Particle Size To Screen Mesh Conversion Chart

This table is designed to guide you in deciding what mesh type is appropriate for your application. While a specific mesh can have the same number of wires/inch as another, a different wire diameter will alter the aperture as well as the % open area. For instance, one of the tradeoffs between choosing a TBC grade over a Market Grade with the same aperture is a greater throughput but at the same time potentially shorter effective screen life.

Contact the Gerard Daniel customer service team for help choosing the right mesh for your application!

US Standard			Tensile Bolting Cloth					Mill Grade					Market Grade					Clear Opening		
Std. Sieve	Open Inches	Open µm	Mesh TBC	Opening Inches	Opening Microns	Wire Dia.	% Open Area	Mesh Mill Gr.	Opening TBC Inches	Opening TBC Microns	Wire Dia.	% Open Area	Mesh Mrk. Gr.	Opening TBC Inches	Opening TBC Microns	Wire Dia.	% Open Area	Clear Open	Wire Dia.	% Open Area
																		1.0000	.105	81.9%
																		.7500	.063	82.0%
																		.6250	.063	82.5%
																		.5625	.063	81.0%
																		.5000	.0470	86.0%
								2	.4460	11328	.0540	79.6%	2	.4370	11100	.0630	76.4%	.4375	.0470	79.3%
																		.3750	.0470	79.2%
								3	.2923	7424	.0410	76.7%						.3125	.0470	68.0%
													3	.2790	7087	.0540	70.1%	.2500	.0470	70.9%
3.5	.2205	5600						4	.2150	5461	.3500	74.0%	4	.2030	5165	.0470	65.9%			
4	.1870	4750											4	.1870	4750	.0630	56.0%	.1875	.041	57.3%
5	.1575	4000						5	.1680	4267	.0320	70.6%	5	.1590	4039	.0410	63.2%			
6	.1319	3053						6	.1387	3523	.0280	69.6%	6	.1317	3350	.0350	62.7%	.1250	.041	56.7%
7	.1102	2800						7	.1149	2918	.0280	64.8%	7	.1080	2743	.0350	57.2%			
8	.0929	2360						8	.1000	2540	.0250	64.0%	8	.0970	2468	.0280	60.2%			
								9	.0881	2238	.0230	62.7%								
10	.0787	2000						10	.0800	2032	.0200	64.0%	10	.0750	1908	.0250	56.3%			
								11	.0709	1801	.0200	61.0%	11	.0730	1854	.0180	64.5%			
12	.0669	1700	14	.0620	1575	.0090	76.4%	12	.0653	1659	.0180	60.8%	12	.0603	1532	.0230	51.8%			
14	.0551	1400	16	.0535	1359	.0090	73.3%	14	.0544	1382	.0170	57.2%	14	.0514	1308	.0200	51.0%			
16	.0465	1180	18	.0466	1184	.0090	70.2%	16	.0465	1181	.0160	55.4%	16	.0445	1132	.0180	50.7%			
			20	.0410	1041	.0090	67.2%	18	.0406	1031	.0150	53.4%								
18	.0394	1000	22	.0380	965	.0075	69.7%						18	.0386	982	.0170	48.3%			
20	.0335	850	24	.0342	869	.0075	67.2%	20	.0360	914	.0140	51.8%	20	.0340	865	.0160	46.2%			
			26	.0310	787	.0075	64.8%	22	.0320	813	.0135	49.6%								
								24	.0287	729	.0130	47.4%								
25	.0280	710	28	.0282	716	.0075	62.4%	26	.0275	699	.0110	51.1%	24	.0277	704	.0140	44.2%			
			30	.0268	681	.0065	64.8%													
			32	.0248	630	.0065	62.7%	28	.0257	653	.0100	51.8%								
			34	.0229	582	.0065	60.7%	30	.0238	605	.0095	51.0%								
30	.0236	600																		
			36	.0213	541	.0065	58.7%	32	.0223	566	.0090	50.9%	30	.0213	542	.0120	41.0%			
			38	.0198	503	.0065	56.7%	34	.0204	518	.0090	48.1%								

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35	.0197	500																		
			40	.0185	470	.0065	54.8%	36	.0188	478	.0090	45.8%								
			42	.0183	465	.0055	59.1%	38	.0178	452	.0090	45.8%								
			43	.0188	476	.0045	65.0%				.0085	45.8%								
			43	.0183	464	.0050	61.6%													
			44	.0172	437	.0055	57.4%						35	.0176	448	.0110	37.9%			
			46	.0162	411	.0055	55.8%	40	.0165	419	.0085	43.6%					43.6%			
40	.0167	425																		
			48	.0153	389	.0055	54.2%						40	.0150	382	.0100	36.0%			
			50	.0145	368	.0055	52.6%	45	.0142	361	.0080	40.8%								
			52	.0137	348	.0055	51.0%													
45	.0140	355																		
			54	.0130	330	.0055	49.4%													
			56	.0139	352	.0040	60.2%													
			58	.0127	323	.0045	54.6%	50	.0125	318	.0075	39.1%								
			60	.0122	310	.0045	53.3%													
			62	.0116	295	.0045	51.7%													
50	.0118	300																		
			64	.0111	282	.0045	50.7%	55	.0112	284	.0070	37.9%	50	.0110	279	.0090	30.3%			
			66	.0117	296	.0035	59.1%													
			66	.0107	271	.0045	49.4%													
			70	.0106	269	.0037	54.9%													
			72	.0102	259	.0037	53.8%	60	.0102	259	.0065	37.5%								
			74	.0098	249	.0037	52.7%													
60	.0098	250																		
			76	.0095	241	.0037	51.7%													
			78	.0091	231	.0037	50.6%						60	.0092	234	.0075	30.5%			
			80	.0088	224	.0037	49.6%													
			84	.0084	213	.0035	49.8%													
70	.0083	212																		
			88	.0079	201	.0035	57.9%													
			90	.0076	193	.0035	47.8%													
80	.0071	180	94	.0071	180	.0035	45.0%						80	.0070	178	.0055	31.4%			
			105	.0065	165	.0030	46.9%													
100	.0059	150	120	.0058	147	.0025	47.3%						100	.0055	140	.0045	30.3%			
			135	.0051	130	.0023	47.5%													
120	.0049	125	145	.0047	119	.0022	46.4%						120	.0047	120	.0036	30.5%			
140	.0042	106	165	.0042	107	.0019	47.1%						150	.0041	104	.0026	37.9%			
170	.0035	90	200	.0034	86	.0016	46.2%						170	.0035	89	.0024	35.4%			
200	.0030	75	230	.0029	74	.0014	46.0%						200	.0029	74	.0021	33.6%			
230	.0025	63											250	.0024	61	.0016	36.0%			
270	.0021	53	300	.0022	56	.0012	42.0%						270	.0021	53	.0016	32.0%			
325	.0018	45											325	.0017	43	.0014	30.5%			
400	.0015	38											400	.0015	38	.0100	36.0%			
500	.0010	25											500	.0010	25	.0010	25.0%			
635	.0008	20											635	.0008	20	.0008	25.0%			