VIBRATORY SIEVE SHAKER AS 200 DIGIT CA

The **analytical sieve shakers** of the series AS 200 are used in research & development, quality control of raw materials, interim and finished products as well as in production monitoring. The **controllable electromagnetic drive** offers an **optimal adaption** for every product. **Sharp fractions** are obtained even after **short sieving times.**

The AS 200 digit cA sieve shaker is recommended whenever **controlled amplitude**, digital display of vibration height and time and **interval operation** are required.

PRODUCT ADVANTAGES

- NEW: controlled amplitude
- suitable for dry and wet sieving
- excellent separation efficiency even with short sieving times
- efficient electromagnetic drive
- 3-D throwing motion which ensures optimum use of the open sieve area and lets the sample move equally over the whole sieving surface
- maintenance-free
- sieve stack up to 510 mm height
- free adjustment of all process parameters (time, amplitude)
- interval operation (fix 10 s)
- digital display of vibration height and time
- easy operation, ergonomic design

WET SIEVING WITH VIBRATORY SIEVE SHAKERS

There are many applications for which wet sieving is the best solution, e.g. when the material to be tested is a suspension or when a very fine sample (< 45 µm) that tends to agglomerate needs to be sieved. All vibratory sieve shakers from RETSCH can be used for wet sieving. There are special accessories like clamping lids with spray nozzle and collecting pans with outlet available. By placing RETSCH's venting rings between the sieves, air cushions can expand without letting liquid or sample material escape.

ACCESSORIES & OPTIONS

RETSCH sieve shakers can be equipped with a variety of accessories to meet a wide range 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.

Accessories for wet sieving

Clamping lid with nozzle, collecting pans with outlet, venting rings.

Sieving Aids

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

Sample Dividers

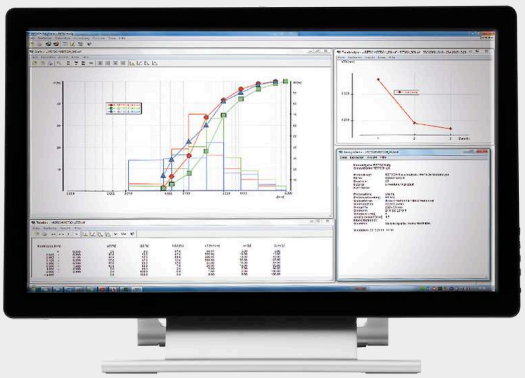
Meaningful results can only be obtained if the sample represents the original material. Sample dividers produce representative part samples, thus ensuring reproducibility of the analysis.

Ultrasonic baths and dryers

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

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.



VIBRATORY SIEVE SHAKER AS 200 DIGIT CA

TYPICAL SAMPLE MATERIALS

RETSCH's vibratory sieve shakers are ideally suited for separation, fractioning and particle size determination of cement clinker, chemicals, coffee, construction materials, fertilizers, fillers, flours, grains, metals powders, minerals, nuts, plastics, sand, seeds, soils and washing powder.

fertilizers

soil

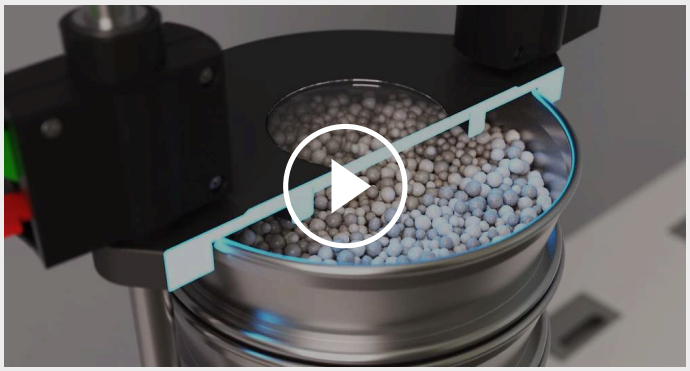
cereals

construction materials

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

FUNCTIONAL PRINCIPLE

All sieve shakers of the series AS 200 work with an electromagnetic drive that is patented by RETSCH (EP 0642844). This drive produces a 3D throwing motion that moves the product to be sieved equally over the whole sieving surface. The advantage: high stress capacity, extremely smooth operation and short sieving times with high separation efficiency.



Click to view video

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, suspensions
Measuring range*	20 µm - 25 mm
Sieving motion	throwing motion with angular momentum
Max. batch / feed capacity	3 kg
Max. number of fractions	9 / 17
Max. mass of sieve stack	4 kg
Amplitude	digital, 0.20 - 3.00 mm
Controlled amplitude	yes
Time display	digital, 1 - 99 min
Interval operation	10 s
Storable SOPs	1
Suitable for dry sieving	yes
Suitable for wet sieving	yes
USB interface	-
Including test certificate / can be calibrated	-
Suitable sieve diameters	100 mm / 200 mm / 203 mm (8")
Max. height of sieve stack	510 mm
Clamping devices	standard, "comfort", each for wet and dry sieving
Protection code	IP 21
Electrical supply data	different voltages
Power connection	1-phase
W x H x D	417 x 212 x 384 mm
Net weight	~ 35 kg
Standards	CE

*depending on feed material and instrument configuration/settings

www.retsch.com/as200digit

ORDER DATA

VIBRATORY SIEVE SHAKERS AS 200

Vibratory Sieve Shakers AS 200 for test sieves up to 203 mm / 8” Ø
(please order clamping device, test sieves and collecting pan separately)

30.031.0001		AS 200 digit cA, 100–240 V, 50/60 Hz

other electrical versions available for the same price

CLAMPING DEVICES AS 200

		max. number of fractions, for test sieves Ø
32.662.0002		Clamping device “standard”, 9 / 17, 200 / 203 mm Ø
32.662.0001		Clamping device “comfort”, 9 / 17, 200 / 203 mm Ø
32.662.0005		Universal clamping device “standard”, 9 / 17, 100 – 203 mm Ø
32.662.0004		Universal clamping device “comfort”, 9 / 17, 100 – 203 mm Ø
32.662.0007		Universal wet sieving clamping device “standard”, 9 / 17, 100 – 203 mm Ø
32.662.0006		Universal wet sieving clamping device “comfort”, 9 / 17, 100 – 203 mm Ø

SIEVE STACKS AND ACCESSORIES AS 200

60.131.000999		Sieve stack consisting of 8 test sieves (ISO 3310-1), 200 mm Ø, 50 mm height (45 µm, 63 µm, 125 µm, 250 µm, 500 µm, 1 mm, 2 mm, 4 mm) and collecting pan
60.150.000999		Sieve stack consisting of 8 test sieves (ASTM E11), 203 mm (8”) Ø, 50 mm (2”) height (325 mesh, 230 mesh, 120 mesh, 60 mesh, 35 mesh, 18 mesh, 10 mesh, 5 mesh) and collecting pan

ACCESSORIES AS 200

02.938.0001		Add-on weight 2100 g (two discs) for low loads (< 2 kg) for AS 200 basic
03.243.0044		Rubber disc for sieve plate
99.200.0036		IQ/OQ Documentation for AS 200 digit cA

[LL:iid.retsch.link_test_sieve_range]

32.481.0022		Clamping lid with large window of Perspex for test sieves 200/203 mm Ø
32.481.0014		Universal clamping lid with small window for test sieves 100/150/200/203 mm Ø
32.481.0015		Universal wet sieving lid with small window for test sieves 100/150/200/203 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
05.114.0061		O-ring for quick-clamping element for AS 200, 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”
32.742.0009		Rods, smooth, (2 pieces) for clamping device “comfort” AS 200
32.742.0011		Rods, smooth, short, (2 pieces) for clamping of max. 5 test sieves for clamping device “comfort” AS 200

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

TEST SIEVE RACK

32.012.0001		Test Sieve Rack for 10 Test Sieves Ø 200 mm/8”, height 50 mm/25 mm

ACCESSORIES FOR TEST SIEVES (PANS, RINGS, LIDS)

FOR TEST SIEVES 200 MM Ø, HEIGHT 50 MM

69.720.0050		Collecting pan	stainless steel	200 mm Ø	height 50 mm
69.220.0050		Intermediate pan	stainless steel	200 mm Ø	height 50 mm
69.121.0050		Intermediate ring	stainless steel	200 mm Ø	height 50 mm
69.520.0051		Sieve lid	stainless steel	200 mm Ø	
69.420.0050		Collecting pan with outlet	stainless steel	200 mm Ø	height 50 mm
69.221.0025		Venting ring for wet sieving	stainless steel	200 mm Ø	height 25 mm
05.114.0174		O-ring for test sieves	200 mm Ø		

FOR TEST SIEVES 200 MM Ø, HEIGHT 25 MM

69.720.0025		Collecting pan, stainless steel, 200 mm Ø, height 25 mm
69.220.0025		Intermediate pan, stainless steel, 200 mm Ø, height 25 mm
69.121.0025		Intermediate ring, stainless steel, 200 mm Ø, height 25 mm
69.520.0051		Sieve lid, stainless steel, 200 mm Ø
69.420.0050		Collecting pan with outlet, stainless steel, 200 mm Ø, height 50 mm
69.221.0025		Venting ring for wet sieving, stainless steel, 200 mm Ø, height 25 mm
05.114.0174		O-ring for test sieves, 200 mm Ø

FOR TEST SIEVES 203 MM Ø / 8” Ø, HEIGHT 2”

69.720.3050		Collecting pan, stainless steel, 8” Ø, height 2”
69.220.3050		Intermediate pan, stainless steel, 8” Ø, height 2”
69.121.3050		Intermediate ring, stainless steel, 8” Ø, height 2”
69.520.3051		Sieve lid, stainless steel, 8” Ø
69.420.3050		Collecting pan with outlet, stainless steel, 8” Ø, height 2”
69.221.3025		Venting ring for wet sieving, stainless steel, 8” Ø, height 1”
05.114.0174		O-ring for test sieves, 8” Ø

FOR TEST SIEVES 203 MM Ø / 8” Ø, HEIGHT 1”

69.720.3025		Collecting pan, stainless steel, 8” Ø, height 1”

69.220.3025		Intermediate pan, stainless steel, 8” Ø, height 1”
69.121.3025		Intermediate ring, stainless steel, 8” Ø, height 1”
69.520.3051		Sieve lid, stainless steel, 8” Ø
69.420.3050		Collecting pan with outlet, stainless steel, 8” Ø, height 2”
69.221.3025		Venting ring for wet sieving, stainless steel, 8” Ø, height 1”
05.114.0174		O-ring for test sieves, 8” Ø

FOR TEST SIEVES 100 MM Ø		
60.010.000100		Collecting pan, stainless steel, 100 mm Ø, height 40 mm
60.220.000100		Intermediate pan, stainless steel, 100 mm Ø, height 40 mm
60.935.000100		Intermediate ring, stainless steel, 100 mm Ø, height 40 mm
60.107.000100		Sieve lid, stainless steel, 100 mm Ø
60.010.100100		Collecting pan with outlet, stainless steel, 100 mm Ø, height 40 mm
05.114.0045		O-ring for test sieves, 100 mm Ø

TEST SIEVES Ø 200 MM - 50 MM HEIGHT - ISO 3310/1 - STAINLESS STEEL / WIRE GAUZE

	# mm	# mesh no.	ø	height	standard
60.131.000020	20 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000025	25 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000032	32 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000036	36 µm	-	200 mm	50 mm	ISO 3310/1

60.131.000038	38 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000040	40 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000045	45 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000050	50 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000053	53 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000056	56 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000063	63 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000071	71 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000075	75 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000080	80 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000090	90 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000100	100 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000106	106 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000112	112 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000125	125 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000140	140 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000150	150 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000160	160 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000180	180 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000200	200 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000212	212 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000224	224 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000250	250 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000280	280 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000300	300 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000315	315 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000355	355 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000400	400 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000425	425 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000450	450 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000500	500 µm	-	200 mm	50 mm	ISO 3310/1

60.131.000560	560 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000600	600 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000630	630 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000710	710 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000800	800 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000850	850 µm	-	200 mm	50 mm	ISO 3310/1
60.131.000900	900 µm	-	200 mm	50 mm	ISO 3310/1
60.131.001000	1.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.001120	1.12 mm	-	200 mm	50 mm	ISO 3310/1
60.131.001180	1.18 mm	-	200 mm	50 mm	ISO 3310/1
60.131.001250	1.25 mm	-	200 mm	50 mm	ISO 3310/1
60.131.001400	1.40 mm	-	200 mm	50 mm	ISO 3310/1
60.131.001600	1.60 mm	-	200 mm	50 mm	ISO 3310/1
60.131.001700	1.70 mm	-	200 mm	50 mm	ISO 3310/1
60.131.001800	1.80 mm	-	200 mm	50 mm	ISO 3310/1
60.131.002000	2.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.002240	2.24 mm	-	200 mm	50 mm	ISO 3310/1
60.131.002360	2.36 mm	-	200 mm	50 mm	ISO 3310/1
60.131.002500	2.50 mm	-	200 mm	50 mm	ISO 3310/1
60.131.002800	2.80 mm	-	200 mm	50 mm	ISO 3310/1
60.131.003150	3.15 mm	-	200 mm	50 mm	ISO 3310/1
60.131.003350	3.35 mm	-	200 mm	50 mm	ISO 3310/1
60.131.003550	3.55 mm	-	200 mm	50 mm	ISO 3310/1
60.131.004000	4.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.004500	4.50 mm	-	200 mm	50 mm	ISO 3310/1
60.131.004750	4.75 mm	-	200 mm	50 mm	ISO 3310/1
60.131.005000	5.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.005600	5.60 mm	-	200 mm	50 mm	ISO 3310/1
60.131.006300	6.30 mm	-	200 mm	50 mm	ISO 3310/1
60.131.006700	6.70 mm	-	200 mm	50 mm	ISO 3310/1
60.131.007100	7.10 mm	-	200 mm	50 mm	ISO 3310/1

60.131.008000	8.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.009000	9.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.009500	9.50 mm	-	200 mm	50 mm	ISO 3310/1
60.131.010000	10.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.011200	11.20 mm	-	200 mm	50 mm	ISO 3310/1
60.131.012500	12.50 mm	-	200 mm	50 mm	ISO 3310/1
60.131.013200	13.20 mm	-	200 mm	50 mm	ISO 3310/1
60.131.014000	14.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.016000	16.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.018000	18.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.019000	19.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.020000	20.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.022400	22.40 mm	-	200 mm	50 mm	ISO 3310/1
60.131.025000	25.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.026500	26.50 mm	-	200 mm	50 mm	ISO 3310/1
60.131.028000	28.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.031500	31.50 mm	-	200 mm	50 mm	ISO 3310/1
60.131.035500	35.50 mm	-	200 mm	50 mm	ISO 3310/1
60.131.037500	37.50 mm	-	200 mm	50 mm	ISO 3310/1
60.131.040000	40.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.045000	45.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.050000	50.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.053000	53.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.056000	56.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.063000	63.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.071000	71.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.075000	75.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.080000	80.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.090000	90.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.100000	100.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.106000	106.00 mm	-	200 mm	50 mm	ISO 3310/1

60.131.112000	112.00 mm	-	200 mm	50 mm	ISO 3310/1
60.131.125000	125.00 mm	-	200 mm	50 mm	ISO 3310/1

TEST SIEVES Ø 200 MM - 25 MM HEIGHT - ISO 3310/1 - STAINLESS STEEL /WIRE GAUZE

	# mm	# mesh no.	ø	height	standard
60.122.000020	20 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000025	25 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000032	32 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000036	36 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000038	38 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000040	40 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000045	45 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000050	50 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000053	53 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000056	56 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000063	63 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000071	71 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000075	75 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000080	80 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000090	90 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000100	100 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000106	106 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000112	112 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000125	125 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000140	140 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000150	150 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000160	160 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000180	180 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000200	200 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000212	212 µm	-	200 mm	25 mm	ISO 3310/1

60.122.000224	224 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000250	250 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000280	280 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000300	300 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000315	315 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000355	355 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000400	400 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000425	425 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000450	450 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000500	500 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000560	560 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000600	600 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000630	630 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000710	710 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000800	800 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000850	850 µm	-	200 mm	25 mm	ISO 3310/1
60.122.000900	900 µm	-	200 mm	25 mm	ISO 3310/1
60.122.001000	1.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.001120	1.12 mm	-	200 mm	25 mm	ISO 3310/1
60.122.001180	1.18 mm	-	200 mm	25 mm	ISO 3310/1
60.122.001250	1.25 mm	-	200 mm	25 mm	ISO 3310/1
60.122.001400	1.40 mm	-	200 mm	25 mm	ISO 3310/1
60.122.001600	1.60 mm	-	200 mm	25 mm	ISO 3310/1
60.122.001700	1.70 mm	-	200 mm	25 mm	ISO 3310/1
60.122.001800	1.80 mm	-	200 mm	25 mm	ISO 3310/1
60.122.002000	2.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.002240	2.24 mm	-	200 mm	25 mm	ISO 3310/1
60.122.002360	2.36 mm	-	200 mm	25 mm	ISO 3310/1
60.122.002500	2.50 mm	-	200 mm	25 mm	ISO 3310/1
60.122.002800	2.80 mm	-	200 mm	25 mm	ISO 3310/1
60.122.003150	3.15 mm	-	200 mm	25 mm	ISO 3310/1

60.122.003350	3.35 mm	-	200 mm	25 mm	ISO 3310/1
60.122.003550	3.55 mm	-	200 mm	25 mm	ISO 3310/1
60.122.004000	4.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.004500	4.50 mm	-	200 mm	25 mm	ISO 3310/1
60.122.004750	4.75 mm	-	200 mm	25 mm	ISO 3310/1
60.122.005000	5.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.005600	5.60 mm	-	200 mm	25 mm	ISO 3310/1
60.122.006300	6.30 mm	-	200 mm	25 mm	ISO 3310/1
60.122.006700	6.70 mm	-	200 mm	25 mm	ISO 3310/1
60.122.007100	7.10 mm	-	200 mm	25 mm	ISO 3310/1
60.122.008000	8.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.009000	9.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.009500	9.50 mm	-	200 mm	25 mm	ISO 3310/1
60.122.010000	10.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.011200	11.20 mm	-	200 mm	25 mm	ISO 3310/1
60.122.012500	12.50 mm	-	200 mm	25 mm	ISO 3310/1
60.122.013200	13.20 mm	-	200 mm	25 mm	ISO 3310/1
60.122.014000	14.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.016000	16.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.018000	18.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.019000	19.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.020000	20.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.022400	22.40 mm	-	200 mm	25 mm	ISO 3310/1
60.122.025000	25.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.026500	26.50 mm	-	200 mm	25 mm	ISO 3310/1
60.122.028000	28.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.031500	31.50 mm	-	200 mm	25 mm	ISO 3310/1
60.122.035500	35.50 mm	-	200 mm	25 mm	ISO 3310/1
60.122.037500	37.50 mm	-	200 mm	25 mm	ISO 3310/1
60.122.040000	40.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.045000	45.00 mm	-	200 mm	25 mm	ISO 3310/1

60.122.050000	50.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.053000	53.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.056000	56.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.063000	63.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.071000	71.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.075000	75.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.080000	80.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.090000	90.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.100000	100.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.106000	106.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.112000	112.00 mm	-	200 mm	25 mm	ISO 3310/1
60.122.125000	125.00 mm	-	200 mm	25 mm	ISO 3310/1