



Mesh vs. Micron Comparison Chart

Mesh	Microns	Inches	Millimeters	Netafim Disk Ring Color	Object
3	6730	0.2650	6.730		
4	4760	0.1870	4.760		Gravel starts at 4.75 mm
5	4000	0.1570	4.000		
6	3360	0.1320	3.360		
7	2830	0.1110	2.830		
8	2380	0.0937	2.380		
10	2000	0.0787	2.000		
12	1680	0.0661	1.680		
14	1410	0.0555	1.410		
16	1190	0.0469	1.190		Eye of a Needle = 1,230 microns
18	1000	0.0394	1.000		
20	841	0.0331	0.841		
25	707	0.0280	0.707		
28	700	0.0280	0.700		
30	595	0.0232	0.595		
35	500	0.0197	0.500		
40	420	0.0165	0.420	Blue	
45	354	0.0138	0.354		
50	297	0.0117	0.297		
60	250	0.0098	0.250		Fine Sand
70	210	0.0083	0.210		
80	177	0.0070	0.177	Yellow	
100	149	0.0059	0.149		
120	125	0.0049	0.125	Red	
140	105	0.0041	0.105	Black	
	100	0.00394	0.100		Beach Sand (100 - 2,000 microns)
170	88	0.0035	0.088		
200	74	0.0029	0.074		Portland Cement
	70	0.00276	0.070	Brown	Average Human Hair (70 - 100) / Grain of Salt
230	63	0.0024	0.063		
	55	0.00217	0.055	Green	
270	53	0.0021	0.053		
	50	0.00197	0.500		Remove Visible Particles from Liquid
325	44	0.0017	0.044		Silt (10 - 75)
	40	0.00157	0.040	Purple	Lower Limit of Visibility (Naked Eye)
400	37	0.0015	0.037		Plant Pollen
(550)*	25	0.00099	0.025		White Blood Cells / Level to Achieve 'Optical Clarity' in a Liquid
(625)	20	0.00079	0.020	Gray	
(1200)	12	0.0005	0.012		
(1250)	10	0.000394	0.010		Talcum Powder / Level to Remove Haze from Liquid / Fertilizer (10 - 1,000 microns) / Mold Spores (10 - 30 microns)
	7	0.000276	0.007		Red Blood Cells (8 - 12 microns)
(2500)	5	0.000197	0.005		Bacteria (0.5 - 20 microns)
(4800)	3	0.000118	0.003		
(5000)	2.5	0.000099	0.0025		Cigarette Smoke & Bacteria (Cocci) = 2 microns
(12000)	1	0.0000394	0.001		Cryptosporidium (1 - 10 microns)

* Mesh numbers in parentheses are too small to exist as actual screen sizes. They are only estimations and are included for reference.

What does mesh size mean? Determining mesh is very simple. Simply count how many openings there are in one inch of screen. The number of openings is the mesh size. An 80-mesh screen means there are 80 openings across one linear inch of screen. A 140-mesh screen has 140 openings, and so on. Therefore, as the mesh number increases, the size of the openings decreases. Note - Mesh size is not a precise measurement of particle size because of the size of the wire used in the screen. Beyond 400 mesh, particle size is normally defined only in "microns." That is because the finer the weave, the closer the wires get together; eventually there is no space between them.

What do the minus (-) and plus (+) plus signs mean when describing mesh sizes and particle distribution tests? To characterize particle size by mesh designation:

- A "+" before the mesh indicates the particles are retained by the sieve,
- A "-" before the mesh indicates the particles pass through the sieve, and
- Typically, 90%+ of the particles will lie within the indicated range.

For example, if the particle size of a material is described as -10 / +30 mesh, then 90% or more of the material will pass through a 10-mesh sieve (particles smaller than 2.0 mm) but will be retained by a 30-mesh sieve (particles larger than 0.595 mm). If the material is described as -30 mesh, then 90% or more of the material will pass through a 30-mesh sieve (particles smaller than 0.595 mm).