Engelsmann Laboratory Equipment

precise, flexible, easy



- Jolting Volumeter
  Type STAV II
- Drum Hoop Mixer
  Type RRM Mini-II
- Test Screening Machine
  Type JEL 200-II
- Automatic Pigment Muller
  Type JEL 25/53-III

J. ENGELSMANN AG

The Experts for bulk solids processes



Welcome to the Experts for Bulk Solids Processes

Founded over 150 years ago, J. Engelsmann AG focused on the specific needs of the bulk solids industry very early on. Whether machines for screening appliances or plants for filling and emptying big bags, Engelsmann designs, manufactures and distributes process solutions for almost all kinds of bulk solids across the world.

By specializing on our key business screening technology, big bag plants and mixing technology for the chemical, plastics, pharmaceutical and food processing industry, we combine years of experience with our expertise in planning, manufacturing and assembling process plants. High quality product solutions for conveying, dosing, weighing and in laboratory technology complete our product portfolio.



Your Safety is our Priority

A comprehensive range of services complements our portfolio and provides you with a solution that is tailored to your needs and from a single source. Our fast, local replacement parts service means that we avoid long periods of inactivity and help to reduce breakdown costs.

However, our range of services is not limited purely to Úman aging emergencies‡. An extensive service portfolio accompanies the operating life of our machines and plants, from putting them into service right up until the end of their service life.

Small-Scale Testing for Large-Scale Applications

We use our pilot station to optimize procedural parameters in downscaled plants so that they can later be used in production processes in larger plants.

Upstream tests are used to certify bulk solids processes and to compile production processes and throughput rates efficiently. We would be happy to run tests together with you upon request.



Jolting Volumeter Type STAV II



Type	Article No.
STAV II	205752010
measuring cylinder	125 99 0008
noise damping hood	125 75 0001

Convincing Facts

- modern soft design
- easy handling
- application-oriented control unit
- possible use of different measuring cylinders
- easy exchanging of measuring cylinders
- easy cleaning

Short Description

- speed of the camshaft: 250 rpm +/- 15 rpm
- single-phase AC motor and condenser
- 50W
- weight of the measuring cylinder with holder: 670g +/- 45g
- dropping height of the guide punch: 3 mm +/- 0.1 mm
- noise level acc. to DIN 45635: approx. 80 dB(A)
- standard voltage: 230 V / 50 Hz
  (special voltage is possible upon request)
- net weight: approx. 9 kg
- dimensions: approx. 290x330x180mm (without measuring cylinder)
- dimensions: approx. 290x330x500mm
  (with 250 ml measuring cylinder)

Operation

Using various sizes of measuring cylinders fixed by means of a holding cap makes it possible to determine the tapped density of varying quantities of a powdery, fibrous or granular product.

Range of Application

The apparatus serves to determine the volumes before and after tamping, the compaction as well as the tapped density according to the European Pharmacopoeia, DIN ISO 787 part 11, ISO 3953, ISO 8967 and ASTM B 527-93. The possibility of using measuring cylinders of 10, 25, 50, 100, 250, 500 and 1000 ml opens a wide range of industrial applications for this kind of equipment.

Construction

The distinguishing features of the jolting volumeter STAV II in soft design are the round shape and the metallic surface. The main parts of the STAV II are a modern silver metallic plastic housing with onephase AC motor, the jolting mechanism with clamping device for the measuring cylinder and the ON and OFF switch. The application-oriented control unit with functional display is mounted in the housing. Optimal ergonomic properties are achieved due to the arrangement of the display. The weight and graduation of 250 ml measuring cylinders is standardized according to ISO 4788.

Noise damping hood



Range of Application

The noise level of your jolting volumeter can be reduced by using the noise damping hood. Due to its decorative design the hood fits into any laboratory.

noise level without hood	approx. 80 dB(A)
noise level with hood	approx. 58 dB(A)

Construction

Housing of wood-plastic compound, pressed under high pressure, very stable. The transparent front pane of plexi glass serves as a covering through which the counter and the measuring cylinder can be seen even when the hood is closed.

The front pane can be arrested in any desired position due to a memory hinge. The noise-damping lining of Sonex foam material ensures optimal noise absorption. The extra-thick bottom plate is coated with sound absorbing material preventing resonance effects.

- net weight: approx. 17 kg
- inside dimensions: approx. 400 x 430 x 550 mm
- outside dimensions: approx. 435 x 450 x 570 mm

Drum Hoop Mixer Type RRM Mini-II



Convincing Facts

- modern soft design
- easy handling
- application-oriented control unit
- easy cleaning
- possible use of different mixing containers
- easy exchanging of mixing containers

Short Description

The laboratory mixer JEL RRM Mini-II serves to mix products in the form of powder or granules. The drum hoop mixer can also be used to dye plastics, to mix solid and liquid materials and/or for similar tasks. The JEL RRM-Mini-II can be equipped with the containers listed below.

- speed: infinitely adjustable 5 - 40 rmp
- noise level according to DIN 45635: 70 dB(A)
- the drum hoop mixer is designed for a filling degree of 40% to 70% and a maximum product weight of 5 kg.
- 50 W
- standard voltage: 230 V / 50 Hz
  (special voltage is possible upon request)
- net weight: approx. 9 kg
- dimensions: approx. 280 x 350 x 350 mm

Type	Material	Article No.
RRM Mini-II	-	05 75 6000 0007
drum 5.5 l	plexiglas	125 65 0001
drum 5 l	1.4301	205 13 6000 020 01
mixing insert 5 l	1.4541	203 13 31 50 000 16
adapter for using a 2 l drum	Polyamid	125 62 0001
drum 2 l	1.4301	125 13 0012
mixing insert 2 l	1.4541	203 13 3150 00018





Operation

The diagonal insertion of mixing containers in the drum hoop causes a tumbling movement during mixing. The arrangement of the container walls and the rotation of the drum ensure uniform three-dimensional mixing of the product.

Range of Application

The instrument is used for mixing powdery to granular products. It can also be applied for dyeing plastics, for mixing solid and liquid media and/or for similar duties.

Construction

The distinguishing features of the drum hoop mixer Mini-II in soft design are the round shape and the metallic surface.

The main parts of the Mini-II are a modern silver metallic plastic housing with 24 V DC motor, the drum hoop of cast Silumin with built-in container base and the ON/OFF switch.

The application-oriented control unit with functional display is mounted in the housing. Optimal ergonomic properties are achieved due to the arrangement of the display.

Special Execution

The pictures show a drum hoop mixer Mini which mainly consists of a modern silver metallic plastic housing with a motor-driven roller track and the drum hoop.
The plastic adapter is necessary to ensure fitting of a 2.0 l stainless steel drum. If desired, plastic adapters can be adjusted to containers provided by the customer. Stainless-steel drums for 5.0 l are also available.

Additional Equipment

The mixing intensity of powdery products can be improved and accelerated by using a three-blade mixing insert in the stainless-steel drum. The mixing insert is put on the bottom of the drum and clamped by closing the drum cover.



Test Screening Machine Type JEL 200-II



Type	Article No.
JEL 200-II	05 34 1000 0015
cover	430 13 0079
bottom with effective height 25 mm	430 13 0077
bottom with effective height 50 mm	430 13 0078

Convincing Facts

- easy handling
- optimal speed and stroke
- wide range of test sieves
- easy exchanging of test sieves
- easy cleaning

Short Description

- 110 W
- 15 mm stroke of the vibration plate
- speed 270 rpm
- standard voltage: 230 V / 50 Hz
  (special voltage is possible upon request)
- noise level according to DIN 45635: approx. 70dB(A)
- can be used with 8 test sieves, each 25 mm high, plus cover and bottom or with 4 test sieves, each 50 mm high, plus cover and bottom
- net weight without test sieves: approx. 24 kg
- net weight with test sieves: approx. 28 kg
- dimensions: approx. 410 x 380 x 630 mm

Operation

This analysis screening machine works according to the horizontal screening principle with horizontal vibrations. The speed and length of stroke have been optimized based on decades of experience. Tens of thousands of Engelsmann screening machines working according to this largely unchanged principle are presently used in laboratories of the industrialized countries.

Range of Application

The unit serves to analyse dry powdery to coarse-grained materials. By using sieves with different mesh sizes or openings it is possible to achieve almost tolerance-free separation of the product sample into its grain composition. The achieved reproducible values provide information making it possible to draw conclusions for milling, grinding and other processes.

Construction

The distinguishing features of the test screening machine JEL 200-II in soft design are the round shape and the metallic surface. The main parts of the JEL 200-II are a modern silver metallic housing of silumin with one-phase AC motor, the holding device for the test sieves and the ON/OFF switch. The application-oriented control unit with functional display is mounted in the housing. Optimal ergonomic properties are achieved due to the arrangement of the display.

Test Sieves



Range of Application

Determination of the grain size distribution of bulk goods in laboratories and production. Our test sieves are only covered with selected wire fabric according to DIN ISO 3310, A.S.T.M.E-11-87 or on request according to B.S. 410 and AFNOR. We recommend to use precision sieves with individual test certificates, if especially precise separations are required. The analysing process itself is carried out by using our test screening machine JEL 200-II.

Automatic Pigment Muller Type JEL 25/53-III



Type	Article No.
JEL 25/53-III (DS)	100 40 665
JEL 25/53-III (DS) (with water cooling system)	100 37 578
glass plate	125 99 0012

Convincing Facts

- maintenance-free
- easy handling
- easy cleaning

Range of Application

This apparatus is used for grinding pasty color pigments in laboratories. The purpose of this process is to determine the consistency, density or coloring power of pigments. Test series can be carried out with product quantities of 3 to 7 g. It is also possible to test similar products under identical conditions.

Short Description

- motor: 0.37 kW
- speed: 72 rpm
- net weight: approx. 80 kg
- dimensions: approx. 600 x 480 x 400 mm
- standard voltage: 230 V / 50 Hz
  (special voltage is possible upon request)



Construction

The picture shows an automatic pigment muller JEL 25/53-III consisting of base plate, built-on gear motor, lower disk, hinged upper disk, loading handle with manually removable weights and preselection counter with ON/OFF switch. Both disks are provided with one glass plate each. The base area of the machine is about 600 x 480 mm, the height without lever about 400 mm. The grinding plates are smoothly ground and have a diameter of 250 mm. By means of the weights included in the delivery optional loading with 8.5, 25, 37.5, 50, 62.5, 75, 87.5 and 100 kg is possible.
The application-oriented control unit with functional display is mounted in the housing. Optimal ergonomic properties are achieved due to the arrangement of the display. The machine has a high-grade powder coating, the rods for the movable parts as well as the holding rings of the glass plate are chromium-plated, the ball knobs are made of plastic. All bearings are arranged in such a way that easy adjusting is possible in case the glass plate is worn.

Operation

The desired color is applied on the lower glass plate. The upper glass plate is put down by means of the lever and weighted using varying weights in order to define the pressing force of the glass plates. The upper glass plate of the automatic pigment muller is fixed while the lower plate rotates. This process serves to determine the consistency, density or coloring power of pigments.

Special Execution

If desired, the JEL 25/53-III is also available with a water cooling system in the upper glass plate. The liquid is led through a labyrinth consisting of cross ribs. Continuous feeding of cooling water is provided via the inlet and outlet nozzle for hose connection. The cooling plate can also be installed subsequently.



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