

The logo consists of the word "LAARMANN" in a bold, white, sans-serif font, followed by a registered trademark symbol (®). It is set against a dark blue rectangular background.

LAARMANN[®]

Innovators in Solids

SAMPLE PREPARATION | INDUSTRIAL & LABORATORY SAMPLING | MATERIAL TESTING

GENERAL CATALOGUE

Laarmann Group B.V.
Op het Schoor 6
6041 AV
Netherlands

info@laarmann.eu
www.laarmann.eu
webshop.laarmann.eu
+31 6 23 40 00 33



Introduction

- About us 3
- Platforms 4

Sampling

- Industrial bulk sampling solutions 5-6
- Rotary sample dividers 7
- Micro sample divider 8
- Riffle splitter and manual sampling 9

Sample Preparation

- Jaw crushers 10-13
- Cuttings mills 14-16
- Roll crushers 17
- Combi mill 18
- Disc Mill 19
- Pulverizing ring mills 20-21
- Planetary ball mills 22
- Bottle rollers 23
- Ball mills 24
- Pressure filters 25
- Drying oven 26
- Pellet presses 27

Material Testing

- Bond index testing 28
- TML equipment 29-31
- Flotation machine 32

Laboratory equipment

- Sieving machines 33
- Fire assay 34
- **Benchtop machines** 35-36
 - - Lab wizz micro ball mill 35
 - - Mortar Grinder 35
 - - Ultra centrifugal mill 36
 - - Tumble mixer 36
- Consumeables 37

Projects and engineering

- Container labs 38
- LAARMANN Projects 39
- LAARMANN Engineering 40



Dear Partner,

Future-proof your laboratory operations with a partner who delivers precision, dependability, and strategic support, wherever you are in the world.

At LAARMANN, we specialise in delivering complete solutions for sampling, sample preparation, and lab process optimisation. Our portfolio includes advanced equipment, consultancy, and long-term supply contracts for consumables such as grinding media. Whether you're in mining, materials science, environmental analysis or industrial production, we help you achieve consistent results with maximum return on investment.

Responsible Innovation

We take our role in the global supply chain seriously, not just in performance, but in sustainability. From product design to packaging, logistics to digitalisation, we continuously seek smarter ways to reduce our environmental footprint while delivering lasting value for our customers.

Reliable Access Through Tailored Partnerships

To ensure optimal product availability and support, we are actively building a global network of exclusive distributors and authorised resellers. Where appropriate, we also work directly with end users to provide fast, expert guidance and support. Each relationship is built with care, guided by transparency, shared goals, and mutual growth.

We aim to provide not only the shortest lead times, but also the best price-performance ratio, proven quality, and measurable ROI for every investment.

Strategic, Responsible Presence

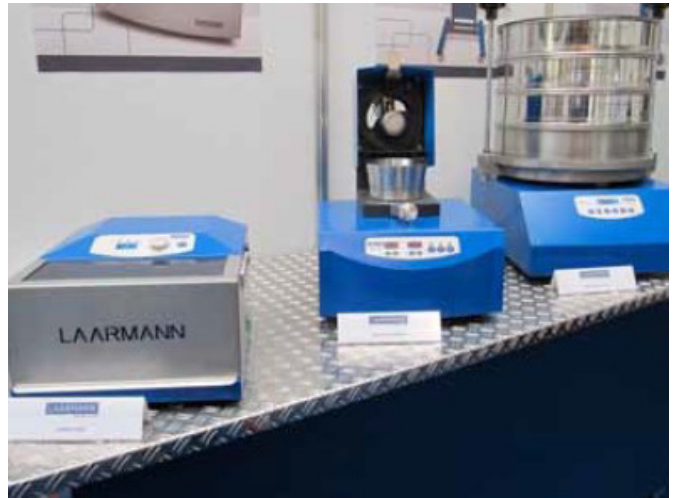
From our digital tools and online configurators to our carefully selected exhibitions and site visits, every point of contact is intentional. We choose how, where, and when we engage based on financial, environmental, and health-conscious decisions, always with your needs in mind.

At LAARMANN, we don't just supply equipment - we deliver certainty.

We invite you to explore our digital platforms or contact us directly. Let us show you how our expertise can make the difference.

With kind regards,

Steven Adang
Managing Director



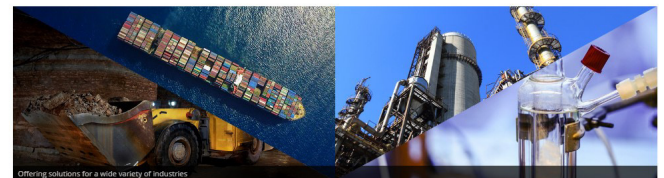
Our webshop

Using our webshop will give you the opportunity to get our high quality equipment and spares for sharp prices. Even spares for our competitors can be bought for a fraction of their pricelevel.



Our website

Visit our website to view detailed descriptions and specifications of our machines and solutions. When following our news page you will be posted on our new developments, potential solutions and worldwide projects.



WE CREATE INNOVATIVE CUSTOM MADE SAMPLING SOLUTIONS ACCORDING TO THE INTERNATIONAL STANDARDS AND BEYOND

WHAT WE DO

Laarmann is at the forefront of sampling, sample preparation and material testing product development. We pioneered large capacity pulverizing systems and made custom sampling solutions for customers all over the world. Our commitment to keep improving is highlighted in the release of next generation pulverizing mills, high-capacity fine jaw crushers, innovative robotic systems and more.



Our YouTube channel

Visit our youtube channel to view the most recent promotional and informational movies of our solutions. Becoming a subscriber will give you the opportunity to be informed upfront about new machinery and special actions on our webshop.





LMVS Vezin Sampler

Vezin samplers are diverse, cost-effective and easily applied samplers that are highly accurate and reliable. They can be used as a primary, secondary, tertiary and quaternary sampling unit from a free falling stream of dry bulk material or slurry flow. Vezin Samplers are implemented in a wide variety of applications, from mining to pharma.

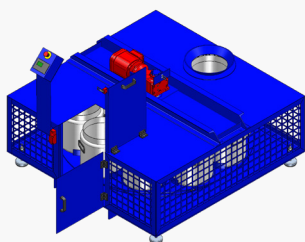
Speed setting	10 - 45 rpm.
Feed size	VS30= 10mm / VS60= 20mm / VS200= ±65mm
Spoons	5% / 10% / 15%
Weight	250kg (depending on model)
Dimensions W x H x D	640 x 520 x 1200 mm (VS60) 1050 x 1050 x 2076 mm (VS200)



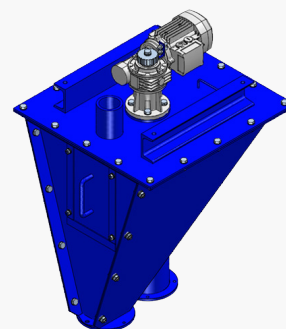
LMSC250 Sample Collector

The sample collector can be used in combination with an industrial sampling device. When the requested sample is collected the automatic program will rotate a new bucket underneath the sample stream. This allows the operator to pay attention to other topics without having the fear of overflowing material influencing the representativeness of the collected sample.

Speed setting	18-54 rpm
Sample collector amount	10
Sample collector volume	26L
Weight	400kg
Dimensions W x H x D	1050 x 1050 x 2076 mm



Sample collector: indexing carousel



VS200, vezin sampler and VS30 vezin sampler



sample collector: straight conveyor



Big bag sampling solutions

Segregation significantly increases the risk of contamination, particularly when samples are transported over long distances in packaging such as big bags. A key factor is the well-known Brazilian nut effect, in which smaller particles migrate to the bottom through the larger particles. As a result, representative sampling of bulk materials becomes a critical challenge.



The well know brazilian nut effect where smaller particles find their way to the bottom



1600liter to 8 x 200liter barrels, high version.



1600liter to 8 x 200liter barrels, low version.

The feed sample is introduced at a controlled rate as a falling stream. It is then divided into equal portions by a rotating circle of segmented buckets passing beneath the stream. The unit operates in accordance with internationally recognized sampling protocols.



Mini Sample Divider

Material feed size*	≤ 2.5 mm
Batch size / feed quantity*	≤ 160 ml
Number of divisions	6 - 8 - 10 reagent tubes
Collector Tube Volume	16 ml / tube



RSD4 Table Model

Material feed size*	≤ 10 mm
Batch size / feed quantity*	≤ 5000
Number of divisions	6/8/10 bottles
Collector volume	30 ml / 100 ml / 250 ml / 500 ml
Dimensions W x D x H	460 x 456 x 850 mm
Weight	30kg



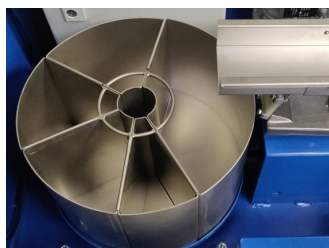
Rotary Sample Divider 2-10L

Material feed size*	≤ 19 mm
Batch size / feed quantity*	depending on configuration: up to 2 / 10 L
Number of divisions	1- 20 (customers requirement)
Dimensions W x D x H	705x670x1062mm with funnel
Weight	130 kg

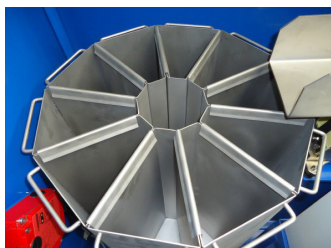


Rotary Sample Divider 30-60L

Material feed size*	≤ 34 mm
Batch size / feed quantity*	depending on configuration: up to 30 / 60 L
Number of divisions	1- 20 (customers requirement)
Dimensions W x D x H	30 l configuration: 942 x 702 x 1550 60 l configuration: 1120 x 702 x 1620
Weight	210 / 230kg (30/60L)



rotary sample divider custom percentage buckets and custom grip point



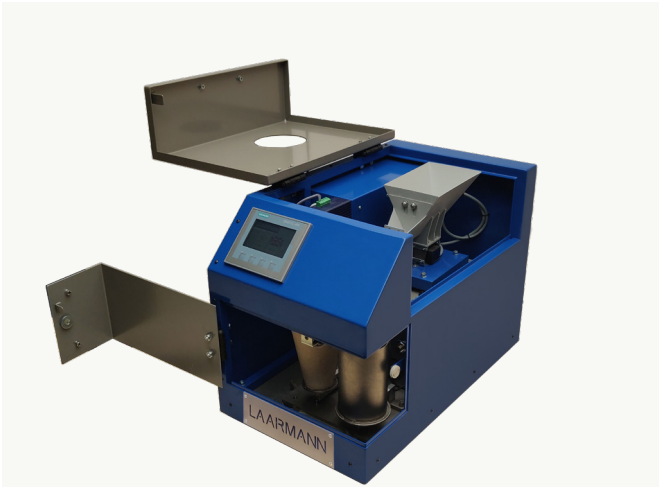
Rotary sample divider 10 x 10% bucket



PU coating bucket and feeder

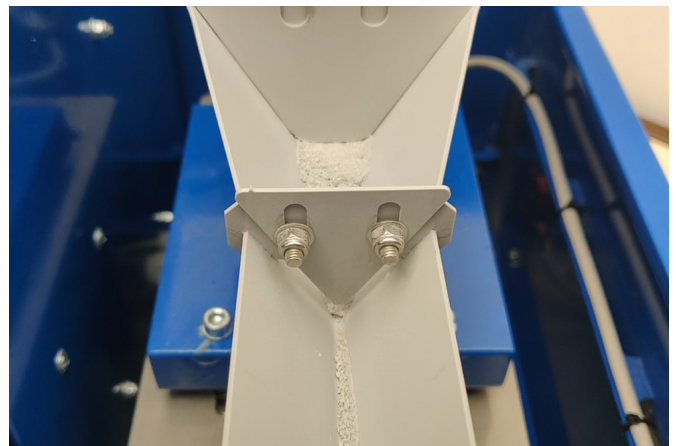


Rotary sample divider 6 x 16,6% bucket with custom grip point and height



Micro Sample Divider

Power supply	230V ± 10 – 50Hz
Maximum volume of inlet funnel	About 400 gram of material
Dimensions (LxWxH)	600 x 350 x 400 mm
Weight	80 kgs

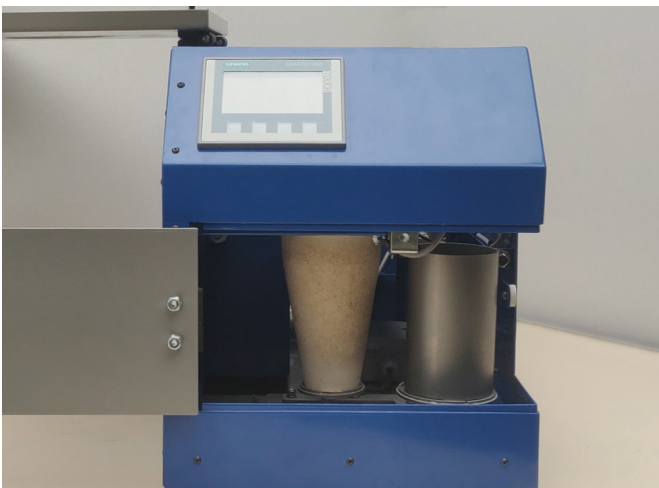
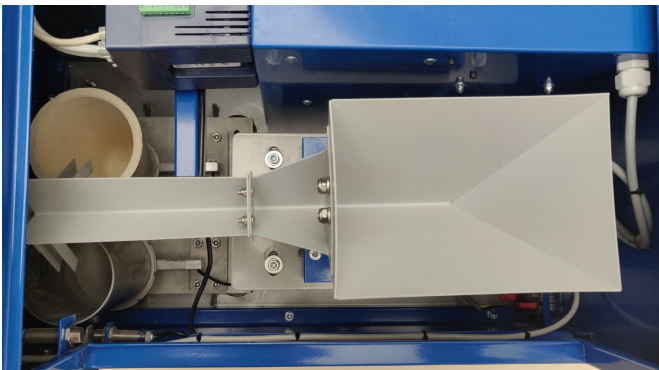


The Micro Sampler is a compact laboratory and process machine designed for taking small representative samples. Its scales are capable of detecting weights down to hundredths of a gram. The machine is intended for obtaining the final small sample prior to fire assaying. Parameters such as the number of increments and the required sample weight can be set according to specific process requirements. The housing of the Micro Sampler is made of steel plate with a highly durable painted finish.

The weighing module is enclosed by a strong protective hood, while the vibratory feeder is covered by a side hood. This side hood includes an opening for feeding material into the machine. The Micro Sampler stands on flexible, vibration-absorbing rubber mounts.

Analytical instruments have now reached a level of accuracy that was inconceivable just a few years ago. Many analytical methods require only small sample quantities, and the precision of the analysis is greatly influenced by the accuracy with which a representative sample of the material is prepared.

Representative sample division is therefore a basic requirement for precision in particle size analysis, chemical analysis, milling, spectroscopic analysis, trace element analysis, and similar applications. The Micro Sampler is maintenance-free. When used and cleaned properly, no maintenance is required.





Riffle splitter

Fast and easy sample division in a range of sizes

Available types:

- RT: for sample sizes from 6.3 mm to 75.0 mm
- RB 108: large-capacity model

Laarmann Riffle Splitters are designed for fast and easy sample division. Each unit is supplied with three buckets for convenient feeding and collecting of the sample from both sides.

RB 108 features:

- Variable chute bar openings: 12 to 108 mm
- Dimensions: 800 × 400 × 1000 mm

Optional accessories:

- Spare collecting pan
- Wheel kit

Riffle Splitter

Riffle Box types

Sample Splitter Type RT 6.3 mm
 Sample Splitter Type RT 6.5 mm
 Sample Splitter Type RT 12.5 mm
 Sample Splitter Type RT 25.0 mm
 Sample Splitter Type RT 50.0 mm
 Sample Splitter Type RT 75.0 mm



sampling grid (norm)



sampling shovel (norm)



sampling spear (norm)

Large capacity Sample Splitter with variable chute bars of 12mm



Sample Splitter RT6,3



Sample Splitter RT12.5



Sample Splitter RT75

For over 10 years, LAARMANN Jaw Crushers have set the industry standard, proving that their designs stand the test of time. They deliver high sample throughput, excellent reduction ratios, and minimal sample contamination. Designed for easy maintenance and repair, these crushers feature durable components such as long-life roller bearings and heavy-duty jaw plates. This helps reduce downtime and maintenance costs, improving overall operational efficiency. Their simple mechanical design also ensures safe and user-friendly operation.



LMC50 Jaw Crusher

Material feed size*	50x60 mm
End-fineness*	< 1.5 mm
Throughput*	50 kg/h
Gap width setting	0 - 5 mm
Dimensions W x D x H	700 x 400 x 700 mm
Weight	110kg

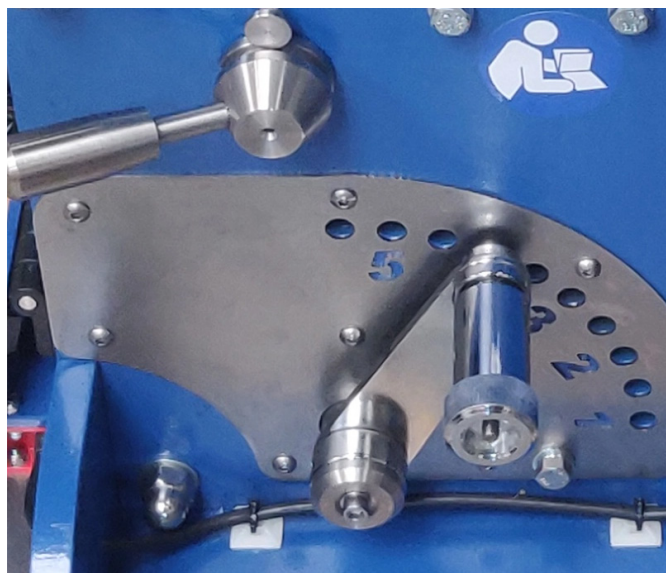


LMC100D Jaw Crusher

Material feed size*	115 x 90 mm
End-fineness*	< 2.0 mm
Throughput*	250 kg/h
Gap width setting	0 - 5 mm
Dimensions W x D x H	640 x 520 x 1200 mm
Weight	250kg

Various grinding materials

- manganese steel
- tungsten carbide
- hardened steel
- heavy metal free steel
- stainless steel



LMC50 Jaw Crusher with gap adjustment



LMC100D Jaw Crusher with custom PU jaw plates

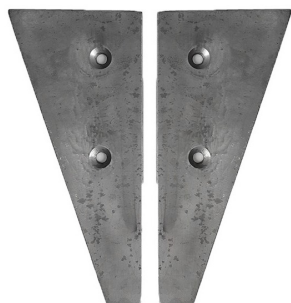


LMC200D Jaw Crusher

Material feed size*	<215 x 90 mm
End-fineness*	< 4.0 mm
Throughput*	1000 kg/h
Gap width setting	0 - 5 mm
Dimensions W x D x H	650 x 860 x 1311 mm
Weight	480 kg



crusher with vibratory feeder and sieve dividing street



Side liners



Manganese jaw plates



LMC200 Manganese jaw plates and side liners



jaw crusher and rotary sample divider combination

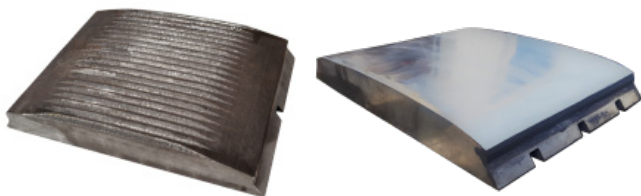


LMFC250 Jaw Crusher

Material feed size*	≤ 110 mm
End-fineness*	90% <2 mm
Throughput*	500 kg/h
Gap width setting	0 - 5 mm
Dimensions W x D x H	899 x 565 x 795 mm
Weight	880 kg



LMFC250 Fine Crusher with custom frame and infeed hopper



Tungsten carbide buttons processed by the LMFC250 Fine Crusher



LMFC250 Fine Crusher with frame and sieving street



LMC400 Jaw Crusher

Material feed size*	< 350 x 170mm
End-fineness*	< 6.0 mm
Throughput*	3500 kg/h
Gap width setting	6 - 50 mm
Dimensions W x D x H	622 x 1420 x 869 mm
Weight	980 kg

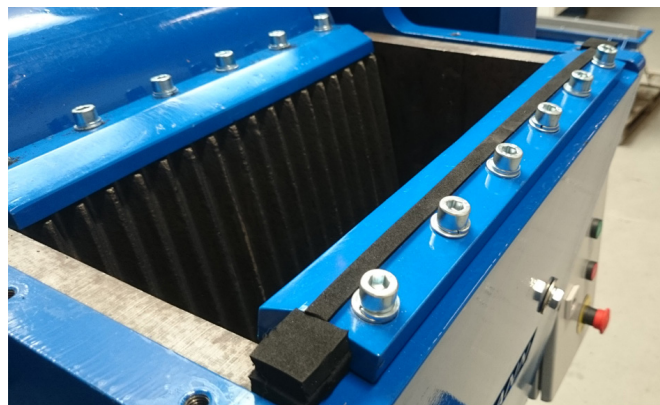


LMC500 Jaw Crusher

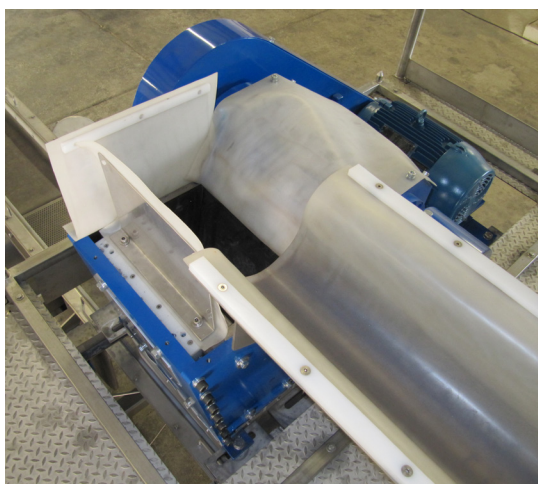
Material feed size*	≤ 250 mm
End-fineness*	< 12.0 mm
Throughput*	15000 kg/h
Gap width setting	12 - 50 mm
Dimensions W x D x H	765 x 1190 x 1370 mm
Weight	3500 kg



LMC400 Jaw Crusher without frame



LMC400 Jaw Crusher close view



LMC400 Jaw Crusher installation with sieving multiple sieving streets



LAARMANN Cutting Mills are state-of-the-art sample preparation machines designed for cuttable materials. They are suitable for both coarse and fine grinding of dry substances, with a range of bottom sieve sizes available to meet different application requirements. The result is a high output of homogenized samples, which can be collected using various collection units.



CM100 Cutting Mill

Material feed size*	Up to 80mm depending on sample
End-fineness*	250µm
Handling capacity*	0.5/1/5/2/30 liter batch collector
Sieve sizes	0,5/1 mm trapezoid holes 2/6/8/10 mm round holes 4 mm square holes
Dimensions W x D x H	390 x 485 x 375 mm
Weight	135 kg

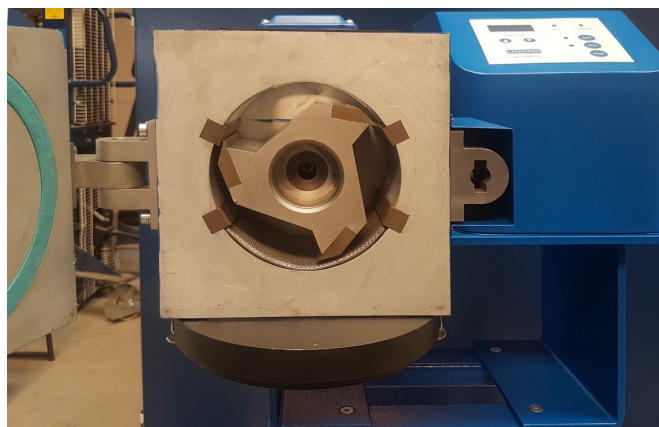


CM200 Cutting Mill

Material feed size*	≤ 60 x 80 mm
End-fineness*	250µm
Sieve sizes	0.20 / 0.5/ 1.00 / 2.00 / 4.00/6.00/8.00/10.00/20.00 mm
Dimensions W x D x H	640 x 825 x 1510mm
Weight	186 kg



Cutting Mill bottom sieves



CM100 Cutting mill open with knives and sieve



Various cutting mill knives



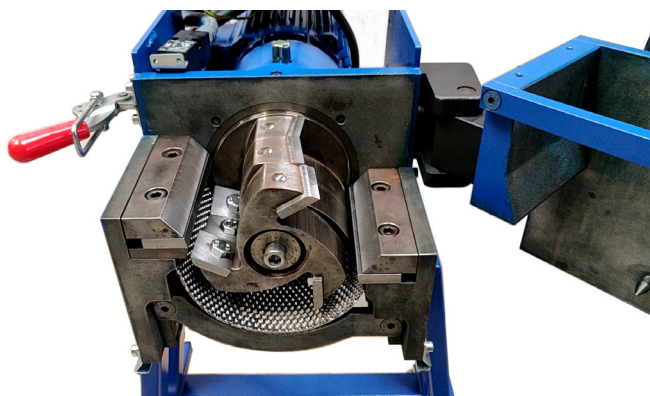
CM500 Cutting Mill

Material feed size*	< 90 mm
End fineness*	250µm
Throughput*	>30kg/h
Speed setting	224rpm
Sieve sizes	0,50 - 2,00mm trapezoid 3,00mm - 20mm round holes
Dimensions W x D x H	390 x 485 x 375 mm
Weight	135 kg

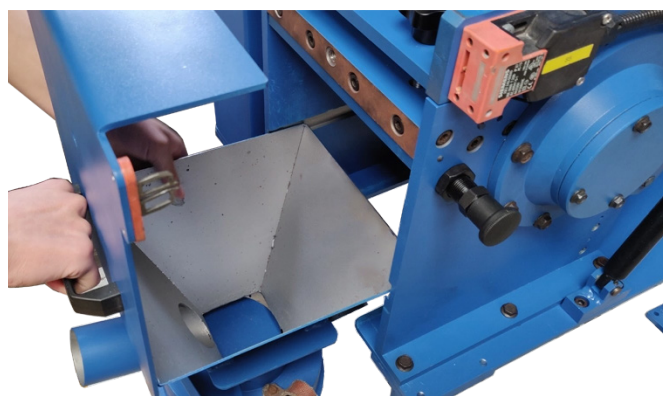


CM1000 Cutting Mill

Material feed size*	<60 x 80mm
End fineness*	500µm
Throughput*	>60kg/h
Speed setting	280rpm
Sieve sizes	4,00 - 20mm round holes
Dimensions W x D x H	600 x 600 x 600 mm (with standard hopper)
Weight	230 kg



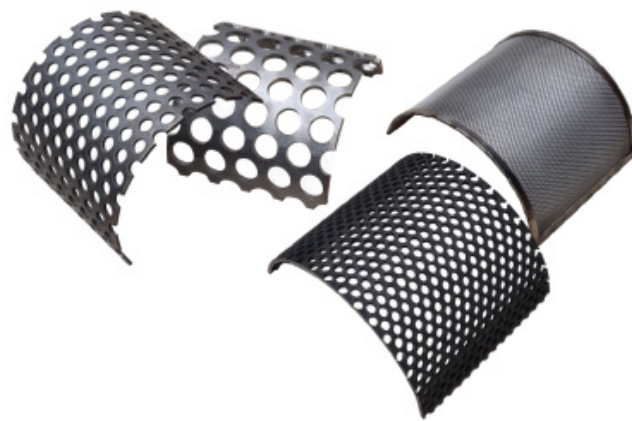
CM500 Cutting mill open with knives and bottom sieve



CM1000 Cutting Mill view of collector with dust extraction point



Cutting mill hopper with plunger



CM1000 Cutting mill knives and bottom sieve



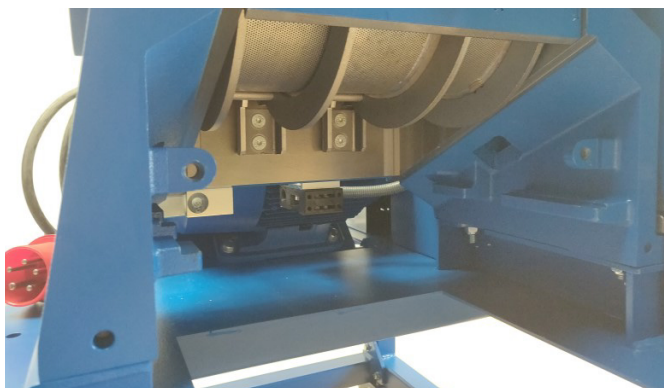
CM2500 Cutting Mill

Material feed size*	up to 350mm*
End-fineness*	1.0mm
Throughput*	up too 150 kg/h*
Speed setting	350/540 rpm
Sieve sizes	2 - 20 mm round holes
Dimensions W x D x H	900 x 1025 x 1930 mm
Weight	380 kg



CM4000 Cutting Mill

Material feed size*	Up to 350mm
End-fineness*	1.0mm
Throughput*	200kg/h
Speed setting	350/540 rpm
Sieve sizes	2 - 20 mm round holes
Dimensions W x D x H	1000 x 1025 x 1930 mm
Weight	430 kg



CM2500 Cutting mill close view



CM4000 Cutting mill close view



CM2500/CM4000 collector with dust extraction



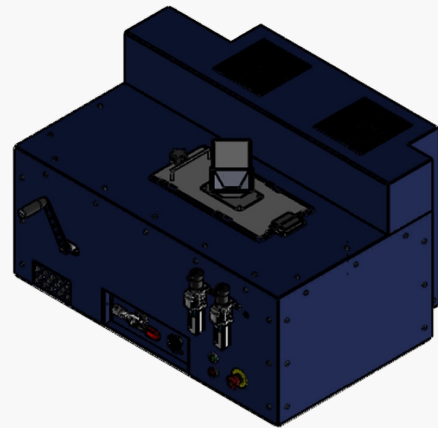
CM2500/4000 Cutting mill knives and bottom sieve

Roll Crushers are widely used in the mining and mineral processing industries to reduce materials into smaller, more manageable sizes. They operate using two rotating cylindrical rolls that work together to crush the material fed between them.



LMRC100 Roll Crusher

Feed size*	30 - 35mm
End-fineness*	< 5mm
Throughput*	100 - 1500 kg/h
Weight	330kg
Dimensions (W x D x H)	700 x 900 x 970 mm



LMRC200 Roll Crusher

Feed size*	< 35mm
End-fineness*	< 5mm
Throughput*	<1.5 tons/h
Weight	400kg
Dimensions (W x D x H)	1056 x 856 x 1040 mm



LMRC100 Roll crusher collector



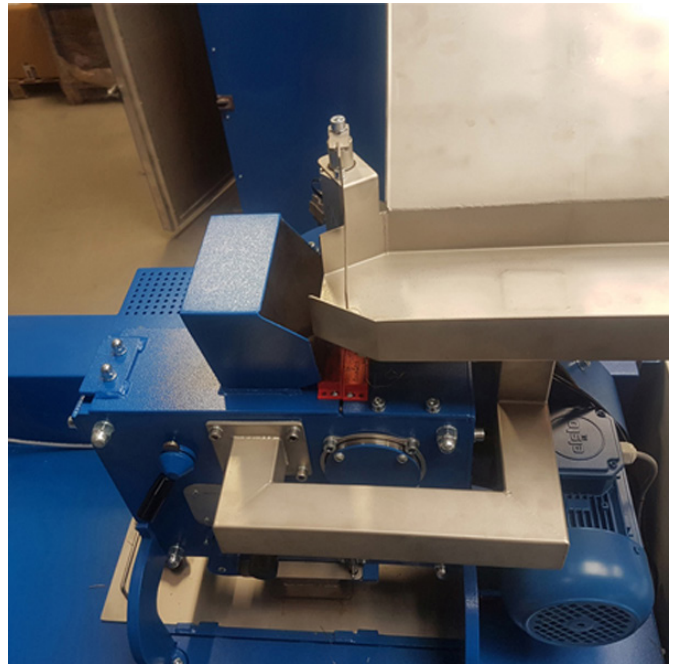
LMRC100 Roll crusher control box



LMRC100 Rolls crusher inside view

**LMCOM Combi Mill**

Feed size	< 20 mm
End fineness	< 1 mm
Weight	450kg
Dimensions (LxWxH)	1715 x 746 x 1641 mm

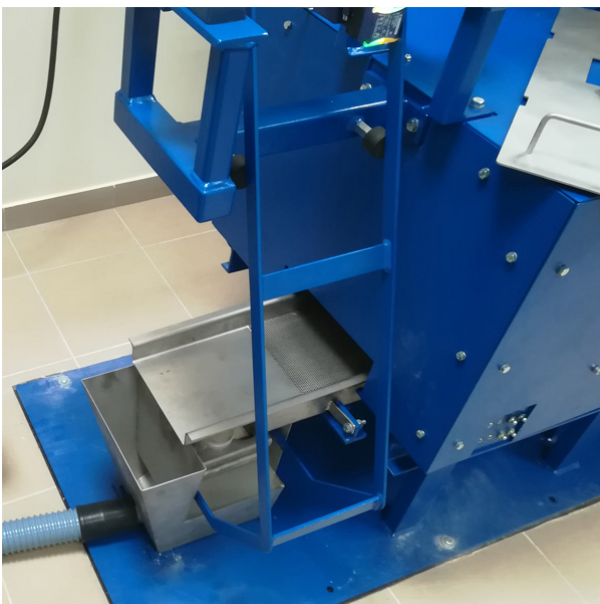
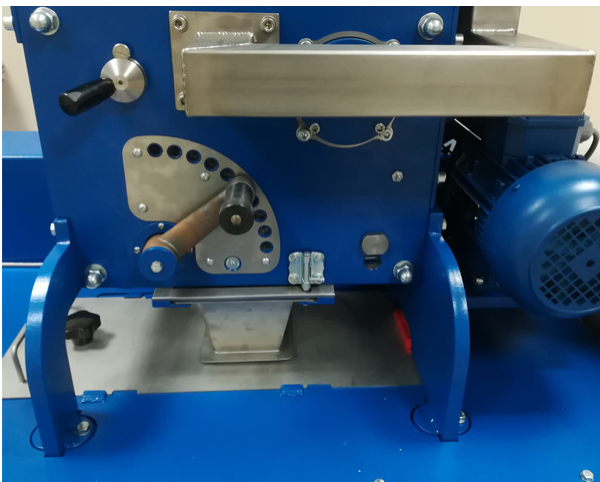


The LAARMANN LMCOM Combi Mill is a laboratory sampling machine that combines a compact jaw crusher, a roll crusher, and a sampling unit in a single system.

The sample is fed into the jaw crusher from the top. After the initial crushing stage, it passes into the roll crusher, where the material is reduced to a finer end product. The processed sample then moves onto a small screening section and is transported by a vibratory feeder.

In this configuration, material that meets the required final fineness is collected in a small bottle, while the coarser fraction is discharged into the reject sample collector. The bottle can be removed easily using a large handle. Once removed, the vibratory feeder stops automatically to prevent any loss of sample.

The LMCOM Combi Mill enables a wide range of materials to be processed efficiently with a single machine.





Various grinding materials

- Zirconium oxide
- Tungsten carbide
- PU Coated
- Stainless steel
- Hardened steel
- Abramax 500

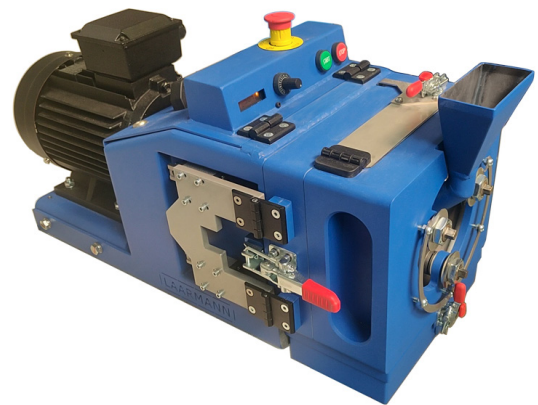


DM200 Disc Mill grinding discs

LM-DM200 Disc Mill

LAARMANN Disc Grinders provide an efficient solution for reducing particle size and homogenizing materials across a wide range of industries. Designed for precision grinding and pulverizing, they produce fine, consistent powders for both laboratory and industrial applications. Their robust design and reliable performance make them ideal wherever accurate and repeatable particle size reduction is required.

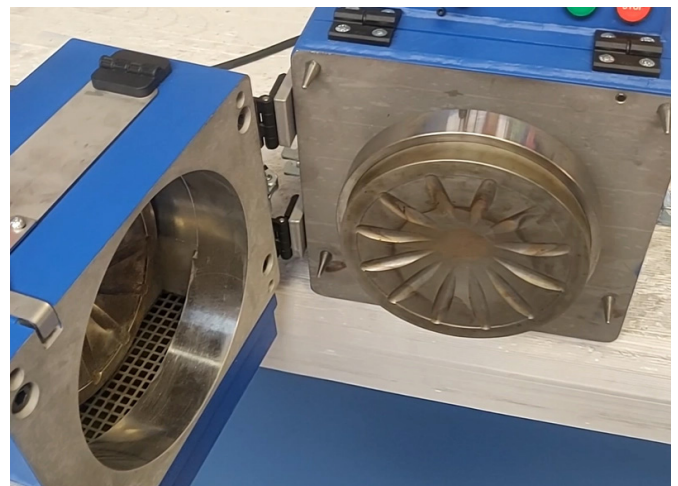
Feed size*	20 mm
End fineness*	< 100µm
Throughput*	150kg/h
Collector size	3000ml
Dimensions W x D x H	865 x 420 x 385 mm
Weight	130 kg



Disc Mill closed



DM200 Disc Mill grinding discs



Disc Mill closed

LAARMANN Ring Mills are essential for applications that require hard, brittle, or fibrous materials to be ground to analytical fineness. In operation, the sample is placed in a grinding bowl together with a disc or a set of rings and rollers, where it is subjected to intense three-dimensional vibrations. Inside the bowl, the material is rapidly ground and homogenized by a combination of pressure, impact, and friction, achieving analytical fineness in a short time. Typical samples are ground to 90–95% <75 µm in approximately 3 minutes, depending on the material characteristics and the required final fineness.



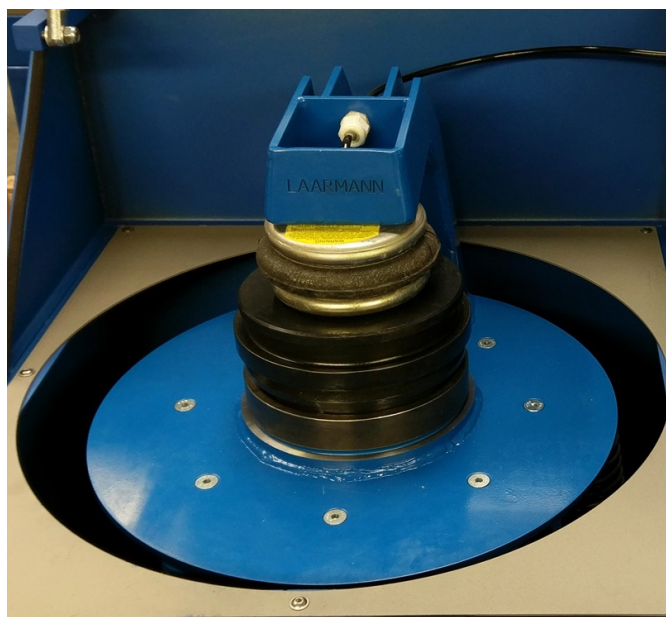
LM250 Pulveriser Ring Mill

Material feed size*	< 15 mm
End-fineness*	< 75 µm
Grinding media volume*	20-300cc (cm³)
Speed setting	1450 rpm
Dimensions W x D x H	550 x 602 x 1032 mm
Weight	210kg



LM1000 Pulveriser Ring Mill

Material feed size*	< 25 mm
End-fineness*	< 75 µm
Grinding media volume*	20-1000cc (cm³)
Speed setting	1450 rpm
Dimensions W x D x H	550 x 602 x 1032 mm
Weight	230kg



LM250/LM1000 Pulveriser Ring mill view of grinding bowl and airbag clamp



Various ring mill consumables



LM2000 Pulveriser Ring Mill

Material feed size*	< 25 mm
End-fineness*	< 75 µm
Grinding media volume*	20-2000cc (cm ³)
Speed setting	1450 rpm
Dimensions W x D x H	1087 x 741 x 1378 mm
Weight	475kg



LM5000 Pulveriser Ring Mill

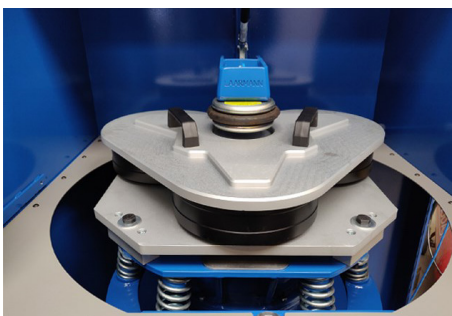
Material feed size*	< 25 mm
End-fineness*	< 75 µm
Grinding media volume*	20-5000cc (cm ³)
Speed setting	1450 rpm
Dimensions W x D x H	1400 x 730 x 1460 mm
Weight	560kg



Liftboy for ergonomic handling and soundproof material for LM250/LM1000/LM2000



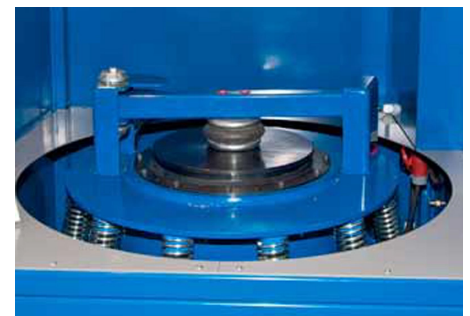
LM5000 Pulveriser Ring Mill with vacuum system



LM2000 with 3 x adaptor plates



LM2000 with 4 x 100ml adaptor plates



LM5000 Pulveriser Ring Mill closed grinding chamber

LAARMANN Planetary Ball Mills are used whenever the highest degree of fineness is required. In addition to classical mixing and size reduction, they are ideally suited for colloidal grinding and provide the high energy input needed for mechanical alloying processes. The centrifugal forces generated inside the mill create exceptionally high pulverization energy, resulting in rapid and highly effective grinding. LAARMANN grinding media are also available for use in, or adaptation to, similar machines from competing suppliers.



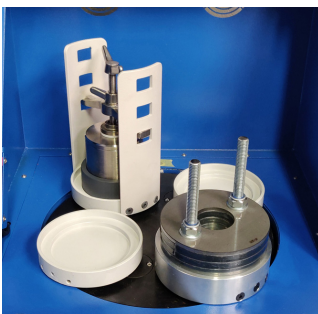
LMPBM1000 Planetary Ball Mill

Material feed size*	< 10 mm
End-fineness*	< 1µm; < 0,1µm for colloidal grinding
Feed quantity	max 4 x 220ml / 8 x 20ml when stacked
Speed setting	30 - 425 min-1 (Sun wheel 50-650 min-1)
Dimensions W x D x H	759 x 480 x 548 mm
Weight	95kg



LMPBM4000 Planetary Ball Mill

Material feed size*	< 10 mm
End-fineness*	< 1µm; < 0,1µm for colloidal grinding
Feed quantity	max 8 x 220ml when stacked
Speed setting	30 - 425 min-1 (Sun wheel 50-650 min-1)
Dimensions W x D x H	1090 x 660 x 1400 mm
Weight	158kg



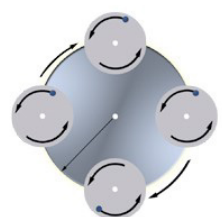
LM PBM with grinding jars and counter weight



Stackable jars 2 x 500ml

Various grinding materials

- Chrome steel
- Agate
- Tungsten carbide
- Standard steel
- Polyurethane coated
- Zirconium oxide



Movement planetary ball mill

LAARMANN Bottle Rollers are designed for ultra-fine grinding and mixing in laboratory environments and small-batch production. They are widely used in scientific research, education, testing, and production thanks to their easy operation, high efficiency, and ability to deliver uniform particle size distribution.



LMBR500 Bottle Roller

Bottle amount	1
Speed setting	27.5 to 276 rpm
Dimensions W x D x H	550 x 602 x 1032 mm
Weight	41kg



LMBR2000 Bottle Roller

Bottle amount	Up to 14
Speed setting	30 to 280 rpm
Dimensions W x D x H	550 x 602 x 1032 mm
Weight	470kg



BR500 with tainless steel bottle



BR2000 Bottle Roller running with multiple bottles



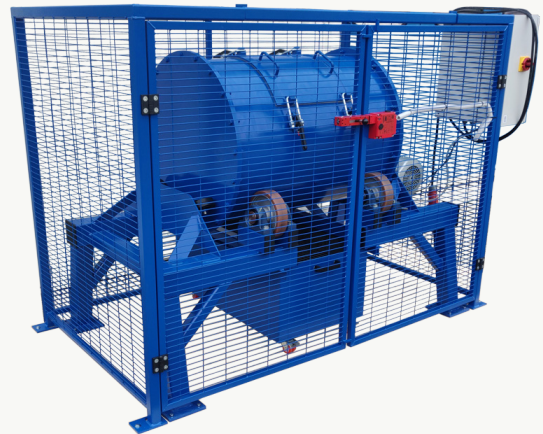
Different material bottles such as Aluminium oxide bottle stainless steel

LAARMANN Ball Mills are designed for both laboratory and process applications, making them ideal for milling and homogenizing soft, fibrous, hard, and brittle materials in both dry and wet conditions. Their versatile performance ensures reliable and consistent results across a wide range of sample preparation requirements.



LMBM Ball Mill

Material feed size*	< 25 mm
End-fineness*	< 20 µm*
Drum volume	1,6,12, 21 or 42 litre
Speed setting	10-70 rpm
Dimensions W x D x H	735 x 1415 x 1360 mm (closed)
Weight	475kg



LMBRM Ball and Rod Mill

Material feed size*	< 25 mm
End-fineness*	< 1 mm
Volume of grinding barrel	150L - 450L (customer request)
Speed setting	7-33 rpm
Dimensions W x D x H	1180 x 1250 x 1000 mm
Weight	750kg



Continuous Ball Mill

The LMCBM is a continuous laboratory and process ball mill designed for milling and homogenizing soft, fibrous, hard, and brittle materials in both dry and wet conditions. For automated feeding, the machine can be equipped with an optional vibratory feeder, which is also available as a separate unit for use with other equipment. An optional collector hopper with an air-driven membrane pump enables efficient discharge of the processed material and smooth transfer to the next stage in the process.

LAARMANN Pressure Filters are designed to deliver the highest standards of precision, reliability, and compliance. Available in a range of standard sizes for both low- and high-volume test work as well as batch processing, they can also be custom-built to meet specific capacity requirements. LAARMANN Pressure Filters are recognized for their fast filtration performance, ease of loading and unloading, and user-friendly operation. Their intelligent design helps minimize the risk of contamination and sample loss, making them one of the most advanced pressure filter solutions available on the market. LAARMANN Pressure Filters are available in stainless steel or coated carbon steel, depending on application requirements.



LMPF Pressure Filter Table mounted version

Max air pressure to the filter	500 kPa
Standard range of volume sizes	4, 13, 24, or 41 Liters



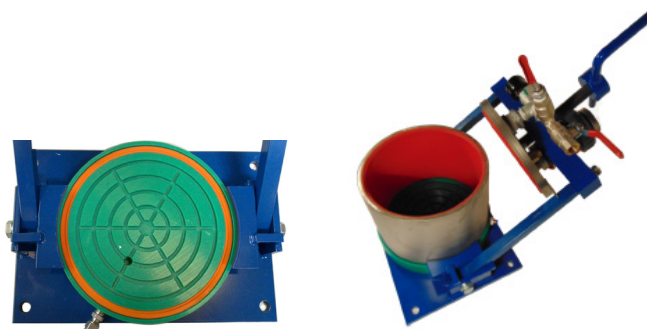
LMPF Pressure Filter Floor mounted version

Max air pressure to the filter	500 kPa
Standard range of volume sizes	13, 24, or 41 Liters



LMPF Pressure Filter Double Spindle Version

Max air pressure to the filter	500 kPa
Standard range of volume sizes	13, 24, or 41 Liters



Pressure filter with PU coating



optional stainless steel labrith pressure filter

LAARMANN Hot Air Drying Ovens (HAD) are designed for the efficient drying of wet mineral samples prior to chemical analysis. Spacious, reliable, and easy to operate, the HAD range is suitable for a wide variety of sample types, including cores, granular materials, and filter cake from pressure filters. These ovens provide a cost-effective solution for sample preparation and can be used before crushing and pulverising to save valuable processing time. LAARMANN offers three standard sizes: 2.5 m³, 5.0 m³, and 10.0 m³, with expert guidance available to help select the best option for your operational requirements.



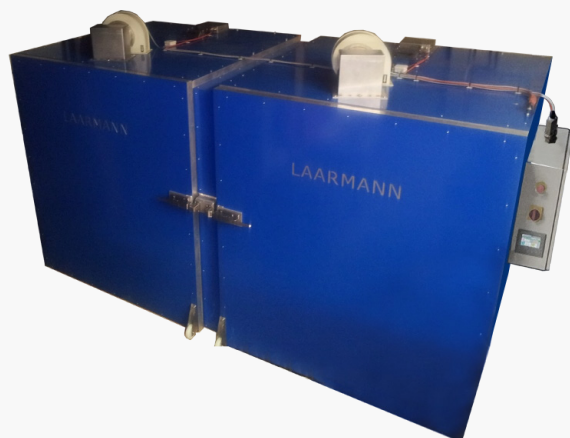
LMHAD2500 Drying Oven

Internal volume	2.5 m ³
Number of trolleys	1 x 6 shelves
temperature setting	20° – 175°
Dimensions W x D x H	1129 x 794 x 2262 mm
Weight	950kg



LMHAD5000 Drying Oven

Internal volume	5.0 m ³
Number of trolleys	2 x 6 shelves (customizable)
temperature setting	20° - 175°
Dimensions	2256 x 1921 x 1761 mm
Weight	2000kg



LMHAD1000 Drying Oven

Internal volume	10 m ³
Number of trolleys	4 x 6 shelves
temperature setting	20° – 175°
Dimensions W x D x H	3697 x 2255 x 1775 mm
Weight	≈ 3000kg



Drying oven trolley



Drying oven tray set

If you analyze ground soil, powders, or other processed materials using X-ray fluorescence, infrared spectroscopy, calorimetry, or similar analytical techniques, a reliable laboratory press is essential for producing high-quality pellets. LAARMANN Manual Lab Presses are designed for easy handling and consistent performance, helping users produce accurate and uniform pellets with confidence. Built from high-quality stainless steel and aluminium, they offer a robust and durable construction and are compatible with a wide range of die sets from 3 to 50 mm, delivering excellent results across a variety of laboratory applications.



LMTP1 1-15 tons pellet press

Max pressure	15 T
Piston	108mm
Press tool	13 / 32 / 40 mm
Dimensions W x D x H	400 x 360 x 300 mm
Weight	42kg



LMTP1 1-25 tons pellet press

Max pressure	25 T
Piston	108mm
Press tool	13 / 32 / 40 mm
Dimensions	300 x 370 x 497 mm
Weight	49,5kg



LMPP40 40 tons pellet press

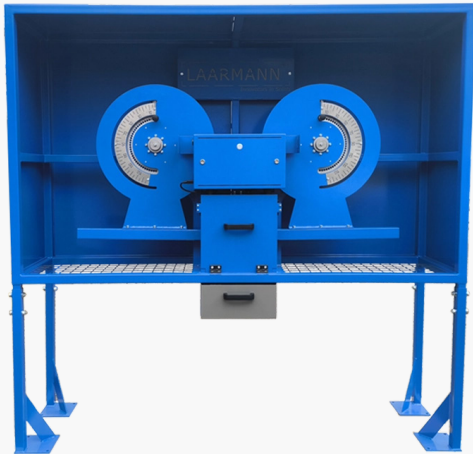
Time setting	0-20 sec in 1 sec steps. Each level is controllable.
Power setting	0-40t
Press tool	32 / 40 mm
Dimensions W x D x H	500 x 850 x 1150 mm
Weight	200kg



LMTP pellet press motorized

Max pressure	5 T
Piston	108mm
Press tool	13 / 32 / 40 mm
Dimensions	300 x 370 x 497 mm
Weight	49,5kg

When designing the layout of a processing plant, detailed knowledge of the raw material characteristics is essential. To minimize potential risks, extensive testing is required to determine the material properties accurately. Bond Index test methods provide a reliable basis for defining crushing capacity requirements and the desired product quality with precision. By applying these procedures, the crushing and abrasion behaviour of mineral samples can be accurately assessed. This information is crucial for determining the appropriate ball mill or rod mill design, estimating production capacity and energy consumption, and defining drilling and blasting requirements during exploration.



LMBIT BOND Impact Tester

Material feed size*	> 50 / < 76 mm
Test repetition (Throughput)	At least 10, preferably 20 test runs per sample
Setting adjustment method	2 button activation and hammer adjustment by scale
Dimensions W x D x H	2006 x 506 x 1960 mm
Weight	260kg



LMBAT1000 BOND Abrasion Tester

Material feed size*	4 x 400 gram according to bond norm
Time setting	4 x 15 minutes according to bond norm
Max volume of grinding barrel	5000ml
Speed setting	Drum: 70rpm Paddle 632rpm
Dimensions W x D x H	900 x 700 x 1000 mm
Weight	250kg

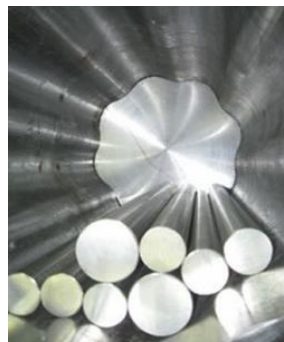


LMBRM BOND Ball and Rod Mill

Material feed size*	3,35mm (ball mill) / 12,50mm (rod mill)
EndEnd-fineness*	100 µm (ball mill) / 2100 µm (rod mill)
Drum volume	21 L
Speed setting	70 rpm (ball mill) / 46 rpm (rod mill)
Dimensions W x D x H	735 x 1415 x 1360 mm (closed)
Weight	475kg



Bond ball mill rounded structure



Bond rod mill wave structure

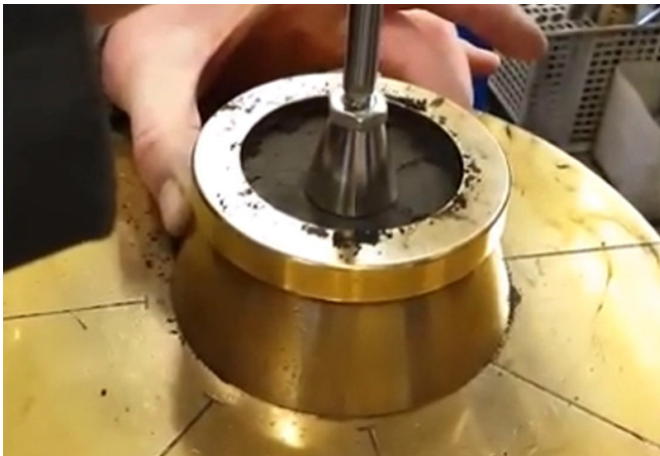
Three methods are commonly used to determine the Transportable Moisture Limit (TML): the Flow Table Test, the Penetration Test, and the Proctor/Fagerberg Test. Each method offers specific advantages, and the most suitable option is typically selected in accordance with local practice or the requirements of the relevant authorities. The Flow Table Test is a widely recognized method for determining the maximum moisture content at which bulk cargo can be transported safely.



TML Flow Table Test

The Flow Table Test is used to determine the Transportable Moisture Limit (TML) and assess whether bulk cargo can be transported safely. During the test, the sample is placed in a mould and compacted to simulate the pressures experienced during transport. Once the mould is removed, the compacted material is subjected to controlled mechanical motion to evaluate its deformation behaviour. This provides a reliable indication of the moisture condition at which the material may begin to lose stability during transportation.

Setting adjustment method	Drop mode, time mode
Drop amount	1-99
Surface frame	250mm / 762mm
Speed setting	10-55rpm
Dimensions W x D x H	723 x 403 x 749mm
Weight	38kg



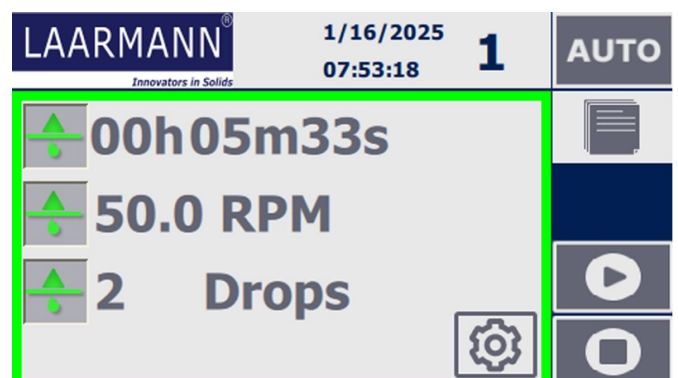
TML flow table tester material pressed with tamper



TML flow table tester material test result



TML flow table tester table main drive



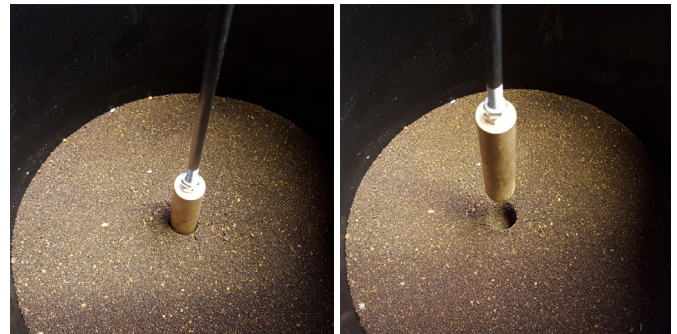
TML flow table tester control panel



TML Penetration Test

The Penetration Test is used to determine whether the Transportable Moisture Limit (TML) has been reached. During the test, the sample is placed in a cylinder, loaded with a weight, and subjected to vibration. If the weight penetrates the sample, this indicates low shear strength. The Flow Moisture Point is then determined based on the depth of penetration, providing a reliable indication of the material's suitability for safe transport.

Cylinder inner diameter	194mm (large) 146mm (small)
Depth	253 (large) 202 (small)
Collector volume	10 litre (other volumes on request)
Speed setting	1600 - 4006rpm
Dimensions W x D x H	600 x 500 x 1150 mm
Weight	90kg



TML penetration test with solid test material result



TML penetration test small cylinder 146mm inner diameter



TML penetration test large cylinder 194mm inner diameter



TML proctor/fagerberg test	normal* / coal* / iron* / bauxite*
The Proctor/Fagerberg Test determines the Transportable Moisture Limit (TML) of bulk materials by measuring how moisture affects compaction. Samples are compacted at different moisture levels to find the point at which the material remains safe for transport. It is especially useful for materials that do not flow easily in other TML tests.	
Hammer weight	350g / 337.5g / 150g / 337.5g
compact hammer diameter	50mm / 75mm / 50mm / 50mm
drop height	200mm / 150mm / 150mm / 150mm
mould inner volume	1000cm ³ / 2121cm ³ / 1000cm ³ / 2121cm ³
Speed setting	75mm / 75mm / 75mm / 75mm



TML proctor/fagerberg hammer



TML proctor fagerberg equipment



LMFTM Flotation Machine

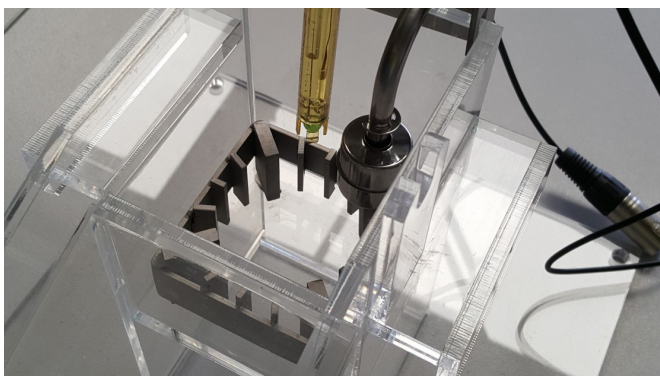
Available Accessories (with digital read-out)	Froth remover, level indicator, Peristaltic pump, PH indicator
Flotation cells capacity	0,2 - 7 liters
Impeller speed	100-2000 rpm
Froth remover speed	5 - 19 rpm
Dimensions W x D x H	839 x 480 x 834 mm
Weight	133kg

Designed to deliver accurate and reliable test reproduction, the LAARMANN Flotation Machine is ideal for duplicating plant processes and operations on a laboratory scale. It can be used for flotation, attritioning, blending, and agitation, making it a highly versatile solution for a wide range of test applications.

The machine is equipped with a programmable digital touchscreen, allowing operators to create and store programs with parameters tailored to each individual product. This ensures a high level of representativity and reproducibility throughout the testing process.

LAARMANN's Flotation Machine also features a pneumatic slide unit for precise raising and lowering of the rotor, supporting accurate control and ease of operation.

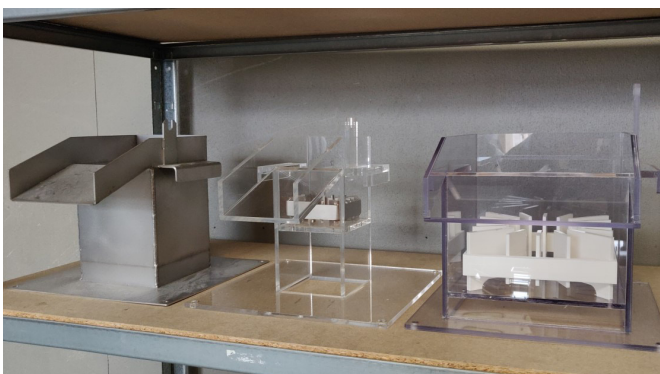
Available options include an automatic froth remover, peristaltic pump, level indicator, pH meter, square or round cells, and a variety of construction materials to suit specific application requirements.



left: optional pH meter ; right: optional level indicator.



Flotation machine control panel interface



acrylic and stainless steel flotation cells in various volumes



acrylic and stainless steel rotors suitable for different cell volumes.

LAARMANN Sieving Machines are designed for both batch and continuous sieving of soft, medium-hard, hard, and brittle materials. Engineered to deliver precise and reproducible results, they offer a wide range of parameter settings that enable fast, reliable, and highly efficient sieving performance across a variety of applications.



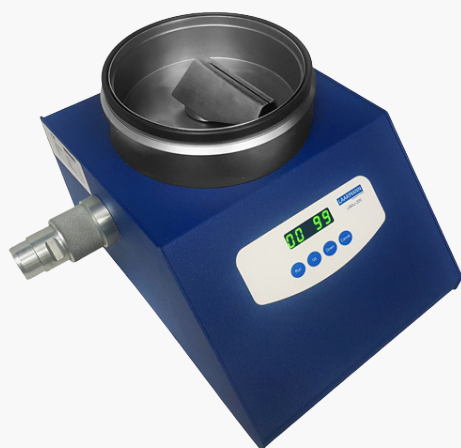
LMSM 75/200 Sieve Shaker

Maximum sieve diameter	200mm diameter / 8 inch (203mm)
Minimum sieve diameter	75mm diameter
Vibrational frequency regulation	from 3 to 30 Hz (180 - 1800 min-1), in 0.1 Hz steps
Sieve stack	9 sieves plus collector and lid
Dimensions W x D x H	300 x 240 x 240 mm (670 mm with rods)
Weight	28kg



LMSM 300/450 Sieve Shaker

Maximum sieve diameter	450mm diameter
Minimum sieve diameter	200mm diameter
Vibrational frequency regulation	from 3 to 30 Hz (180 - 1800 min-1), in 0.1 Hz steps
Sieve stack	up to 10 sieves plus collector and lid
Dimensions W x D x H	480 x 500 x 1150 mm
Weight	85kg



LMAJ200 Air Jet Sieve Machine

Sieve support size	200mm diameter / 8 inch
Sieve mesh sizes available	20µm - 1,7mm
Sieve stack	1 or 2 sieves
Throughput air	0-99 mBar
Dimensions W x D x H	600 x 450 x 400 mm
Weight	25kg

Test Sieves types and sizes

- Available in diameters from 75 mm to 450 mm
- Stainless steel woven wire mesh sieves with aperture sizes from 20 µm to 125 mm
- Perforated round-hole sieves with aperture sizes from 500 µm to 125 mm
- Perforated square-hole sieves with aperture sizes from 4 mm to 125 mm
- Designed to provide precise and reliable particle size analysis across a wide range of applications



Fire Assay remains the industry-standard method for determining gold and platinum group element (PGE) concentrations in high-grade ores. Lead collection fire assay is widely regarded as the most definitive technique for gold analysis and can also be used to determine platinum and palladium. For analysis of the full six-element PGE suite, nickel sulfide collection fire assay is the preferred method. Lead collection fire assay is suitable for a wide range of sample types, including rocks, drill core, soil, and chip samples. Depending on the expected gold content and the degree of sample homogeneity, standard assay crucibles of 25 g, 30 g, or 50 g can be applied.



Fusion furnace

Models

LM-25PFF, 25 pot fusion furnace
LM-50PFF, 50 pot fusion furnace Type K thermocouple

maximum operating temperature

≥ 1200°C



Cupellation furnace

Models

LM-50PCF, 25 pot fusion furnace
LM-100PCF, 50 pot fusion furnace 3 phase, 380 volts, 50-60 Hz

maximum operating temperature

≥ 1200°C



Hot pot trolley



Pouring mould



Pouring trolley with mould



Work station



Slag plate



Knock up bench



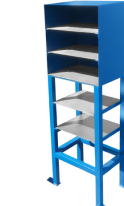
Pot trolley



Pot bench



Crucible cooling rack



Cupel cooling rack



Tool rack



Multi-pot pouring tong



Furnace shovel



Furnace brush



Furnace rake



Cupels



Crucibles



Jar holder with key and jars



Micro vial adapters

Lab Wizz 320 Micro Ball Mill

Micro Ball Mill for soft, hard, and brittle materials, designed for processing two or more samples simultaneously in jars with volumes ranging from 0.2 ml to 100 ml each.

Feed size*	2 x 50 ml
End fineness*	5 µm
Speed setting	Digital, from 3 to 30 Hz (180 - 1800 min-1), in 0.1 Hz steps
Timer	5 sec - 99 min
Grinding jar volume	50ml - 100ml - 160ml
Dimensions W x D x H	385 x 420 x 240 mm
Weight	42 kg

Available grinding media

- Stainless steel
- Tungsten carbide
- Zirconium oxide



Zirconium oxide set



Stainless steel set



Agate set

LMMG100 Mortar Grinder

The MG100 is designed for grinding, homogenizing, and mixing a wide range of samples under dry, wet, or cryogenic conditions. It is suitable for processing hard, soft, brittle, and pasty materials, delivering outstanding performance in both capacity and versatility. Its robust design, combined with safe and user-friendly operation, makes the MG100 an efficient solution for demanding laboratory applications.

Feed size*	8-10mm
End fineness*	10 - 20 µm*
Speed setting	50-130rpm
Timer	5 sec - 99 min
Dimensions W x D x H	700 x 750 x 700 mm
Weight	42 kg

Available grinding media

- Stainless steel
- Standard steel
- Tungsten carbide
- Zirconium oxide
- Agate



6 -12 - 24 push fit rotor
*suitable for competitor machines



ring sieve available in various
mesh sizes

UCM100 Ultra centrifugal mill

The Ultra Centrifugal Mill UCM200 is a high-speed rotor mill designed for the rapid size reduction of soft to medium-hard and fibrous materials. With a comprehensive range of accessories, including various ring sieves and rotors, the UCM200 offers exceptional versatility and can be easily adapted to suit a wide range of applications.

Feed size*	10 mm
End fineness*	< 40µm
Speed setting	6000 - 18000rpm/min constant adjustable
Timer	5 sec - 99 min
Grinding jar volume	50ml - 100ml - 160ml
Dimensions W x D x H	400 x 506 x 495mm
Weight	35 kg



Accessories and spares



Stainless steel mixing bottle

LM-TM100 Tumbler mixer

The TM100 Tumbler Mixer is designed for efficient mixing of particulate solids and liquid samples. It is an ideal solution for quality control and R&D applications, ensuring reliable and consistent analysis results through smooth and even rotation. The TM100 combines simple operation with high sample capacity, making it a practical and dependable choice for routine laboratory sample preparation.

Speed setting	20-100rpm
Collector volume	2L / 1L / 0.5L
Dimensions W x D x H	496 x 640 x 375mm
Weight	60 kg



Optionally available on a frame

Grinding media

Maximize milling quality and extend the service life of your grinding media with LAARMANN's high-quality grinding media solutions. Suitable for Planetary Ball Mills, Mixer Mills, Lab Wizz systems, and Pulverisers, LAARMANN grinding media are designed to deliver optimal performance across a wide range of applications. By selecting the right combination of grinding media, users can reduce operating costs while maintaining consistently high sample quality. LAARMANN can provide expert guidance in choosing the most suitable solution based on your sample characteristics and analytical requirements.



Zirconium oxide and stainless steel balls



Zirconium oxide grinding jar up to 200ml



Agate grinding jar up to 200ml

Available grinding media materials

- Stainless steel
- Standard steel
- Tungsten carbide
- Zirconium oxide
- Agate

Test sieves

We offer a comprehensive range of Test Sieves with precision woven wire mesh, perforated plates, or electroformed mesh to suit a wide variety of laboratory and industrial applications. Compared with many conventional sieve designs, LAARMANN Test Sieves are engineered to reduce maintenance requirements and minimize the risk of cross-contamination. The folded rim provides excellent stability and ensures an accurate fit when sieves are stacked, supporting reliable and consistent sieving performance. Test Sieves are available in the following diameters: 8", 12", 100, 150, 200, 300, 315, 350, 400, and 450 mm.



Round hole perforated plate sieves



square hole perforated plate sieves



Woven wire sieves



Air jet sieves

Bowls and discs

Bowls, Rings, and Discs are available in a wide range of materials, including chrome steel, hardened steel, tungsten carbide, silicon nitride, zirconium oxide, agate, and PU-coated variants. Designed for milling, grinding, and pulverising down to micron-level fineness, they are suitable for use with all pulveriser ring mills. This broad material selection allows the optimum combination to be chosen for specific sample characteristics, application requirements, and contamination control needs.



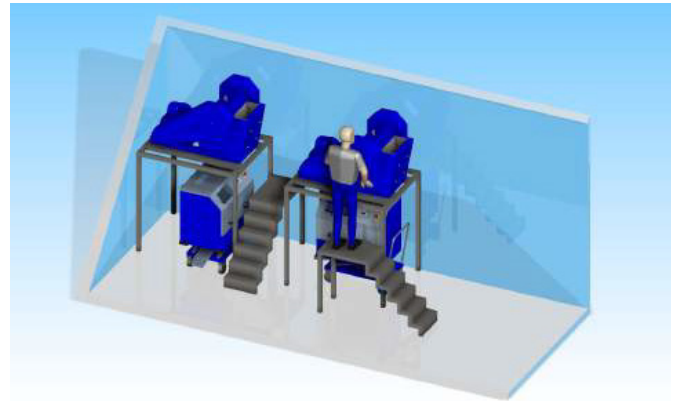
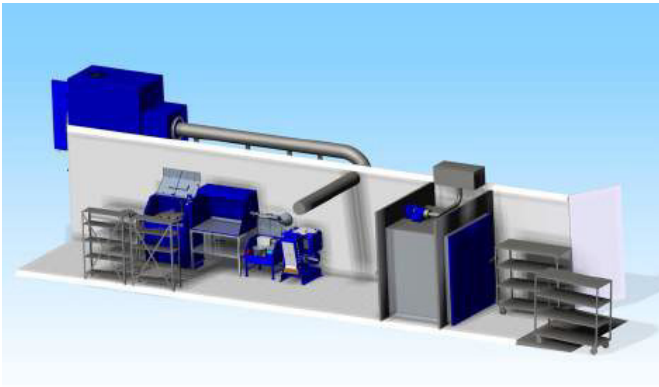
Zirconium oxide ring mill set



Tungsten steel ring mill set



Chrome steel ring mill set



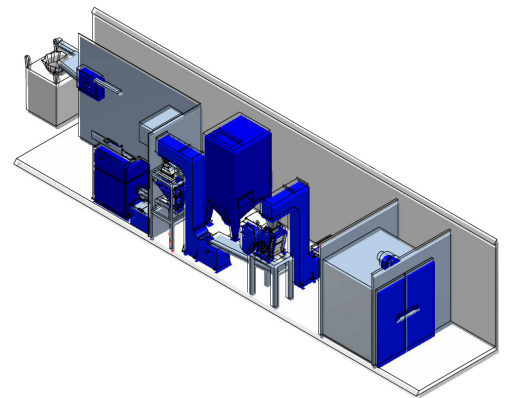
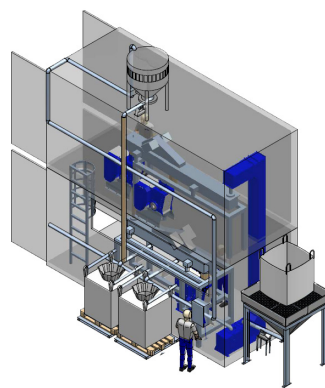
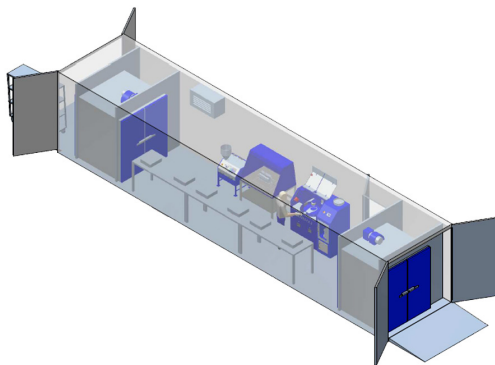
Potencial set ups for container labs

In the mining industry, materials such as iron ore are often sent in large-volume big bags to external laboratories for sampling and analysis. This approach can be time-consuming, costly, and less reliable. LAARMANN offers a more efficient alternative through the development of mobile sampling and laboratory containers designed to perform sample processing and analysis directly on site.

The exact machine configuration depends on the material and the application, but for representative sampling LAARMANN generally recommends a combination of a crusher or pulverising ring mill together with a sample divider. This enables accurate preparation of representative samples close to the source, reducing transport time and improving process efficiency.

LAARMANN Container Labs and Sampling Containers are designed for on-site sample analysis and processing. We offer a wide range of concepts and have extensive experience in developing customized laboratory and sampling containers tailored to each customer's specific requirements, for both mobile and stationary use.

Available options can include air conditioning to suit environmental conditions, self-sufficient power and water supply systems, and multiple rooms or storage areas. Whether the requirement is for material analysis, sample crushing and division, or office space for data evaluation, LAARMANN can deliver a fully tailored container solution to match your operational needs.



Container Labs are designed for the on-site analysis and processing of samples, providing scientists with a clean, practical, and controlled working environment. Where required, the container can be equipped to maintain a fixed temperature, ensuring suitable conditions for sensitive analytical work.

Compared with sampling containers, container labs are generally more straightforward in design and are intended to provide a functional laboratory space directly at site. Depending on the application, they can be fitted with dedicated sample analysis equipment such as flotation machines, micro ball mills, and sieve shakers, all integrated within the container.

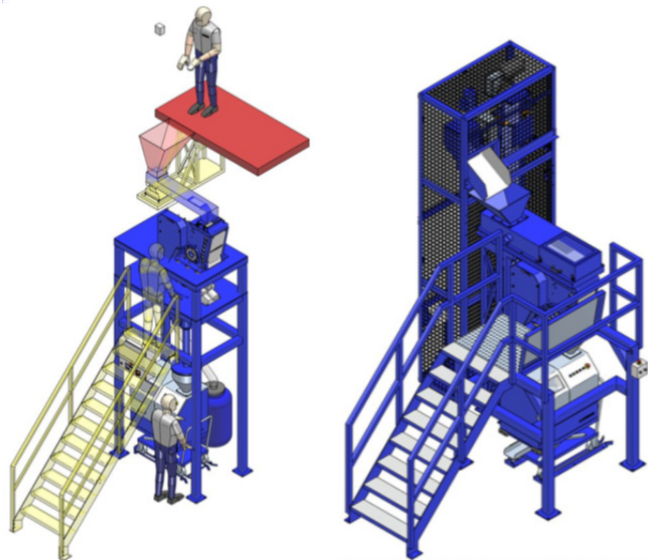
This enables LAARMANN to deliver a compact, efficient, and tailor-made laboratory solution for reliable on-site testing and sample preparation.

Custom made sampling solution

The process of developing a custom made sampling solution where, with the push of a button, a complete sampling installation can be started goes as follows. An absolute representative sample will be taken from incoming bulk material.

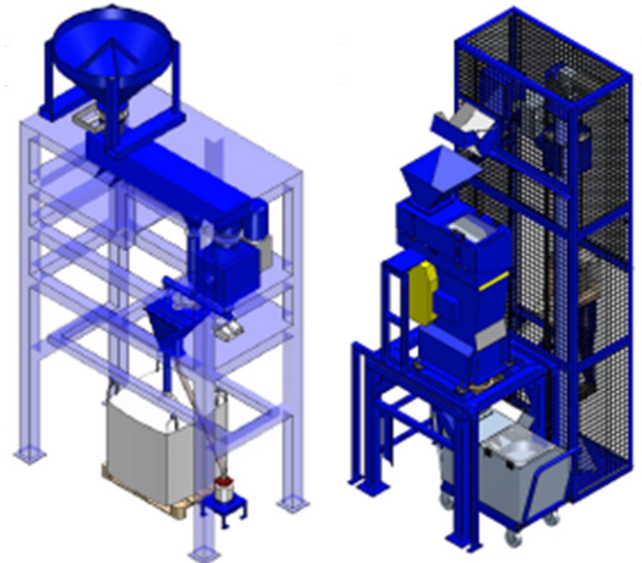
The initial packing of the bulk material can be bags of 20kg, 200L barrel, or big bags of 1000/2000L. Going down to 100 gram is also possible. In case needed, the sample will be crushed and transported by mechanical or pneumatic transport systems to bunkers.

From these bunkers a system based on weighing cells will produce a final sample ready to be analyzed for quality or chemical composition. This way a capacities of around 1 ton per hour can be easily sampled in a representative way.



Sampling unit with crusher and samplers

Sampling installation with crusher and lifting device



Sampling installation with CM4000 and a Vezin Sampler for printed circuit board

Sampling installation with LMFC250 and RSD sample divider for Ferrochrome

We supply total solutions

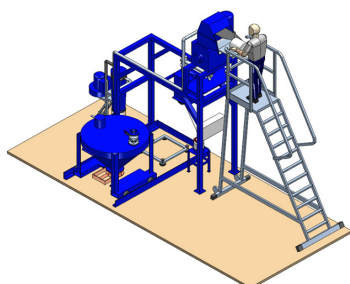
We provide complete solutions, including comprehensive technical consulting for complex installations and processing plants. Many projects require custom-engineered systems that integrate seamlessly into existing facilities, and our expertise ensures that each solution is tailored to the operational environment.

With deep technical knowledge and a strong focus on innovation, LAARMANN is equipped to handle even the most demanding challenges. Efficient workflows, aligned with your specific requirements, deliver reliable results, long service life, and an optimal price-performance ratio.

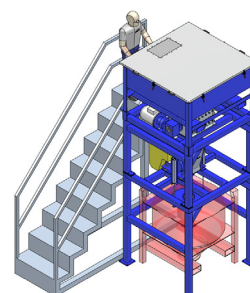
LAARMANN - Innovators in solids

LAARMANN is at the forefront of sampling, sample preparation, and material testing technology. We specialize in the development of high-capacity pulverizing systems and custom-engineered sampling solutions for customers worldwide. Our drive for continuous innovation is reflected in the introduction of next-generation pulverizing mills, high-capacity fine jaw crushers, advanced robotic systems, and other cutting-edge technologies.

Modern industries demand higher product quality, increased production capacity, shorter lead times, and lower operating costs. Automation is the key to meeting these challenges. That is why LAARMANN engineers fully integrated solutions to automate critical processes such as sampling, big bag handling, and sample preparation plants. With years of experience combined with creative engineering expertise, we are able to deliver reliable, efficient, and future-ready systems tailored to our customers' specific requirements.



Sampling installation with cm4000 cutting mill



Crushing installation with precrusher and LMFC250 fine crusher

Ferroalloy crusher for sample preparation

The LAARMANN Ferroalloy Crusher is designed to simplify sample preparation and reduce the need to send large quantities of material for external analysis, resulting in significant savings in material costs.

By improving the preparation process, the system enables a higher sampling frequency, supporting better process control and improved production quality. Accurate sample preparation is essential, as incorrectly taken or processed samples can lead to false analytical results, causing material to be wrongly approved or rejected.

Bringing this process in-house also helps eliminate the high costs and product losses often associated with outsourcing.



Sampling Installation for Recycling Companies

The LAARMANN Sampling Installation is a heavy-duty multi-ton system designed to take representative samples from large material streams while simultaneously filling big bags for further processing.

Material is loaded into a large bunker, often directly from delivery, using a bulldozer. From there, a bucket elevator transports the material to a vibratory feeder, which creates a consistent flow toward the LAARMANN Vezin Sampler 200.

The Vezin Sampler extracts a representative subsample from the main material stream, with the sampling frequency adjustable through the system parameters. The collected sample can either be discharged directly into a sample box or transferred to a secondary bunker for an additional sampling stage.

The reject material is automatically directed to either the left or right big bag filling station, and when one station is full, the flow is switched to the other to ensure continuous operation.

