



HORIZONTAL SIEVE SHAKER AS 400 CONTROL

The RETSCH AS 400 control is used for sieving dry goods with test sieves up to 400 mm in diameter. The uniform, horizontal circular sieving motion produces a sharp separation of the sample fractions. Fine and coarse-grained goods from areas such as milling, brewing, chemical industry, quarries, soil testing, woodworking and plastics industry, can be exactly separated with the AS 400 control. This particular sieving motion is preferably used for long or fibrous, needle-shaped or flat materials due to their horizontal orientation. For the testing of plastics (grainy molding materials), the standard DIN 53 477 stipulates exactly this circular sieving motion.

The AS 400 control can be used as test instrument for the quality control according to DIN EN ISO 9001. Due to the controlled drive which is independent of the power frequency the AS 400 control yields reproducible results worldwide. The speed and sieving time are set, displayed and monitored digitally. The instrument is supplied with a test certificate and can be recalibrated. If desired, the rotation direction can be set to alternate in the interval. A memory for 9 sieving programs facilitates routine analyses. The AS 400 control has an integrated interface for controlling all sieving parameters via the EasySieve® software.



ACCURACY & EFFICIENCY

- | Circular sieving motion according to DIN 53477
- | For sieves up to (Ø) 400 mm
- | Measuring range 45 µm to 63 mm
- | Easy operation, ergonomic design
- | Free digital selection of process parameters (time, speed, interval)
- | Memory for 9 Standard Operating Procedures (SOPs)
- | Test materials monitoring according to DIN EN ISO 9001

HORIZONTAL SIEVE SHAKER AS 400 CONTROL

ACCESSORIES & OPTIONS

The sieve shakers of the control series can be equipped with a variety of accessories to provide for a wealth of application requirements.



| Clamping units

With the RETSCH clamping devices the sieves are clamped safely, quickly and conveniently on the sieve shaker. The clamping devices "comfort" are particularly user-friendly and timesaving.



| Accessories for test sieves

Collecting pans, intermediate pans, intermediate rings and sieve lids.

| Sieving Aids

Chain rings, brushes, cubes, balls (e.g. for reducing agglomerations when sieving particles < 100 µm and keeping the mesh free).



| IQ/OQ Documents

We provide IQ/OQ documentation for the „control“ sieve shakers to support IQ/OQ certification by our customers.



| Sample Dividers

Meaningful results can only be obtained if the sample represents the original material. Sample dividers produce representative part samples, thus ensuring reproducibility of the analysis.

| Ultrasonic baths and dryers

Suitable for thorough cleaning of test sieves and for quick, gentle drying of samples and sieves.

RETSCH TEST SIEVES AND ACCESSORIES - ENGINEERED FOR SUPERIOR PERFORMANCE

EASYSIEVE / EASYSIEVE CFR EVALUATION SOFTWARE

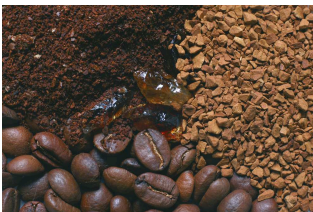
EasySieve, the software for particle size analyses, exceeds manual evaluation in many aspects. The software is able to automatically control the necessary measurement and weighing procedures – from the registration of the weight of the sieve up to the evaluation of the data. It is simple and convenient to use and is also available in an FDA 21 CFR Part 11-conform version.



HORIZONTAL SIEVE SHAKER AS 400 CONTROL

TYPICAL SAMPLE MATERIALS

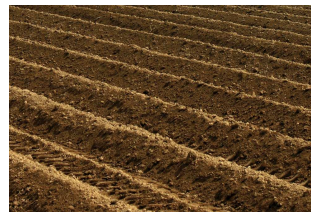
RETSCH's Analytical Sieve Shaker AS 400 control is ideally suited for separation, fractioning, particle size determination of construction materials, ground corn, plastics, sand, splints



coffee



wood chips



soil



cereals

To find the best solution for your sample preparation task, visit our application database.

FUNCTIONAL PRINCIPLE

The base plate of the AS 400 control performs horizontal circular motions with a radius of 15 mm (according to DIN 53477). The speed of 50 to 300 rpm is electronically controlled. It is continuously adjustable to meet the requirements of the product to be sieved. The actual value of the number of revolutions is digitally displayed. The base plate is driven by a robust, maintenance-free drive motor with a power of 125 Watt. The power is transmitted via an eccentric.



HORIZONTAL SIEVE SHAKER AS 400 CONTROL

TECHNICAL DATA

Applications	separation, fractioning, particle size determination
Field of application	agriculture, biology, chemistry / plastics, construction materials, engineering / electronics, environment / recycling, food, geology / metallurgy, glass / ceramics, medicine / pharmaceuticals
Feed material	powders, bulk materials
Measuring range*	45 µm - 63 mm
Sieving motion	horizontal circular motion
Max. batch / feed capacity	5 kg
Max. number of fractions	7 / 9 / 17
Max. mass of sieve stack	15 kg
Speed	digital, 50 - 300 min ⁻¹
Time display	digital, 1 - 99 min
Interval operation	1 - 10 min
Storable SOPs	9
Suitable for dry sieving	yes
Suitable for wet sieving	no
Serial interface	yes
Including test certificate / can be calibrated	yes
Suitable sieve diameters	100 mm / 200 mm / 203 mm (8") / 305 mm / 315 mm / 400 mm
Max. height of sieve stack	510 mm
Clamping devices	standard, "comfort", each for dry sieving
Protection code	IP 20
Electrical supply data	100-240 V, 50/60 Hz
Power connection	1-phase
W x H x D	540 x 260 x 507 mm
Net weight	~ 70 kg
Standards	CE


*depending on feed material and instrument configuration/settings

www.retsch.com/as400control

ORDER DATA

HORIZONTAL SIEVE SHAKER AS 400 CONTROL

Horizontal Sieve Shaker AS 400 control for test sieves up to 400 mm Ø
(please order clamping device, test sieves and collecting pan separately)

30.022.0001  AS 400 100–240 V, 50/60 Hz incl. test report acc. to EN 10204 2.2 control

CLAMPING DEVICES AS 400 CONTROL

32.662.0010  Clamping device "standard", for test sieves 400 mm Ø

32.662.0011  Clamping device "comfort", for test sieves 400 mm Ø

SIEVE STACKS AND ACCESSORIES AS 400 CONTROL

60.166.000999 Sieve stack consisting of 6 test sieves (ISO 3310-1), 400 mm Ø, 65 mm height (500 µm, 1 mm, 2 mm, 5 mm, 10 mm, 20 mm) and collecting pan

60.167.000999 Sieve stack consisting of 6 test sieves (ASTM E11), 400 mm Ø, 65 mm height (35 mesh, 18 mesh, 10 mesh, 4 mesh, 3/8", 3/4") and collecting pan

ACCESSORIES AS 400 CONTROL


03.802.0006  Transportation handles AS 400

99.200.0026 IQ/OQ Documentation for AS 400 control



ACCESSORIES FOR CLAMPING DEVICES AS 200, AS 300, AS 400

CLAMPING LIDS




32.481.0022  Clamping lid with large window of Perspex for test sieves 200/203 mm Ø

02.660.0012  Clamping lid with large window of Perspex for test sieves 400 mm Ø








CLAMPING ELEMENTS

- | | | |
|-------------|---|--|
| 32.142.0001 |  | Clamping nuts, (2 pieces) for clamping device "standard" |
| 32.737.0001 |  | Quick-clamping elements, (2 pieces) for clamping device "comfort" AS 200/300/400 |
| 05.114.0080 | | O-ring for quick-clamping element for AS 300 and AS 400, 1 piece |

CLAMPING RODS





- | | | |
|-------------|--|--|
| 32.248.0002 |  | Threaded rods, (2 pieces) for clamping device "standard" |
| 32.248.0001 |  | Threaded rods, short, (2 pieces) for clamping of max. 5 test sieves for clamping device "standard" |
| 32.742.0010 |  | Rods, smooth, (2 pieces) for clamping device "comfort" AS 300/400 |

SIEVING AIDS

- | | | |
|-------------|---|--|
| 32.365.0001 |  | Chain ring for test sieves 200 mm and 203 mm Ø to support horizontal sieving |
| 32.050.0001 |  | Brushes, 3 pieces |
| 32.902.0001 |  | Cubes of polyurethane, 12 x 12 x 12 mm, 10 pieces |
| 32.902.0002 |  | Cubes of polyurethane, 20 x 20 x 20 mm, 10 pieces |
| 32.354.0001 |  | Balls of rubber, 20 mm Ø, 5 pieces |
| 32.354.0002 |  | Balls of agate, 10 mm Ø, 10 pieces |
| 32.354.0004 |  | Balls of steatite, 6 mm Ø, 150 g |

ACCESSORIES FOR TEST SIEVES (PANS, RINGS, LIDS)

FOR TEST SIEVES 400 MM Ø

60.010.000400		Collecting pan, stainless steel, 400 mm Ø, height 65 mm
60.220.000400		Intermediate pan, stainless steel, 400 mm Ø, height 65 mm
60.935.000400		Intermediate ring, stainless steel, 400 mm Ø, height 65 mm
60.107.000400		Sieve lid, stainless steel, 400 mm Ø

TEST SIEVES Ø 400 MM - 65 MM HEIGHT - ISO 3310/1 - STAINLESS STEEL / WIRE GAUZE

	# mm	# mesh no.	Ø	height	standard
60.166.000025	25 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000032	32 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000036	36 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000038	38 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000040	40 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000045	45 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000050	50 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000053	53 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000056	56 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000063	63 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000071	71 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000075	75 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000080	80 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000090	90 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000100	100 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000106	106 µm	-	400 mm	65 mm	ISO 3310/1

60.166.000112	112 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000125	125 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000140	140 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000150	150 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000160	160 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000180	180 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000200	200 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000212	212 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000224	224 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000250	250 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000280	280 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000300	300 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000315	315 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000355	355 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000400	400 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000425	425 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000450	450 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000500	500 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000560	560 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000600	600 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000630	630 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000710	710 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000800	800 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000850	850 µm	-	400 mm	65 mm	ISO 3310/1
60.166.000900	900 µm	-	400 mm	65 mm	ISO 3310/1
60.166.001000	1.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.001120	1.12 mm	-	400 mm	65 mm	ISO 3310/1
60.166.001180	1.18 mm	-	400 mm	65 mm	ISO 3310/1
60.166.001250	1.25 mm	-	400 mm	65 mm	ISO 3310/1
60.166.001400	1.40 mm	-	400 mm	65 mm	ISO 3310/1
60.166.001600	1.60 mm	-	400 mm	65 mm	ISO 3310/1

60.166.001700	1.70 mm	-	400 mm	65 mm	ISO 3310/1
60.166.001800	1.80 mm	-	400 mm	65 mm	ISO 3310/1
60.166.002000	2.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.002240	2.24 mm	-	400 mm	65 mm	ISO 3310/1
60.166.002360	2.36 mm	-	400 mm	65 mm	ISO 3310/1
60.166.002500	2.50 mm	-	400 mm	65 mm	ISO 3310/1
60.166.002800	2.80 mm	-	400 mm	65 mm	ISO 3310/1
60.166.003150	3.15 mm	-	400 mm	65 mm	ISO 3310/1
60.166.003350	3.35 mm	-	400 mm	65 mm	ISO 3310/1
60.166.003550	3.55 mm	-	400 mm	65 mm	ISO 3310/1
60.166.004000	4.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.004500	4.50 mm	-	400 mm	65 mm	ISO 3310/1
60.166.004750	4.75 mm	-	400 mm	65 mm	ISO 3310/1
60.166.005000	5.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.005600	5.60 mm	-	400 mm	65 mm	ISO 3310/1
60.166.006300	6.30 mm	-	400 mm	65 mm	ISO 3310/1
60.166.006700	6.70 mm	-	400 mm	65 mm	ISO 3310/1
60.166.007100	7.10 mm	-	400 mm	65 mm	ISO 3310/1
60.166.008000	8.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.009000	9.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.009500	9.50 mm	-	400 mm	65 mm	ISO 3310/1
60.166.010000	10.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.011200	11.20 mm	-	400 mm	65 mm	ISO 3310/1
60.166.012500	12.50 mm	-	400 mm	65 mm	ISO 3310/1
60.166.013200	13.20 mm	-	400 mm	65 mm	ISO 3310/1
60.166.014000	14.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.016000	16.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.018000	18.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.019000	19.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.020000	20.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.022400	22.40 mm	-	400 mm	65 mm	ISO 3310/1

60.166.025000	25.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.026500	26.50 mm	-	400 mm	65 mm	ISO 3310/1
60.166.028000	28.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.031500	31.50 mm	-	400 mm	65 mm	ISO 3310/1
60.166.035500	35.50 mm	-	400 mm	65 mm	ISO 3310/1
60.166.037500	37.50 mm	-	400 mm	65 mm	ISO 3310/1
60.166.040000	40.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.045000	45.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.050000	50.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.053000	53.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.056000	56.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.063000	63.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.071000	71.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.075000	75.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.080000	80.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.090000	90.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.100000	100.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.106000	106.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.112000	112.00 mm	-	400 mm	65 mm	ISO 3310/1
60.166.125000	125.00 mm	-	400 mm	65 mm	ISO 3310/1