

Metallic Wire Mesh for High Precision Screen Printing Applications

All of NBC's metal meshes are woven with a special screen printing grade of precision metal wires; giving greater tensile strength, lower elongation and quality consistency to fulfill all technical demands of screen printing applications in the electronics and photovoltaic markets.

We are proud to introduce the 5 ranges of precision metal wire mesh listed below.

M-10 (Standard Stainless Steel Wire Mesh)

M-10 is NBC's standard stainless steel wire mesh produced with rigorous quality control.

It is widely used for many sophisticated screen printing applications such as Printed Circuit Board, Membrane Switch, Solar Cells, Ceramic Packages, Capacitors and so forth.

The reliable quality and print repeatability are well recognized by those markets.

M-13 (Upgraded Stainless Steel Wire Mesh)

M-13 is upgraded NBC stainless steel wire mesh which is woven with 30% stronger stainless steel wire compared with standard stainless steel wire. The extra tensile strength of M-13 achieves higher screen tension and optimizes printing parameters for further improvement of dimensional accuracy, and prolongs screen service life.

M-30 (Super Stainless Steel Wire Mesh)

M-30 has exceptionally low elongation and large mesh open area.

It is woven with super stainless steel wire with 3 times stronger tensile strength than that of standard stainless steel wire. It minimizes mesh interference to print image while ensuring excellent paste transition; making it suitable for challenging applications utilizing high viscosity paste, such as Solar Cell, MLCC, LTCC and so forth.

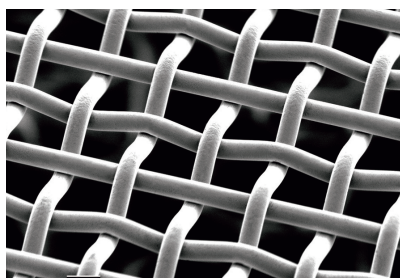
W-40 (Tungsten Wire Mesh, Next Generation)

W-40 is the next generation of wire meshes woven with tungsten wire which has even greater physical stability and print repeatability than the above super stainless steel wire mesh. Comparison of tensile strength per sq.mm is shown in the chart next page above.

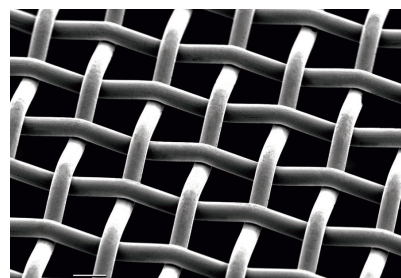
HDM (Heavy Deposit Mesh)

HDM is developed for specific screen-printing applications that require a heavy ink deposit.

The magnified photo below shows unique structure of HDM compared with standard wire mesh.

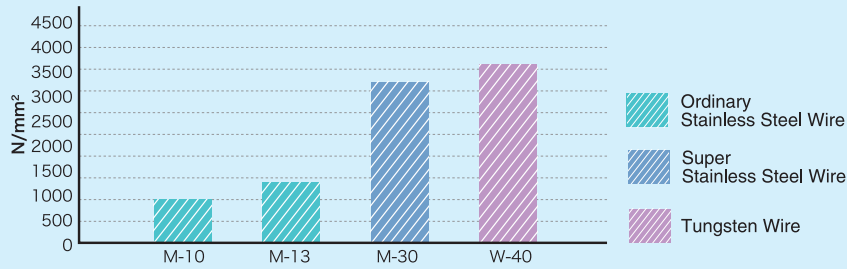


HDM 250-30



M-10-250-030

■ Comparison of tensile strength per mm²



■ M-10

Mesh Code	Mesh Count	Wire Diameter	Mesh Opening	Open Area	Normal		Thickness of Calendered Mesh		
					Theoretical Ink Volume	Thickness	Standard	Heavy	S.Heavy
	/inch	μm	μm	%	cm ³ /m ²	μm	μm	μm	μm
M10 500-019	500	19	32	39	16	41±2	30	25	22
M10 400-019	400	19	45	49	19	39±2	28	25	22
M10 400-023	400	23	41	41	22	55±2	40	35	30
M10 325-028	325	28	50	41	26	64±2	46	42	35
M10 325-030	325	30	48	38	26	68±2	55	50	45
M10 300-030	300	30	55	42	28	68±2	52	46	40
M10 280-035	280	35	56	38	25	65±2			
M10 250-030	250	30	72	50	30	60±2	45	40	35
M10 250-035	250	35	67	43	28	65±2			
M10 230-035	230	35	75	47	31	66±2			
M10 200-040	200	40	87	47	38	80±2	63	56	50
M10 180-050	180	50	91	42	42	100±3			
M10 165-045	165	45	109	50	45	90±2			
M10 150-060	150	60	109	42	50	120±3			
M10 150-065	150	65	104	38	49	130±3			
M10 120-080	120	80	132	39	62	160±3			

■ M-13

Mesh Code	Mesh Count	Wire Diameter	Mesh Opening	Open Area	Normal		Thickness of Calendered Mesh		
					Theoretical Ink Volume	Thickness	Standard	Heavy	S.Heavy
	/inch	μm	μm	%	cm ³ /m ²	μm	μm	μm	μm
M13 730-013	730	13	22	39	11	28±2	21	17	15
M13 640-015	640	15	25	39	14	35±2	25	21	18
M13 500-016	500	16	35	47	17	36±2	25	20	18
M13 500-019	500	19	32	39	16	41±2	30	25	22
M13 400-019	400	19	45	49	19	39±2	28	25	22
M13 400-023	400	23	41	41	22	55±2	40	35	30
M13 325-023	325	23	55	50	25	50±2	38	31	28

■ M-30

Mesh Code	Mesh Count	Wire Diameter	Mesh Opening	Open Area	Normal		Thickness of Calendered Mesh		
					Theoretical Ink Volume	Thickness	Standard	Heavy	S.Heavy
	/inch	μm	μm	%	cm ³ /m ²	μm	μm	μm	μm
M30 430-013	430	13	46	61	18	29±2		21	17
M30 380-014	380	14	53	62	20	32±2	26	21	18
M30 360-016	360	16	55	60	22	36±2	26	22	20
M30 325-016	325	16	62	63	22	35±2	26	22	20
M30 290-020	290	20	68	60	27	45±2		30	25
M30 250-020	250	20	82	65	29	45±2		30	25

■ W-40

Mesh Code	Mesh Count	Wire Diameter	Mesh Opening	Open Area	Normal		Thickness of Calendered Mesh		
					Theoretical Ink Volume	Thickness	Standard	Heavy	S.Heavy
	/inch	μm	μm	%	cm ³ /m ²	μm	μm	μm	μm
W40 430-013	430	13	46	61	18	29±2		21	17
W40 380-014	380	14	53	62	20	32±2	26	21	18
W40 325-016	325	16	62	63	23	36±2	25	22	

■ HDM(Heavy Deposit Mesh)

Mesh Code	Mesh Count	Wire Diameter	Mesh Opening	Open Area	Normal	
					Theoretical Ink Volume	Thickness
	/inch	μm	μm	%	cm ³ /m ²	μm
HDM 325-028	325	28	50	41	31	76±2
HDM 250-030	250	30	72	50	40	81±2
HDM 200-040	200	40	87	47	51	108±2

● Most calendered thickness can be customized. Please ask us for the detail. ● The above catalogue values may change without notice.