjustable vibrating inlet flap combined with the controllable vertical sifter not only allows optimal cleaning, but also an individual adjustment to almost any product. In addition, wear protection can be installed when processing abrasive products or in continuous operation (24/7).

## Separate discharge for dust and lightweight particles.

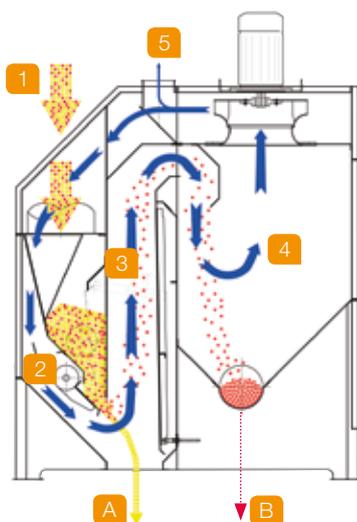
The LAIA air cleaners convince by their large expansion rooms with discharge screws. The discharge of the lightweight particles has the advantage that the filter load is reduced. In addition, samples can be taken easily and the volume of air can be adapted accordingly.

### Advantages at a glance:

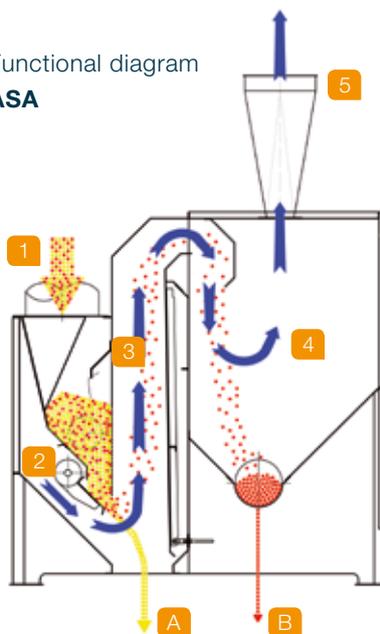
- Economical operation
- Minimized dust emissions in subsequent process steps
- Easy operation and a high level of flexibility through adjustable vertical sifter
- Separate discharge for dust and light particles



Functional diagram  
**ASU**



Functional diagram  
**ASA**



- 1 Product inlet
- 2 Vibrating inlet flap
- 3 Vertical sifter with adjustable cross-section
- 4 Expansion chamber with discharge screw
- 5 Exhaust air connection
  
- A 1st grade
- B Dust and lightweight particles

The ASU is a recirculated air cleaner fitted with two fans in order to significantly improve air distribution.

The cost-effective ASA uses exhaust air and is employed primarily for moist and / or sticky products like malt or rapeseed.

"In our new reception point, we mainly receive corn. Before we dry and store the fresh harvested product, the ASU removes all kind of light particles and dust. In combination with the subsequent Bühler drumsieve we make sure to dry and store only well pre-cleaned product."

**Josef Bittl, Productmanager Grain, BayWa, Germany**

**Technical data and capacities**

		<b>ASU 200</b>	<b>ASA 150</b>	<b>ASA 200</b>
<b>Max. throughput rate</b>				
Wheat, rye, corn	<b>t/h</b>	220	165	220
Barley	<b>t/h</b>	170	130	170
Malt, rapeseed	<b>t/h</b>	-	125	160
<b>Operating width</b>	<b>m</b>	2.0	1.5	2.0
<b>Dimensions (L x W x H)</b>	<b>m</b>	1.69 x 2.53 x 2.28	1.69 x 2.03 x 1.67	1.69 x 2.53 x 1.67
<b>Motor power</b>	<b>kW</b>	2 x 5.5 (Fans) + 0.75	0.75	0.75
<b>Aspiration connection</b>	<b>m³/min</b>	20	195	260

# 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.

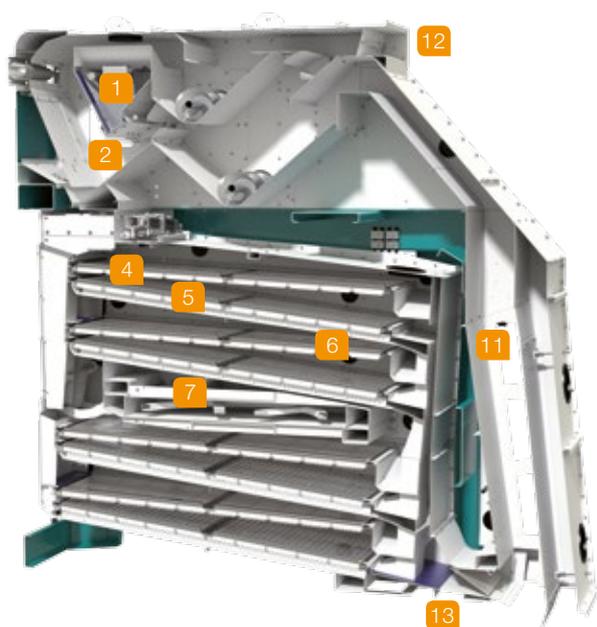
## **Fresh air instead of recirculated air – for a pure end-product.**

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.





- 1 Product inlet with vibrating flap:** for the uniform and gentle distribution of the product across the entire machine width (for all machines with inlet aspiration)
- 2 Inlet aspiration:** removes lightweight particles and dust, which reduces the sieve load and increases the cleaning quality
- 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 1st grade (good product) and 2nd 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 irregular 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 Exhaust air connection:** guides the dusty air to the connected dedusting system to ensure clean air in the machine
- 13 Accessories:** on demand the appropriate connecting pieces such as outlet hopper, exhaust air connection or throttle valve can be supplied

# LAGA GrainPlus.

## The economical and compact screening machine for small capacities.

Flexibility and ease of use have a name: GrainPlus. The compact screening machine for the small capacity range up to 50 t/h (for wheat) is ideally suited for the use in collection points and reception facilities as well as for the processing of grain in mills, malting or seed processing plants.

### Broad range of applications thanks to flexible configuration.

The GrainPlus screening machines are universally applicable to the efficient cleaning of grain and other bulk materials. The cleaning result is improved even further with the optionally available inlet aspiration unit: pre-aspiration of the product reduces wear and dust accumulation on the screens, thus reducing the need for maintenance. A permanent magnet can be optionally integrated in the vertical sifter to remove metallic impurities from the product flow to ensure a safe process.

### Minimum cleaning effort and high sanitation standard.

All machine parts touching the product are easily accessible and therefore easy to clean. The frontal access to the sieves makes changing the sieves considerably easy. A fabric cloth in the inlet area ensures dust-free operation and keeps the machine environment clean all the time.

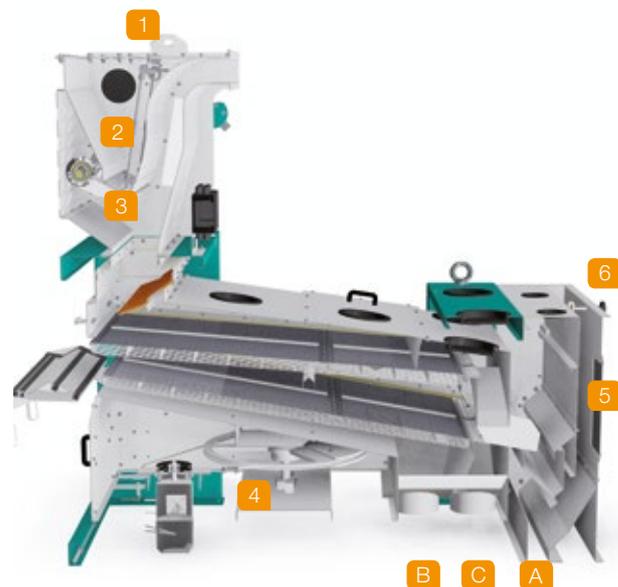
### Compact design at investment-friendly prices.

With up to 6 m<sup>2</sup> sieve area and integrated outlet aspiration on less than 2.30 meters in length, the GrainPlus screening machines can easily be integrated into new or existing plants. But it is more than just the compact and robust design as well as the excellent cleaning results that are exciting. Ask for an offer and get convinced about how low the investment costs are for the GrainPlus machines.

### Advantages at a glance:

- Flexible configuration for multifunctional applications and the desired separation effect
- Minimum cleaning effort and high sanitation standard
- Compact design at investment-friendly prices





- |                          |                    |
|--------------------------|--------------------|
| 1 Product inlet          | A 1st grade        |
| 2 Vibrating inlet flap   | B 2nd grade        |
| 3 Inlet aspiration       | C Coarse particles |
| 4 Sieve box drive        |                    |
| 5 Vertical sifter        |                    |
| 6 Exhaust air connection |                    |

"We use the GrainPlus for the cleaning and processing of malt. The machine works very efficient and runs without any problems – this helps us to save valuable time and money."

**Karl Locher, Managing director Brauerei Locher AG, Switzerland**

#### Technical data and capacities

	GrainPlus 05	GrainPlus 05E	GrainPlus 10	GrainPlus 10E	GrainPlus 20	GrainPlus 20E	
<b>Max. product capacities</b>							
Wheat, corn	t/h	12	12	25	25	50	50
Barley	t/h	10	10	20	20	40	40
Rapeseed, wet corn	t/h	6	6	12	12	25	25
Soybeans	t/h	15	15	30	30	60	60
<b>Operating width</b>	<b>m</b>	0.5	0.5	1.0	1.0	2.0	2.0
<b>Screen area</b>	<b>m<sup>2</sup></b>	1.5	1.5	3.0	3.0	6.0	6.0
<b>Dimensions (L x W)</b>	<b>m</b>	2.24 x 0.91	2.24 x 0.91	2.24 x 1.41	2.24 x 1.41	2.24 x 2.41	2.24 x 2.41
<b>Height</b>	<b>m</b>	1.48	2.15	1.48	2.15	1.48	2.15
<b>Motor power</b>	<b>kW</b>	0.75	0.75	0.75	2 x 0.75	0.75	2 x 0.75
<b>Aspiration connection</b>	<b>m<sup>3</sup>/min</b>	35	50	70	100	120	190

Machine configuration "E" with inlet aspiration.

# LACB SMA. The specialist for oilseed cleaning.

The SMA sieve cleaning machines convince with high capacities and quick access to the sieves for easy cleaning and maintenance – a big advantage for the cleaning of any kind of grain and a must for oilseed processing.

"The SMA cleaning machine is exactly what we need: good cleaning results, easy and fast cleaning after product changes and overall good price conditions. Therefore we just recently bought one more SMA machine."

**Jaroslaw Sapilo, Managing director of GPH Farmer, Poland**

## Advantages at a glance:

- Consistently high cleaning quality, even at high throughput rates
- Easy accessibility for maintenance and cleaning
- Optimal price-performance ratio

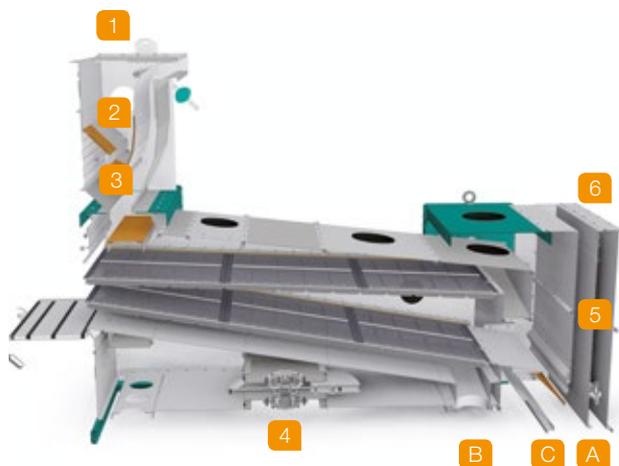
## Optimal accessibility for maintenance and cleaning – particularly important for use with oilseeds.

Thanks to the product flow designed specifically for processing oilseeds, the two machine types meet the high technical requirements of oilseed cleaning. This requires excellent accessibility to the sieves from the front side for easy sieve replacement and cleaning. The cleaning and maintenance process is also facilitated by the increased spacing between the screen levels and the large product outlets.

## High cleaning quality and high capacities at low costs.

The SMA screen cleaning machines not only convince with their high throughput rates of up to 220 t/h (for wheat), but also with their excellent cleaning results. A fabric cloth in the inlet area as well as the sidewise outlet channels ensures a dust-free environment. Thanks to the combination of aspiration and the proven circular sieve movement in a machine with optimized design, the SMA offers an optimal price-performance ratio.





- 1 Product inlet
  - 2 Vibrating inlet flap
  - 3 Inlet aspiration
  - 4 Sieve box drive
  - 5 Vertical sifter
  - 6 Aspiration connection
- A 1st grade
  - B 2nd grade
  - C Coarse particles

## Options for more flexibility and to fulfill all needs.

The SMA 203-3 offers the possibility to use a double inlet instead of the inlet aspiration unit. Polyurethane plates can be installed in the inlet area, the product distribution channels and the vertical sifter as wear protection.

For husk separation, height-adjustable suction nozzles can be attached to the pre-sieve of the SMA 203-3 (version: OL). In this way, an excellent separation of oil seeds from their hulls is achieved.



SMA 203-3



SMA 206-6

### Technical data and capacities

#### Max. product capacities

Wheat, corn	<b>t/h</b>
Sunflowers, wet corn	<b>t/h</b>
Rapeseed	<b>t/h</b>
Soybeans	<b>t/h</b>
<b>Operating width</b>	<b>m</b>
<b>Screen area</b>	<b>m<sup>2</sup></b>
<b>Dimensions (L x W x H)</b>	<b>m</b>
<b>Motor power</b>	<b>kW</b>
<b>Aspiration connection</b>	<b>m<sup>3</sup>/min</b>

	SMA 203-3	SMA 206-6
Wheat, corn	110 / 220*	220 / 440*
Sunflowers, wet corn	55	110
Rapeseed	45	90
Soybeans	100	200
Operating width	2.0	2.0
Screen area	12	24
Dimensions (L x W x H)	3.74 x 2.93 x 2.75	4.47 x 3.40 x 4.29
Motor power	2.2 + 0.75	3.0 + 0.75
Aspiration connection	245	550

\* for coarse cleaning

# LAAB TAS universal cleaning machine. **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.



## Advantages 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.



3D-Animation  
**TAS.**



"We use the TAS cleaners in our wheat-intake but also in the main-cleaning 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 sieve. This means major time savings, especially at plants with frequent product changes.

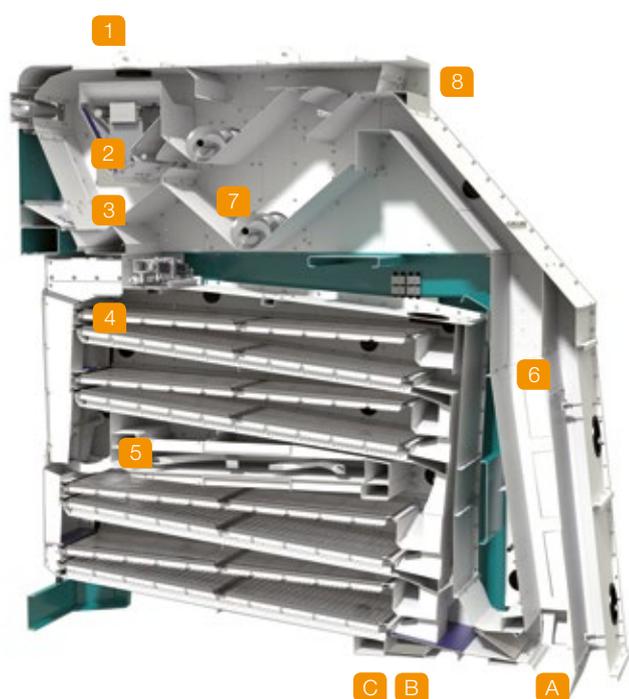
### **Intelligent air flow and a convenient adjustment.**

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.



# LAAB TAS universal cleaning machine. Applicable in a large capacity range.

The TAS series is available in nine different installation sizes and can thus cover a very wide range of capacities. This range is from 20 t/h to a maximum of 250 t/h (for wheat cleaning).



## 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**.

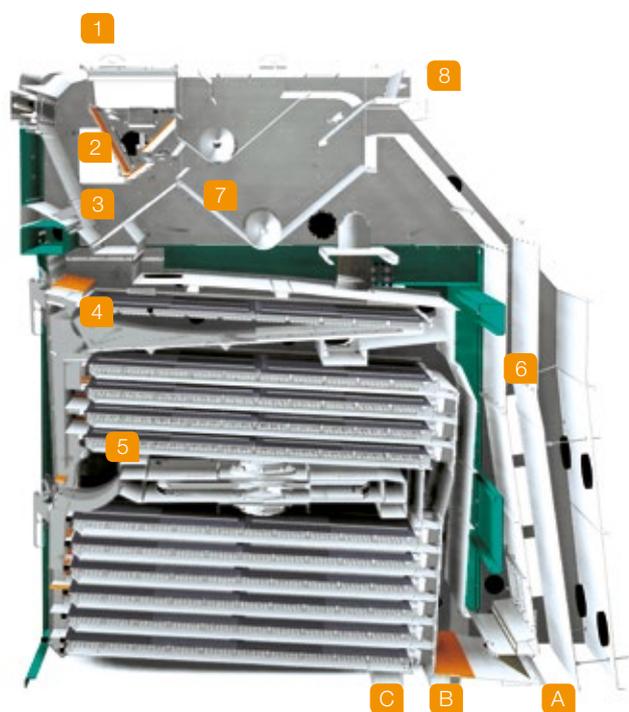
The ratio of the preliminary and main sieve area is the same for all four types. The pre-screen area is particularly crucial for the use as a pre-cleaner as well as for rapeseed cleaning whereas enough main-screen area is important for precise cleaning into 1st and 2nd grade.

- |                                    |  |
|------------------------------------|--|
| 1 Product inlet                    | 7 Expansion chambers with discharge screws |
| 2 Vibrating inlet flap             | 8 Exhaust air connection                   |
| 3 Inlet aspiration                 |  |
| 4 Product distribution onto sieves | A 1st grade                                |
| 5 Drive sieve box                  | B 2nd grade                                |
| 6 Vertical sifter                  | C Coarse particles                         |

### Technical data and capacities

		TAS 152A-2	TAS 154A-4	TAS 204A-4	TAS 206A-6
<b>Max. product capacities</b>					
Wheat, corn	t/h	60	120	160	250
Barley	t/h	50	100	130	210
Rapeseed	t/h	45	90	120	180
Soybeans	t/h	65	130	180	270
<b>Operating width</b>	m	1.5	1.5	2.0	2.0
<b>Screen area</b>	m <sup>2</sup>	12	24	32	48
<b>Dimensions (L x W x H)</b>	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
<b>Motor power</b>	kW	2.2 + 0.75	3.0 + 0.75	3.0 + 0.75	3.0 + 0.75
<b>Aspiration connection</b>	m <sup>3</sup> /min	152	207	272	402

Accordingly, different sieve perforations and sizes can be selected depending on the type of grain and desired cleaning results. All versions have one aspect in common: first-class cleaning technology with maximum throughput and safe operation.



## 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 post-sieve 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.

- |                                    |  |
|------------------------------------|--|
| 1 Product inlet                    | 7 Expansion chambers with discharge screws |
| 2 Vibrating inlet flap             | 8 Exhaust air connection                   |
| 3 Inlet aspiration                 |  |
| 4 Product distribution onto sieves | A 1st grade                                |
| 5 Drive sieve box                  | B 2nd grade                                |
| 6 Vertical sifter                  | C Coarse particles                         |

### Technical data and capacities

		TAS 153A-1	TAS 156A-1	TAS 206A-2	TAS 210A-1	TAS 200A-III
<b>Max. product capacities</b>						
Brewing barley (Main cleaning)	t/h	20	30	60	50	40
<b>Operating width</b>	m	1.5	1.5	2.0	2.0	2.0
<b>Screen area</b>						
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	m <sup>2</sup>					8
<b>Dimensions (L x W x H)</b>	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
<b>Motor power</b>	kW	2.2 + 0.75	3.0 + 0.75	3.0 + 0.75	3.0 + 0.75	3.0 + 0.75
<b>Aspiration connection</b>	m <sup>3</sup> /min	152	152	272	152	152

# LADB Ultratrieur. Sorting by grain length at the highest level of precision.

The Ultratrieur is a well-established grading machine that separates grain and other granular products according to their length. The different models are ideal for size separation applications. They are used for cleaning, grading, seed processing as well as the conditioning of various industrial products.



## Advantages at a glance:

- Precise grading results
- Flexible application area thanks to the modular design
- Proven technology and optimized design result in low investment and maintenance costs

"There is no doubt, the indented cylinder is the most operative and zero interruption machine to remove screenings (long grain & broken kernel) from wheat. It improves the overall cleaning efficiency with high output, less power consumption & less maintenance. From the beginning of the flour milling, this machine is the inevitable part of cleaning section."

**Md Imran Hossain Khan, Head-Miller AKIJ Flour Mill, Bangladesh**

## Technical data and capacities

		Ultratrieur
<b>Max. product capacities</b>		
Wheat, rye	<b>t/h</b>	up to 48
Barley	<b>t/h</b>	up to 40
Oats	<b>t/h</b>	up to 28
White rice	<b>t/h</b>	up to 10
<b>Models</b>		
		Round grain separation, long grain separation, round grain final separation, long grain final separation
<b>Grading</b>		up to 7 grades
<b>Diameter of cylinder</b>	<b>mm</b>	max. 700
<b>Cylinder length</b>	<b>mm</b>	max. 4,000
<b>Motor power</b>	<b>kW</b>	0.55-9.0

## Operator-friendly setting and product monitoring ensure excellent separation.

Samples can be taken at any time by opening the plastic cover. The trough can be adjusted to the respective product needs via a simple variable adjustment. This ensures a high degree of separation.

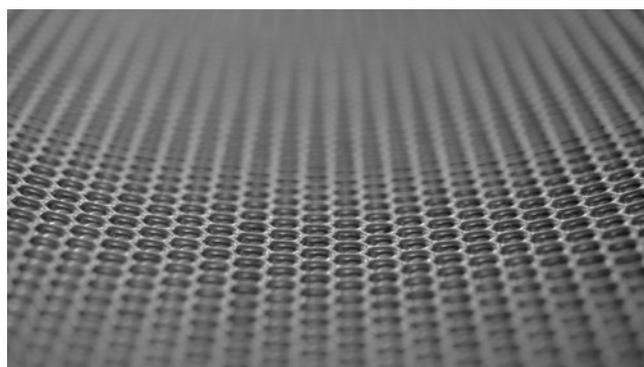
## Flexibility thanks to modular design for ideal grading results.

The Ultratrieur is available in 12 combinations with different lengths from 1 m to 4 m. The wide range of possibilities allows the machine to be modularly adapted to the processed product and the desired grades. Combining round and long grain separation with an optional final separation achieves a highly precise cleaning and grading of the product. This is the cornerstone for the production of high quality food.

## The centerpiece – the trieur jacket.

The diameter and shape of the pockets as well as their condition significantly affect the grading results. That is why Bühler offers a large selection of pocket sizes. You can optionally choose hardened trieur jackets. These roughly double the service life compared to conventional trieur jackets, which in total achieves cost savings of about 30 %.

The maintenance, cleaning and inspection of the grain cleaning machine interior is additionally facilitated by an optionally available device for the installation and removal of the trieur jacket.



# Dedusting technology for cleaning machines. **The perfectly matched system.**

Powerful fans are just as indispensable as modern filter systems due to the current safety and environmental regulations. The filter and dedusting technology "made by Bühler" ensures holistic and standardized system solutions for the smooth use of cleaning machines.

## **Standardized technology for economical operation.**

- The corresponding dust aspiration solution using filter or cyclone, including all relevant system components, is already available for all models of the machine types TAS, GrainPlus and SMA.
- Employing the correct dedusting technology and coordinated system components has a significant influence on achieving the best possible cleaning results and leads to an energy-efficient and economic operation thanks to the optimal design.

## **Everything from a single source.**

- Quick offer creation and low engineering costs
- Design of the entire machine and plant technology by Bühler experts
- One supplier for all spare parts





## 1 Filter

- The round filters can be used for flammable or explosive dusts due to the pressure-resistant design with pressure relief
- Less space required due to the compact design with high filter area
- Certified and designed according to all current relevant standards and guidelines for explosion protection



## Cyclone

- Optimal separation efficiency for high volumes with moderate requirements for residual dust content
- Compact maintenance-free design



## 2 Air pipe system

- Designed by experts to ensure the necessary air speeds in the pipelines
- Sturdy design that withstands the negative pressure in the system



## 3 Fan

- Our portfolio includes 65 different fans in 8 versions to complete the system covering volume flow of 20-1800 [m<sup>3</sup>/min] and pressures from 800-6000 [Pa]
- Approved for installation in ATEX zones



## 4 Silencer

- Includes transition pieces and telescopic supports
- Noise reduction from -10 to -34 dB



## 5 Deflector hood

- Enables pure air to be released into atmosphere
- Prevents rain or other matter from entering

# Mycotoxin reduction from A-Z. For safe food and feed products.

Mycotoxin contamination of agricultural raw materials for the production of food and feed is one of the major threats to the health of humans and animals. According to the Food and Agriculture Organization of the United Nations (FAO), up to 25 % of agricultural raw materials are contaminated with mycotoxins.

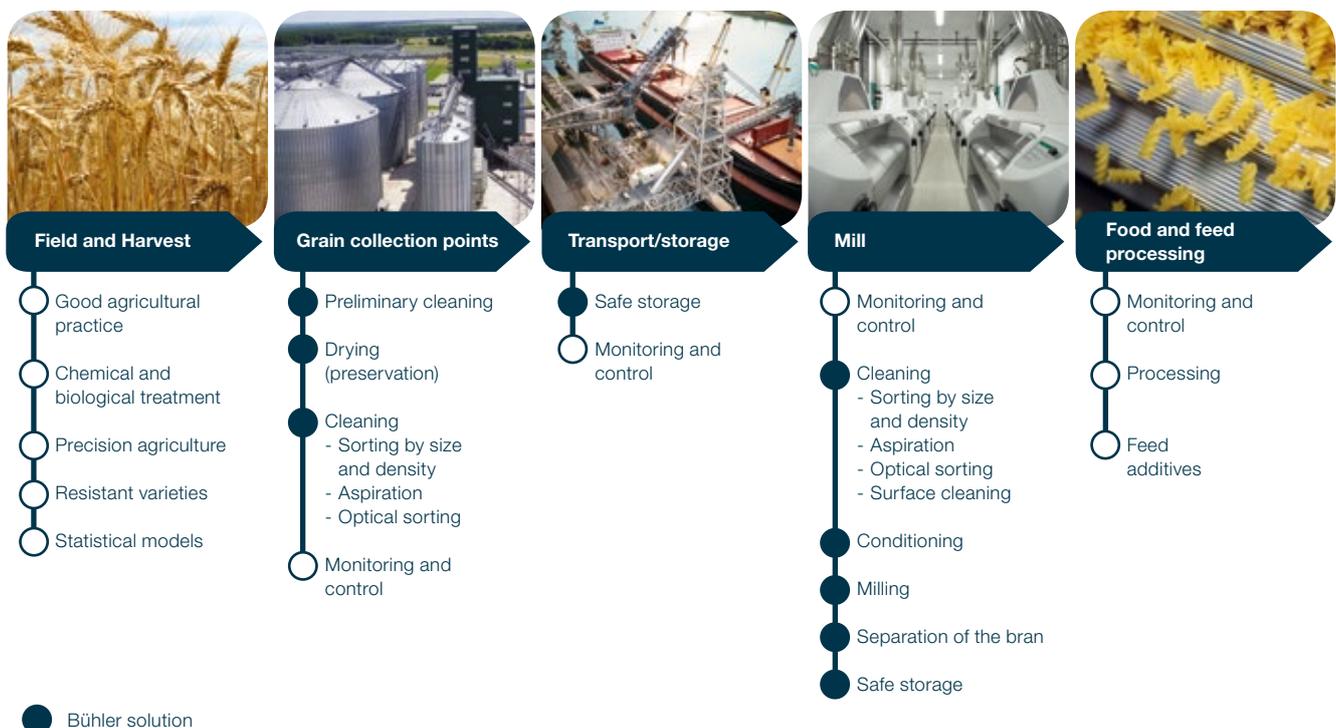
The risk of mycotoxin contamination of grain can be reduced through good agricultural practice, but never entirely eliminated. In order to effectively reduce mycotoxin levels, Bühler offers efficient solutions for all steps of grain processing.

The focus is on the removal of grain and grain fractions affected by fungus based on characteristics such as size, density and optical properties, which are the core tasks of our sieving

machines and our optical sorters. Grain cleaning is thus considered a key measure to reduce the mycotoxin content. This was already successfully proven in many practical applications for different types of grains and mold fungi with their respective mycotoxins.

Get in touch with us and lay the foundation for high-quality products that ensure your business success for the future.

## Reduced mycotoxin contamination through Bühler solutions along the entire value-added chain.





**Our vision:**  
Healthy food.

# In the region, for the region. **Bühler's unique service network.**

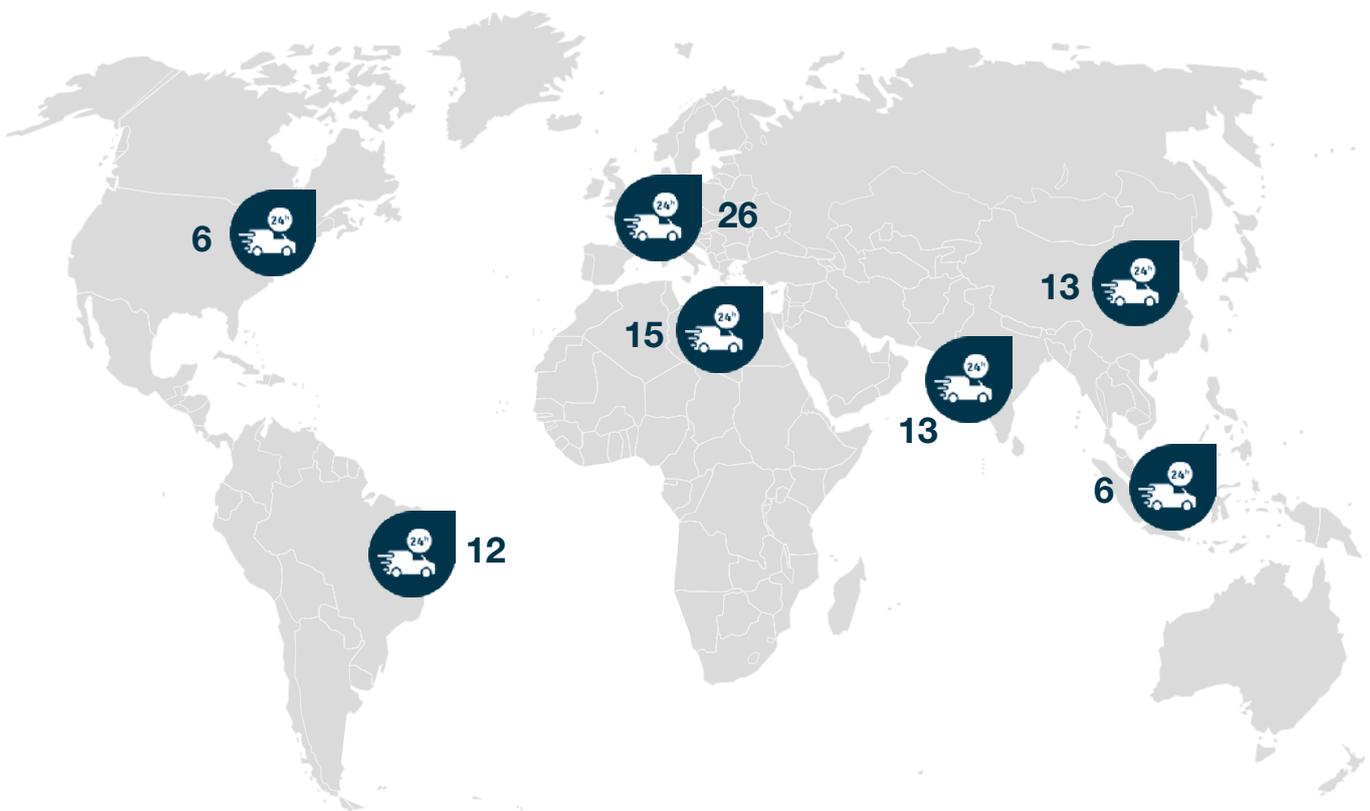
Take advantage of the full potential and expertise of our global service network. You can always rely on the extensive support of the Bühler service team.

## We care for you.

With almost 100 service stations worldwide, we are always there for you and are able to react immediately. To further strengthen this service and to increase your plant uptime, we utilize the power of digitalization. You can connect to the Bühler World around-the-clock by using our digital services and mobile applications. Let's take the chance of digital services and prepare together your plant for the future.

## Advantages at a glance:

- Local service stations worldwide
- Local experts
- Fast response time and help
- Minimized downtime and maximal productivity
- Fast spare part availability thanks to global logistic network



# Long-term safety. Spare parts, training and maintenance.

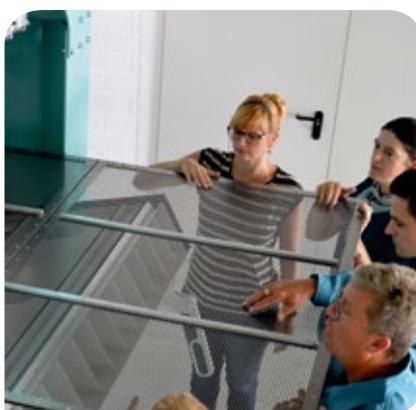
Whether high quality spare and wear parts, targeted training and education, innovative retrofits or quick repairs: we offer efficient service solutions for sustainable business success. Together we will find the optimal solution for your company and your concerns. We are happy to advise you and look forward to hearing from you!



## Bühler original spare parts.

We supply our customers in the long-term and quickly with high quality spare and wear parts. We assist in the identification of the correct parts and guarantee optimal compatibility for maximum performance and operational reliability.

- The right part for the machine for guaranteed operation
- The safety concept of the plant is only maintained with original spare parts
- Long-term and reliable spare parts availability
- Everything from a single source - one supplier for all spare parts



## Training and education.

Expert well-trained employees are key success factors for any company. In individual training sessions, we convey professional industry-specific knowledge and practical skills to our customers and their employees.

- Transfer of expertise from Bühler experts
- Optimal plant performance due to sound process knowledge
- Experience shared within the international Bühler network
- Practical examples and exercises in small groups for optimal individual learning success



## Preventative maintenance.

With our **Bühler Care** service contracts, we offer comprehensive global service for all components and systems. By using **ProPlant**, the customer-specific service management system from Bühler, it is possible to precisely plan and document maintenance work on the system in a simple and clear way.

- Individual service solution to minimize risk
- Transparent and predictable service costs
- Maximum productivity and plant availability
- Reduced operating costs
- Easy planning of service work

You can find an overview of our entire service offering under "Services" on our website [www.buhlergroup.com](http://www.buhlergroup.com)

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