



SIEBTECHNIK TEMA



Sample Preparation in the Laboratory

JAW CRUSHER - EB

With our various sizes of jaw crushers, we are sure to have the right model for your application.



In the jaw crusher, comminution takes place in a wedge-shaped crushing chamber between one stationary and one moving crushing jaw. Our jaw crushers deliver:

- ◆ **High final fineness of up to 90% < 1 mm^{*1)}**
depending on the size of the crusher, the material, and the crushing gap set, it is possible to achieve comminution ratios of up to 1:200.
- ◆ **A stationary crushing jaw, which is designed like a door**
this allows the crushing chamber to be opened quickly and without tools for purposes of cleaning and full inspection, making it possible to ensure that no cross contamination of material takes place.
- ◆ **Continuously adjustable crushing gap**
which can be read via a scale on the housing. The zero point of the scale can be readjusted when the crushing jaws are worn down.
- ◆ **Reversible overload protection**
for size EB 100x80-L and above
- ◆ **Crushing jaws can be rotated 180°**
the service life of the crushing jaws can thus be doubled, as the main wear usually occurs in the area of the smallest crushing gap.
- ◆ **Dust extractor connection**
via a connection flange in the tamper-proof feed chute.
- ◆ **Low-maintenance and lubricant contamination-free comminution**
with the sealed and lifetime lubricated bearings up to size EB 200x125-L.
- ◆ **Low-contamination comminution with crushing jaws made from**
high-carbon cast steel, stainless steel, tungsten carbide or zirconium oxide.



JAW CRUSHER - EB

If you would like to save a preparation step during sample preparation, our **jaw crushers with integrated dividers** are ideally suited for this purpose:

- ◆ **Innovative app control**
 - Standard Operating Procedures (SOP)
 - Display showing the gap width setting
 - Accessing the operating instructions
 - Direct spare parts inquiry
 - Sample/machine data exportable in csv format
 - Update-friendly app and firmware
- ◆ **The rotary table with 5 collecting boxes**
for dividing the sample quantity into 3x 1:4 and 2x 1:8



If you have any additional requirements, e.g. a base frame that can be picked up with a forklift truck, continuous material feed, ...please contact us.

Technical data

Jaw crusher		EB 50x40-L	EB 100x80-L	EB 150x100-L	EB 200x125-L	EB 300x250-L
Dimensions with door closed (W×H×D)	mm	375 × 678 × 686	470 × 951 × 773	615 × 1150 × 938	663 × 1340 × 1142	972 × 1874 × 1717
Weight	kg	122	250	380	787	2255
Motor	kW	1,1	2,2	4	7,5	18,5
Jaw width	mm	50 × 40	100 × 80	150 × 100	200 × 125	300 × 250
Stroke in discharge gap (min.)	mm	0,5	1,2	1,4	1,4	2,0
Discharge gap	mm	0 – 10	0 – 12	0 – 15	0 – 32	0 – 32
Max. feed unit size for individual infeed	mm	30	70	90	110	240
Throughput rate	kg/h	10 – 50	50 – 350	75 – 500	250 – 2000	400 – 3500
Collection container volume	dm ³	0,5	5	9	20	33
Operating voltage		230 V, 1/N/PE, 50 Hz		400 V, 3/N/PE, 50 Hz		
Jaw crusher with integrated divider		EB 100x80-TL		EB 150x100-TL		EB 200x125-TL
Dimensions (W×H×D)	mm	730 × 1315 × 978		730 × 1451 × 978		790 × 1696 × 1300
Weight	kg	445		550		1150
Motor	kW	2,2 & 0,25		4 & 0,25		7,5 & 0,25
Collection container volume, cumulative	dm ³	7		7		12

The throughput rate depends on the size of the discharge gap, the bulk density and the comminution behavior of the crushed material.
*1) The final fineness obtained is largely determined by the discharge gap selected, the stroke and the comminution behavior of the material. To achieve sufficient particle precision, the feed batch should be crushed for a period of at least 30 seconds. Depending on the machine type, the collection containers can only be partially filled. Subject to technical changes.

DOUBLE-ROLLER MILL - WS

The double-roller mills can be used to crush brittle materials such as ore, slag, glass, ceramics, battery materials, limestone, ... up to a Mohs hardness of approx. 8.5. Depending on the material and size of the crusher, comminution ratios of 1:2, ... , 1:5, max. up to approx. 1:20 can be realized.

Comminution mainly takes place by means of a pressure and shear stress, between two counter-rotating grinding rollers.

Our roller mills have:

◆ Innovative app control

- Standard Operating Procedures (SOP)
- Roller gap display
- Accessing the operating instructions
- Direct spare parts inquiry
- Sample/machine data exportable in csv format
- Update-friendly app and firmware

◆ Continuously adjustable roller gap

One of the two rollers is fixed in position, while the second roller can be adjusted via a spindle. The roller gap setting is displayed via the app. The zero point can be reset accordingly when the rollers are worn.

◆ Reversible overload protection

Spring packs give the moving roller the possibility to avoid damage in the event of comparatively small non-breakable materials.

◆ Easy cleaning and inspection of the crushing chamber

via the hinged upper crusher housing

◆ High force transmission to the moving grinding roller

by installation on a rocker, high compressive forces can be generated in the roller gap.

◆ Dust extractor connection

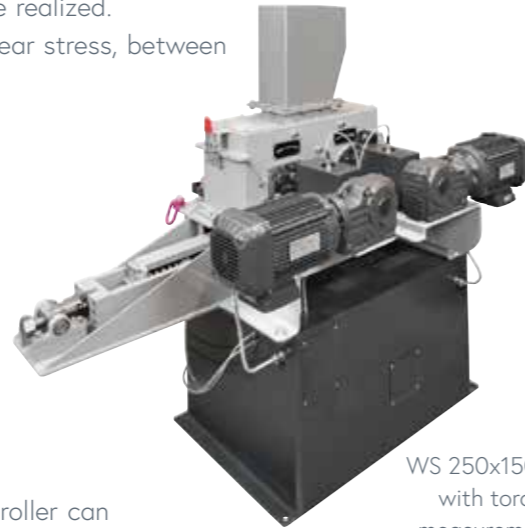
in the feed hopper or below the rollers

◆ Low-contamination comminution with grinding rollers made from

cast steel, tungsten carbide or aluminum oxide

◆ Torque and force measurement

optionally available



WS 250x150-L
with torque
measurement



WS 250x150-L with
opened upper part
of the mill housing



WS 250x150-L
with optional
display

Technical data

Double-roller mill		WS 250x150-L	WS 400x200-L
Dimensions (W×H×D)	mm	1113 × 1368 × 676	1916 × 1547 × 950
Weight	kg	479	973
Motor	kW	3	2 × 5.5
Grinding roller dimensions	mm	∅ 250 × 150	∅ 400 × 200
Discharge gap	mm	0.2 – 5	0.2 – 15
Max. feed material grain size	mm	12	20
Throughput rate	kg/h	50 – 2000	75 – 6000
Collection container volume	dm ³	30	40
Operating voltage		400 V, 3/N/PE, 50 Hz	

The throughput rate depends on the size of the discharge gap, the bulk density and the comminution behavior of the crushed material. The final fineness obtained is largely determined by the discharge gap selected and the comminution behavior of the material. Subject to technical changes

CONE CRUSHER - KM

As slow-running comminution machines, cone crushers are used e.g. when cubic particles need to be produced, or for crushing thermally sensitive products or very hard materials (corundum, ferrosilicon, ores).

Comminution is achieved by a shear stress between the slowly rotating crushing cone and the stationary outer grinding ring. In order to adjust the fineness of grind, the crushing gap between the crushing tools can be infinitely varied by rotating the feed hopper. Due to the toothing on the fine cone, final finenesses of max. < 2 mm can be achieved with the cone crusher.

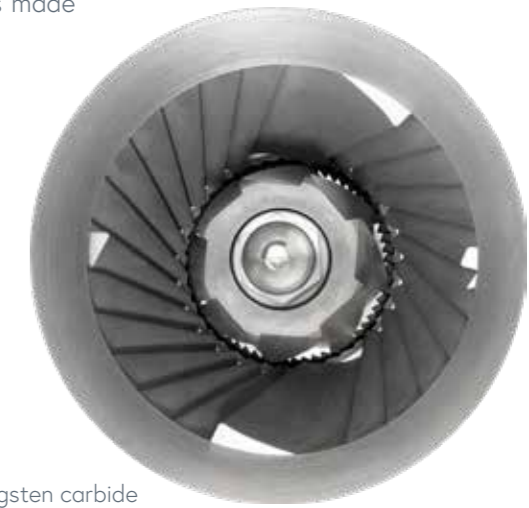
The KM 65 cone crusher can optionally be equipped with a dividing device so that samples can be comminuted and divided in a single step during sample preparation in the laboratory.

A register can be used to set the continuously separated sample quantities to 1:2, 1:4, or 1:8. In order to ensure a long service life, the entire grinding mechanism is made of tungsten carbide.



Cone crusher KM 65

Cone crusher KM 65 with dividing device



Tungsten carbide
Crushing tool made from tungsten
carbide

Technical data

Cone crusher			KM 65	KM 170
Dimensions (W×H×D)	without dividing device	mm	500 × 1380 × 505	1010 × 1680 × 750
	with dividing device	mm	710 × 1380 × 505	-
Weight	without dividing device	kg	130	650
	with dividing device	kg	142	-
Motor		kW	1.5	4.0
Max. feed material grain size		mm	25	25
Final fineness		mm	2 - 10	2 - 10
Throughput rate		kg/h	60	200
Operating voltage			400 V, 3/N/PE, 50 Hz	

The throughput rate depends on the size of the discharge gap, the bulk density and the comminution behavior of the crushed material. The final fineness obtained is largely determined by the discharge gap selected. Subject to technical changes.

HAMMER- /CUTTING MILL - HM

The HM 1-L hammer-/cutting mill was specially designed for use and the requirements in a laboratory.

It is characterized in particular by:

- ◆ **For the preparation of large sample quantities** of soft to medium-hard materials with a hardness of 2 - 5 Mohs
- ◆ **Easy cleaning and inspection of the grinding chamber** via the tool-free opening of the front door
- ◆ **Rotor change**
By replacing the rotor, the mill can fulfil both the function of a hammer mill as well as a cutting mill and can therefore be used universally.
- ◆ **Easy replacement of the grate basket** executed as profile bar or perforated plate via the hinged front door
- ◆ **Variable rotor speed** via integrated frequency converter
- ◆ **Plastic collection container** optionally available in stainless steel with suction connection. The suction connection can be used to generate a slight vacuum in the grinder, which supports the discharge of very light materials in particular.
- ◆ **Suction connection**
- ◆ **Innovative app control**
 - Standard Operating Procedures (SOP)
 - Accessing the operating instructions
 - Direct spare parts enquiry
 - Sample/machine data can be exported via csv file
 - Updatefriendly app and firmware

Size reduction in the hammer-/cutting mill takes place via a high-speed rotor, either with pendulum-suspended hammers (hammer mill version) or with screwed-on cutting plates (cutting mill version).

In the hammer mill version, the crushing takes place via impact forces, in the area of the hammers and the grate basket. The milled material remains in the grinding chamber until it passes the grate basket. The gap width between the grate basket significantly determines the final fineness of the ground material.

In the cutting mill version, the material comminution takes place through shear forces, between the cutting plates and the cutting bars mounted in the housing.

Here too, the material remains in the grinding chamber until it can pass through the perforated plate.



HM 1-L



Rotor: Cutting mill design

Technical data

Hammer-/ Cutting mill		HM 1-L
Dimensions (W×H×D)	mm	460 × 1440 × 991
Weight	kg	294
Motor	kW	5.5
Max. feed material grain size	mm	50
Grate baskets	mm	1 - 30
Throughput rate (at 10 mm gap width)	kg/h	1000
Collection container volume	dm ³	approx. 10
Operating voltage		400 V, 3/N/PE, 50 Hz

The throughput rate depends on the gap width of the grating basket, the bulk density and the comminution behavior of the crushed material. Subject to technical changes.

MULTI-PURPOSE MILL - UM

With the UM 100 multi-purpose mill, we provide a machine that can be used to crush, cut and mill a wide variety of sample materials. Thanks to the various grinding inserts, minerals, salts, chemically produced products, fibres, plastics, food or even pharmaceutical products can be finely ground for further analysis.

It is characterized above all by:

- ◆ **Use of different grinding tools:**
 - Impact insert with annular perforated plates
 - Cross beater insert with slotted screens
 - Pin insert with and without annular perforated plates
 - Mix insert
- ◆ **Possibility of continuous comminution** to process larger sample quantities.
 - **Glass bottle** in which the ground material is collected, optional **collection container up to 5000 ml**.
 - Possibility of **connecting an extraction system** for dust-free grinding.
- ◆ **Variable speeds up to 23,000 rpm**
- ◆ **Temperature detection** via integrated temperature sensor
- ◆ **Innovative app control**
 - Standard Operating Procedures (SOP)
 - Accessing the operating instructions
 - Direct spare parts inquiry
 - Sample/machine data exportable in csv format
 - Update-friendly app and firmware
 - Integration of a dosing feeder through control system

Technical data

Multi-Purpose Mill		UM 100
Dimensions (W×H×D)	mm	520 × 530 × 500
Weight	kg	39
Motor	kW	1,5
Max. feed material grain size	mm	15
Annular perforated plates	mm	0,08...5
Throughput	kg/h	max. 60
Operating voltage		230 V, 1/N/PE, 50 Hz

The throughput depends on the size of the annular perforated plates/slotted screens, the bulk density and the comminution behavior of the ground material. Technical changes reserved.



UM 100 with cyclone



Grinding tools

With the universal basic unit and the optionally available grinding inserts, you have the option of expanding the range of functions of the machine according to your requirements.



with dosing feeder

UM 100 with grinding cassette

DISC MILL - SBM

The disc mill can be used for fine grinding of soft to hard materials with a Mohs hardness of up to 8. Crushing & Milling in the Disc mill takes place between two coarsely toothed grinding discs. One grinding disc is non-rotating, while the other is set in rotation by a gear motor, so that a shearing force acts on the material to be ground. The gap between the two grinding discs determines the fineness of the ground material.

The SBM is characterized above all by:

- ◆ **Simple gap width adjustment**
via adjustment wheel with digital display and zero point correction in the app
- ◆ **Quick cleaning of the grinding chamber**
with excellent accessibility thanks to the hinged grinding chamber door
- ◆ **Glass bottle**
in which the ground material is collected, optional **hose adapter**, which is screwed in place of the glass bottle, thus offering the possibility of placing a larger container underneath for larger sample quantities
- ◆ Option to **connect an extraction system**
for dust-free grinding



Disc mill
SBM 200

- ◆ **Right/left rotation**
for maximum utilization of the grinding discs' service life
- ◆ **Safety** thanks to monitored grinding chamber door
- ◆ **Innovative app control**
 - Standard Operating Procedures (SOP)
 - Accessing the operating instructions
 - Direct spare parts enquiry
 - Sample/machine data can be exported via csv file
 - Updatefriendly app and firmware
- ◆ **Grinding discs**
Made of cast steel. Optionally made of zirconium oxide or tungsten carbide

Technical data

Disc mill		SBM 200
Dimensions (W×H×D)	mm	425 × 812 × 820
Weight	kg	155
Motor	kW	1.5
Crushing disc diameter	mm	200
Max. feed material grain size	mm	20
Discharge gap	mm	0.1 - 12
Throughput rate	kg/h	5 - 150
Collection container volume	dm ³	0.5
Operating voltage		400 V, 3/N/PE, 60 Hz
The throughput rate depends on the size of the discharge gap, the bulk density and the comminution behavior of the crushed material. The final fineness obtained is largely determined by the discharge gap selected. Subject to technical changes.		



VIBRATING MILL - GSM

The GSM 06 is a vibrating vessel mill used for fine and ultra-fine grinding of brittle and fibrous materials. The comminution effect is based on a impact and frictional forces, which is created by means of two grinding barrels set into vibration while filled with freely moving grinding media.

Due to the movement of the grinding media within the barrels, comminution and intensive homogenization take place simultaneously.

The material grinding can be dry or in a liquid, and the size and type of the grinding media are the key factors in determining the fineness achieved.

The feed material grain size should typically be smaller than 2 mm. Depending on the material, the final fineness achieved can be as low as <1µm.



The GSM 06 is characterized in particular by:

- ◆ **Easy removal of the grinding barrels**
with quick-release fasteners
- ◆ **Grinding barrels in various designs**
available in steel, stainless steel or ceramic. Double-walled barrels for cooling or heating are also possible. Adapter for holding disposable pipettes for cell disruption.
- ◆ **Soundproofed metal housing**
with monitored operating flap
- ◆ **Counterweight in the cover**
ensures a secure stand and smooth running of the machine
- ◆ **Maintenance-free unbalance motor**
with the possibility of changing the amplitude
- ◆ **Innovative app control**
 - Standard Operating Procedures (SOP)
 - Accessing the operating instructions
 - Direct spare parts enquiry
 - Sample/machine data can be exported via csv file
 - Updatefriendly app and firmware



Vibrating mill GSM with ceramic milling vessel

Technical data

Vibrating mill		GSM 06
Dimensions (W×H×D)	mm	800 × 400 × 636
Weight	kg	105
Grinding barrels volume	Total volume	l
	Useful capacity	l
Vibration frequency	rpm	1500
Vibration amplitude	mm	0 - 6
Motor	kW	0.19
Operating voltage		400 V, 3/N/PE, 50 Hz
Subject to technical changes.		



Steel and ceramic milling barrels with grinding media

LABORATORY DISC MILL - T/TS

Sample preparation in a laboratory disc mill has been a proven method for decades, especially in the fields of

- ◆ geology
- ◆ mineralogy
- ◆ metallurgy
- ◆ the glass/ceramics industry
- ◆ the construction materials industry
- ◆ soil/plan analysis
- ◆ power plants

The laboratory disc mill enables fast, loss-free and reproducible fine comminution and homogenization of the samples.

The grinding barrels can hold sample batches of 10 - 1000 cm³ and grind and homogenize the sample material to final finenesses of up to < 40 μm^{*)} in a single step.

Sample preparation with a laboratory disc mill is thus the ideal prerequisite for subsequent analysis using X-ray spectrometers, regardless of whether pressed tablets or melt tablets are produced from the ground samples.

^{*)} The fineness achievable depends on the sample material, the grinding barrel, and the mill settings.

The grinding tools (stones/rings) in the grinding barrel are set into a rolling impact motion by means of a circular oscillation.

This motion achieves very high forces, which rapidly result in fine comminution to analytical fineness.



Grinding barrels made from zirconium oxide, steel and agate

Available grinding barrels

Material	Useful capacity in cm ³
Chrome steel	10 50 100 250 500 1000 cont.
Tungsten carbide	10 20 50 100 250 cont.
Zirconium oxide	100 250
Agate	50 100



Laboratory disc mill TS 1200 - P

LABORATORY DISC MILL - T/TS

Now with:

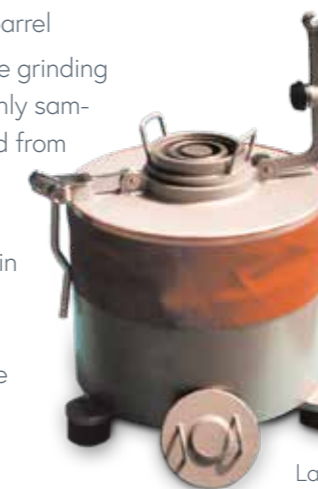
- ◆ **Innovative app control**
 - Standard Operating Procedures (SOP)
 - Variable speed in the range 700 – 1200 rpm
 - Variable grinding duration
 - Accessing the operating instructions
 - Direct spare parts inquiry
 - Sample/machine data exportable in csv format
 - Update-friendly app and firmware
- ◆ **Closed, sound-insulated housing**
- ◆ **Optional pneumatic closing device**
- ◆ **Space under the mill for lift truck**
- ◆ **Drive system with brake**
allows immediate opening of the housing flap.

The laboratory disc mill is available in different designs:

- with manual or pneumatic closing device
- with adapter for holding several grinding barrels
- in sound-insulated housing (TS design) or also free-standing (T design)
- for continuously operated grinding barrel
- in fully automatic versions, where the grinding barrel remains in the machine and only sample loading and removal is performed from outside.
- integrated in an automatic milling and pressing system (AMP), which - in a single device - combines all processes from pre-crushing dividing, fine grinding, and compression of the powder into a tablet.



Automatic milling and pressing system AMP



Laboratory disc mill T 750

Technical data

Laboratory disc mill		T 750	T 1000	TS 1200	TS 1200 - P
Dimensions (W×H×D)	mm	530 × 600 × 530		770 × 1167 × 595	
Weight	kg	150		360	
Motor	kW	0.5	0.85	0.85	
Operating voltage		400 V, 3/N/PE, 50 Hz		230 V, 1/N/PE, 50 Hz	

Subject to technical changes.

The new SLS 200 for fast, precise and reproducible particle size analysis of all dry screenings in the laboratory and in production monitoring.

With an analysis range from approx. 20 to 4000 µm, for sample quantities of up to approx. 500 g, depending on material density.

The air-jet necessary for the exceptionally good dispersion, is generated by a vacuum cleaner and directed through the slotted nozzle rotating below the analytical sieve surface.

In order to reduce the screening time and to achieve more precise screening, the shape of the slot nozzle has been lengthened and extended with an additional edge dispersion, which ensures a double loosening of the edge area with each revolution and thus a faster screening result compared to conventional nozzles.



Ionization unit

SLS 200 with glass cover



SLS 200 with 400 mm sieve adapter and air pre-warming device

The fines are drawn through the sieve openings into the container of the vacuum cleaner and collected. The vacuum required for this as well as the screening time can be preset via the app and can be saved using SOPs.

With the stainless steel housing and the stainless steel intake of the sieve, the unit can withstand even the toughest applications.

The air-jet sieve is simple and intuitive to operate via an app.

◆ **Innovative app control**

- Standard Operating Procedures (SOP), formula management
- Display of grain size distributions (Rosin-Rammler and linear diagram)
- Coupling of analytical balances with optional RS 232 dongle
- Accessing the operating instructions
- Direct spare parts inquiry
- Sample/machine data exportable in csv format
- Update-friendly app and firmware

◆ **Automatic vacuum control**

◆ **USB connection**

◆ **Optional ionization unit**

for avoiding/reducing agglomerate formation during screening, especially of plastics, due to electrostatic charging.

◆ **Optional air pre-warming**

for avoiding/reducing water absorption of hygroscopic substances during screening.

◆ **Suitable accessories**

- Vacuum cleaner
- Mobile supports with and without sound absorbing housing for the vacuum cleaner
- Cyclone
- Adapter set for holding sieves of diameter 400 mm, for screening larger quantities



Adapter for seven sieves of diameter 100 mm



Cyclone

Technical data

Air-jet sieve		SLS 200
Dimensions (W×H×D)	mm	326 × 276 × 468
Weight	kg	22
Nominal diameter of test sieves	mm	200 (optional 100 & 400 mm)
Measurement range	µm	20 - 4000
Slot nozzle drive		AC gear motor, 22 rpm
Operating voltag		110 V - 230 V, 1/N/PE, 50/60 Hz

Mains power connection, vacuum cleaner connection exhausting socket and appliance socket for the vacuum cleaner are located at the rear. Subject to technical changes.

SIEVE SHAKER - ASM 200

The new ASM 200 can now be controlled using the innovative "LabCo" app and offers the user new possibilities.

The ASM 200 is particularly appealing thanks to the following features:

- ◆ **Electromagnetic drive with three-dimensional screening motion**

in a vertical orientation. This motion ensures even distribution of the screened material on the surface of the sieve, and ensures fast separation thanks to the high proportion of vertical screening motion.

- ◆ **Stainless steel housing**

- ◆ **Quick-release fasteners for simple sieve tower fixation**

For transport purposes, the sieve tower fixation can also be removed.

- ◆ **Acrylic glass cover**

- ◆ **Wet/dry screening**

For wet screening, a cover with a nozzle and a collecting box with a drain are required.

- ◆ **Vibration sensor**

For recording of vibration amplitude

- ◆ **Innovative app control**

- Adjusting the vibration amplitude to the preset value
- Interval control
- Coupling of analytical balances with optional RS 232 dongle
- Display of grain size distributions (Rosin-Rammler and linear diagram)
- Standard Operating Procedures (SOP)



Sieve Shaker
ASM 200

- Accessing the operating instructions
- Direct spare parts inquiry
- Sample/machine data exportable in csv format
- Update-friendly app and firmware

Technical data

Sieve Shaker		ASM 200
Dimensions (W×H×D)	mm	463 × 816 × 488
Weight	kg	35
Test sieve diameter	mm	200
Number of test sieves (internal height 25 mm)		11, optional 16 cover and collection vessel
Measurement range	mm	0.020 – 25
Vibration frequency	rpm	3000
Oscillation diameter	mm	0 – 3.2
Drive type		Electromagnet
Operating voltage		230 V, 1/N/PE, 50 – 60 Hz

Subject to technical changes.

ANALYTICAL SCREENING MACHINE - LAVIB

The LAVIB 300 is a horizontal screening machine with a horizontal circular screening motion to accommodate test sieves of max. diameter 300 mm.

Due to the uniform movement, the material to be screened is guided over the screen in a circular motion that is very gentle on the material. The use of the horizontal screening machine is limited to dry screening.

The horizontal screening machine is mainly used for the classification of fibrous and platelet-like bulk materials, such as occur in the wood, spice, tobacco and plastics industries, and in grain milling and brewing.

Depending on the application, the machine offers options for fixing the sieve tower or mounting it to remain freely movable on the drive plate.

In the latter case, the centrifugal forces bounce the sieves against the stop pieces, generating additional horizontal impacts on the sieve. These additional pulses shorten the screening time and reduce granule jams.

The eccentric drive for the drive plate and the ballast mass are housed in an attractively designed housing, whose high mass ensures that the machine runs smoothly and remains stable.

The On/Off function and screening duration settings of the maintenance-free machine are controlled via a clearly structured and labeled keypad.



Laboratory screening
machine LAVIB

Technical data

Analytical screening machine		LAVIB
Dimensions (W×H×D)	mm	478 × 400 – 611 × 603
Weight	kg	70
Test sieve diameter	mm	100 – 300
Number of test sieves (internal height 25 mm)		8 + cover and collection vessel
Measurement range	mm	0.020 – 63
Vibration frequency	rpm	270
Oscillation diameter	mm	30
Drive type		Geared motor
Operating voltage		230 V, 1/N/PE, 50 Hz

Subject to technical changes.

SIEVE SHAKER - ASM 400

The ASM 400 can also be controlled with the innovative „Lab-Co“ app and offers the user many new possibilities. In particular, the ASM 400 impresses with the following features:



Sieve Shaker ASM 400

- ◆ **High degree of fluffing up of the material to be sieved due to double-unbalanced drive**
- ◆ **Stainless steel housing**
- ◆ **Quick-release clamp for easy screen tower fastening**
The screen tower fastening can be removed for transport via screw connections.
- ◆ **Acrylic glass cover**
- ◆ **Wet/dry screening**
A cover with a nozzle and a collecting vessel with a drain pipe are required for wet sieving.
- ◆ **Vibration sensor**
for measuring the vibration amplitude
- ◆ **Sieves with**
 - mesh fabric
 - Perforated plates with round or square perforations
 - Bars for determining the flatness
- ◆ **Innovative app control**
 - Import of weighing data via Bluetooth
 - Evaluation of sieve analyses with graphical representation in a linear or RRSB diagram
 - Standard Operating Procedures (SOP)
 - Accessing the operating instructions
 - Direct spare parts enquiry
 - Sample/machine data can be exported via csv file
 - Updatefriendly app and firmware
- ◆ **Special version also available for installation in hazardous areas**
- ◆ **Soundproof housing**

Technical data

Sieve Shaker		ASM 400
Dimensions (W×H×D)	mm	780 × 1405 × 630
Weight	kg	85
Test sieves diameter	mm	400
Number of test sieves (internal height 60 mm)		10 + cover and collection vessel
Measurement range	mm	0.063 – 90
Vibration frequency	rpm	3000
Oscillation diameter	mm	Max. 3
Drive type		2 unbalance motors
Operating voltage		400 V, 3/N/PE, 50 Hz

Subject to technical changes.



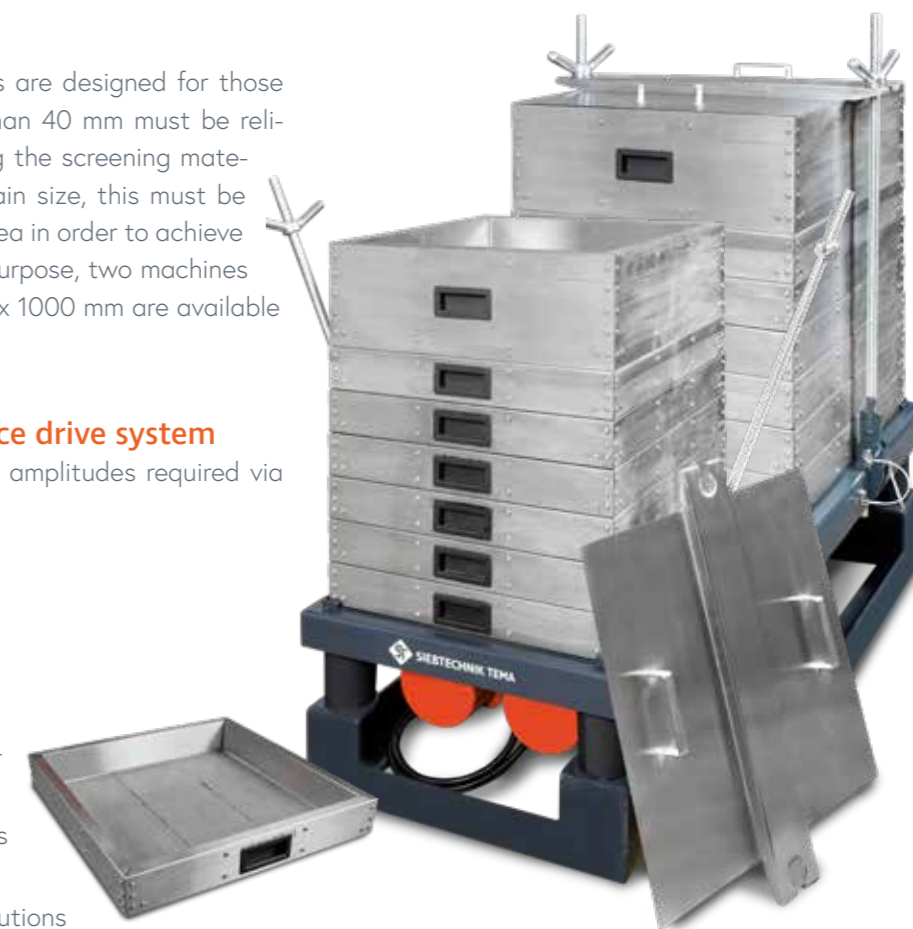
ASM 400 with sound iproof housing and bar screens

LARGE ANALYTICAL SCREENING MACHINE - GAS

The large analytical screening machines are designed for those applications where grain sizes larger than 40 mm must be reliably determined. Since in test screening the screening material quantities increase with coarser grain size, this must be compensated for by the sieve surface area in order to achieve representative test screening. For this purpose, two machines with sieves of 500 × 500 mm and 1000 × 1000 mm are available for the respective tasks.

Both machines have

- ◆ **A maintenance-free unbalance drive system**
which generates the high vibration amplitudes required via two unbalance motors.
- ◆ **Test sieves in stainless steel**
- ◆ **Low residual vibration**
thanks to unbalance motor brakes
- ◆ **Innovative app control**
 - Display showing vibration amplitude
 - Coupling of analytical balances with optional RS 232 dongle
 - Display of grain size distributions (Rosin-Rammler and linear diagram)
 - Standard Operating Procedures (SOP)
 - Accessing the operating instructions
 - Direct spare parts inquiry
 - Sample/machine data exportable in csv format
 - Update-friendly app and firmware



The clamping rods for the GAS 1000 can also optionally be designed as a lifting and tilting device. The sieve tower clamped in this device is lifted by a crane so that the lowest test sieve can be emptied by tilting. The GAS 500 and GAS 1000 can also be used as a vibrating table without a sieve set.

Technical data

Large analytical screening machine		GAS 500	GAS 1000
Dimensions (W×H (max. screening tower height) ×D)	mm	714 × 1910 × 701	1214 × 1942 × 1206
Weight (without screening tower)	kg	160	360
Test sieves area	mm	500 × 500	1000 × 1000
Test sieve height	mm	80, 200	125, 200
Max. sieving tower height	mm	1400	1400
Max. load of vibrating table	kg	250	500
Measurement range	mm	0.2 – 125	4 – 125
Vibration frequency	rpm	1000	1000
Oscillation diameter	mm	max. 3.7	max. 3.7
Drive type		2 unbalance motors	2 unbalance motors
Operating voltage		400 V, 3/N/PE, 50 Hz	

Subject to technical changes.

SOLID TESTING DRUM - FPT

For abrasion and strength tests according to DIN, ISO and ASTM standards for coke, iron ore, sinter and HBI (e.g. ISO 556, ISO 3271, ISO 15967).

Due to the quantities handled, drum tests to determine the abrasion behavior or strength of bulk materials are very labor-intensive. Reduce the additional lifting workload of your employees with our automatic test drums.

◆ Our test drums have

- Fully automatic operation of the drum process, including emptying the drum.
- Fully automatic opening and closing of the test drum via pneumatic cylinders.
- Dust and noise protection thanks to complete enclosure of the solid testing drum.
- Drive bars/brackets compliant with the requirements of the respective standard.
- Split stainless steel collection vessels on a mobile cart.
- Touchscreen control
- Preselection for number of revolutions, compliant with testing required under IRSID, MICUM, ...
- Preselection of speed



Technical data

Solid testing drum		FPT 500/1000-A	FPT 1000/1000-A
Dimensions (W×H×D)	mm	1725 × 1652 × 1570	2232 × 1652 × 1570
Weight	kg	975	1250
Internal diameter of drum	mm	1000	1000
Internal length of drum	mm	500	1000
Motor	kW	1.5	1.5
Operating voltage		400 V, 3/N/PE, 50 Hz	
Subject to technical changes.			

DIVIDER



The divider is suitable for representative division of dry and free-flowing bulk materials (< 2mm) into 8 sample containers. The sample to be divided is placed into the feed hopper, and is first mixed via a clearing arm after switching on the divider. After the discharge openings in the feed container have been opened, the sample material is distributed into the 8 screwed-in sample containers by means of a rotating clearing arm.

Your benefits:

- No dosing channel for sample infeed required!
- Mixing function in the feed hopper
- Adjustable rotation speed of the clearing arm

Technical data

Divider		VER 8/200
Dimensions (W×H×D)	mm	260 × 360 × 260
Weight	kg	18
Feed quantity	cm ³	1500
Sample container	cm ³	8 × 200
Operating voltage		230 V, 1/N/PE, 50 – 60 Hz
Subject to technical changes.		



LABORATORY SAMPLE SPLITTER

Sample splitter	10/10	10/32
Number of cells	10	32
Cell width	mm	10
Ext. Dimensions	mm	325 × 250
Height	mm	370

Sample splitter	20/10	20/16	20/20
Number of cells	10	16	20
Cell width	mm	20	20
Ext. Dimensions	mm	325 × 340	325 × 485
Height	mm	370	370

Sample splitter	40/10	40/16	40/20
Number of cells	10	16	20
Cell width	mm	40	40
Ext. Dimensions	mm	325 × 565	325 × 805
Height	mm	370	370



Sample splitters for the simple manual division of bulk materials, provide two representative partial sample by means of alternating chutes. The split sample can continue to be halved and halved again by repeating the splitting process, achieving splitting results of 1/2n.

Benefits:

- Easy to clean
- Made entirely from stainless steel
- 3 collection vessels
- Mobile

We also manufacture your sample splitters in **custom dimensions**.

The max. feed material grain size should be approx. 1/3 smaller than the cell width of the splitter. For higher standards of splitting accuracy and function, the max. grain size should be max. 1/3 of the cell width.

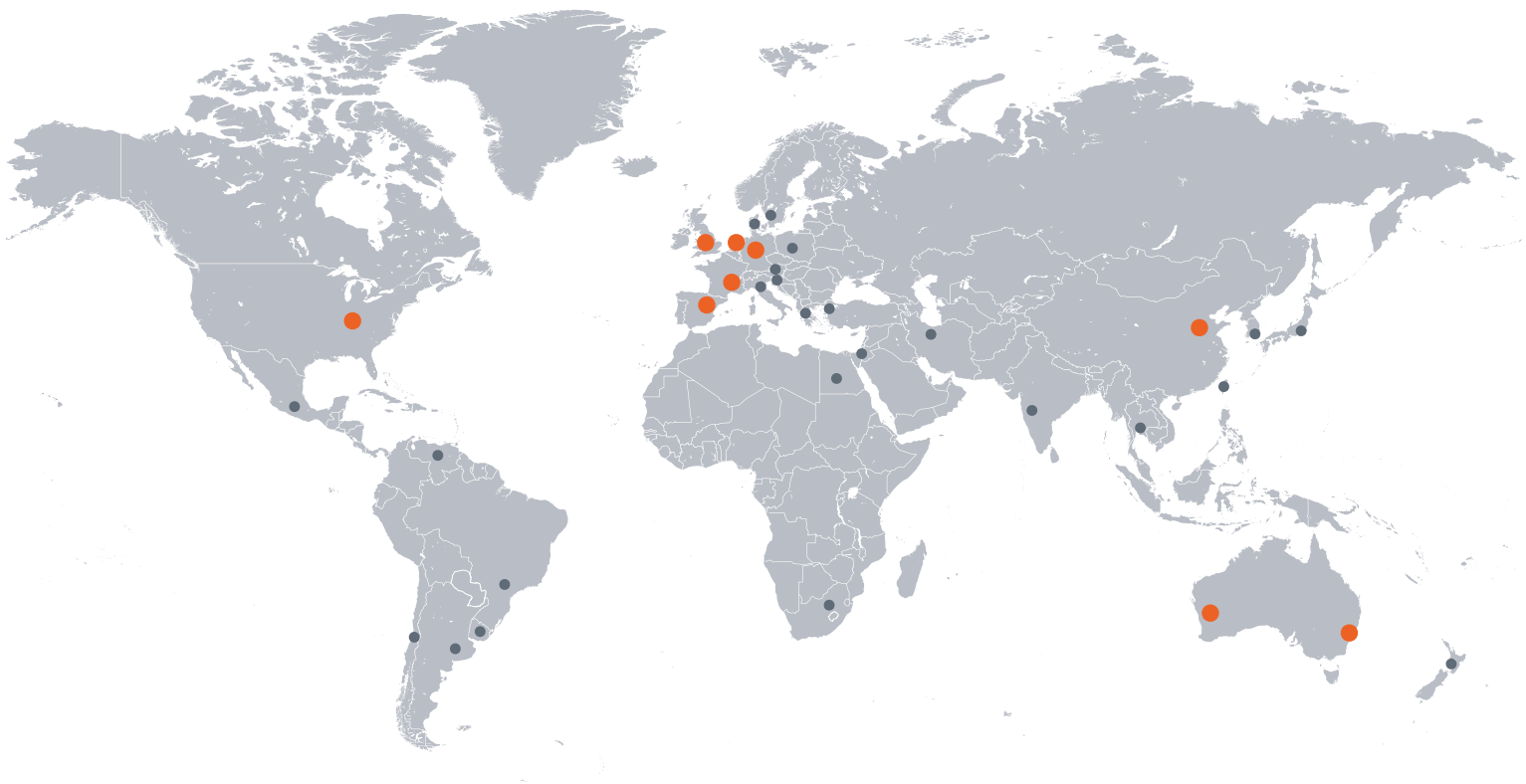
Do you need to split **bulk materials with significantly coarser sizes and larger quantities?**

Then we have a solution here for your splitting problem!

Our brochure "Sampling and Sample Preparation" provides initial information on this.



Leading Process Solutions



SIEBTECHNIK TEMA provides more than 50 local support offices worldwide as well as main sites located in:

Mülheim an der Ruhr, Germany | Rijswijk / The Hague, The Netherlands | Madrid, Spain
Daventry, Great Britain | Mundolsheim, France | Sydney & Perth, Australia | Cincinnati, USA
Tianjin, China

We are experts in the field of solid-liquid separation and the processing of bulk materials

Automation | Channel conveyors | Crushing & Milling Equipment | Control Screening Machines
Decanter | Dryers | Laboratory Equipment | Pneumatic Tube Systems | Preparation Systems
Process Equipment | Pulsator Jigs | Pusher Centrifuges | Sampling Systems | Screening
Machines | Screen Worm Centrifuges | Sliding Centrifuges | Vibrating Centrifuges

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