

WHICH STANDARD SHOULD I USE?

The aperture size of every sieve manufactured from 20 to 3350 microns can be certified to NIST traceability.

Our standards are named after the 30 most popular sieves (R40/3) but can also be used for the 30 intermediate sizes.

If you are unsure of the standard you should be using just check the table below (table 1).

The 'primary' sieve size is highlighted in bold, the sieve on either side can also be calibrated using the same Sieve Standard.

Table 1: Selecting the Correct Standard

Sieve Size		
-	20 µm	-
-	25 µm	-
-	32 µm	-
36 µm	38 µm	40 µm
-	45 µm	50 µm
-	53 µm	56 µm
-	63 µm	-
71 µm	75 µm	80 µm
-	90 µm	-
100 µm	106 µm	112 µm
-	125 µm	-
140 µm	150 µm	160 µm
-	180 µm	-
200 µm	212 µm	224 µm
-	250 µm	280 µm
-	300 µm	315 µm
-	355 µm	-
400 µm	425 µm	450 µm
-	500 µm	-
560 µm	600 µm	630 µm
-	710 µm	-
800 µm	850 µm	900 µm
-	1.00mm	-
1.12mm	1.18mm	1.25mm
-	1.40mm	1.55mm
1.60mm	1.70mm	1.80mm
-	2.00mm	-
2.24mm	2.36mm	2.50mm
-	2.80mm	3.15mm
-	3.35mm	3.55mm

Table 2: Recommended Tolerances – Microscopy (ISO 3310-1:2000 and ASTM E-11)

Nominal Sieve size	Mesh #	ISO Tolerance @ mean	ASTM Tolerance @ mean	ISO Max single aperture	ASTM Max single aperture	ISO Max SD =D84%	ASTM Max @ D95%	ISO Count for microscopy
20µm	635	17.7 – 22.3µm	17 – 23µm	34µm	35µm	25.7µm	29µm	2 x 300
25µm	500	22.5 – 27.5µm	22 – 28µm	41µm	41µm	31.1µm	34µm	2 x 300
32µm	450	29.3 – 34.7µm	29 – 35µm	51µm	50µm	38.8µm	42µm	2 x 300
38µm	400	35.1 – 40.9µm	35 – 41µm	58µm	57µm	45.7µm	48µm	2 x 300
45µm	325	41.9 – 48.1µm	42 – 48µm	67µm	66µm	53.3µm	57µm	2 x 250
53µm	270	49.6 – 56.3µm	49 – 57µm	77µm	76µm	62.0µm	66µm	2 x 250
63µm	230	59.3 – 66.7µm	59 – 67µm	89µm	89µm	72.9µm	77µm	2 x 250
75µm	200	70.9 – 79.1µm	70 – 80µm	104µm	103µm	85.8µm	91µm	2 x 250
90µm	170	85.4 – 94.6µm	85 – 95µm	122µm	122µm	102.0µm	108µm	2 x 200
106µm	140	100.8 – 111.2µm	100 – 112µm	141µm	141µm	119.2µm	126µm	2 x 200
125µm	120	119.2 – 130.8µm	118 – 132µm	163µm	163µm	139.4µm	147µm	2 x 200
150µm	100	143.4 – 156.6µm	142 – 158µm	193µm	192µm	166.3µm	174µm	2 x 200
180µm	80	172.4 – 187.6µm	171 – 189µm	227µm	227µm	198.0µm	207µm	2 x 200
212µm	70	203.3 – 220.7µm	202 – 222µm	264µm	263µm	232.0µm	242µm	2 x 160
250µm	60	240.1 – 259.9µm	238 – 262µm	308µm	306µm	272.4µm	283µm	2 x 160
300µm	50	288 – 312µm	286 – 314µm	365µm	363µm	325.4µm	337µm	2 x 160
355µm	45	342 – 368µm	339 – 371µm	427µm	425µm	383.2µm	396µm	2 x 160
425µm	40	409 – 441µm	406 – 444µm	506µm	502µm	457.2µm	471µm	2 x 120
500µm	35	482 – 518µm	480 – 520µm	589µm	585µm	535.9µm	550µm	2 x 120
600µm	30	579 – 621µm	575 – 625µm	701µm	695µm	640.5µm	660µm	2 x 100
710µm	25	685 - 735µm	680 – 740µm	822µm	815µm	755.8µm	775µm	2 x 100
850µm	20	821 – 879µm	815 – 880µm	977µm	970µm	902.2µm	925µm	2 x 80
1.00mm	18	0.97 – 1.03mm	0.96 – 1.04mm	1.14mm	1.135mm	1.059mm	1.083mm	2 x 80
1.18mm	16	1.14 – 1.22mm	1.135 – 1.225mm	1.34mm	1.330mm	1.247mm	1.270mm	2 x 80
1.40mm	14	1.35 – 1.45mm	1.35 – 1.45mm	1.58mm	1.565mm	1.487mm	1.505mm	2 x 80
1.70mm	12	1.64 – 1.76mm	1.64 – 1.76mm	1.90mm	1.890mm	1.787mm	1.820mm	2 x 50
2.00mm	10	1.93 – 2.07mm	1.93 – 2.07mm	2.23mm	2.215mm	2.105mm	2.135mm	2 x 50
2.36mm	8	2.28 – 2.44mm	2.28 – 2.44mm	2.61mm	2.609mm	2.474mm	2.515mm	2 x 40
2.80mm	7	2.71 - 2.89mm	2.705 – 2.895mm	3.09mm	3.070mm	2.930mm	2.975mm	2 x 40
3.35mm	6	3.24 - 3.46mm	3.24 – 3.46mm	3.67mm	3.66mm	3.501mm	3.55mm	2 x 40

TOLERANCES

Please note that although the sieve may not conform to the exact nominal size, it is still in specification if the variation about the mean is accordance with table 2.