



**ALLGAIER** | PROCESS TECHNOLOGY

*MOGENSEN*

MSIZER

The new dimension of screening



# THE NEW DIMENSION OF SCREENING

## ECONOMICAL – EFFICIENT – ENVIRONMENTALLY FRIENDLY

With the new MSizer, the Allgaier-Group pushes bulk material screening into a new era.

The MSizer models are based on the same Sizer principle developed and proven by Fredrik Mogensen more than five decades ago. They combine state-of-the-art technology with decades of extensive knowledge and expertise.

The result is an even more accurate screening process with increased throughput in a smaller footprint.

## YOUR ADVANTAGES AT A GLANCE

	<b>STRONG PERFORMANCE</b>	Increased material throughput with small space requirement. High process flexibility and reliability. High grading quality for excellent process results.
	<b>HIGH EFFICIENCY, SIGNIFICANTLY REDUCED OPERATING COSTS</b>	Reduced energy consumption. Reduced total cost of ownership (TCO). Long-term investment security through high durability.
	<b>MAXIMUM FLEXIBILITY</b>	Customized to specific requirements. Extensive accessory. Standardized transport dimension. Optimized hexagonal outlet hoods.
	<b>MAXIMUM PLANT AVAILABILITY</b>	Low clogging risk through Sizer principle. High lifetime of the screen coverings. Long-term testing under maximum load. Maximum operational safety by FEM-optimized, heavy-duty construction.
	<b>EASY TO INSTALL AND MAINTAIN</b>	Simple screen replacement requiring only one person. EasyMount with non-confusable assembly coding – quick change of attached components such as motors. Fail-safe plug interface for motor connection. Digital service with the Allgaier ProcessApp.

# THE NEW SIZER GENERATION

For the development of the new MSizer, the latest development methods have been used to optimize the design. A complete finite element analysis of all structural obstacles was simulated with virtual prototypes and thoroughly tested while under continuous operation.

As a result, the new MSizer is the new Sizer generation that drastically minimizes the risk of failure, ensuring safe and trouble-free production in all areas of operation.



Sophisticated and proven Sizer technology in industrial applications





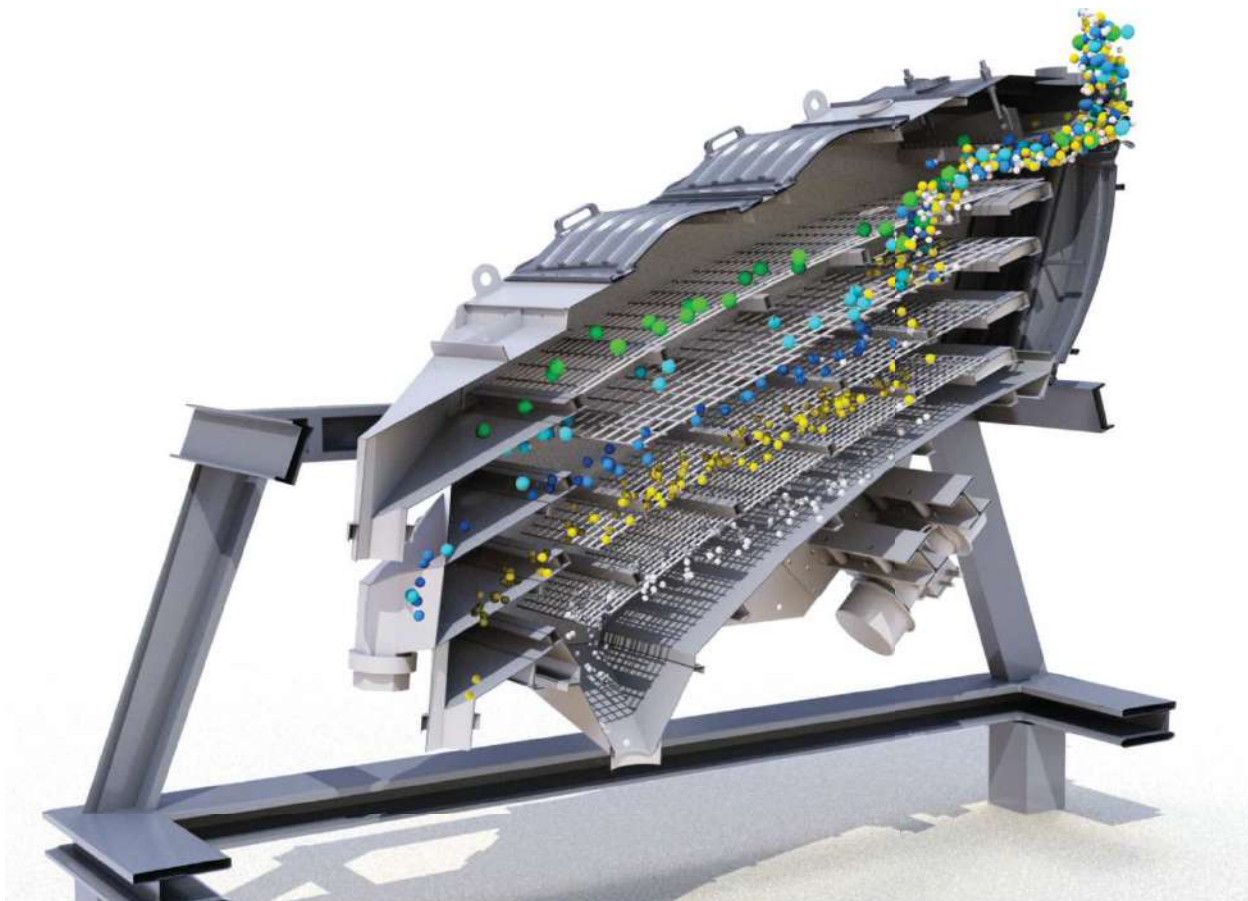
# FUNCTIONALITY

The MSizer family is the most powerful and versatile classifier machine according to the Sizer principle. The machine combines economic and operating efficiency benefiting from a new screen deck concept with a modified angle of inclination of the screens. The one to six screen decks of the MSizer considerably reduce screen replacement times thanks to the fast screen changing mechanism.

The MSizer extend screen decks move in a linear oscillation pattern and in the newly designed MSizer compact the screen deck movement is elliptic. Both with the precisely adapted oscillation and elliptic range, the fine grain of the

feed material quickly flows, almost vertically downwards, while the coarse grains are efficiently screened from the material stream. Clogging is effectively eliminated with a significantly increased throughput.

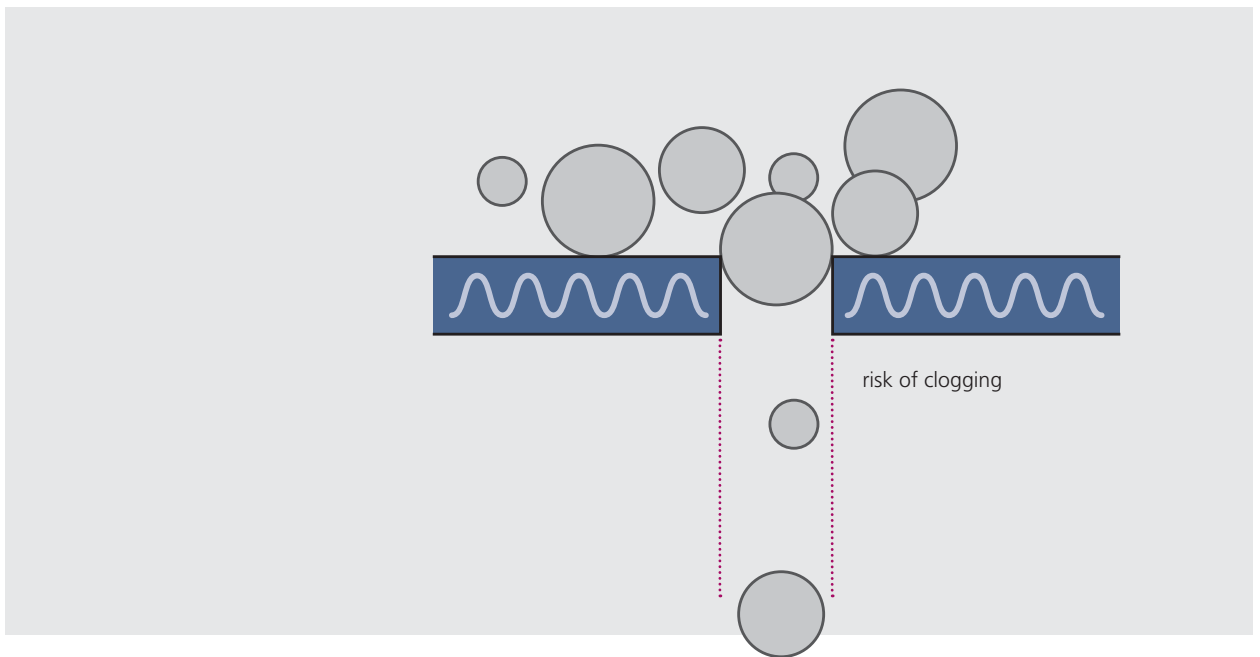
Unlike conventional flat screens, the mesh sizes of the MSizer are designed to be larger due to the optimized screen inclination which promotes superior grading quality. The increased mesh size – compared to the separating cut – counteracts the formation of material layers and clogging, leading to a significantly higher throughput and service life of the screen linings.



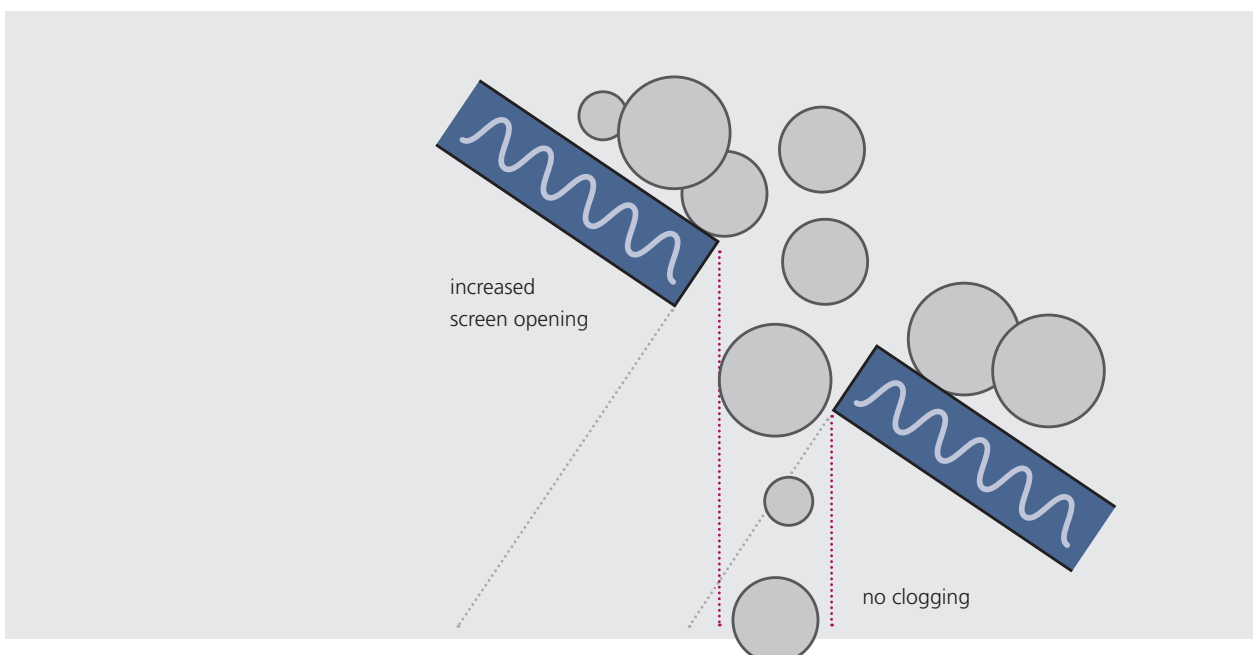
1-6 screen decks arranged on top of each other, with the topmost screen having the smallest inclination and the bottom-most screen having the greatest inclination

# FUNCTIONALITY

## CONVENTIONAL SCREENING TECHNOLOGY



## MSIZER FAMILY: THE NEW DIMENSION OF SCREENING



# PRODUCT OVERVIEW

## PRODUCT OVERVIEW

The MSizer can be used in almost all industrial sectors. Decades of Sizer experience, in combination with the new features of the MSizer, ensure a long service life and a long-term confidence in your investment.

All MSizer series are available with a new machine control. The MSizer additionally has integrated fail-safe vibration monitoring which drastically minimizes the risk of failure and ensures safe and durable operation.

## THE CORRECT SIZE FOR YOUR APPLICATION

The machine size depends on the type of infeed material, the desired grain sizes and the process-related feed rate. Each machine is customized to specific requirements, applications and production environment. Thus the design of the inlets and outlets allow for a flexible configuration. Due to the multi-deck design, the machine sizes are significantly smaller than with conventional screening machines.

		<b>MSizer compact</b>	<b>MSizer extend</b>	<b>MSizer giant</b>
Type		short deck sizer	long deck sizer	long deck sizer
Number of screen decks		1-4	2-6	2-6
Effective screen length	m	1.3	2.4	3.35
Screen deck width	m	0.5-2	1-3	3
Number of motors		1 vibration motor	2 vibration motors or exciters	2 vibration motors or exciters
Movement		elliptical	linear	linear



## MACHINE VOLUME AND GRAIN SIZES

Overview of how the different models in the MSizer family overlap. The information in the visualization is based on a machine width of 1 m for the MSizer compact and the

MSizer extend as well as a machine width of 3 m for the MSizer giant.

### MSIZER COMPACT



### MSIZER EXTEND



### MSIZER GIANT



Feed pellets 2-8 mm 12-80 tph

Minerals 0.2-10 mm 5-450 tph

Mining 5-150 mm 50-1,200 tph

Sugar 10-100 tph

# MSIZER COMPACT

## MSIZER COMPACT

The MSizer compact is driven by a single vibrator resulting in the typical elliptical motion pattern that counteracts blinding of the screens and loosens and stratifies the feed material. This secures an efficient material spread. Thus the MSizer compact achieves a throughput of over 40 t/h e.g. for feed screening. It is often used in the feed and food industry, but is also regularly used successfully for other industrial applications.



## OPTIONS

- ATEX version – Use in a potentially explosive plant environment
- Industrial or stainless steel
- Motor and brake control system
- Electronic machine monitoring system
- Integrated material distribution system
- Mechanical screen cleaning system
- Pneumatic screen cleaning system
- Screen tension monitoring system
- Electrical screen deck heating system



# MSIZER EXTEND

## MSIZER EXTEND

The long deck classifier machine MSizer extend is a completely optimized development of the Mogensen Sizer, which has been used successfully worldwide for decades. MSizers can be used in almost all industrial sectors. Depending on the screen structure, fines of 200 micrometers and coarse products up to 40 millimeters can be processed. The machine is characterized by high performance and enormous flexibility. Thanks to the new screen deck concept and the changed inclination angles of the screens, the MSizer combines highest operating efficiency, as well

as robust and compact design with significantly reduced operating costs. The MSizer extend convinces with up to 20 % reduced energy consumption compared to previous machines.





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- ATEX version – Use in a potentially explosive plant environment
- Industrial or stainless steel
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- Electronic machine monitoring system
- Integrated material distribution system
- Mechanical screen cleaning system
- Pneumatic screen cleaning system
- Screen tension monitoring system
- Electrical screen deck heating system
- Replacement wear protection
- Vibration dampening system





# MSIZER GIANT

## MSIZER GIANT

The new MSizer giant offers an average throughput increase of up to 35 % compared to the MSizer extend. With a throughput of over 80 t/h, e.g. when screening granulated sugar, the MSizer giant becomes the largest sizer in the world. Thus, the MSizer giant is suitable for all applications that require extra volume, such as sugar or building materials. The MSizer giant makes it possible to reduce the number of sizers or conventional screening machines in large production plants and with it effectively reduce the investment costs in infrastructure and maintenance.



## OPTIONS

- ATEX version – Use in a potentially explosive plant environment
- Industrial or stainless steel
- Motor and brake control system
- Electronic machine monitoring system
- Integrated material distribution system
- Mechanical screen cleaning system
- Pneumatic screen cleaning system
- Screen tension monitoring system
- Electrical screen deck heating system
- Replacement wear protection
- Vibration dampening system



# ALLGAIER PROCESSAPP

## ALLGAIER PROCESSAPP – SERVICE2GO

MSizer customers can now use the digital Allgaier Service2Go via smartphone or tablet. The ProcessApp is available in 5 languages (German, English, French, Spanish and Swedish) and for iOS and Andorid devices.

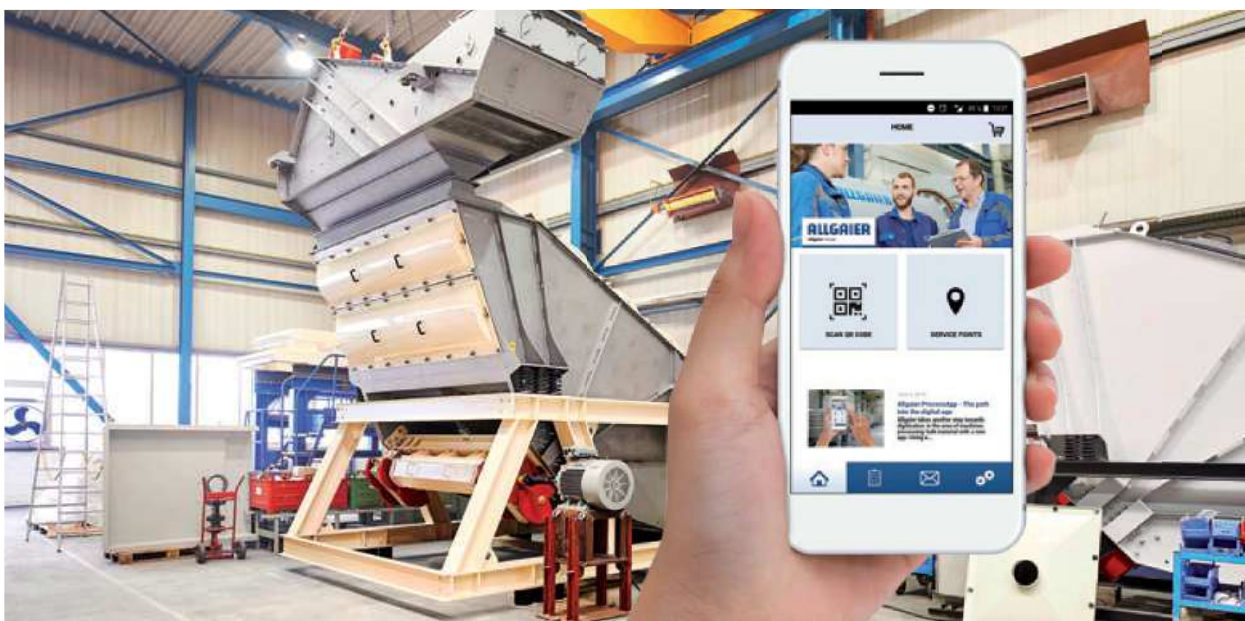
### FUNCTIONALITY

- By scanning the machine QR code on the MSizer itself, the machine can be identified immediately and customers have access to a digital twin – an interactive drawing of their machine.
- In addition to the spare parts order, the documentation of the specific machine can be viewed at the production site.

- In case of planned maintenance or in the event of a fault, it takes only one click to establish contact with the Allgaier Process Technology service team.

### ADVANTAGES

- Time savings through easy identification and faster spare parts quotation process
- Direct document access and overview of all maintenance logs
- Allows mobile work directly on the machine
- Easy handling and intuitive operation
- Immediate service contact



Download your free  
ProcessApp with the  
QR code today





# UNLIMITED APPLICATION RANGE

## STONES AND SOIL

sand  
gravel  
chalk  
basalt  
limestone

## FODDER

animal feed  
grain handling  
mineral handling  
security screening

## CERAMICS

bentonite  
silicium carbide

## METALLURGY

iron ore  
nickel ore  
manganese  
aluminum oxide  
fly ash

## CHEMICALS

fertilizer  
titanium dioxide  
zinc sulfate  
cupric sulfate

## WASTE/RECYCLING

glass  
organic residual waste  
plastic granules

## FOODSTUFFS

sugar  
cocoa beans  
milk powder  
flour from fish and meat  
tobacco  
salt

## MINING

coal  
coke  
anthracite

## WOOD/PARTICLE BOARDS

wood shavings  
wood flour  
sawdust

## PLASTICS

## PHARMA

## BIO FUELS/PELLETS

and many other solid bulk materials.



# CONVINCE YOURSELF IN OUR TECHNICAL CENTER

Convince yourself of the quality and the advantages of the MSizer in the Mogensen technical center in Wedel, Germany and in Hjo, Sweden.

You will not only get to know the MSizer capabilities related to your products, but we also accompany you in the smooth implementation of the MSizer into your planned processes and in the integration into existing systems.

With more than 50 years of experience we are gladly at your disposal and look forward to welcoming you to our technical centers.

We are looking forward to your visit.







Allgaier Process Technology with its core brands Allgaier, Mogensen, Gosag and Mozer is the market leader in custom-made systems for industrial **washing, drying, cooling, screening and sorting** applications for all types of bulk material. With a presence in over 40 countries, Allgaier Process Technology serves more than 30,000 manufacturing customers in a variety of industries including, but not limited to, chemicals, pharmaceuticals, foodstuffs, fodder, waste/recycling, mining, metallurgy, bio fuels, wood, ceramics, plastics, stones and soil.

ALLGAIER

MOGENSEN

GOSAG

MOZER

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