DRYING WEIGHING GRADING

- **10 Drying samples**
- 11 Weighing samples
- 15 Samples grading

Ovens and similar equipment,
balances and test sieves with related accessories
are common items of equipment that are
indispensable for all laboratories for construction materials.
We offer a wide range of models which
satisfy the requirements of all main International Standards
and particularly EN 932-5 "Tests for general properties of
aggregates – Part 5: Common equipment
and calibration."

Drying, Weighing and Grading

10

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Samples grading

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Laboratory drying ovens

STANDARD*

- EN 932-5 PEN 1097-5 PASTM C127 PASTM D1559 PASTM D698 PASTM D558 PASTM D1557 PASTM C136
- ASTM D559 ASTM D560 BS 1924:1

*H and Q Series only



Common FEATURES

- » Max. temperature 200°C
- » Exhaust holes for fast cooling
- » Reduced internal depth for better operation
- » Safety thermostat to avoid overheating
- » Forced convection airflow with fan positioned on the base for better heat distribution (except 100 I model of L series)
- » Stainless steel front frame and door (linen patterned only for Q Series)
- » Sturdy hinges and handles
- » Supplied complete with two grid shelves

Specially designed for the testing laboratories of the construction industry, we offer three model variants within this range:

- L Series, General purpose entry models, 100-250 and 450 l capacity.
- H Series, High precision models, 100-250 and 450 l capacity, conforming to all above Standards, including the "9" test point control.
- Q Series, same as H series but internally made from stainless steel, front frame and door made from "linen patterned" stainless steel. This series includes also the "Deluxe" 780 I capacity model internally made from stainless steel and "linen patterned" stainless steel outer, resistant to scratches and shocks.

ADDITIONAL FEATURES OF THE H AND Q SERIES

- » Digital PID temperature control system
- High uniformity and precision temperature on 9 different points (8 at the corners, 1 central) strictly conforming to Standards

LSERIES

Ordering information

L Series

Internally and externally made in galvanized steel. Front frame and door in stainless steel.

10-D1390/10L

Natural convection oven, 100 liter capacity, digital thermo-regulator / indicator 230 V, 50-60 Hz, 1 ph.

10-D1390/25L

Forced convection oven, 250 liter capacity, digital thermo-regulator / indicator. 230 V, 50-60 Hz, 1 ph.

10-D1390/45L

Forced convection oven, 450 liter capacity, digital thermo-regulator / indicator. 230 V, 50-60 Hz, 1 ph.



Ordering information

H Series, High precision models Internally and externally made in galvanized steel. Front frame and door in stainless steel.

10-D1390/10H

Forced convection oven, 100 liter capacity, digital PID temperature control system 230 V, 50-60 Hz, 1 ph.

10-D1390/25H

Forced convection oven, 250 liter capacity, digital PID temperature control system 230 V, 50-60 Hz, 1 ph.

10-D1390/45H

Forced convection oven, 450 liter capacity, digital PID temperature control system 230 V, 50-60 Hz, 1 ph.



Ordering information

Q Series, High precision models. Stainless steel internal lining

10-D1390/10O

Forced convection oven, 100 liter capacity, digital PID temperature control system, stainless steel internal lining 230 V, 50-60 Hz, 1 ph.

10-D1390/25Q

Forced convection oven, 250 liter capacity, digital PID temperature control system, stainless steel internal lining 230 V, 50-60 Hz, 1 ph.

10-D1390/45O

Forced convection oven, 450 liter capacity, digital PID temperature control system, stainless steel internal lining 230 V, 50-60 Hz, 1 ph.

10-D1398

Forced convection oven, 780 liter capacity, digital PID temperature control system, "deluxe" all stainless steel linen patterned model 380 V, 50 Hz, 3 ph.

Note: 110 V, 60 Hz versions also available. Add suffix Z to the model number. Example: 10-D1390/25LZ

General specification (all models)

Models	10-D1390/10L 10-D1390/10H 10-D1390/10Q	10-D1390/25L 10-D1390/25H 10-D1390/25Q	10-D1390/45L 10-D1390/45H 10-D1390/45Q	10-D1398
Nominal capacity	100	250	450 l	780
Max. temp.	200°C	200°C	200°C	200°C
Air convection	Forced (Natural only for 10-D1390/10L)	Forced	Forced	Forced
Max. number of shelves*	2	4	6	8
Rated power	1300 W	2000 W	2500 W	4200 W
Internal dim. (wxdxh), mm	440 x 461 x 492	671 x 571 x 638	761 x 621 x 958	810 x 800 x 1200
External dim. (wxdxh), mm	722 x 623 x 750	953 x 733 x 890	1043 x 781 x1210	1235 x 1180 x 1450
Weight (approx), kg	60	80	120	200

^{*2} included

Accessories and spares

10-D1390/G10

Spare grid shelves for 10-D1390/10x series

10-D1390/G25

Spare grid shelves for 10-D1390/25x

10-D1390/G45

Spare grid shelves for 10-D1390/45x series

10-D1398/1 Spare grid shelves for 10-D1398 model





Detail of external stainless lining: "linen patterned"

Muffle furnaces | Air drier | Microwave oven | Hot plates

MUFFLE FURNACES

This range of muffle furnaces covers practically all requirements of the construction material laboratory, from aggregates to concrete/cement and asphalt testing. Model 10-D1418/AP is supplied complete with a programmer for setting the temperature ramp.

10-D1418

Muffle furnace, 1100 °C max temperature 230 V, 50-60 Hz, 1 ph.

10-D1418/Z

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

10-D1418/A

Muffle furnace, 1200 °C max temperature 230 V, 50-60 Hz, 1 ph.

10-D1418/AP

Muffle furnace, 1200 °C max temperature, complete with temperature ramp programmer 230 V, 50-60 Hz, 1 ph.

10-D1418/APZ

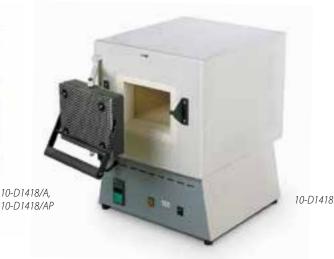
As above but 110 V, 60 Hz, 1 ph.

10-D1419

Muffle furnace, 1100 $^{\circ}$ C max temperature, high capacity, floor mounted model 220-380 V, 50-60 Hz, 3 ph.

Models 10-	D1418	D1418/A D1418/AZ	D1418/AP	D1419
Max. temp., °C	1100	1200	1200	1100
Accuracy, °C	±4	±4	±4	±4
Rated power, W	3900	4200	4200	9000
Internal dimensions, mm	210 x 320 x 145	210 x 280 x 145	210 x 280 x 145	300 x 220 x 500
External dimensions, mm	510 x 750 x 660	510 x 650 x 650	510 x 650 x 650	750 x 1650 x 1100
Weight, kg (approx.)	89	70	70	400
Reference standards	EN 12697-1 EN 13108	EN 196-2 EN 196-1 EN 459-2	EN 196-2 EN 196-1 EN 459-2	EN 1367-5





AIR DRIER

Used to dry small quantities of soil and aggregate particles.

Weight: 1.5 kg (approx.)

10-D1425

Warm-air drier 1000 W, 230 V, 50 Hz, 1 ph.

MICROWAVE OVEN

10-D1424

Microwave oven, 28 litre capacity, 900 W, 230 V, 50-60 Hz, 1 ph.

Hot plates

DIGITAL HOT PLATE

Designed to meet routine heating requirements of laboratories, this hot plate has a digital temperature controller and an aluminum heating surface.

10-D1401/E

Digital hot plate, 300×400 mm, aluminum alloy/stainless steel plate 230 V, 50-60 Hz, 1 ph.

Technical specifications

- Plate dimension: 300 x 400 mm
- Heating power: 2000 W
- Max temperature: 350°C ± 5°C
- Overall dimensions: 400x300x150 mm
- Weight approx.: 18 kg (approx.)

GENERAL UTILITY HOT PLATE

Used in the laboratory for a large variety of applications.

10-D1402/D

Hot plate, 185 mm dia., with thermostat 230 V, 50-60 Hz, 1 ph

Technical specifications

- Plate dimension: 185 mm dia.
- Heating power: 1500 W
- Max temperature: 250°C
- Overall dimensions:
- 260x260x135 mm
- Weight approx.: 3 kg (approx.)





10-D1402/D



TRC

Temperature and humidity controlled climatic Cabinets

STANDARD

- ► EN 1367-1 ► EN 196-1
- ►EN 12390-2

Three versions of this advanced thermal chamber are available:

10-D1429/B

Temperature controlled from -30 to 70°C, for testing aggregates conforming to EN 1367-1 and other similar tests on concrete and other construction materials;

10-D1429/C

Temperature and relative humidity controlled respectively from -30 to 70°C and from 20 to ≥90% humidity, for aggregates and various other tests as for instance concrete and cement specimens curing (EN 196-1).

10-D1429/D

Temperature and relative humidity controlled respectively from -30 to 70°C and from 20 to ≥95% humidity, for aggregates and various other tests as for instance concrete and cement specimens curing (EN 196-1).

Cabinet

Constructed from monobloc stainless steel, the cabinet has four shelves supported on stainless steel guides capable of holding heavy specimens. All internal angles have been rounded for easy cleaning. The cooling system and control unit are in the top of the cabinet for easy inspection and maintenance.

Insulation with high density (42 kg/m3) polyurethane 90mm thick is CFC free and reduces heat loss by 30% compared to similar having 60 mm thickness.

Thermostatic unit

Air circulation is ensured by two fans for optimum uniformity conditions in the chamber. Cooling is obtained by direct evaporation of CFC free refrigerant gas by evaporator, while heating is achieved by resistances. The de-humidifi-



cation is controlled by a smooth tube evaporator, while two options are available for humidity control.

The first (fitted on 10-D1429/C model) is based on efficient evaporative pack ensuring 90% humidity in the chamber. The second (available on 10-D1429/D) is based on pressure steam boiler and ensures humidity values above 95% to saturation.

Control unit

The front panel includes 7" touch screen display allowing:

- Manual control of the cabinet (setpoints, temperature rate, etc.)
- Automatic control of of thermal cycles, even with delayed test start.
- Data acquisition and saving of humidity, temperature and times values at sampling rate of 1 samples/minute.
- Simultaneous display of set points and absolute output values, both in numerical and graphical format.

All models allow easy export, through industrial USB port, of data saved on the internal 512 MBytes memory including temperature and humidity values and implemented thermal cycles

Temperature sensor

Two channels available for PT100 sensors. One PT100 is included and movable inside the cabinet area or inside the test sample. The second sensor is available on request. See accessories.

Humidity sensor

Allows measurements of humidity up to RH 100%

Technical specifications

- Capacity: 500 liters
- 7" colour display, 800x480 pixels
- 512 MBytes internal memory
- Industrial USB port integrated in the front panel
- Function controller: cycle programmer for 100 programs each one up to 64 segments
- Temperature range/accuracy: -30 to +70°C/±1°C
- Humidity range: from 20 to ≥90% (model 10-D1429/C); from 20 to ≥95% (model 10-D1429/D);
- Power: Cooling system 1100 W, Heating system 1500 W
- Internal air circulation: 450 m3/h
- Shelves dimensions (l x d): 530 x 580 mm, 4 included 40 kg loading cap. each
- Internal dimensions (w x d x h): 560 x 680 x 1300 mm
- External dimensions (w x d x h): 730 x 850 x 2100 mm
- Weight approx.: 180 kg

MAIN FEATURES

- » Advanced controller with cycle programmer for 100 programs each one up to 64 segments
- » Up to 2 (one included, one additional) temperature sensors movable inside the cabinet or inside the sample, according to the norms
- » Temperature, humidity and time recording, as per Standards requirement
- » High accuracy: \pm 1°C, \pm 5%RH (RH with 10-D1429/C and 10-D1429/D models only)
- » A multipurpose climatic chamber suitable for Aggregates, Cement, Concrete, Bricks, Blocks, Asphalt and other construction materials
- » Intuitive interface with 7" large easy-to-use colour touchscreen display

Ordering information

10-D1429/B

Temperature controlled cabinet, $500 \, \text{l}$ cap., temperature range -30 to $70 \, ^{\circ}\text{C}$. 230 V, 50 Hz, 1 ph.

10-D1429/BY

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

10-D1429/BZ

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

10-D1429/C

Temperature and humidity controlled cabinet, 500 I cap., temperature range -30 to 70°C, humidity range from 20 to ≥90%. 230 V, 50 Hz, 1 ph.

10-D1429/CY

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

10-D1429/CZ

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

10-D1429/D

Temperature and humidity controlled cabinet, 500 l cap., temperature range -30 to 70°C, humidity range from 20 to ≥95%. 230 V, 50 Hz, 1 ph.

10-D1429/DY

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

10-D1429/DZ

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

Accessories

10-D1429/1

Additional PT 100 sensor.

BALANCES

Balances are a general purpose laboratory apparatus used either for soil, aggregates, cement, concrete or asphalt testing.

CONTROLS supplies a wide range of electronic models suitable for different applications ranging from large central laboratories and on-site laboratories, to educational facilities.

We also offer a range of accessories and calibration weights for periodically checking the balances.

HOW TO SELECT BALANCES

Where specifications for a balance are not stated by the relevant Standard, the tables below may be used to select an appropriate balance that conforms to the general specifications given in the ASTM D4753-95, BS 1377:Part 1 and EN 932-5.

Very often a single specification requires that the balance has a readability and tolerance of 0.1% of the specimen mass to be measured and this can also be used as a choice criteria.

Other Standards covering aggregates and granular materials in general give information about

the quantity of aggregate to be tested depending upon its size (UNI 8520 Part 5, BS 812:Part 1, BS 598 etc.). The different standards give practically the same recommendations so we have included this information in a separate table

Selection guide for weighing in conformance with ASTM, BS and EN standards

_			
Minimum sample weight, g	Standards	Resolution (scale interval or decimal), g	Minimum accuracy (tolerance), g
20 to 200	ASTM C114 (Cement testing)	0.0002	± 0.0002
200	ASTM D4753 (GP2)	0.1	± 0.2
	BS1377:1	0.001	± 0.005
	EN 932-5	0.001	± 0.005
1200	ASTM D4753 (GP2)	0.1	± 0.2
	BS1377:1	0.01	± 0.05
	EN 932-5	0.01	± 0.05
2000	ASTM D4753 (GP5)	1	± 2
	BS1377:1	0.1	± 0.3
	EN 932-5	0.1	± 0.3
5000	ASTM D4753 (GP10)	5	±5
	BS1377:1	0.5	±1
	EN 932-5	0.5	±1
10000	ASTM D4753 (GP10)	5	±5
	BS1377:1	1	±3
	EN 932-5	1	±3
25000	ASTM D4753 (GP10)	5	± 5
	BS1377:1	5	± 10
	EN 932-5	5	± 10
50000	ASTM D4753 (GP10)	50	± 50
	BS1377:1	10	± 20
	EN 932-5	10	± 30

Minimum mass of sample for sieve analysis¹

Nominal size of material, mm	Minimum mass of sample, kg
63	50
50	35
40	15
28	5
20	2
14	1
10	0.5
6	0.2
5	0.2
3	0.2
<3	0.1

CONTROLS CONTROLS GROUP

Top loading electronic balances

STANDARD

► EN 932-5 ► ASTM D4753

These two lines of balances have been selected to satisfy the requirements of either field or central testing laboratories.











11-D0630/300

Models with traceable calibration certificate

Models 11-	Capacity [g]	Resolution [g]	Pan dimensions [mm]	Under balance weighing facility	Weight [kg] (approx.)
D0630/03A	300	0.001	dia. 80	No	1.5
D0630/05	520	0.001	dia. 80	Yes	1.5
D0630/06	600	0.01	dia. 130	Yes	1.5
D0630/3	3000	0.01	dia. 160	Yes	1.5
D0630/4A	4200	0.01	dia. 130	Yes	1.5
D0630/6	6000	0.1	225x300	Yes	3
D0630/15	15000	0.2	225x300	Yes	3
D0630/15A	15000	0.1	225x300	Yes	3
D0630/20	20000	0.1	175x195	Yes	4.6
D0630/30	30000	0.5	225x300	Yes	5.1
D0630/60A	60000	1	450x600	No	6.5
D0630/150A	150 kg	10	450x600	No	4
D0630/300	300 kg	20	450x600	No	4

ADVANTAGES

- » Mains and rechargeable battery operated (battery pack included)
- » Multi-voltage and multi-frequency mains power supply: 110-230V/50-60Hz/1ph
- » Under balance weighing facility (for models from 520 g up to 30 kg, hook included)
- » RS 232 serial port
- » Supplied complete with Traceable Calibration Certificate







11-D0630/24



11-D0630/60



DKV certified models

DKV Certified ino	DNY CERTIFIED IIIOGEIS					
Models 11-	Capacity [g]	Resolution [g]	Pan dimen- sions [mm]	Under balance weighing facility	Voltage	Weight [kg] (approx.)
D0630/10	10000	0.1	150x170	Yes	230V/50-60Hz/1Ph	1.1
D0630/10Z					110V/60Hz/1Ph	
D0630/24	24000	0.1	160x200	Yes	230V/50-60Hz/1Ph	4
D0630/24Z					110V/60Hz/1Ph	
D0630/60	65000	1	340x240	No	230V/50-60Hz/1Ph	6.5
D0630/60Z					110V/60Hz/1Ph	
D0632/150	60/150 [kg]	2/5	318x308	No	230V/50-60Hz/1Ph	4
D0632/150Z					110V/60Hz/1Ph	

ADVANTAGES

- » Mains and rechargeable battery operated (battery pack included)
- » Under balance weighing facility (for models 10 kg and 24 kg, hook included)
- » RS 232 serial port
- » Supplied complete with DKD certificate (Deutscher Kalibrierdienst-German Accreditation Authority)

Analytical and moisture determination balances | Standard calibration weights

ANALYTICAL BALANCE

This balance is particularly suitable for testing the heat of hydration of cement, where a high accuracy is required.

MOISTURE DETERMINATION BALANCE

This model automatically and simultaneously dries and weighs solid samples for the determination of moisture content. With a built-in timer, the balance provides a continuous direct readout for both weight and percentage moisture loss throughout the entire cycle.



11-D0613/B

Electronic analytical balance, 210 g capacity, 0.1 mg resolution 110-230 V, 50-60 Hz, 1 ph.

Technical specifications

- Capacity: 210 g
- Resolution: 0.1 mg
- Accuracy: ±0.3 mg
- Tare range: by subtraction up to full capacity
- Display: seven-character LCD
- Data interface: bi-directional RS 232
- Pan diameter: 80 mm
- Dimensions: 215 x 345 x 345 mm (w x d x h)
- Weight: 5.9 kg (approx.)

19-D0602/B

Moisture determination balance, 160 g capacity, 1 mg resolution 230 V, 50-60 Hz, 1 ph.

Technical specifications

- Capacity: 160 g
- Resolution: 1 mg
- Timer: 0-99 minutes
- Dimensions: 194 x 340 x 235 mm (w x d x h)
- Weight: 11.5 kg (approx.)
- Operating temperature range: 5° - 35°
- Temperature working range: 35° 160°, that can be set with steps of 1°

SPECIFIC GRAVITY DETERMINATION

STANDARD

- ► EN 12697 ► EN 12390-7
- ► EN 1097-6 ► ASTM C127
- ► ASTM C128 ► AASHTO T84
- ▶ BS 812:2 ▶ BS 1881:14

11-D0612/C

Specific gravity frame

Note

For more details and information see page 156

11-D0612/C with balance and accessories



STANDARD CALIBRATION WEIGHTS M1 CLASS, 50 kg TO 20 kg

Used for periodic checking of balances. The standard weights 11-D0700/C to 11-D0707/C are supplied complete with a manufacturer's certificate of conformity. Calibrated models, with ACCREDIA certificate also available and are identified adding suffix 1 to the code. E.g.: 11-D0700/C1.

11-D0700/C

50 g calibration weight, M1 Class, ± 3 mg tolerance.

11-D0701/C

100 g calibration weight, M1 Class, ±5 mg tolerance.

11-D0702/C

200 g calibration weight, M1 Class, ±10 mg tolerance.

11-D0703/C

500 g calibration weight, M1 Class, ±25 mg tolerance.

11-D0704/C

1 kg calibration weight, M1 Class, ±50 mg tolerance.

11-D0705/C

2 kg calibration weight, M1 Class, ±100 mg tolerance.

11-D0706/C

5 kg calibration weight, M1 Class, ±250 mg tolerance.

11-D0707/C

10 kg calibration weight, M1 Class, ±500 mg tolerance.

11-D0708/C

20 kg cast iron calibration weight, M1 class, \pm 1 g tolerance

Accessories

11-D0708

Wooden box for single weights up to 500 g

11-D0708/1

Wooden box for 1 kg weight

11-D0708/2

Wooden box for 2 kg weight

11-D0708/3

Wooden box for 5 kg weight

11-D0708/4

Wooden box for 10 kg weight

Set of weights 1mg to 50 g

11-D0709/

Set of weights, 1 mg to 50 g, 20 pieces in total.





TESTING SIEVES

We offer a comprehensive range of full depth testing sieves with 200 mm, 8", 250 mm, 300 mm, 12", 315 mm and 450 mm dia., with woven wire cloth and perforated plate conforming to the different Standards.

We can also supply models with round holes perforated plate from 1 to 100 mm diameter upon request. All frames except the 450 mm dia., and wire cloth sieves are manufactured from stainless steel. Perforated plates are made from tinned steel. Sieves having the same nominal diameter are designed to nest inside each other. Using 200 mm (8") sieves it is possible to test up to 1000 g of aggregates and 3000 g with the 300 mm (12") dia. sieve.



STANDARDS

European

Conforming to the European EN Standards all sieves for the construction industry are specified to the following Standards:

EN 933-2

Test for geometrical properties of aggregates

Determination of particle size distri-

Test sieves, nominal size of apertures

ISO 3310-1

Test sieves of woven wire cloth

ISO 3310-2

Test sieves of perforated metal plate

Nominal size of openings for woven wire and perforated plate sieves.

The most common national Standards including BS 410, NF X11-504, DIN 4187-1, UNI 2331 - 2333, UNE 7050 are practically identical to the ISO 3310-1 and 2, except for some missing openings which have been included in the list for those users who prefer to complete or substitute existing old sets. The European Standards also specify that: "Sieves with aperture size of 4 mm and above shall be perforated plate square hole test sieves. Below that size they shall be woven wire test sieves."

The sieves are conforming to the following Standards:

ASTM E11

Wire-cloth sieves for testing purposes.

Note. The sieve specifications are clearly marked on the label comprising the serial number and other information for the identification and traceability of the product as requested by the international specifications.

TRACEABLE CERTIFICATE **OF CALIBRATION**

Upon request, all sieves can be supplied with traceable certificate of calibration.

In that case just add to the code number the suffix "C". Example: for an ISO 3310-1 test sieve, 200 mm dia. 1 mm opening, the code becomes 15-D2215/JC.

ISO 3310-1* Test sieves of woven cloth

Nominal aperture	Code 200 mm dia.	Code 250 mm dia.	Code 300 mm dia.	Code 315 mm dia.	Code 450 mm dia
20 μm	15-D2365/J	15-D2365/F	15-D3365/J	15-D3365/F	15-D4365/
18 μm	15-D2360/J	15-D2360/F	15-D3360/J	15-D3360/F	15-D4360/
0 μm	15-D2355/J	15-D2355/F	15-D3355/J	15-D3360/1	15-D4300/
5 μm	15-D2350/J	15-D2350/F	15-D3350/J	15-D3359/F	15-D4353/
0 μm	15-D2345/J				
		15-D2345/F	15-D3345/J	15-D3345/F	15-D4345/
3 μm	15-D2340/J	15-D2340/F	15-D3340/J	15-D3340/F	15-D4340/
3 μm	15-D2335/J	15-D2335/F	15-D3335/J	15-D3335/F	15-D4335/
5 μm	15-D2330/J	15-D2330/F	15-D3330/J	15-D3330/F	15-D4330/
0 μm	15-D2325/J	15-D2325/F	15-D3325/J	15-D3325/F	15-D4325/
00 μm	15-D2320/J	15-D2320/F	15-D3320/J	15-D3320/F	15-D4320/
00 μm	15-D2315/J	15-D2315/F	15-D3315/J	15-D3315/F	15-D4315/
06 μm	15-D2310/J	15-D2310/F	15-D3310/J	15-D3310/F	15-D4310/
25 μm	15-D2305/J	15-D2305/F	15-D3305/J	15-D3305/F	15-D4305/
50 μm	15-D2300/J	15-D2300/F	15-D3300/J	15-D3300/F	15-D4300/
60 μm	15-D2295/J	15-D2295/F	15-D3295/J	15-D3295/F	15-D4295/
80 μm	15-D2290/J	15-D2290/F	15-D3290/J	15-D3290/F	15-D4290/
00 μm	15-D2285/J	15-D2285/F	15-D3285/J	15-D3285/F	15-D4285/
12 μm	15-D2280/J	15-D2280/F	15-D3280/J	15-D3280/F	15-D4280/
!50 μm	15-D2275/J	15-D2275/F	15-D3275/J	15-D3275/F	15-D4275/
00 μm	15-D2270/J	15-D2270/F	15-D3270/J	15-D3270/F	15-D4270/
15 μm	15-D2265/J	15-D2265/F	15-D3265/J	15-D3265/F	15-D4265/
55 μm	15-D2260/J	15-D2260/F	15-D3260/J	15-D3260/F	15-D4260/
-00 μm	15-D2255/J	15-D2255/F	15-D3255/J	15-D3255/F	15-D4255/
25 μm	15-D2250/J	15-D2250/F	15-D3250/J	15-D3250/F	15-D4250/
00 μm	15-D2245/J	15-D2245/F	15-D3245/J	15-D3245/F	15-D4245/
i00 μm	15-D2240/J	15-D2240/F	15-D3240/J	15-D3240/F	15-D4240/
i30 μm	15-D2235/J	15-D2235/F	15-D3235/J	15-D3235/F	15-D4235/
'10 μm	15-D2230/J	15-D2230/F	15-D3230/J	15-D3230/F	15-D4230/
300 μm	15-D2225/J	15-D2225/F	15-D3225/J	15-D3225/F	15-D4225/
350 μm	15-D2220/J	15-D2220/F	15-D3220/J	15-D3223/F	15-D4223/
mm	15-D2220/J	15-D2220/F 15-D2215/F	15-D3220/J	15-D3220/F 15-D3215/F	
					15-D4215/
.18 mm	15-D2210/J	15-D2210/F	15-D3210/J	15-D3210/F	15-D4210/
.25 mm	15-D2205/J	15-D2205/F	15-D3205/J	15-D3205/F	15-D4205/
.4 mm	15-D2200/J	15-D2200/F	15-D3200/J	15-D3200/F	15-D4200/
.6 mm	15-D2195/J	15-D2195/F	15-D3195/J	15-D3195/F	15-D4195/
.7 mm	15-D2190/J	15-D2190/F	15-D3190/J	15-D3190/F	15-D4190/
! mm	15-D2185/J	15-D2185/F	15-D3185/J	15-D3185/F	15-D4185/
2.36 mm	15-D2180/J	15-D2180/F	15-D3180/J	15-D3180/F	15-D4180/
2.5 mm	15-D2175/J	15-D2175/F	15-D3175/J	15-D3175/F	15-D4175/
2.8 mm	15-D2170/J	15-D2170/F	15-D3170/J	15-D3170/F	15-D4170/
3.15 mm	15-D2165/J	15-D2165/F	15-D3165/J	15-D3165/F	15-D4165/
3.35 mm	15-D2160/J	15-D2160/F	15-D3160/J	15-D3160/F	15-D4160/
l mm	15-D2155/J	15-D2155/F	15-D3155/J	15-D3155/F	15-D4155/
1.75 mm	15-D2150/J	15-D2150/F	15-D3150/J	15-D3150/F	15-D4150/
5 mm	15-D2145/J	15-D2145/F	15-D3145/J	15-D3145/F	15-D4145/
5.6 mm	15-D2140/J	15-D2140/F	15-D3140/J	15-D3140/F	15-D4140/
5.3 mm	15-D2135/J	15-D2135/F	15-D3135/J	15-D3135/F	15-D4135/
5.7 mm	15-D2130/J	15-D2130/F	15-D3130/J	15-D3130/F	15-D4130/
'.1 mm	15-D2128/J	15-D2128/F	15-D2128/J	15-D2128/F	15-D2128/
mm	15-D2125/J	15-D2125/F	15-D3125/J	15-D3125/F	15-D4125/
).5 mm	15-D2120/J	15-D2120/F	15-D3120/J	15-D3120/F	15-D4120/
0 mm	15-D2115/J	15-D2115/F	15-D3115/J	15-D3115/F	15-D4115/
1.2 mm		15-D2110/F	15-D3110/J	15-D3110/F	15-D4110/
	15-D2110/J		15-D3110/J		
2.5 mm	15-D2105/J	15-D2105/F		15-D3105/F	15-D4105/
3.2 mm	15-D2100/J	15-D2100/F	15-D3100/J	15-D3100/F	15-D4100/
4 mm*	15-D2096/J	15-D2096/F	15-D3096/J	15-D3096/F	15-D4096/
6 mm	15-D2095/J	15-D2095/F	15-D3095/J	15-D3095/F	15-D4095/
8 mm*	15-D2091/J	15-D2091/F	15-D3091/J	15-D3091/F	15-D4091/
9 mm	15-D2090/J	15-D2090/F	15-D3090/J	15-D3090/F	15-D4090/
0 mm	15-D2085/J	15-D2085/F	15-D3085/J	15-D3085/F	15-D4085/
2.4 mm	15-D2080/J	15-D2080/F	15-D3080/J	15-D3080/F	15-D4080/
!5 mm	15-D2075/J	15-D2075/F	15-D3075/J	15-D3075/F	15-D4075/
6.5 mm	15-D2070/J	15-D2070/F	15-D3070/J	15-D3070/F	15-D4070/
31.5 mm	15-D2065/J	15-D2065/F	15-D3065/J	15-D3065/F	15-D4065/
7.5 mm	15-D2060/J	15-D2060/F	15-D3060/J	15-D3063/F	15-D4060/
0 mm	15-D2060/J	15-D2060/F	15-D3060/J	15-D3055/F	15-D4055
5 mm	15-D2050/J	15-D2050/F	15-D3050/J	15-D3050/F	15-D4050
0 mm	15-D2045/J	15-D2045/F	15-D3045/J	15-D3045/F	15-D4045
3 mm	15-D2040/J	15-D2040/F	15-D3040/J	15-D3040/F	15-D4040
66 mm	15-D2035/J	15-D2035/F	15-D3035/J	15-D3035/F	15-D4035
3 mm	15-D2030/J	15-D2030/F	15-D3030/J	15-D3030/F	15-D4030/
'5 mm	15-D2025/J	15-D2025/F	15-D3025/J	15-D3025/F	15-D4025/
30 mm	15-D2020/J	15-D2020/F	15-D3020/J	15-D3020/F	15-D4020/
00 mm	15-D2015/J	15-D2015/F	15-D3015/J	15-D3015/F	15-D4015
100 mm	15-D2010/J	15-D2013/F	15-D3013/J	15-D3013/1	15-D4013
25 mm	15-D2005/J	15-D2005/F	15-D3005/J	15-D3005/F	15-D4005/
	45 Dece 4/1	45.00004/5	45 333347	45 222215	
an and cover	15-D2004/J	15-D2004/F	15-D3004/J	15-D3004/F	15-D4004/J
an only	15-D2003/J	15-D2003/F	15-D3003/J	15-D3003/F	15-D4003/J
lover only	15-D2002/J	15-D2002/F	15-D3002/J	15-D3002/F	15-D4002/J
rame only	15-D2001/J	15-D2001/F	15-D3001/J	15-D3001/F	15-D4001/J
		15-D2000/F	15-D3000/J	15-D3000/F	15-D4000/J

 $[\]mbox{\ensuremath{^{\star}}}$ Apertures conforming also to BS, NF, DIN, UNE, UNI Standards. See introduction



ISO 3310-2* Test sieves of perforated metal plate

The European Standards also specify that: "Sieves with aperture size of 4 mm and above shall be perforated plate square hole test sieves. Below that size they shall be woven wire test sieves."

	Code	Code	Code	Code	Code
Nominal aperture	200 mm dia.	250 mm dia.	300 mm dia.	315 mm dia.	450 mm dia.
4 mm	15-D2550/J	15-D2550/F	15-D3550/J	15-D3550/F	15-D4550/J
4.75 mm	15-D2545/J	15-D2545/F	15-D3545/J	15-D3545/F	15-D4545/J
5 mm	15-D2540/J	15-D2540/F	15-D3540/J	15-D3540/F	15-D4540/J
5.6 mm	15-D2535/J	15-D2535/F	15-D3535/J	15-D3535/F	15-D4535/J
6.3 mm	15-D2530/J	15-D2530/F	15-D3530/J	15-D3530/F	15-D4530/J
6.7 mm	15-D2525/J	15-D2525/F	15-D3525/J	15-D3525/F	15-D4525/J
7.1 mm	15-D2520/J	15-D2520/F	15-D3520/J	15-D3520/F	15-D4520/J
8 mm	15-D2515/J	15-D2515/F	15-D3515/J	15-D3515/F	15-D4515/J
9 mm	15-D2514/J	15-D2514/F	15-D3514/J	15-D3514/F	15-D4514/J
9.5 mm	15-D2510/J	15-D2510/F	15-D3510/J	15-D3510/F	15-D4510/J
10 mm	15-D2505/J	15-D2505/F	15-D3505/J	15-D3505/F	15-D4505/J
11.2 mm	15-D2500/J	15-D2500/F	15-D3500/J	15-D3500/F	15-D4500/J
12.5 mm	15-D2495/J	15-D2495/F	15-D3495/J	15-D3495/F	15-D4495/J
13.2 mm	15-D2490/J	15-D2490/F	15-D3490/J	15-D3490/F	15-D4490/J
14 mm	15-D2485/J	15-D2485/F	15-D3485/J	15-D3485/F	15-D4485/J
16 mm	15-D2480/J	15-D2480/F	15-D3480/J	15-D3480/F	15-D4480/J
18 mm*	15-D2479/J	15-D2479/F	15-D3479/J	15-D3479/F	15-D4479/J
19 mm	15-D2475/J	15-D2475/F	15-D3475/J	15-D3475/F	15-D4475/J
20 mm	15-D2470/J	15-D2470/F	15-D3470/J	15-D3470/F	15-D4470/J
22.4 mm	15-D2465/J	15-D2465/F	15-D3465/J	15-D3465/F	15-D4465/J
25 mm	15-D2460/J	15-D2460/F	15-D3460/J	15-D3460/F	15-D4460/J
26.5 mm	15-D2455/J	15-D2455/F	15-D3455/J	15-D3455/F	15-D4455/J
28 mm	15-D2450/J	15-D2450/F	15-D3450/J	15-D3450/F	15-D4450/J
31.5 mm	15-D2445/J	15-D2445/F	15-D3445/J	15-D3445/F	15-D4445/J
37.5 mm	15-D2440/J	15-D2440/F	15-D3440/J	15-D3440/F	15-D4440/J
40 mm	15-D2442/J	15-D2442/F	15-D3442/J	15-D3442/F	15-D4442/J
45 mm	15-D2442/J	15-D2442/1	15-D3442/J	15-D3442/1	15-D4435/J
50 mm	15-D2430/J	15-D2430/F	15-D3430/J	15-D3430/F	15-D4430/J
53 mm	15-D2430/J	15-D2430/F	15-D3430/J	15-D3430/F	15-D4430/3
56 mm	15-D2426/J	15-D2426/F	15-D3426/J	15-D3425/F	15-D4426/J
63 mm	15-D2420/J	15-D2420/F	15-D3420/J	15-D3420/F	15-D4420/J
75 mm	15-D2420/J	15-D2415/F	15-D3420/J	15-D3420/F	15-D4420/J
75 IIIII 80 mm	15-D2416/J	15-D2416/F	15-D3416/J	15-D3415/F	15-D4416/J
90 mm					
	15-D2410/J	15-D2410/F	15-D3410/J	15-D3410/F	15-D4410/J
100 mm	15-D2402/J	15-D2402/F	15-D3402/J	15-D3402/F	15-D4402/.
106 mm	15-D2405/J	15-D2405/F	15-D3405/J	15-D3405/F	15-D4405/.
125 mm	15-D2400/J	15-D2400/F	15-D3400/J	15-D3400/F	15-D4400/.
Pan and cover	15-D2004/J	15-D2004/F	15-D3004/J	15-D3004/F	15-D4004/.
Pan only	15-D2003/J	15-D2003/F	15-D3003/J	15-D3003/F	15-D4003/
Cover only	15-D2002/J	15-D2002/F	15-D3002/J	15-D3002/F	15-D4002/.
Frame only	15-D2001/J	15-D2001/F	15-D3001/J	15-D3001/F	15-D4001/J
Receiver/Separator	15-D2000/J	15-D2000/F	15-D3000/J	15-D3000/F	15-D4000/J

 $[\]ensuremath{^{*}}$ Apertures conforming also to BS and DIN Standards. See introduction

MAIN FEATURES

» All ISO 3310-1 and ISO 3310-2 sieves are supplied complete with certificate of conformity



ASTM E11 US Sieve series

Woven wire cloth sieves (coarse)

Aperture mm/in.		Code 8" dia.	Code 12" dia.
100 mm	4 in.	15-D0100/2J	15-D0100/3J
90 mm	3½ in.	15-D0101/2J	15-D0101/3J
75 mm	3 in.	15-D0102/2J	15-D0102/3J
63 mm	2½ in.	15-D0103/2J	15-D0103/3J
53 mm	2.12 in.	15-D0104/2J	15-D0104/3J
50 mm	2 in.	15-D0105/2J	15-D0105/3J
45 mm	1¾ in.	15-D0106/2J	15-D0106/3J
37.5 mm	1½ in.	15-D0107/2J	15-D0107/3J
31.5 mm	1¼ in.	15-D0108/2J	15-D0108/3J
26.5 mm	1.06 in.	15-D0109/2J	15-D0109/3J
25.0 mm	1 in.	15-D0110/2J	15-D0110/3J
22.4 mm	7/8 in.	15-D0111/2J	15-D0111/3J
19.0 mm	3/4 in.	15-D0112/2J	15-D0112/3J
16.0 mm	5/8 in.	15-D0113/2J	15-D0113/3J
13.2 mm	.530 in.	15-D0114/2J	15-D0114/3J
12.5 mm	½ in.	15-D0115/2J	15-D0115/3J
11.2 mm	7/16 in.	15-D0116/2J	15-D0116/3J
9.5 mm	3/8 in.	15-D0117/2J	15-D0117/3J
8.0 mm	5/16 in.	15-D0118/2J	15-D0118/3J
6.7 mm	.265 in.	15-D0119/2J	15-D0119/3J
6.3 mm	1/4 in.	15-D0120/2J	15-D0120/3J
5.6 mm	No. 31/2	15-D0121/2J	15-D0121/3J
4.75 mm	No. 4	15-D0122/2J	15-D0122/3J
4.00 mm	No. 5	15-D0123/2J	15-D0123/3J

Test Sieve

Woven wire cloth sieves (fine)

Aperture mm/in.		Code 8" dia.	Code 12" dia.
3.35 mm	No. 6	15-D0124/2J	15-D0124/3J
2.8 mm	No. 7	15-D0125/2J	15-D0125/3J
2.36 mm	No. 8	15-D0126/2J	15-D0126/3J
2 mm	No. 10	15-D0127/2J	15-D0127/3J
1.7 mm	No. 12	15-D0128/2J	15-D0128/3J
1.4 mm	No. 14	15-D0129/2J	15-D0129/3J
1.18 mm	No. 16	15-D0130/2J	15-D0130/3J
1 mm	No. 18	15-D0131/2J	15-D0131/3J
850 μm	No. 20	15-D0132/2J	15-D0132/3J
710 μm	No. 25	15-D0133/2J	15-D0133/3J
600 μm	No. 30	15-D0134/2J	15-D0134/3J
500 μm	No. 35	15-D0135/2J	15-D0135/3J
425 μm	No. 40	15-D0136/2J	15-D0136/3J
355 μm	No. 45	15-D0137/2J	15-D0137/3J
300 μm	No. 50	15-D0138/2J	15-D0138/3J
250 μm	No. 60	15-D0139/2J	15-D0139/3J
212 μm	No. 70	15-D0140/2J	15-D0140/3J
180 μm	No. 80	15-D0141/2J	15-D0141/3J
150 μm	No. 100	15-D0142/2J	15-D0142/3J
125 μm	No. 120	15-D0143/2J	15-D0143/3J
106 μm	No. 140	15-D0144/2J	15-D0144/3J
90 μm	No. 170	15-D0145/2J	15-D0145/3J
75 μm	No. 200	15-D0146/2J	15-D0146/3J
63 μm	No. 230	15-D0147/2J	15-D0147/3J
53 μm	No. 270	15-D0148/2J	15-D0148/3J
45 μm	No. 325	15-D0149/2J	15-D0149/3J
38 μm	No. 400	15-D0150/2J	15-D0150/3J
Pan and cover	15-D0151/2J	15-D0151/3J	
Pan only	15-D0152/2J	15-D0152/3J	
Cover only	15-D0153/2J	15-D0153/3J	
Frame only	15-D0154/2J	15-D0154/3J	
Receiver/Separator	15-D0155/2J	15-D0155/3J	



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: 5um 4000um
- 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



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



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

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				
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	
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.)	foldable top cover. The control panel of the shakers is mounted inside the cabinet, directly on the machine	
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		(w x d x h): 770 x 670 x 1335 mm 60 kg (approx.)	Single-door opening system. The control panel of the shakers	
15-D0411 15-D0411/Z	15-D0400/CAB		is mounted inside the cabinet, directly on the machine	

High capacity Shaker and Screen trays

STANDARD ► EN 932-5



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 with15-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 660x 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.





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	Alter- native	
15-D0425/01	100	4"	
15-D0425/02	90	3 ½"	
15-D0425/03	75	3" 2½"	
15-D0425/04	63		
15-D0425/05	53	2.12"	
15-D0425/06	50 (•)	2"	
15-D0425/07	45	1¾"	
15-D0425/08	37.5 (•)	1½"	
15-D0425/09	31.5	11/4"	
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.3½"	
15-D0425/23	4.75	No. 4	

(•) Standard set recommended by ASTM

Intermediate series

intermediate series				
Code	Sieve op. mm	Alter- native		
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.	Alter- native
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	Alterna- tive		
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

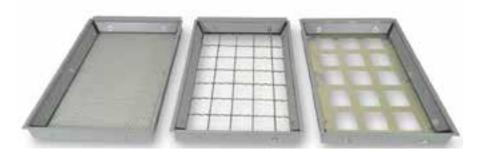
Woven wire cloth type

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

Wet washing sieves | Ultrasonic cleansing apparatus | Sieve brushes

STANDARD ASTM E11

WET WASHING SIEVES

Used for wet sieving fine granular materials, these sieves have a stainless steel frame and woven mesh base and are available in 200 mm and 203 mm (8") diameter versions, 100 or 200 mm high, with 75 or 63 µm mesh size.

Weight: 0.5 kg (100 mm high versions), 0.9 kg (200 mm high versions) (approx.).

100 mm high versions

15-D0160

Wet washing sieve, 203 mm (8") diameter, 75 µm opening.

15-D0160/1

As above but 200 mm diameter.

15-D0160/2

Wet washing sieve, 200 mm diameter, $63 \mu m$ opening.

200 mm high versions

15-D0160 /A

Wet washing sieve, 203 mm (8") diameter, 75 µm opening.

15-D0160/A1

As above but 200 mm diameter.

15-D0160/A2

Wet washing sieve, 200 mm diameter, 63 μm opening.

ULTRASONIC CLEANSING APPARATUS

15-D0405

Ultrasonic cleansing apparatus for sieves up to 203 mm (8") diameter. 230 V, 50-60 Hz, 1 ph.

15-D0405/B

Ultrasonic cleansing apparatus for sieves up to 315 mm diameter. 230 V, 50-60 Hz, 1 ph.

Used to thoroughly clean test sieves without causing distortion, this apparatus is particularly suitable for fine mesh sieves which could be damaged by ordinary cleaning methods (using brushes or knocking the frame).

Complete with timer, sieve rack and lid.

Two models are available:

- 15-D0405, suitable for 200 and 203 mm (8") diameter sieves
- 15-D0405/B suitable for sieves up to 315 mm diameter.

Accessories

15-D0405/3

Cleaning liquid, 5 liter can.





15-D0405

Models 15 Power, W Internal tank dimensions mm, (diameter x height) Weight, kg (approx.) D0405 240 245x130 6 D0405/B 500 410x200 10



Sieve Brushes

86-D1672

Soft hair brush, 3 mm diameter (BS 812).

86-D1673/G

Brass sieve brush.

86-D1673/G1

Double ended brass/nylon sieve brush.

86-D1675

Round bristle brush, 33 mm diameter.

86-D1685

Nylon sieve brush 33 mm diameter.

86-D1685/G

Double ended nylon sieve brush.



86-D1685, 86-D1675, 86-D1672, 86-D1673/G1, 86-D1685/G

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Sampling

STANDARD

- ► EN 932-1 ► EN 932-5
- ► EN 933-5 ► ASTM C136
- ► ASTM C702 ► AASHTO T27

RIFFLE BOXES (Sample splitters)

Used to divide representative dry samples into the required batch sizes for testing. Made from sheet steel and supplied complete with 3 metal pans.

Ordering information

15-D0438

EN riffle box, 7 mm slot width

15-D0438/A

EN riffle box, 15 mm slot width

15-D0438/B

EN riffle box, 30 mm slot width

15-D0438/C

EN riffle box, 50 mm slot width

15-D0438/D

EN riffle box, 19 mm slot width

15-D0438/F

EN riffle box, 38 mm slot width

15-D0438/G

EN riffle box, 64 mm slot width

15-D0438/H

EN riffle box, 45 mm slot width

15-D0431

Stainless steel sample splitter, sixteen 5 mm slots.





15-D0438 to 15-D0438/H

Model 15-	Maximum particle size, mm	Slot width, mm	Number of slots	Capacity, dm³	Weight, kg
D0438	5	7	12	0.24	1.5
D0438/A	10	15	12	2	5
D0438/B	20	30	10	4.6	19
D0438/C	40	50	8	14	23.5
D0438/D	13	19	10	3	5.5
D0438/F	25	38	8	9.6	19
D0438/G	50	64	8	21	27
D0438/H	35	45	8	28	23
D0431	3-4	5	16	0.15	1.4

LARGE CAPACITY SAMPLE SPLITTER

This large sample splitter is designed for reducing large quantities of sample to a manageable size.

Specifications

- Aggregate particle size: up to 150 mm
- Adjustable openings: from 12.5 mm at 12.5 mm intervals
- Clam shell hopper capacity: 28
- Number of pans: 2
- Overall dimensions: 720 x 464 x 745 mm (w x d x h)
- Weight: 37 kg (approx.)

Ordering information

15-D0430/A

Large capacity sample splitter



15-D0430/A

Accessories

15-D0430/A1

Spare metal pan

STANDARD EN 933-1

BAR SIEVES (Grids)

Used to determine the flakiness index of aggregates. Aluminum frame with steel bars.

For more information see page 146



Accessories

86-D1601

Round aluminum scoop, 325 ml capacity.

86-D1602

Round aluminum scoop, 1000 ml capacity.

86-D1603

Round alumin sum scoop, 2600 ml capacity.

86-D1645 Shovel.

86-D1180/1 Soil mortar.

16-D1179/A Rubber-headed pestle.

15-D0439

Quartering canvas to ASTM C702. 2x2 m



86-D1601 to 86-D1603



86-D1180/1, 16-D1179/A