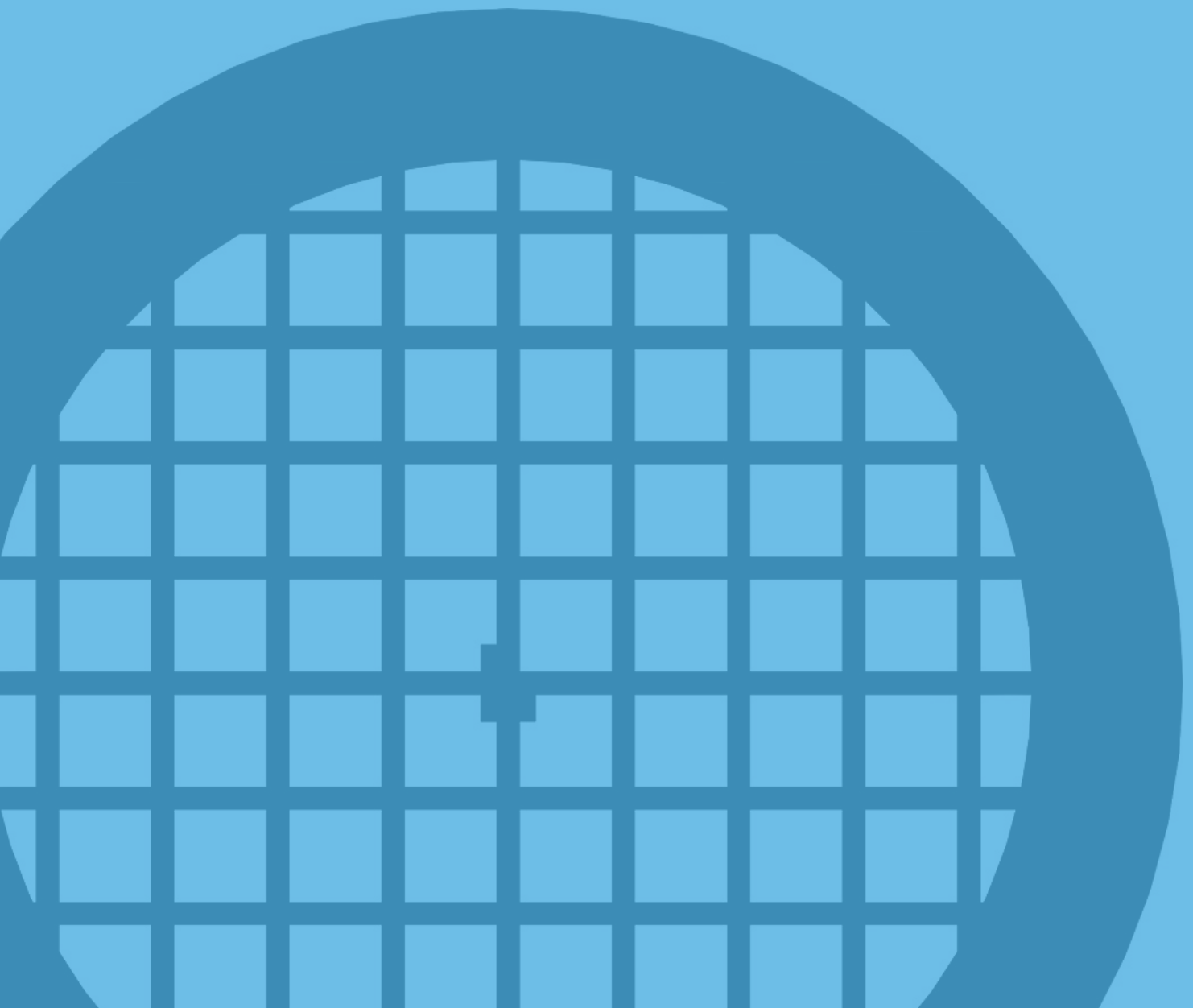




GRATICULES
OPTICS

Electron Microscopy Grids



GRIDS FOR ELECTRON MICROSCOPY

Our extensive range includes:

- Square mesh grids
- Parallel line grids
- Parallel line grids with central dividing bar
- Slotted mesh grids
- Folding grids
- Hexagonal grids
- Solid/slot grids
- Finder grids
- Freeze fracture grids
- Reference pattern grids
- Co-ordinate grids
- Various specialist patterns

Graticules Optics have been manufacturing specimen support grids for electron microscopes for over 45 years using the extensive knowledge of processes and techniques gained from their micropattern production.

In 1994 Graticules Optics (Under Pyser-SGI) took over the production of grids made in Holland by Brandsma BV (Known as Embra grids) and as a result offer a wide range of grids in a variety of metals and finishes to meet the majority of requirements. More recently Graticules Optics has introduced carbon coated grids as well as a Value range for the larger user.

Graticules Optics grids are available throughout the world from laboratory and electron microscopy accessory suppliers or direct from our factory. Copper, nickel and gold grids are all produced using electroforming processes to give well-defined patterns and consistent quality. Aluminium, stainless steel, molybdenum and titanium use an etching process.

Most grids are supplied in anti-static vials of 100 pieces, except for:- Etched grids in aluminium, molybdenum, stainless steel, Embra gold and titanium, which are in vials of 25 pieces. The etched grids can easily be identified in the following section by GG, GM, GT, GA & GS appearing in the bracketed old part reference, i.e. [1GT75].

Value range of grids, which are supplied in vials of 120 pieces, in copper and nickel.

Carbon coated grids, which are supplied in indexed grid boxes of 50 pieces and supplied with index card.

Apart from grids coated on one side with rhodium to prevent tarnishing, all grids in copper, nickel and gold are matt on one side, bright on the other side.

All Maxta/Maxtaform grids have a smooth surface (shiny finish) and an outer ring width (frame) of 250-300 μ . Maxta or Maxtaform grids are defined by an H, HF or HR prefix and all are starting with 03D order code. All Embra grids have a rough surface (matt finish) and an outer ring width (frame) of 350-400 μ .

Every grid manufactured by Graticules Optics is individually inspected under a minimum of x25 magnification and packed in anti-static vials. The only exception are the Value range, which are sample inspected.

All patterns are supplied as 3.00-3.05mm diameter grids. We are also able to supply 2.3mm grids (Siemens 2G range) to special order. All grids are approximately 25 micron thickness, with the exception of stainless steel which is 12 μ and titanium which is 15 μ .

In the following section you will note that cross-references are given to relate the order code i.e. 07D00901 to the old part references i.e. [1GC50]. Please note that specifications given for etched grids in titanium, molybdenum, aluminium and stainless steel are given for guidance only as small variations can occur.

Reference and Finder Grids.

Graticules Optics was the first company to introduce referenced graticules for light microscopy and the first to make finder grids for the electron microscopist. Location of points of interest in a specimen and quick relocation is of vital importance in many investigations and with the high magnifications used in transmission electron microscopy this can be very tedious. Finder grids have been designed to assist in this task and there are today many types to choose from. We list those that have proved to be most popular.

Handled Grids

By bending the handle upward the grid can be gripped by fine tweezers without the latter touching the specimen or any liquids. The grid can be placed over or underneath the specimen without surface tension causing the grid to slide up wetted tweezers. Grids can be held by their tab for spraying, rinsing and drying. The handle is also angled to assist in the alignment of the grid bars parallel to the axes of the stage.

Custom Designs

Graticules Optics is able to manufacture grids to your exact requirements. Just send in your specification detailing the pattern, bar thickness, material and quantity and we will provide a quotation.

Central Indexing Marks

All grids with a reference starting 1G and our Value range have a central reference mark, HF and HR patterns do not.

Carbon Coated Grids

Graticules Optics has a standard range of plain mesh grids with carbon coating. Additionally many of our other grids can be supplied with this coating to special order.

SEM Grids

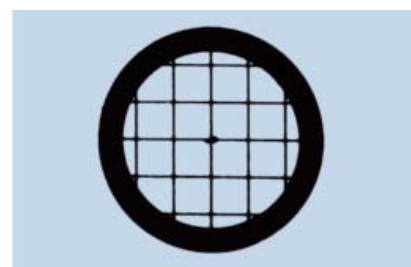
SEM's often require finder grids to place on pin stubs to assist in locating specimens of interest. These are generally 12mm diameter and we can offer standard products or custom made patterns to suit your exact requirements.

GRIDS FOR ELECTRON MICROSCOPY

PLAIN MESH GRIDS

50 Mesh

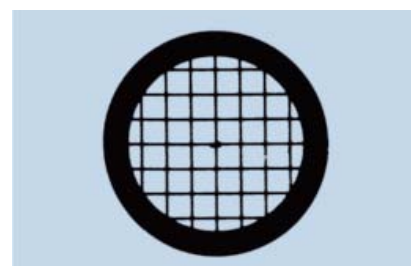
	Old part reference	Order code
Copper	[1GC50]	07D00901
Nickel	[1GN50]	07D01901
Gold	[1GG50]	07D02901
Titanium	[1GT50]	08L07901
Molybdenum	[1GM50]	08L05901
Aluminium	[1GA50]	08L04901
Stainless Steel	[1GS50]	08L06901



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
1G_50	508	50	425	83	70	5

75 Mesh

	Old part reference	Order code
Copper	[1GC 75]	07D00902
Copper	[HF 31Cu]	03D00650
Copper with Rhodium	[HR 21Cu/Rh]	03D00700
Nickel	[1GN 75]	07D01902
Nickel	[HF 31Ni]	03D00651
Nickel (High Grade)	[HR 21Ni]	03D00701
Gold	[1GG 75]	07D02902
Gold (High Grade)	[HR 21Au]	03D00702
Titanium	[1GT 75]	08L07902
Molybdenum	[1GM 75]	08L05902
Aluminium	[1GA 75]	08L04902
Stainless Steel	[1GS 75]	08L06902



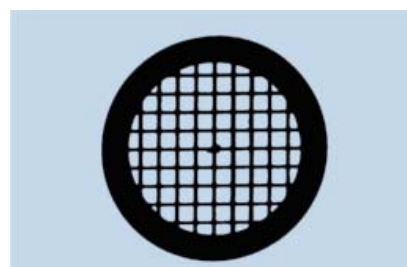
Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
HF	339	75	279	60	70	3
HR	338	75	288	50	72	3
1G_75	339	75	284	55	70	5

GRIDS FOR ELECTRON MICROSCOPY

PLAIN MESH GRIDS

100 Mesh

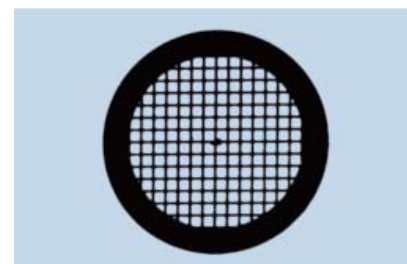
	Old part reference	Order code
Copper	[1GC 100]	07D00903
Copper	[HF 32Cu]	03D00652
Copper with Rhodium	[HR 22Cu/Rh]	03D00703
Nickel	[1GN 100]	07D01903
Nickel	[HF 32Ni]	03D00653
Nickel (High Grade)	[HR 22Ni]	03D00704
Gold	[1GG 100]	07D02903
Gold (High Grade)	[HR 22Au]	03D00705
Titanium	[1GT 100]	08L07903
Molybdenum	[1GM 100]	08L05903
Aluminium	[1GA 100]	08L04903
Stainless Steel	[1GS 100]	08L06903



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
HF	254	100	204	50	65	5
HR	254	100	213	41	70	3
1G_100	254	100	204	50	65	5

150 Mesh

	Old part reference	Order code
Copper	[1GC 150]	07D00904
Copper	[HF 33Cu]	03D00654
Copper with Rhodium	[HR 23Cu/Rh]	03D00706
Nickel	[1GN 150]	07D01904
Nickel	[HF 33Ni]	03D00655
Nickel (High Grade)	[HR 23Ni]	03D00707
Gold	[1GG 150]	07D02904
Gold (High Grade)	[HR 23Au]	03D00708
Titanium	[1GT 150]	08L07904
Molybdenum	[1GM 150]	08L05904
Aluminium	[1GA 150]	08L04904
Stainless Steel	[1GS 150]	08L06904



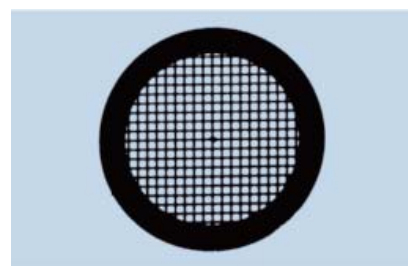
Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
HF	169	150	131	38	60	2
HR	165	150	131	34	42	2
1G_150	169	150	125	44	35	5

GRIDS FOR ELECTRON MICROSCOPY

PLAIN MESH GRIDS

200 Mesh

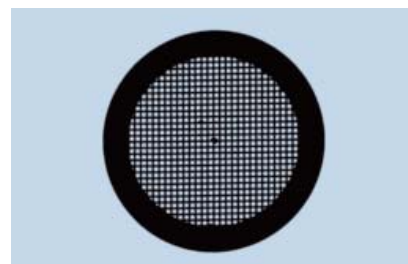
	Old part reference	Order code
Copper	[1GC 200]	07D00905
Copper	[HF 34Cu]	03D00656
Copper with Rhodium	[HR 24Cu/Rh]	03D00709
Nickel	[1GN 200]	07D01905
Nickel	[HF 34Ni]	03D00657
Nickel (High Grade)	[HR 24Ni]	03D00710
Gold	[1GG 200]	07D02905
Gold (High Grade)	[HR 24Au]	03D00711
Titanium	[1GT 200]	08L07905
Molybdenum	[1GM 200]	08L05905
Aluminium	[1GA 200]	08L04905
Stainless Steel	[1GS 200]	08L06905



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
HF	127	200	101	26	63	2
HR	127	200	103	24	66	2
1G_200	127	200	90	37	50	5

300 Mesh

	Old part reference	Order code
Copper	[1GC 300]	07D00906
Copper	[HF 35Cu]	03D00658
Copper with Rhodium	[HR 25Cu/Rh]	03D00712
Nickel	[1GN 300]	07D01906
Nickel	[HF 35Ni]	03D00659
Nickel (High Grade)	[HR 25Ni]	03D00713
Gold	[1GG 300]	07D02906
Gold (High Grade)	[HR 25Au]	03D00714
Titanium	[1GT 300]	08L07906
Molybdenum	[1GM 300]	08L05906
Aluminium	[1GA 300]	08L04906
Stainless Steel	[1GS 300]	08L06906



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
HF	85	300	60	25	50	2
HR	84	300	61	23	53	2
1G_300	85	300	54	31*	40	5

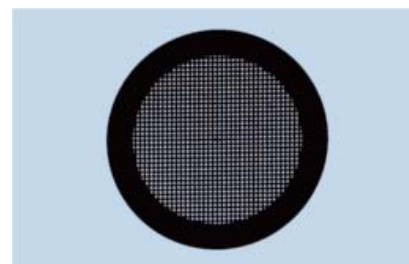
*Except 1GA300 which is 23µ bar width and 6µ tolerance

GRIDS FOR ELECTRON MICROSCOPY

PLAIN MESH GRIDS

400 Mesh

	Old part reference	Order code
Copper	[1GC 400]	07D00907
Copper	[HF 36Cu]	03D00661
Copper with Rhodium	[HR 26Cu/Rh]	03D00715
Nickel	[1GN 400]	07D01907
Nickel	[HF 36Ni]	03D00662
Nickel (High Grade)	[HR 26Ni]	03D00716
Gold	[1GG 400]	07D02907
Gold (High Grade)	[HR 26Au]	03D00717
Titanium	[1GT 400]	08L07907
Molybdenum	[1GM 400]	08L05907
Aluminium	[1GA 400]	08L04907
Stainless Steel	[1GS 400]	08L06907

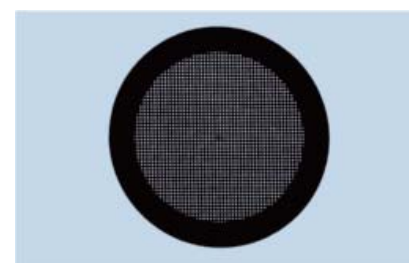


Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
HF	64	400	41	23	41	2
HR	63	400	43	20	47	2
1G_400	64	400	38	26*	35	5

*Except 1GA400 which is 30µ bar width and 1GT400 and IGS400 which have 21µ bar width

500 Mesh

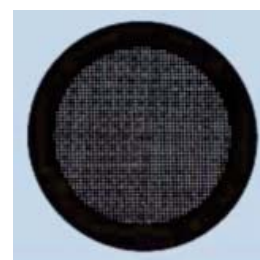
	Old part reference	Order code
Copper	[1GC 500]	07D00908
Nickel	[1GN 500]	07D01908
Gold	[1GG 500]	07D02908



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
1G_500	51	500	28	23	30	5

600 Mesh

	Old part reference	Order code
Copper	[1GC 600]	07D00960
Copper with Rhodium	[1GCR 600]	07D00961
Nickel	[1GN 600]	07D01961



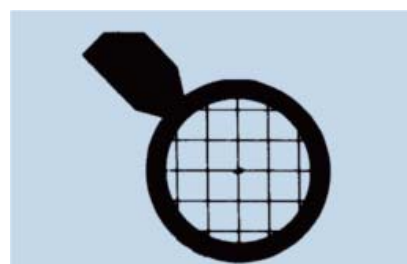
Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
1G_600	41	600	26	15	42	5

GRIDS FOR ELECTRON MICROSCOPY

MESH GRIDS WITH HANDLES

50 Mesh

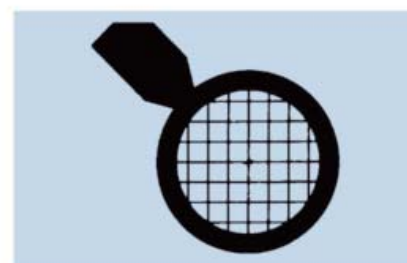
	Old part reference	Order code
Copper	[3HGC 50]	07D30901
Nickel	[3HGN 50]	07D31901
Gold	[3HGG 50]	07D32901
Titanium	[3HGT 50]	08L37901
Molybdenum	[3HGM 50]	08L35901
Stainless Steel	[3HGS 50]	08L36901
Aluminium	[3HGA 50]	08L34901



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
3HG_50	508	50	425	83	70	5

75 Mesh

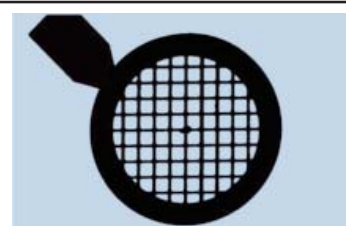
	Old part reference	Order code
Copper	[3HGC 75]	07D30902
Nickel	[3HGN 75]	07D31902
Gold	[3HGG 75]	07D32902
Titanium	[3HGT 75]	08L37902
Molybdenum	[3HGM 75]	08L35902
Aluminium	[3HGA 75]	08L34902
Stainless Steel	[3HGS 75]	08L36902



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
3HG_75	339	75	284	55	70	5

100 Mesh

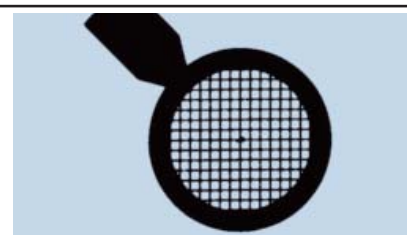
	Old part reference	Order code
Copper	[3HGC 100]	07D30903
Nickel	[3HGN 100]	07D31903



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
3HG_100	254	100	204	50	65	5

150 Mesh

	Old part reference	Order code
Copper	[3HGC 150]	07D30904
Nickel	[3HGN 150]	07D31904
Gold	[3HGG 150]	07D32904



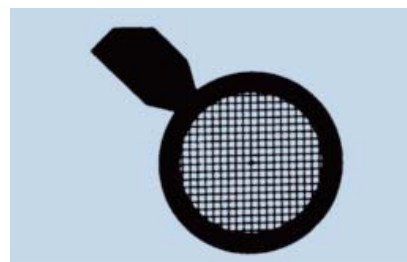
Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
3HG_150	169	150	125	44	55	5

GRIDS FOR ELECTRON MICROSCOPY

MESH GRIDS WITH HANDLES

200 Mesh

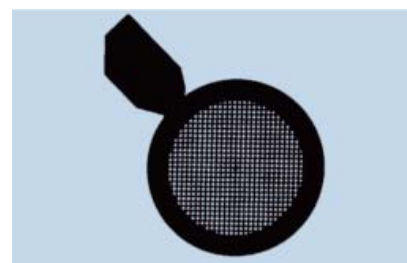
	Old part reference	Order code
Copper	[3HGC 200]	07D30905
Nickel	[3HGN 200]	07D31905
Gold	[3HGG 200]	07D32905
Titanium	[3HGT 200]	08L37905
Molybdenum	[3HGM 200]	08L35905
Stainless Steel	[3HGS 200]	08L36905
Aluminium	[3HGA 200]	08L34905



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
3HG_200	127	200	90	37	50	5

300 Mesh

	Old part reference	Order code
Copper	[3HGC 300]	07D30906
Nickel	[3HGN 300]	07D31906
Gold	[3HGG 300]	07D32906
Titanium	[3HGT 300]	08L37906
Molybdenum	[3HGM 300]	08L35906
Stainless Steel	[3HGS 300]	08L36906
Aluminium	[3HGA 300]	08L34906

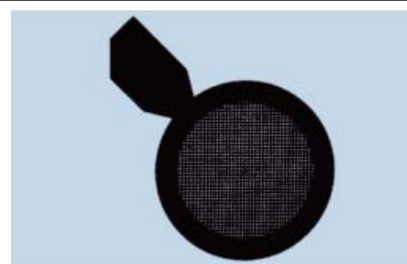


Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
3HG_300	85	300	54	31	40	5

*Except 3HGA300 which is 23μ bar width and 6μ tolerance

400 Mesh

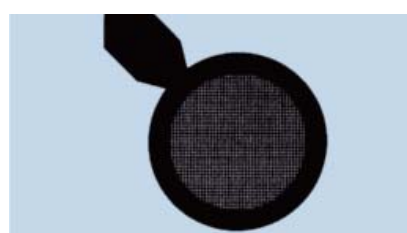
	Old part reference	Order code
Copper	[3HGC 400]	07D30907
Nickel	[3HGN 400]	07D31907
Gold	[3HGG 400]	07D32907



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
3HG_400	64	400	38	26	35	5

500 Mesh

	Old part reference	Order code
Copper	[3HGC 500]	07D30908
Nickel	[3HGN 500]	07D31908



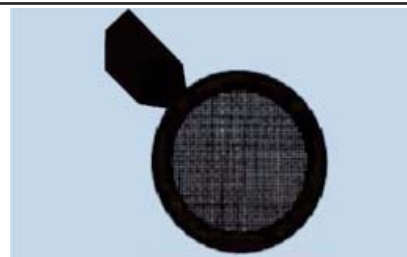
Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
3HG_500	51	500	28	23	30	5

GRIDS FOR ELECTRON MICROSCOPY

MESH GRIDS WITH HANDLES

600 Mesh

	Old part reference	Order code
Copper	[3HGC 600]	07D30960
Copper with Rhodium	[3GCR 600]	07D30961
Nickel	[3HGN 600]	07D31961



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
3HG_600	41	600	26	15	42	5

PARALLEL LINES

254 Micron Pitch

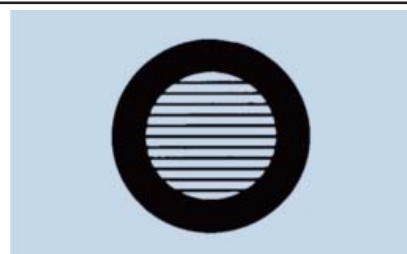
	Old part reference	Order code
Copper	[1GC 100L]	07D00909
Nickel	[1GN 100L]	07D01909



Pattern	Pitch microns	Mesh	Space microns	Bar microns	Transmission %	Tolerance +/- microns
1G_100L	254	100	204	50	65	5

165 Micron Pitch

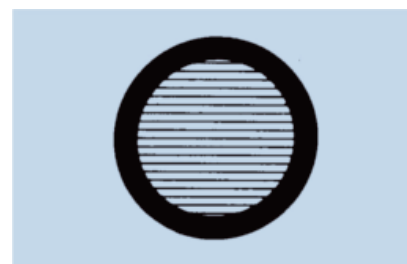
	Old part reference	Order code
Copper	[HF 45]	03D00808
Nickel	[HF 45]	03D00809



Pattern	Pitch microns	Mesh	Space microns	Bar microns	Transmission %	Tolerance +/- microns
HF 45	165	150	127	38	60	3

127 Micron Pitch


	Old part reference	Order code
Copper	[1GC 200L]	07D00910
Copper	[HF 46]	03D00810
Nickel	[1GN 200L]	07D01910
Nickel	[HF 46]	03D00811




Pattern	Pitch microns	Mesh	Space microns	Bar microns	Transmission %	Tolerance +/- microns
HF46	127	200	92	35	53	2
1G_200L	127	200	102	25	80	5


GRIDS FOR ELECTRON MICROSCOPY


PARALLEL LINES

84 Micron Pitch						
		Old part reference	Order code			
Copper		[1GC 300L]	07D00911			
Nickel		[1GN 300L]	07D01911			
Pattern	Pitch microns	Mesh	Space microns	Bar microns	Transmission %	Tolerance +/- microns
1G_300L	84	300	62	22	55	5

PARALLEL LINES WITH HANDLES

254 Micron Pitch						
		Old part reference	Order code			
Copper		[3HGC 100L]	07D30909			
Nickel		[3HGN 100L]	07D31909			
Pattern	Pitch microns	Mesh	Space microns	Bar microns	Transmission %	Tolerance +/- microns
3HG_100L	254	100	204	50	65	5

127 Micron Pitch						
		Old part reference	Order code			
Copper		[3HGC 200L]	07D30910			
Nickel		[3HGN 200L]	07D31910			
Pattern	Pitch microns	Mesh	Space microns	Bar microns	Transmission %	Tolerance +/- microns
3HG_200L	127	200	102	25	65	5

84 Micron Pitch						
		Old part reference	Order code			
Copper		[3HGC 300L]	07D30911			
Nickel		[3HGN 300L]	07D31911			
Pattern	Pitch microns	Mesh	Space microns	Bar microns	Transmission %	Tolerance +/- microns
3HG_300L	84	300	62	22	55	5

GRIDS FOR ELECTRON MICROSCOPY

PARALLEL LINES WITH DIVIDERS

254 Micron Pitch

	Old part reference	Order code
Copper	[1GC 100LD]	07D00912
Nickel	[1GN 100LD]	07D01912
Gold	[1GG 100LD]	07D02912



Pattern	Pitch microns	Mesh	Space microns	Bar microns	Transmission %	Tolerance +/- microns
1G_100LD	254	100	204	50	65	5

165 Micron Pitch

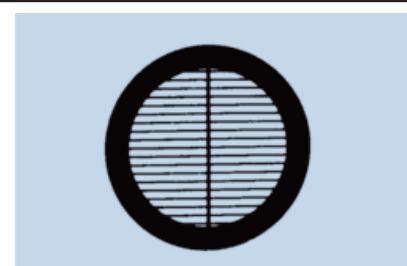
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Copper	[HF 43]	03D00804
Nickel	[HF 43]	03D00805



Pattern	Pitch microns	Mesh	Space microns	Bar microns	Transmission %	Tolerance +/- microns
HF 43	165	150	127	38	60	2

127 Micron Pitch

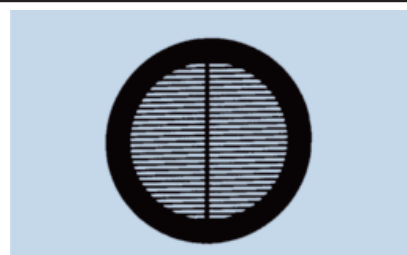
	Old part reference	Order code
Copper	[1GC 200LD]	07D00913
Copper	[HF 44]	03D00807
Nickel	[1GN 200LD]	07D01913
Nickel	[HF 44]	03D00806
Gold	[1GG 200LD]	07D02913



Pattern	Pitch microns	Mesh	Space microns	Bar microns	Transmission %	Tolerance +/- microns
HF 44	127	200	92	35	53	2
1G_200LD	127	200	92	35	53	5

84 Micron Pitch

	Old part reference	Order code
Copper	[1GC 300LD]	07D00914
Nickel	[1GN 300LD]	07D01914
Gold	[1GG 300LD]	07D02914



Pattern	Pitch microns	Mesh	Space microns	Bar microns	Transmission %	Tolerance +/- microns
1G_300LD	84	300	62	22	55	5

GRIDS FOR ELECTRON MICROSCOPY

PARALLEL LINES WITH DIVIDERS AND HANDLES

254 Micron Pitch

	Old part reference	Order code
Copper	[3HGC 100LD]	07D30912
Nickel	[3HGN 100LD]	07D31912



Pattern	Pitch microns	Mesh	Space microns	Bar microns	Transmission %	Tolerance +/- microns
3HG_100LD	254	100	204	50	65	5

127 Micron Pitch

	Old part reference	Order code
Copper	[3HGC 200LD]	07D30913
Nickel	[3HGN 200LD]	07D31913



Pattern	Pitch microns	Mesh	Space microns	Bar microns	Transmission %	Tolerance +/- microns
3HG_200LD	127	200	102	25	65	5

84 Micron Pitch

	Old part reference	Order code
Copper	[3HGC 300LD]	07D30914
Nickel	[3HGN 300LD]	07D31914

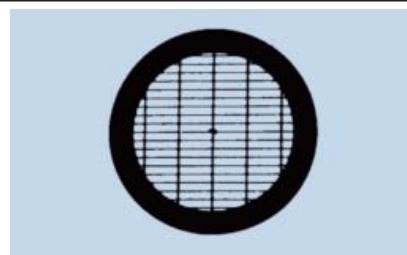


Pattern	Pitch microns	Mesh	Space microns	Bar microns	Transmission %	Tolerance +/- microns
3HG_300LD	84	300	62	22	55	5

SLOTTED MESH GRIDS

50/200

	Old part reference	Order code
Copper	[1GC 50/200]	07D00915
Nickel	[1GN 50/200]	07D01915



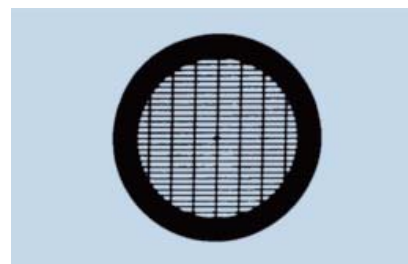
Pattern	Pitch microns	Mesh	Space microns	Bar microns	Transmission %	Tolerance +/- microns
1G_50/200	508x127	50x200	425x87	40	62	5

GRIDS FOR ELECTRON MICROSCOPY

SLOTTED MESH GRIDS

75/300

	Old part reference	Order code
Copper	[1GC 75/300]	07D00916
Copper	[HF 41]	03D00800
Copper with Rhodium	[HR 27]	03D00718
Nickel	[1GN 75/300]	07D01916
Nickel	[HF 41]	03D00801
Nickel (High Grade)	[HR 27]	03D00719
Gold	[1GG 75/300]	07D02916
Gold (High Grade)	[HR 27]	03D00720



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
HR 27	338x84	75x300	288x61	23	62	2
HF 41	338x84	75x300	278x59	23	62	2
1G_75/300	340x85	75x300	285x55	30	62	5

Also available with staggered grid in copper, nickel, copper with rhodium and gold. See next page.

100/400

	Old part reference	Order code
Copper	[1GC 100/400]	07D00917
Copper	[HF 42]	03D00802
Nickel	[1GN 100/400]	07D01917
Nickel	[HF 42]	03D00803
Gold	[HF 42]	03D00825

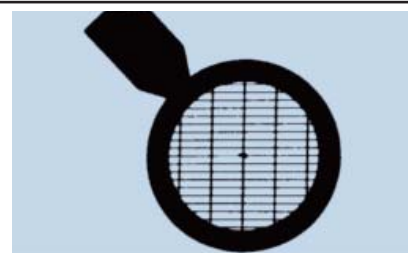


Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
HF 42	254x63	100x400	231x40	23	57	2
1G_100x400	254x64	100x400	231x40	23	57	5

SLOTTED MESH GRIDS WITH HANDLES

50/200

	Old part reference	Order code
Copper	[3HGC 50/200]	07D30915
Nickel	[3GN 50/200]	07D31915



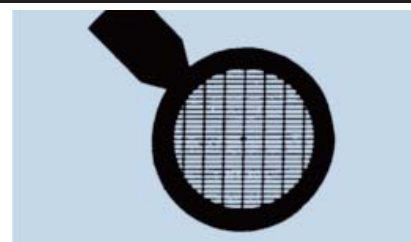
Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
3HG_50/200	508x127	50x200	425x87	40	62	5

GRIDS FOR ELECTRON MICROSCOPY

SLOTTED MESH GRIDS WITH HANDLES

75/300

	Old part reference	Order code
Copper	[3HGC 75/300]	07D30916
Nickel	[3HGN 75/300]	07D031916

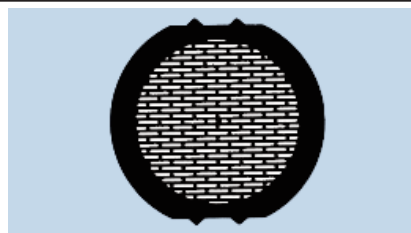


Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
3HG_75/300	340x85	75x300	288x55	30	62	5

STAGGERED GRIDS

75/300 Staggered

	Old part reference	Order code
Copper		07D00970
Copper with Rhodium		07D00971
Nickel		07D01970
Gold		07D02970

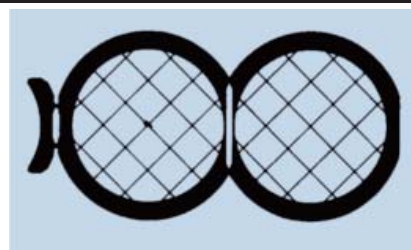


Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
75/300 Staggered	339x85	75x300	284x55	30	55	5

FOLDING GRIDS

50/50

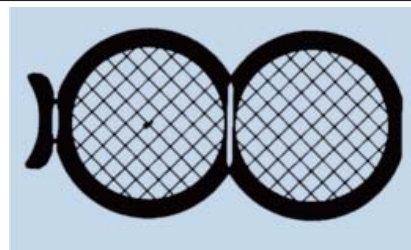
	Old part reference	Order code
Copper	[4GCF 50/50]	07D00927
Nickel	[4GNF 50/50]	07D01927
Gold	[4GGF 50/50]	07D02927



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
4G_F50/50	508 & 508	50x50	425	83	70 & 70	5

100/100

	Old part reference	Order code
Copper	[4GCF 100/100]	07D00928
Nickel	[4GNF 100/100]	07D01928
Gold	[4GGF 100/100]	07D02928
Titanium	[4GTF 100/100]	08L07928
Molybdenum	[4GMF 100/100]	08L05928
Stainless Steel	[4GSF 100/100]	08L06928



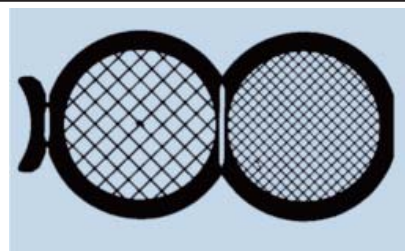
Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
4G_F100/100	254 & 254	100x100	205	49	65 & 65	5

GRIDS FOR ELECTRON MICROSCOPY

FOLDING GRIDS

100/200

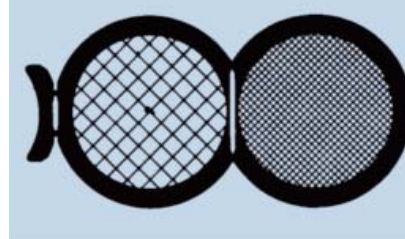
	Old part reference	Order code
Copper	[4GCF 100/200]	07D00929
Nickel	[4GNF 100/200]	07D01929
Gold	[4GGF 100/200]	07D02929
Titanium	[4GTF 100/200]	08L07929
Molybdenum	[4GMF 100/200]	08L05929
Stainless Steel	[4GSF 100/200]	08L06929



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
4G_F100/200	254 & 127	100x200	205 & 90	49 & 37	65 & 50	5

100/300

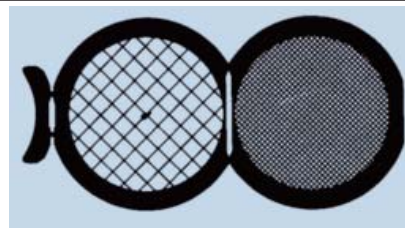
	Old part reference	Order code
Copper	[4GCF 100/300]	07D00930
Nickel	[4GNF 100/300]	07D01930
Gold	[4GGF 100/300]	07D02930
Titanium	[4GTF 100/300]	08L07930
Stainless Steel	[4GSF 100/300]	08L06930



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
4G_F100/300	254 & 85	100x300	205 & 57	49 & 28	65 & 45	5

100/400

	Old part reference	Order code
Copper	[4GCF 100/400]	07D00931
Nickel	[4GNF 100/400]	07D01931

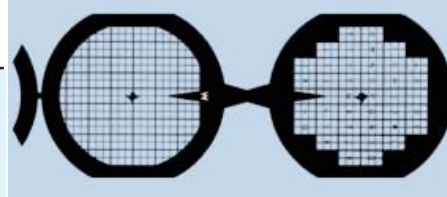


Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
4G_F100/400	254 & 64	100x400	205 & 38	49 & 26	65 & 35	5

200/200 Reference

Combination of H1 and H2 grids in a folded format. LH grid is a standard 200 mesh, RH grid is 200 mesh reference pattern.

The size of type of grid	Old part reference	Order code
Copper	[H12]	03D00609
Nickel	[H12]	03D00632
Copper with Rhodium	[H12]	03D00631



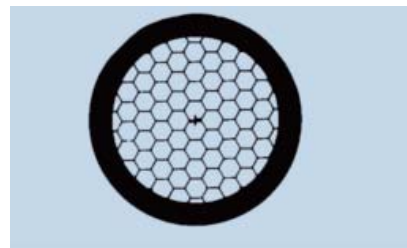
Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
H12	127/127	200	112x108	15 & 19	78 & 72	2

GRIDS FOR ELECTRON MICROSCOPY

HEXAGONAL GRIDS

90 Mesh

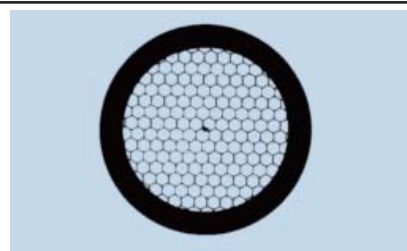
	Old part reference	Order code
Copper	[8GC 90]	07D00948
Nickel	[8GN 90]	07D01948
Gold	[8GG 90]	07D02948



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
8G_90	272x317	85	224x269	48	70	5

135 Mesh

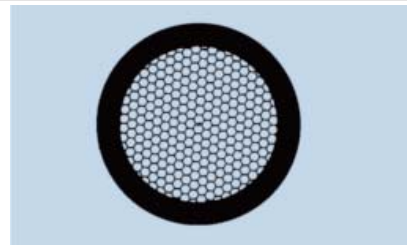
	Old part reference	Order code
Copper	[8GC 135]	07D00949
Nickel	[8GN 135]	07D01949
Gold	[8GG 135]	07D02949



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
8G_135	186x208	130	148x172	36	65	5

180 Mesh

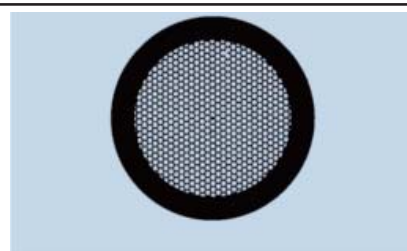
	Old part reference	Order code
Copper	[8GC 180]	07D00950
Nickel	[8GN 180]	07D01950
Gold	[8GG 180]	07D02950



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
8G_180	139x157	170	111x129	28	65	5

270 Mesh

	Old part reference	Order code
Copper	[8GC 270]	07D00951
Nickel	[8GN 270]	07D01951
Gold	[8GG 270]	07D02951



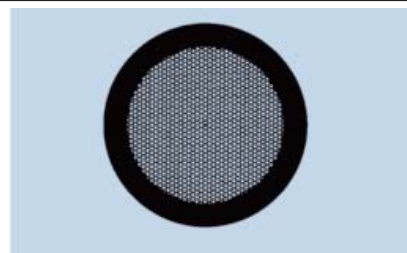
Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
8G_270	86x99	275	62x75	24	55	5

GRIDS FOR ELECTRON MICROSCOPY

HEXAGONAL GRIDS

360 Mesh

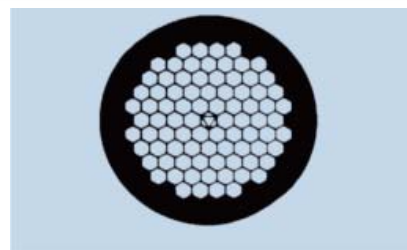
	Old part reference	Order code
Copper	[8GC 360]	07D00952
Nickel	[8GN 360]	07D01952
Gold	[8GG 360]	07D02952



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
8G_360	67x79	350	41x51	26	40	5

H5 Pattern

	Old part reference	Order code
Copper	[H5]	03D00603
Nickel	[H5]	03D00604
Gold	[H5]	03D00605

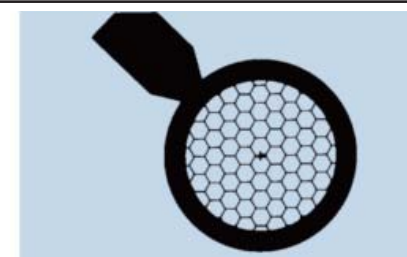


Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
H5	230x262	100	205x237	25	80	2

HEXAGONAL GRIDS WITH HANDLES

90 Mesh

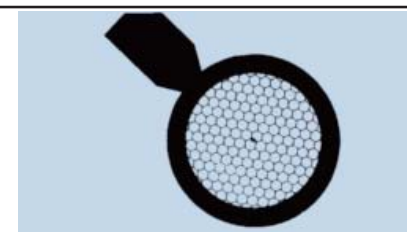
	Old part reference	Order code
Copper	[8HGC 90]	07D30948
Nickel	[8HGN 90]	07D31948



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
8HG_90	272x317	85	224x269	48	70	5

135 Mesh

	Old part reference	Order code
Copper	[8HGC 135]	07D30949



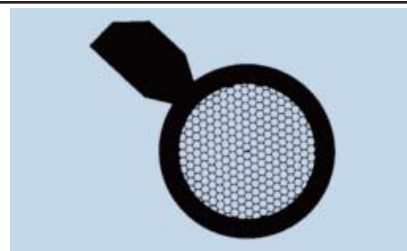
Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
8HG_135	184x208	130	148x172	36	65	5

GRIDS FOR ELECTRON MICROSCOPY

HEXAGONAL GRIDS WITH HANDLES

180 Mesh

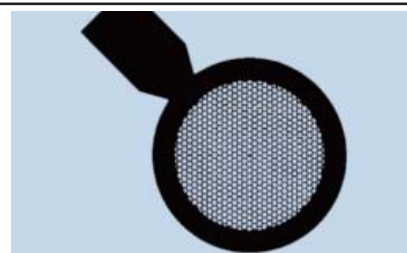
	Old part reference	Order code
Copper	[8HGC 180]	07D30950
Nickel	[8HGN 180]	07D31950
Gold	[8HGG 180]	07D32950



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
8HG_180	139x157	170	111x129	28	65	5

270 Mesh

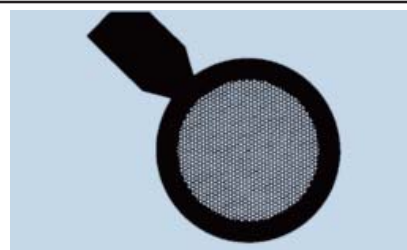
	Old part reference	Order code
Copper	[8HGC 270]	07D30951
Nickel	[8HGN 270]	07D31951
Gold	[8HGG 270]	03D32951



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
8HG_270	86x99	275	62x75	24	55	5

360 Mesh

	Old part reference	Order code
Copper	[8HGC 360]	07D30952
Nickel	[8HGN 360]	07D31952
Gold	[8HGG 360]	03D32952

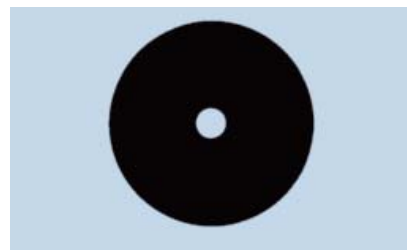


Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
8HG_360	67x79	350	41x51	26	40	5

SOLID GRIDS

0.4mm Hole Grids

	Old part reference	Order code
Copper	[1GC 4H]	07D00918
Nickel	[1GN 4H]	07D01918
Gold	[1GG 4H]	07D02918
Titanium	[1GT 4H]	08L07918
Molybdenum	[1GM 4H]	08L05918
Stainless Steel	[1GS 4H]	08L06918



Pattern	Hole microns	Tolerance +/- microns
1G_4H	400	20

GRIDS FOR ELECTRON MICROSCOPY

SOLID GRIDS

0.6mm Hole Grids

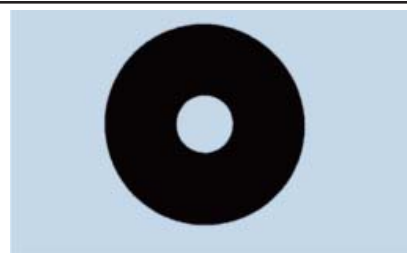
	Old part reference	Order code
Copper	[1GC 6H]	07D00919
Copper	[HF 48]	03D00814
Nickel	[1GN 6H]	07D01919
Nickel	[HF 48]	03D00815
Gold	[1GG 6H]	07D02919
Molybdenum	[1GM 6H]	08L05919



Pattern	Hole microns	Tolerance +/- microns
HF48	600	10
1G_6H	600	10

0.8mm Hole Grids

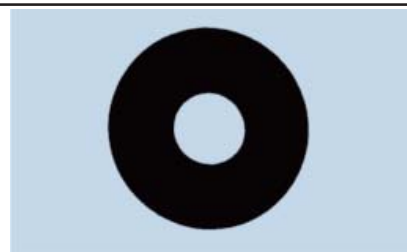
	Old part reference	Order code
Copper	[1GC 8H]	07D00920
Nickel	[1GN 8H]	07D01920



Pattern	Hole microns	Tolerance +/- microns
1G_8H	800	20

1.0mm Hole Grids

	Old part reference	Order code
Copper	[1GC 10H]	07D00921
Copper	[HF 47]	03D00812
Nickel	[1GN 10H]	07D01921
Nickel	[HF 47]	03D00813
Gold	[1GG 10H]	07D02921
Titanium	[1GT 10H]	08L07921
Molybdenum	[1GM 10H]	08L05921
Aluminium	[1GA 10H]	08L04921
Stainless Steel	[1GS 10H]	08L06921



Pattern	Hole microns	Tolerance +/- microns
HF47	1000	10
1G_10H	1000	20

GRIDS FOR ELECTRON MICROSCOPY

SOLID GRIDS

1.5mm Hole Grids

	Old part reference	Order code
Copper	[1GC 15H]	07D00922
Nickel	[1GN 15H]	07D01922
Titanium	[1GT 15H]	08L07922
Molybdenum	[1GM 15H]	08L05922
Aluminium	[1GA 15H]	08L04922
Stainless Steel	[1GS 15H]	08L06922



Pattern	Hole microns	Tolerance +/- microns
1G_15H	1500	20

2.0mm Hole Grids

	Old part reference	Order code
Copper	[1GC 20H]	07D00923
Nickel	[1GN 20H]	07D01923



Pattern	Hole microns	Tolerance +/- microns
1G_20H	2000	20

2mm x 980µ Slot Grids

	Old part reference	Order code
Copper	[1GC 12S]	07D00924
Nickel	[1GN 12S]	07D01924
Copper with Rhodium	[1GCR 12S]	07DSPEC
Gold	[1GG 12S]	07D02924
Titanium	[1GT 12S]	08L07924
Molybdenum	[1GM 12S]	08L05924
Aluminium	[1GA 12S]	08L04924
Stainless Steel	[1GS 12S]	08L06924



Pattern	Hole microns	Tolerance +/- microns
1G_12H	980x2000	20

GRIDS FOR ELECTRON MICROSCOPY

SOLID GRIDS

0.42mm Slot Grids

	Old part reference	Order code
Copper	[1GC 42S]	07D00925
Nickel	[1GN 42S]	07D01925
Gold	[1GG 42S]	07D02925
Titanium	[1GT 42S]	08L07925
Molybdenum	[1GM 42S]	08L05925
Aluminium	[1GA 42S]	08L04925
Stainless Steel	[1GS 42S]	08L06925



Pattern	Hole microns	Tolerance +/- microns
1G_42H	420x2000	20

2mm x 1000µ Slot Grids

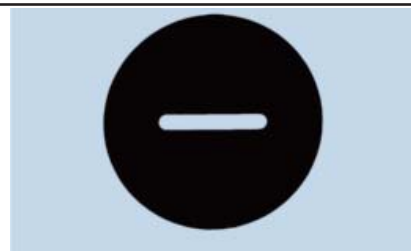
The size of type of grid	Old part reference	Order code
Copper	[HF 49]	03D00816
Nickel	[HF 49]	03D00817
Copper with Rhodium	[HF 49]	03D00824



Pattern	Hole microns	Tolerance +/- microns
HF 49	2000x1000	10

0.2 mm x 1.5 mm Slots

The size of type of grid	Old part reference	Order code
Copper	[HF 50]	03D00818
Nickel	[HF 50]	03D00819



Pattern	Hole microns	Tolerance +/- microns
HF 50	200x1500	10

0.2mm x 0.5mm Slots

	Old part reference	Order code
Copper	[HF 51]	03D00820
Nickel	[HF 51]	03D00821



Pattern	Hole microns	Tolerance +/- microns
HF 50	200x500	10

GRIDS FOR ELECTRON MICROSCOPY

SOLID GRIDS

7 Hexagon Grid

	Old part reference	Order code
Copper	[1HGC 7HEX]	07D00926
Nickel	[1HGN 7HEX]	07D01926
Gold	[1HGG 7HEX]	07D02926



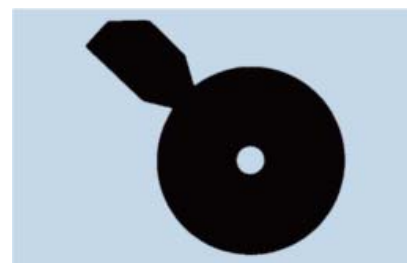
Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
1HG_7HEX	610x690	40	525x604	85	85%	20

SOLID GRIDS WITH HANDLES

0.4mm Hole Grids

	Old part reference	Order code
Copper	[3HGC 4H]	07D30918
Nickel	[3HGN 4H]	07D31918

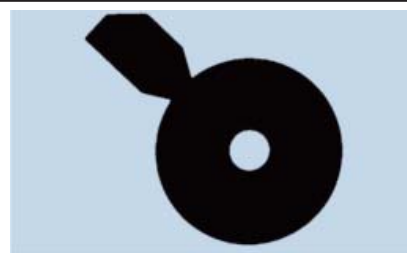
Pattern	Hole microns	Tolerance +/- microns
3HG_4H	400dia	20



0.6mm Hole Grids

	Old part reference	Order code
Copper	[3HGC 6H]	07D30919
Nickel	[3HGN 6H]	07D31919

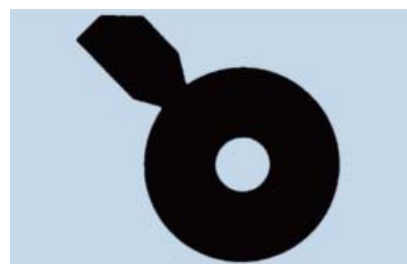
Pattern	Hole microns	Tolerance +/- microns
3HG_6H	600dia	20



0.8mm Hole Grids

	Old part reference	Order code
Copper	[3HGC 8H]	07D30920
Nickel	[3HGN 8H]	07D31920

Pattern	Hole microns	Tolerance +/- microns
3HG_8H	800dia	20



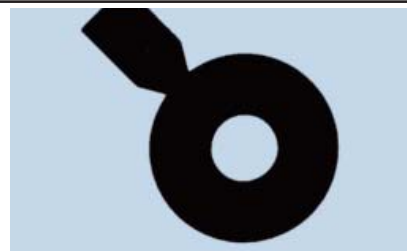
GRIDS FOR ELECTRON MICROSCOPY

SOLID GRIDS WITH HANDLES

1.0mm Hole Grids

	Old part reference	Order code
Copper	[3HGC 10H]	07D30921
Nickel	[3HGN 10H]	07D31921
Gold	[3HGG 10H]	07D32921

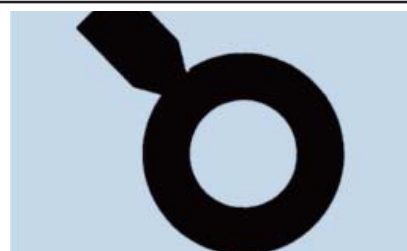
Pattern	Hole microns	Tolerance +/- microns
3HG_10H	1000dia	20



1.5mm Hole Grids

	Old part reference	Order code
Copper	[3HGC 15H]	07D30980
Nickel	[3HGN 15H]	07D31980

Pattern	Hole microns	Tolerance +/- microns
3HG_15H	1500dia	20



2mm x 980µ Slot Grids

	Old part reference	Order code
Copper	[3HGC 12S]	07D30924
Nickel	[3HGN 12S]	07D31924
Gold	[3HGG 12S]	07D32924

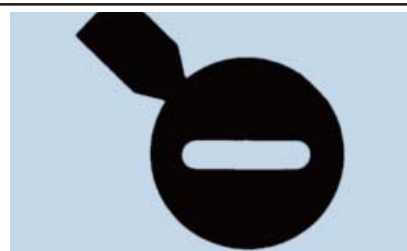
Pattern	Hole microns	Tolerance +/- microns
3HG_12H	980x2000	20



0.42mm Slot Grids

	Old part reference	Order code
Copper	[3HGC 42S]	07D30925
Nickel	[3HGN 42S]	07D31925

Pattern	Hole microns	Tolerance +/- microns
3HG_42H	420x2000	20

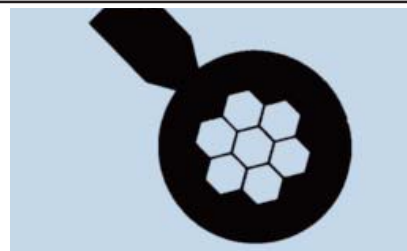


GRIDS FOR ELECTRON MICROSCOPY

SOLID GRIDS WITH HANDLES

7 Hexagon Grids

	Old part reference	Order code
Copper	[3HGC 7HEX]	07D30926
Nickel	[3HGN 7HEX]	07D31926

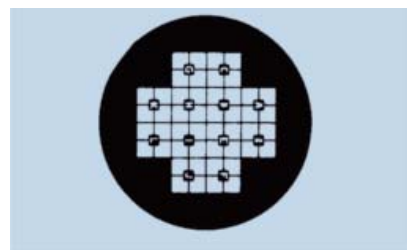


Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
3HG_7HEX		Please ask for information				

SPECIAL TYPES

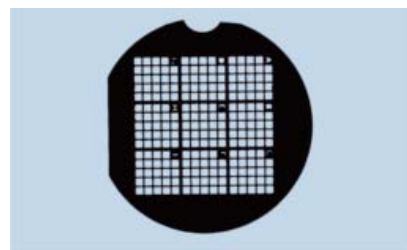
100 Mesh Finders

	Old part reference	Order code
Copper	[7FGC 100]	07D00932
Nickel	[7FGN 100]	07D01932
Gold	[7FGG 100]	07D02932



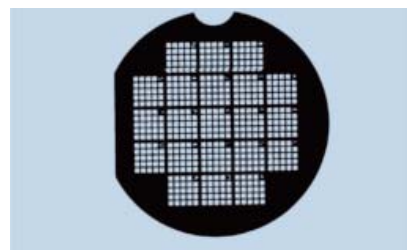
200 Mesh Finders

	Old part reference	Order code
Copper	[7FGC 200]	07D00933
Nickel	[7FGN 200]	07D01933
Gold	[7FGG 200]	07D02933



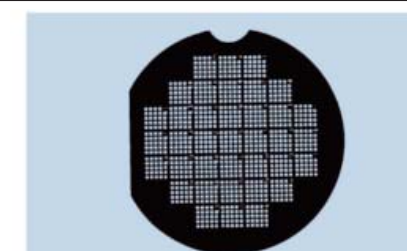
300 Mesh Finders

	Old part reference	Order code
Copper	[7FGC 300]	07D00934
Nickel	[7FGN 300]	07D01934
Gold	[7FGG 300]	07D02934



400 Mesh Finders

	Old part reference	Order code
Copper	[7FGC 400]	07D00935
Nickel	[7FGN 400]	07D01935
Gold	[7FGG 400]	07D02935

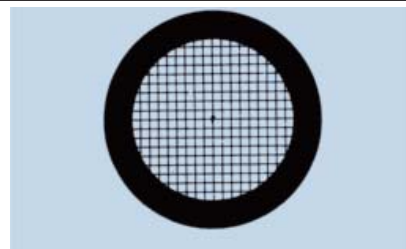


GRIDS FOR ELECTRON MICROSCOPY

SPECIAL TYPES

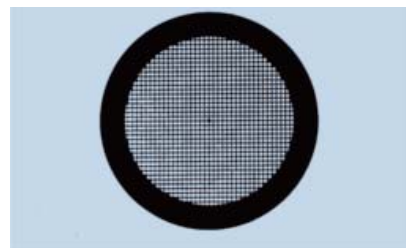
200 Mesh High Open Area

	Old part reference	Order code
Copper	[11GC 200]	07D00940



400 Mesh High Open Area

	Old part reference	Order code
Copper	[11GC 400]	07D00941



75 Mesh Freeze Fracture

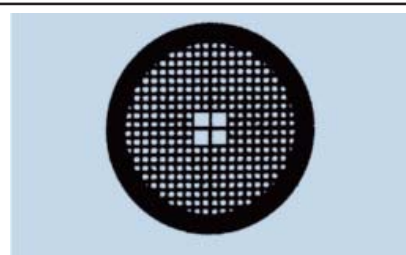
	Old part reference	Order code
Copper	[5GC 75FF]	07D00942
Nickel	[5GN 75FF]	07D01942
Gold	[5GG 75FF]	07D02942



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
5G_75FF	339	75	284	55	70	5

200 Mesh Freeze Fracture

	Old part reference	Order code
Copper/Rhodium	[HF14]	03D00610
Nickel	[HF14]	03D00611
Gold	[HF14]	03D00612



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
HF 14	127	200	105	22	70	2

GRIDS FOR ELECTRON MICROSCOPY

SPECIAL TYPES

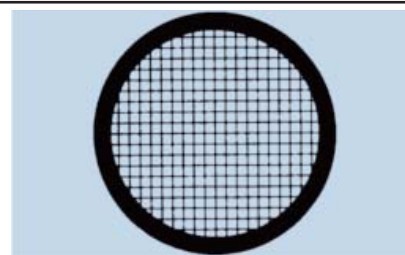
Chien Grid

	Old part reference	Order code
Copper	[9GC 20H]	07D00936



150 Mesh Tissue Processing Screen Diameter 3.8mm

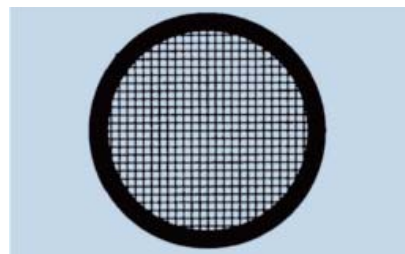
	Old part reference	Order code
Copper	[6GC 150]	07D00944
Nickel	[6GN 150]	07D01944



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
6G_150	170	150	126	44	55	5

200 Mesh Tissue Processing Screen Diameter 3.8mm

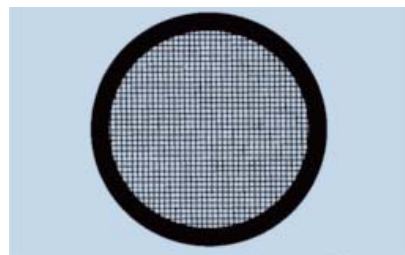
	Old part reference	Order code
Copper	[6GC 200]	07D00945
Nickel	[6GN 200]	07D01945



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
6G_200	127	200	90	37	50	5

300 Mesh Tissue Processing Screen Diameter 3.8mm

	Old part reference	Order code
Copper	[6GC 300]	07D00946
Nickel	[6GN 300]	07D01946



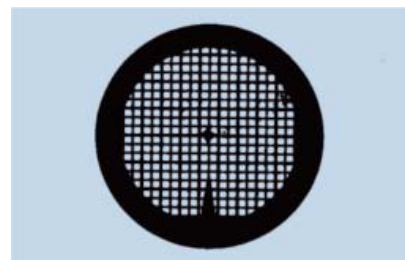
Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
6G_300	85	300	57	28	45	5

GRIDS FOR ELECTRON MICROSCOPY

SPECIAL TYPES

H1 Pattern, 200 Mesh

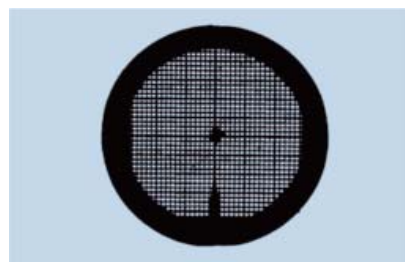
	Old part reference	Order code
Copper	[H1]	03D00600
Nickel	[H1]	03D00601
Gold	[H1]	03D00602



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
H1	127	200	112	15	78	2

H4 Pattern, 400 Mesh

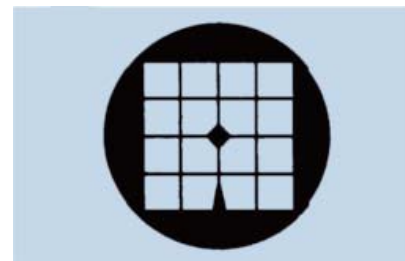
	Old part reference	Order code
Copper	[H4]	03D00620
Nickel	[H4]	03D00621
Gold	[H4]	03D00622



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
H4	63	400	51	12	65	2

H9 Pattern, 50 Mesh

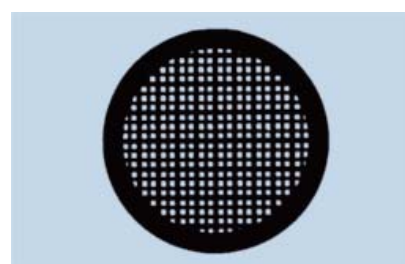
	Old part reference	Order code
Copper	[H9]	03D00606
Nickel	[H9]	03D00607
Gold	[H9]	03D00608



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
H9	508	50	483	25	90	2

HF52 Pattern, 100 Mesh

	Old part reference	Order code
Copper	[HF52]	03D00822
Nickel	[HF52]	03D00823



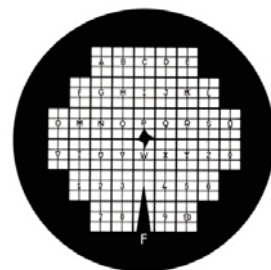
Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
HF52	254x127	100x200	72	47x25	46	2

GRIDS FOR ELECTRON MICROSCOPY

SPECIAL TYPES

H2 Reference Pattern, 200 Mesh

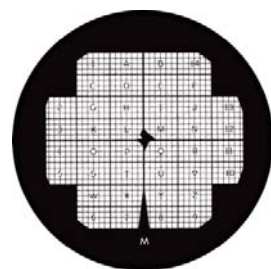
	Old part reference	Order code
Copper	[H2]	03D00753
Nickel	[H2]	03D00754
Gold	[H2]	03D00755



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
H2	127	200	108	18	72	2

H7 Reference Pattern, 400 Mesh

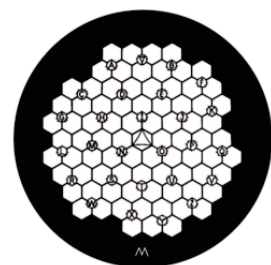
	Old part reference	Order code
Copper	[H7]	03D00759
Nickel	[H7]	03D00760
Gold	[H7]	03D00761



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
H7	63	400	51	12	65	2

H6 Reference Pattern

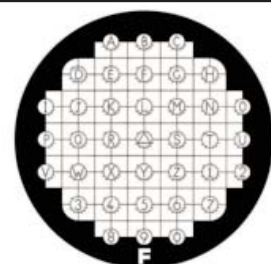
	Old part reference	Order code
Copper	[H6]	03D00756
Nickel	[H6]	03D00757
Gold	[H6]	03D00758



Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
H6	230x262	100	205x237	23	80	2

H15 Reference Pattern

	Old part reference	Order code
Copper/Rhodium	[HF15]	03D00750
Nickel	[HF15]	03D00751
Gold	[HF15]	03D00752



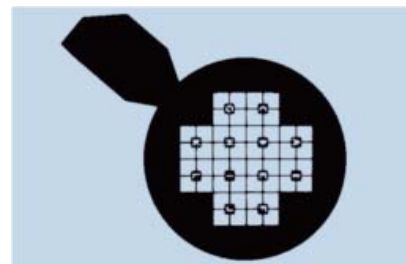
Pattern	Pitch microns	Mesh	Hole microns	Bar microns	Transmission %	Tolerance +/- microns
HF15	188	135	168	20	80	2

GRIDS FOR ELECTRON MICROSCOPY

SPECIAL TYPES WITH HANDLES

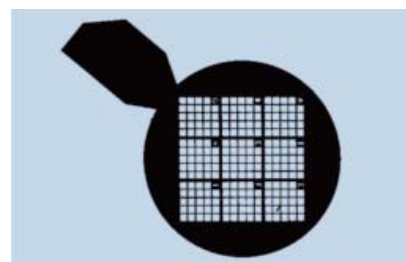
100 Mesh Finders

	Old part reference	Order code
Copper	[7HFGC 100]	07D30932
Nickel	[7HFGN 100]	07D30932



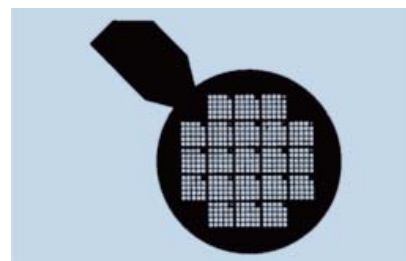
200 Mesh Finders

	Old part reference	Order code
Copper	[7HFGC 200]	07D30933
Nickel	[7HFGN 200]	07D31933
Gold	[7HFGG 200]	07D32933



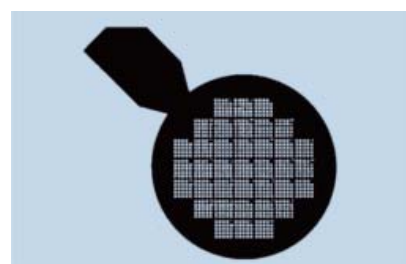
300 Mesh Finders

	Old part reference	Order code
Copper	[7HFGC 300]	07D30934
Nickel	[7HFGN 300]	07D31934
Gold	[7HFGG 300]	07D32934



400 Mesh Finders

	Old part reference	Order code
Copper	[7HFGC 400]	07D30935
Nickel	[7HFGN 400]	07D31935
Gold	[7HFGG 400]	07D32935

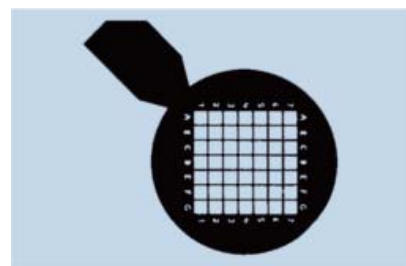


GRIDS FOR ELECTRON MICROSCOPY

SPECIAL TYPES WITH HANDLES

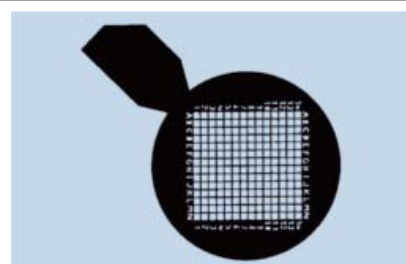
100 Mesh Co-ordinate

	Old part reference	Order code
Copper	[7HXC 100]	07D00937
Nickel	[7HXN 100]	07D01937



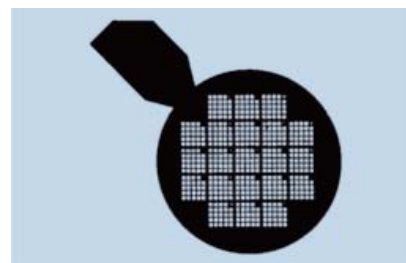
200 Mesh Co-ordinate

	Old part reference	Order code
Copper	[7HXC 200]	07D00938
Nickel	[7HXN 200]	07D01938



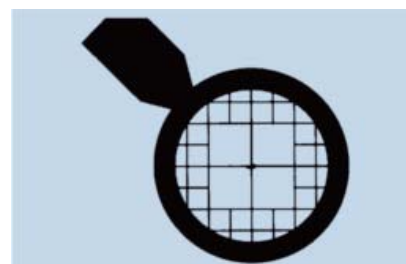
300 Mesh Co-ordinate

	Old part reference	Order code
Copper	[7HXC 300]	07D00939
Nickel	[7HXN 300]	07D01939



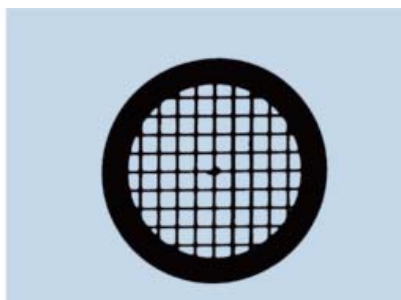
75 Mesh Freeze Fracture

	Old part reference	Order code
Copper	[5HGC 75FF]	07D30942
Nickel	[5HGN 75FF]	07D31942



VALUE RANGE OF ELECTRON MICROSCOPY SUPPORT GRIDS

- Low cost
- Copper or Nickel
- 50 to 400 mesh
- 120 grids per vial



The VALUE range has been introduced to satisfy the needs of the general purpose user who buy grids in quantity, where the very highest quality of the research grade grids is not required, and price is very important. All grids have a centre mark.

Specifications

Mesh Size	Material	Order Code	Pitch (μ)	Bar Width (μ)	Hole Size (μ)	Transmission (%)
50	Copper	09D00901	508	83	425	70
	Nickel	09D01901	508	83	425	70
100	Copper	09D00903	254	50	204	65
	Nickel	09D01903	254	50	204	65
150	Copper	09D00904	169	44	125	55
	Nickel	09D01904	169	44	125	55
200	Copper	09D00905	127	37	90	50
	Nickel	09D01905	127	37	90	50
300	Copper	09D00906	85	31	54	40
	Nickel	09D01906	85	31	54	40
400	Copper	09D00907	64	26	38	35
	Nickel	09D01907	64	26	38	35

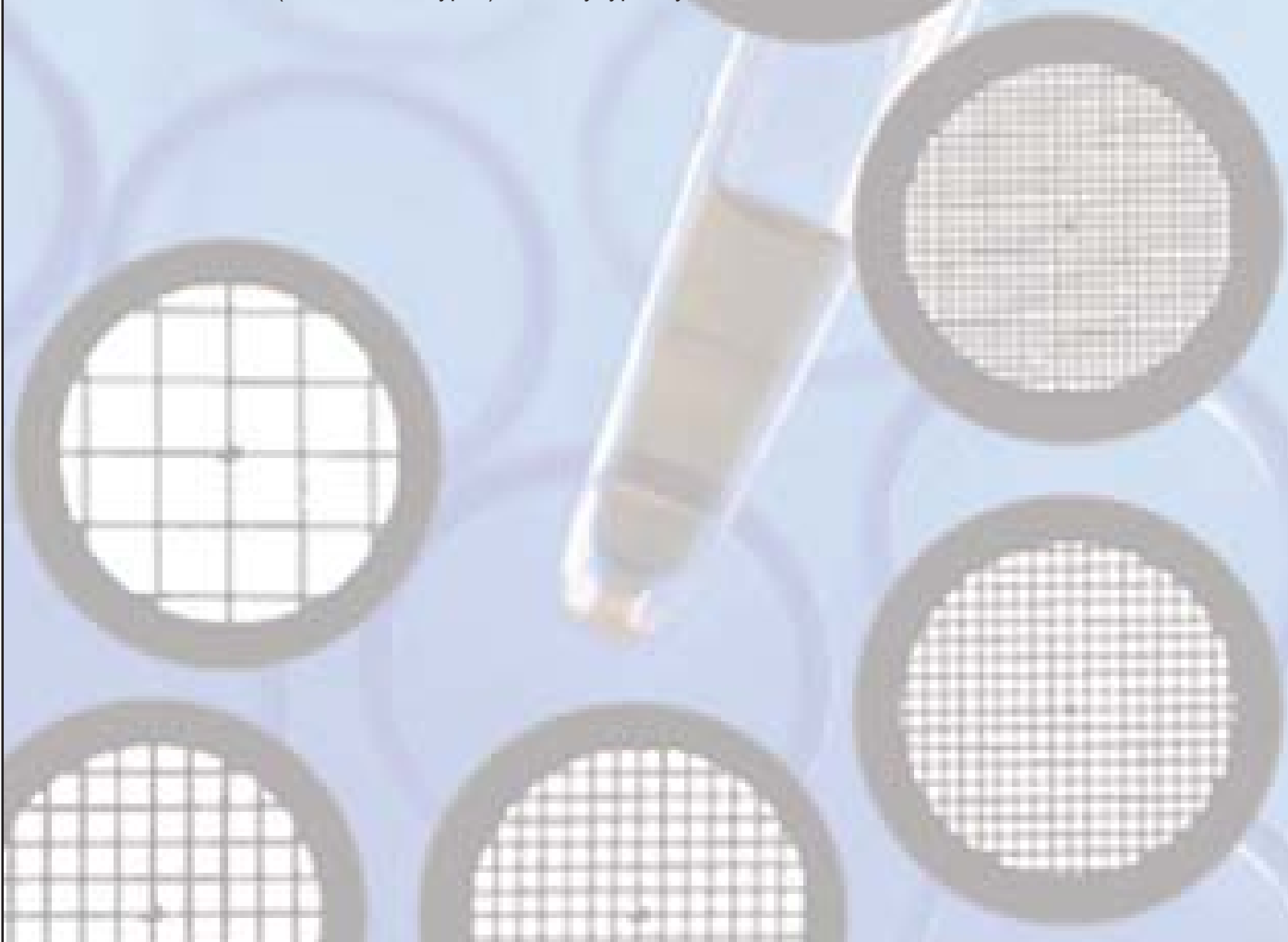
Please note minimum order quantity 5 vials of each type. All copper and nickel Value grids are supplied in vials of a minimum 120 pieces. Dimensions given are for comparative purposes only, there may be slight variations and occasional imperfections. Prices exclude shipping.

CARBON COATED GRIDS

All coated grids are supplied in vials of 50 pieces and we have listed here the most common mesh grids from 200 to 400 mesh. We can of course provide this support film coating on any of our extensive range of grid products – please enquire for prices.

DESCRIPTION	MESH	PITCH MICRONS	HOLE MICRONS	BAR MICRONS	TRANSMISSION %
HF34Cu with carbon	200	127	101	26	63 (+/-2%)
HF34Ni with carbon	200	127	101	26	63 (+/-2%)
HF35Cu with carbon	300	85	60	25	50 (+/-2%)
HF35Ni with carbon	300	85	60	25	50 (+/-2%)
HF36Cu with carbon	400	64	41	23	41 (+/-2%)
HF36Ni with carbon	400	64	41	23	41 (+/-2%)

Minimum order is 2 vials (can be mixed types). Delivery typically 3-4 weeks





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