

Sieve shakers

STANDARD

▶ EN 196-6 ▶ EN 933-10

DIGITAL AIR JET SIEVE SHAKER

The Digital Air Jet Sieve Shaker is ideal for determining size distribution of fine particles from 5 microns to 4 mm. The highly efficient and fast sieving action is achieved by creating a pressure difference across the sieve. The apparatus allows complete customisation of test processes including pressure, nozzle speed and test duration, all shown on the LCD display. Specifically, for the cement industry, the digital air jet sieve has pre-set test standards that guide the user through sieving stages. After each cycle, the mass is entered and calculated to determine if sieving needs to be repeated, progress to the next sieve aperture size, or finished. Upon completion a test report is generated and can be exported to PC or printed using serial connection.

The machine features an integrated pressure transducer and a manual regulation valve to adjust the pressure difference in a range of 1.0 – 9.9 kPa (depending on the vacuum unit). Vacuum unit 15-D0413/A1 provides pressure difference up to 6.5 kPa exceeding Standards requirements.

Technical specifications

- Sieving range: 5µm – 4000µm
- Type of sieving: dry
- Sieving action: vacuum
- Max. number of sieves: 1
- Digital display: 128x80 pixel LCD with easy-to-operate keyboard
- Vacuum control range (pressure differential): adjustable 1.0 to 9.9 kPa (10 to 99 mbar)
- Timer: 0-99 minutes
- Adjustable nozzle speed: 5 – 70 rpm
- Language selection: 5 languages
- Sieve shaker:
 - Overall dimension: 300x300x300 mm
 - Weight: approx 12kg
- Vacuum unit 15-D0413/A1:
 - Overall dimension: 375x385x505 mm
 - Weight: approx 7.5 kg

Ordering information

15-D0413/A
 Digital Air Jet Sieve Shaker for dry granulometric testing of particles from 5 µm to 4 mm to EN 933-10 and EN 196-6.
 80W, 110-230V, 50-60Hz, 1Ph

15-D0413/A1
 Vacuum generator (aspirator) complete with connection hose. Pressure differential up to 6.5 kPa.
 1200W, 230V, 50-60Hz, 1Ph

Spares

15-D0413/A2
 Pack of 4 spare paper bags and 1 filter cartridge for vacuum unit model 15-D0413/A1



15-D0413/A with 15-D0413/A1

ACCESSORIES

Stainless steel, mesh type sieves, required by EN933-10 and EN 196-6.

Model 15-	Mesh size
D0413/063	63 µm
D0413/090	90 µm
D0413/125	125 µm
D0413/2000	2 mm

Note: nylon cloth mesh type and a complete range of stainless steel sieves starting from 5µm to 4.00 mm is also available. For more information please visit our website.

Sieve shakers

ELECTRO-MECHANICAL SIEVE SHAKER 15-D0410, 15-D0410/A SERIES

This new electro-mechanical shaker combines efficient sieving action with a simple but heavy duty design.

The shaker must be secured to the base cabinet using the four holes in the base. Alternatively, if floor-mounting the shaker, it can be fitted with the steel base plate for better stability. A noise reduction cabinet is also available for housing the shaker. See accessories.

Two versions of this shaker are available:

- 15-D0410 for sieves up to 315 mm diameter
- 15-D0410/A for sieves up to 450 mm diameter



Ordering information

15-D0410

Electro-mechanical sieve shaker for sieves up to 315 mm diameter. 230 V, 50 Hz, 1 ph.

15-D0410/Y

As above but 220 V, 60 Hz, 1 ph.

15-D0410/Z

As above but 110 V, 60 Hz, 1 ph.

15-D0410/A

Electro-mechanical sieve shaker for sieves up to 450 mm diameter. 230 V, 50 Hz, 1 ph.

15-D0410/AY

As above but 220 V, 60 Hz, 1 ph.

15-D0410/AZ

As above but 110 V, 60 Hz, 1 ph.

FEATURES and ADVANTAGES

- » Dual effect electro-mechanical sieving
- » High sieve capacity
- » Accommodates sieves up to 315 mm (15-D0410) and 450 mm dia. (15-D410/A)
- » Ergonomic and fast clamping system
- » Timer function included
- » Noise reduction cabinet available. See accessories.
- » Wet sieving attachments available. See accessories



Detail of the fast clamping system



Detail of the adjustable base for 200 to 450 mm diameter sieves

Model 15-	D0410 D0410/Y D0410/Z	D0410/A D0410/AY D0410/AZ
Max. no. of sieves / diameter, mm	12/200 - 203 10/300 - 315	10/200 - 203 8/300 - 315 6/450
Power, W	200	200
Timer scale, minutes	30	30
Dimensions, mm (w x d x h)	660 x 500 x 1510	740 x 640 x 1510
Weight, kg (approx.)	60	70



Noise reduction cabinet 15-D0410/A/CAB.

Sieve shakers

ELECTRO-MECHANICAL, TRIPLE MOTION SIEVE SHAKER 15-D0411 SERIES

This shaker features a unique combination of jarring and rotational action, providing superb sieving and grading performance. It can be completed with the noise reduction cabinet and wet sieving accessories. See accessories.

Technical specifications

- Sieve capacity: up to ten 200 - 203 mm (8") diameter sieves plus pan and cover; up to six 300 - 315 mm (12") diameter sieves plus pan and cover
- Maximum sample weight: from 1500 to 4500 g depending on the sieve size
- Rotational action: 327 oscillations per minute (approx.)
- Jarring action: 40 vertical blows per minute
- Power: 250 W
- Dimensions: 540 x 372 x 1013 mm (w x d x h)
- Weight: 75 kg (approx.)

15-D0411
Electro-mechanical, triple motion sieve shaker. 230 V, 50-60 Hz, 1 ph.

15-D0411/Z
As above but 110 V, 60 Hz, 1 ph.

ELECTRO-MAGNETIC SIEVE SHAKER 15-D0407/B SERIES

This unit has a vertical sieving motion provided by a very effective electro-magnetic unit. The shaker has a built-in timer, and can be used with the wet sieving attachment for washing fine materials through the sieves without any loss of sample. The noise reduction cabinet is recommended for use in CE countries. See accessories.

Technical specifications

- Sieve capacity:
 - up to twelve 203 mm (8") diameter sieves plus pan and cover;
 - up to eight 300 - 315 mm (12") diameter sieves plus pan and cover
- Power: 400 W (approx.)
- Dimensions: 496 x 406 x 946 mm (w x d x h)
- Weight: 30 kg (approx.)

15-D0407/B
Electro-magnetic sieve shaker. 230 V, 50-60 Hz, 1 ph.

15-D0407/BZ
As above but 110 V, 60 Hz, 1 ph.



15-D0411



15-D0407/B

FEATURES and ADVANTAGES

- » Vertical two-way jarring action
- » Rotational action
- » Quick release clamps
- » Robust and efficient sieving motion
- » Timer included

Wet sieving attachments (for all sieve shakers)

This set comprises a locking lid with a spray nozzle, a stainless steel base pan with a drainage plate and spout, a location plate and 10 watertight seals (O-rings). Four models are available:

15-D0400/B1
Wet sieving attachment for 200 mm diameter sieves. Weight 2.5 kg (approx.)

15-D0400/B2
Wet sieving attachment for 203 mm (8") diameter sieves. Weight 2.5 kg (approx.)

15-D0400/B3
Wet sieving attachment for 300 mm diameter sieves. Weight 5 kg (approx.)

15-D0400/B4
Wet sieving attachment for 305 mm (12") diameter sieves. Weight 5 kg (approx.)



Accessories

Noise reduction cabinets

CONTROLS sieve shakers can be housed inside a noise reduction cabinet helping to reduce the working noise level. The cabinets are manufactured from sheet steel and lined internally with soundproofing material. The table below will help in the selection of the right cabinet:

MACHINES		CABINETS	
Sieve shaker model	Codes	Overall dimensions and weight	Features
15-D0410 15-D0410/Y 15-D0410/Z	33-T3000/CB	(w x d x h): 850 x 670 x 1570 mm 75 kg (approx.)	Double-door opening system and foldable top cover. The control panel of the shakers is mounted inside the cabinet, directly on the machine
15-D0410/A 15-D0410/AY 15-D0410/AZ	15-D0410/A/CAB	(w x d x h): 1020 x 842 x 1591 mm 100 kg (approx.)	
15-D0420/A 15-D0420/AZ	15-D0420/A2	(w x d x h): 1310 x 1075 x 1292 mm 120 kg (approx.)	
15-D0407/B 15-D0407/BZ	15-D0400/CAB	(w x d x h): 770 x 670 x 1335 mm 60 kg (approx.)	Single-door opening system. The control panel of the shakers is mounted inside the cabinet, directly on the machine
15-D0411 15-D0411/Z			

High capacity Shaker and Screen trays

STANDARD ▶ EN 932-5

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ADVANTAGES

- » Can separate up to 30 liters (1ft³) of aggregates (approx. 65 kg)
- » Also suitable for sizing crushed stones, slag, coal, coke, ores, pellets etc.
- » Large selection of screen trays available, ASTM and EN standards. See Screen trays.

15-D0420/A with trays
15-D0420/A fitted with 15-D0420/A1 Dust cover

HIGH CAPACITY SCREEN SHAKER

15-D0420/A

High capacity mechanical screen shaker. 230 V, 50 Hz, 1 ph.

15-D0420/AY

As above but 220 V, 60 Hz, 1 ph.

15-D0420/AZ

As above but 110 V, 60 Hz, 1 ph.

The screen shaker has a capacity of about 30 liters (1 ft³) of sample and is ideal for sizing large quantities of crushed stones, sand, gravel, slag, coal, coke, ores, pellets and similar materials. Able to perform between two and six separations simultaneously, the vibrating unit consists of interlocking sections, which support and separate the screen trays. An equal clearance between trays allows each tray to be removed independently. The unit can hold six screen trays (which are ordered separately - see Screen trays) of 457 x 660 x 75 mm size, and one dustpan. For a complete system adhering to CE country regulations, use of the soundproof safety cabinet is recommended. See accessories.

Technical specifications

- Power: 250/300 W (250 W at 220 V, 60 Hz)
- Overall dimensions: 548 x 787 x 850 mm (w x d x h) (approx.)
- Tray dimensions: 457 x 660 x 75 mm
- Sample capacity: up to 30 liters (1ft³)
- Weight: 170 kg (approx.)

Accessories

15-D0420/A2

Soundproof cabinet. See details at page 17

15-D0420/A1

Dust cover.

15-D0428/10

Tray only, without mesh. Used as spacer between trays.

15-D0428/09

Dustpan tray.



15-D0420/A installed inside cabinet
15-D0420/A2

SCREEN TRAYS FOR USE WITH 15-D0420/A SHAKER

Designed for sizing large quantities of aggregates from 4" size (101.6 mm), down to N° 200 opening (0.074 mm). Used with the high capacity screen shaker 15-D0420/A, can size up to 30 liters (1 cubic feet) of aggregates.

Made from steel, and available in two model variants:

- ASTM E11, woven wire coarse, Intermediate, Fine and Fine with reinforced mesh, stainless steel
- ISO 3310-1 and ISO 3310-2 Woven wire stainless steel cloth and perforated steel metal plate

Tray dimensions: 457x660x75 mm
Weight approx.: 6.5 kg

ASTM E11 Screen trays

Woven wire cloth type

Coarse series

Code	Sieve op. mm	Alternative
15-D0425/01	100	4"
15-D0425/02	90	3 1/2"
15-D0425/03	75	3"
15-D0425/04	63	2 1/2"
15-D0425/05	53	2.12"
15-D0425/06	50 (+)	2"
15-D0425/07	45	1 3/4"
15-D0425/08	37.5 (+)	1 1/2"
15-D0425/09	31.5	1 1/4"
15-D0425/10	26.5	1.06"
15-D0425/11	25.0 (+)	1"
15-D0425/12	22.4	7/8"
15-D0425/13	19.0 (+)	3/4"
15-D0425/14	16.0	5/8"
15-D0425/15	13.2	.530"
15-D0425/16	12.5 (+)	1/2"
15-D0425/17	11.2	7/16"
15-D0425/18	9.5	3/8"
15-D0425/19	8.0	5/16"
15-D0425/20	6.7	.265"
15-D0425/21	6.3	1/4"
15-D0425/22	5.6	No.3 1/2"
15-D0425/23	4.75	No. 4

(+) Standard set recommended by ASTM

Intermediate series

Code	Sieve op. mm	Alternative
15-D0426/01	4.00	No. 5
15-D0426/02	3.35	No. 6
15-D0426/03	2.80	No. 7
15-D0426/04	2.36	No. 8
15-D0426/05	2.00	No. 10
15-D0426/06	1.7	No. 12
15-D0426/07	1.4	No. 14

Fine series

Code	Sieve op. mm	Alternative
15-D0427/01	1.18	No. 16
15-D0427/02	1.00	No. 18
15-D0427/03	0.850	No. 20
15-D0427/04	0.710	No. 25
15-D0427/05	0.600	No. 30
15-D0427/06	0.500	No. 35
15-D0427/07	0.425	No. 40
15-D0427/08	0.355	No. 45
15-D0427/09	0.300	No. 50
15-D0427/10	0.250	No. 60
15-D0427/11	0.212	No. 70
15-D0427/12	0.180	No. 80
15-D0427/13	0.150	No. 100

Fine series with reinforcement mesh

Code	Sieve op. mm	Alternative
15-D0428/01	0.125	No. 120
15-D0428/02	0.106	No. 140
15-D0428/03	0.090	No. 170
15-D0428/04	0.075	No. 200

ISO 3310-1 Screen trays

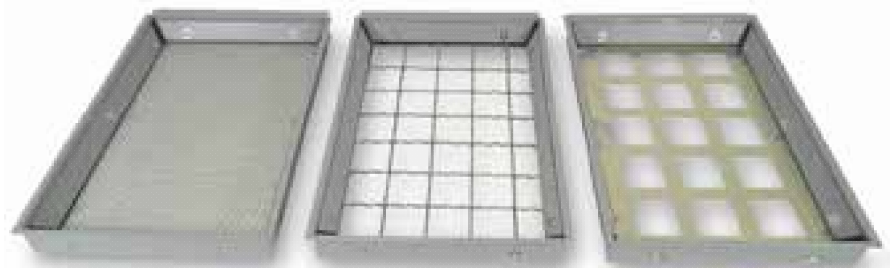
Woven wire cloth type

Code	Nominal aperture
15-D0427/E02	80 µm
15-D0427/E04	100 µm
15-D0427/E08	160 µm
15-D0427/E10	200 µm
15-D0427/E12	250 µm
15-D0427/E14	315 µm
15-D0427/E15	355 µm
15-D0427/E16	400 µm
15-D0427/E20	630 µm
15-D0427/E22	800 µm
15-D0427/E26	1.25 mm
15-D0427/E28	1.6 mm
15-D0427/E34	3.15 mm

ISO 3310-2 Screen trays

Of perforated metal plate

Code	Nominal aperture mm
15-D0425/E05	5.6
15-D0425/E08	7.1
15-D0425/E09	8
15-D0425/E12	10
15-D0425/E13	11.2
15-D0425/E14	12.5
15-D0425/E16	14
15-D0425/E17	16
15-D0425/E18	18
15-D0425/E19	20
15-D0425/E20	22.4
15-D0425/E24	31.5
15-D0425/E26	40
15-D0425/E28	50
15-D0425/E30	56
15-D0425/E31	63
15-D0425/E33	80



Screen trays