

# GSort DENSIMETRIC TABLE

Dry Separation by  
Difference in Density



**MOGENSEN**

## MOGENSEN TECHNOLOGY

# Engineered Material Control Since 1966

Since 1947, MOGENSEN has specialized in advanced screening, classification and washing technologies for industrial, mining, and recycling sectors.

Our systems deliver reliable separation, high process uptime, and low operational cost, combining European engineering precision with proven field performance.



# GSort

## Key Performance Highlights

- Direct CAPEX: Optimized specific capacity per investment
- Indirect CAPEX: Reduced installation costs (two heights available, with or without sunken heavy)
- OPEX: Low direct maintenance costs (kWh/t\*)
- Lead Time: Improved delivery timelines
- Modularity: High adaptability to process requirements

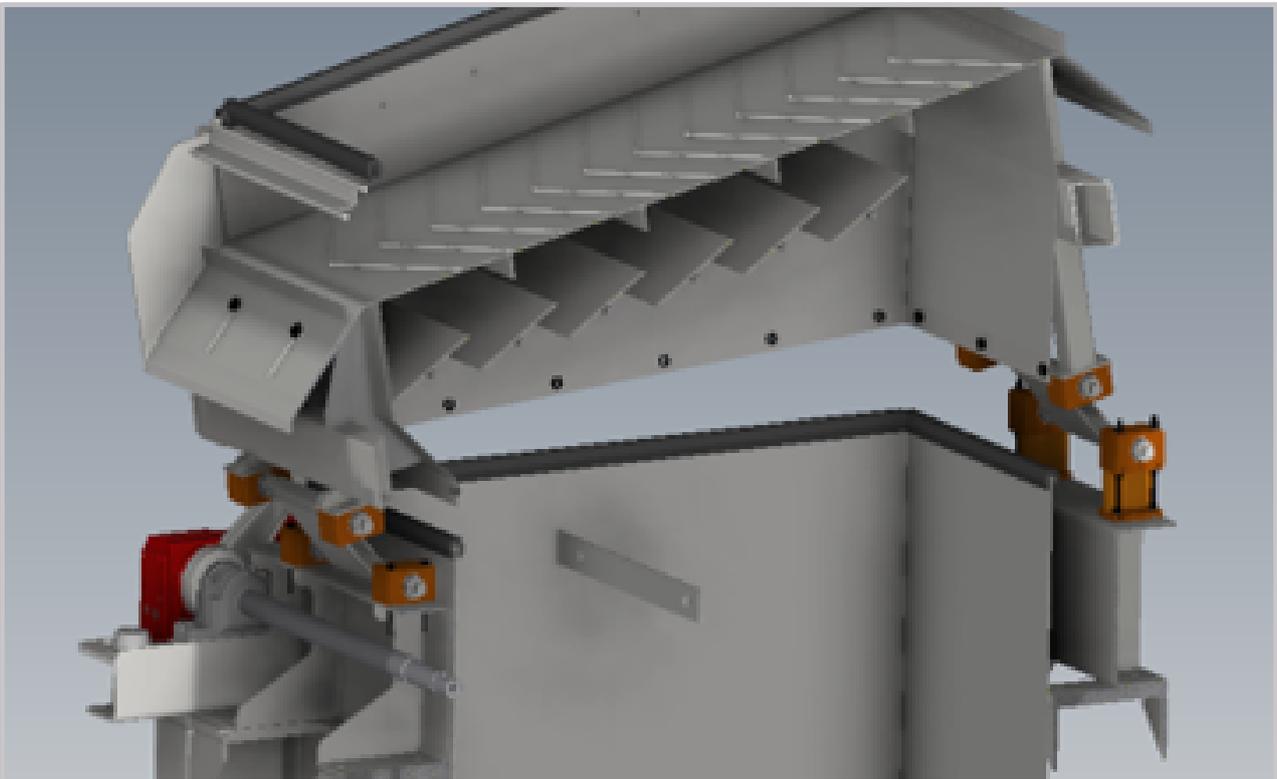
\* Metric ton



# GSort

## Operating Principle

Enhanced feeding and deck design.



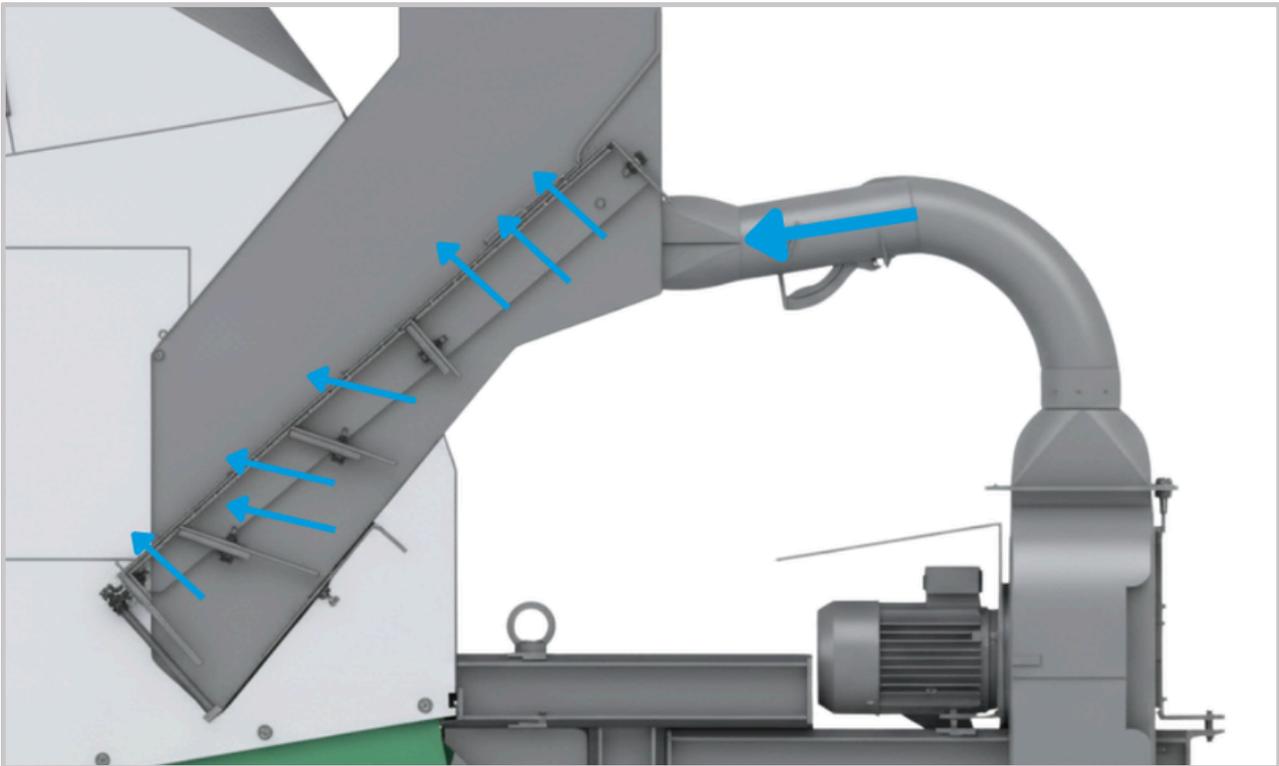
The GSort design emphasizes the interaction between the machine inlet, the treatment deck, and the air distribution system. These elements are configured to provide stable density separation under varying feed conditions.

- Controlled vibration, inclination, and air flow
- Machine inlet configuration
- Chevron-shaped treatment bottom
- Increased slope gradient
- Increased vibration amplitude
- Adjustable air distribution system with multiple operating settings

## GSort

# New Fluidized Input

Stable density separation under varying feed conditions, including moisture and composition changes.



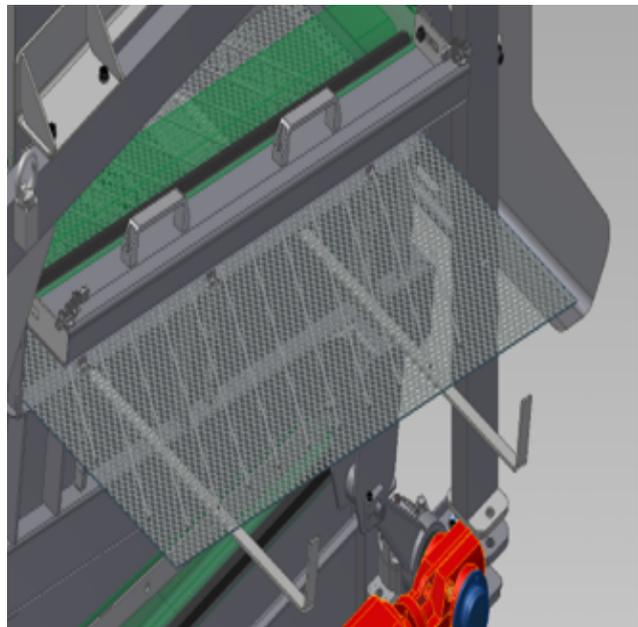
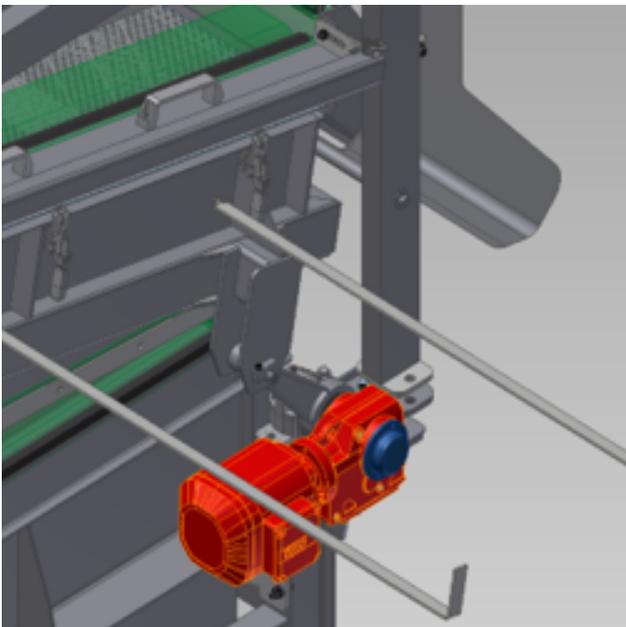
The GSort combines flying and fluidized speeds in the feeding chute. The patented FCFB pre-fluidization chute increases table capacity compared to conventional densimetric tables while maintaining separation purity above 98% and reducing specific energy demand.

- Flying and fluidized zones in the feeding chute
- Increased material load per table meter width
- Higher specific capacity per installed footprint
- Reduced specific energy consumption
- Improved CAPEX efficiency (t/(h·m·€))
- Lower operating costs (kWh/t)

## EASY MAINTENANCE

# Designed for fast access and reduced downtime

The GSort design combines service-oriented access with mechanically robust construction. Maintenance tasks are simplified through accessible components, while structural dimensioning supports stable operation when processing abrasive or variable materials.



- Adjustable air distribution system
- Lateral replacement of the treatment bottom
- No servicing through inlet or outlet openings
- Side openings on the vibratory box for mechanical access
- Reinforced vibratory mechanism, suspension frame, and machine walls
- Adaptability to changing inlet properties through multiple operating adjustments
- Reduced maintenance time compared to conventional densimetric tables

# GSort

## Available Models

GSort R  
R50 | R100 | R150



For light, fibrous, and organic fractions.  
Optimal for compost, RDF, and flexible films.

- Fluidization speed: <math>< 3 \text{ m/s}</math>
- Density: <math>< 1.7 \text{ t/m}^3</math>
- Particle size: <math>< 35 \text{ mm}</math>
- Typical throughput: 13 t/h·m
- Energy: 1.75 kWh/t

### Applications:

Compost, RDF, PET-film, vermiculite, glass-organics

# GSort

## Available Models

GSort M  
M50 | M100 | M150



Built for heavy-duty, high-density mineral fractions.

- Fluidization speed: > 4 m/s
- Density: > 1.3 t/m<sup>3</sup>
- Particle size: > 25 mm
- Reinforced frame and vibratory mechanism for abrasion loads
- Low-wear deck design for mineral applications

### Applications:

Coal, barite, manganese, demolition waste, aluminum scrap

## ADVANTAGES OF GSORT

# Measured performance versus conventional densimetric tables

Key performance indicators comparing GSort R with conventional densimetric tables under equivalent operating conditions.

Parameter/Model	GSort R	Standard Densimetric Table
T/h*m width compost 35% humidity	13	6.5
Compost purity %	99	98
Compost losses %	2 to 3	3 to 5
Consumption kw/ton compost	1.75	2.5
% compost extracted by the filter in a specific case of moisture compost 35%	>40	<25
Cleaning interval of the treatment bottom	>3 days (sandwich deck)	8h
Machine downtime for exchanging the Treatment Bottom	5 min	40 min
Cost reduction in direct investment measured in t/(h*m*EUR) vs standard versions	30%	0

## SECTOR APPLICATIONS & MODULARITY

# Built for Plant Integration and Variable Feed Conditions

MOGENSEN systems operate in environments with fluctuating feed, abrasive materials, and sustainability demands.



### GSort R

- Compost MSW (0 - 10 mm)
- Oversized compost MSW (10 - 40 mm)
- Glass + organics (0 - 20 mm)
- RDF (0-40 mm)
- Vermiculite
- Anthracite coal
- PET-film
- Rubber and textile
- Fine manganese ore

### GSort M

- Coal
- Magnesite
- Hematite
- Barite
- Celestite
- Attapulgit
- Manganese ore
- Ferrum-manganese
- Aluminum recycling
- Crusted cables
- Crusted demolition waste

## TESTING FACILITY

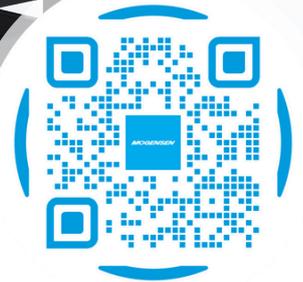
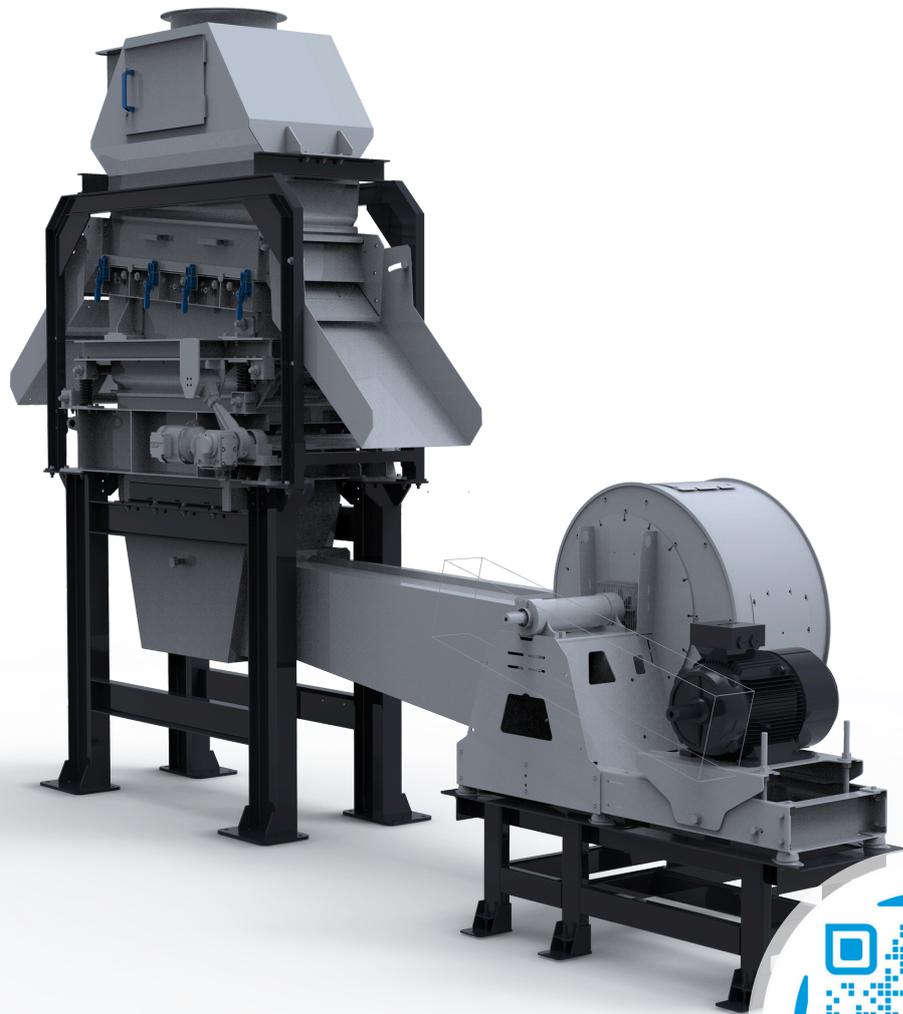
# Where Innovation and Real Life Intersect

The MOGENSEN Test Facility is where advanced technology meets practical application. Here, our customers experience first-hand how our advanced equipment handles different materials and delivers consistent, streamlined results.

This space, equipped with the latest technology and operated by professional technicians, demonstrates the capabilities of our machines and reflects our commitment to quality and continuous technological advancement, ensuring that every solution far exceeds the requirements of the real world landscapes.



# WHERE We Are



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