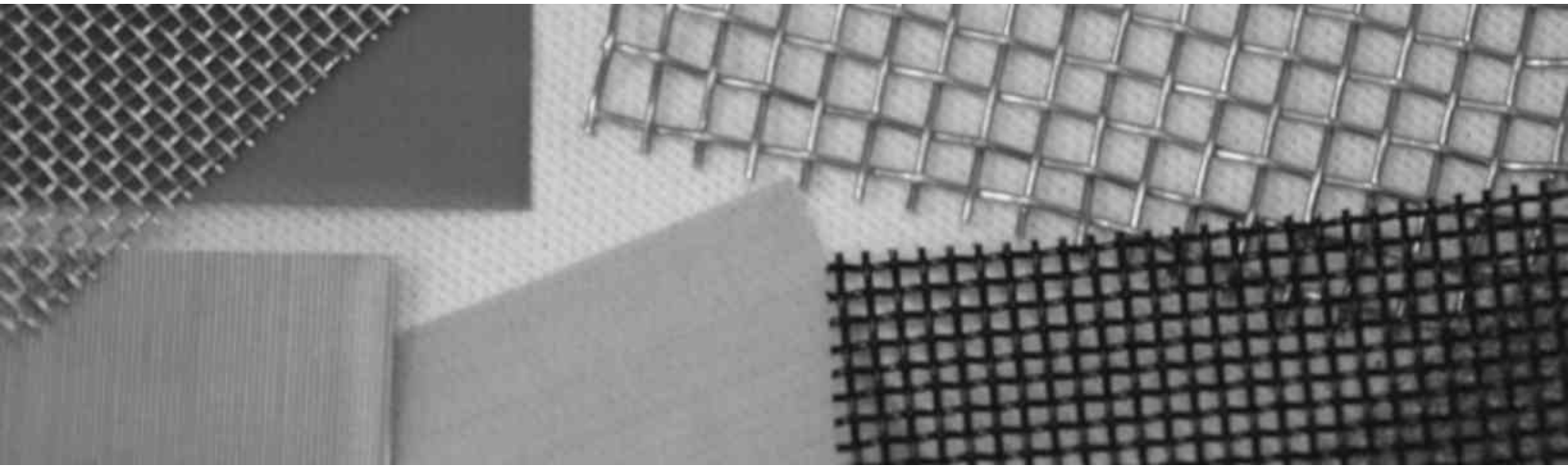


PRODUCT CATALOG

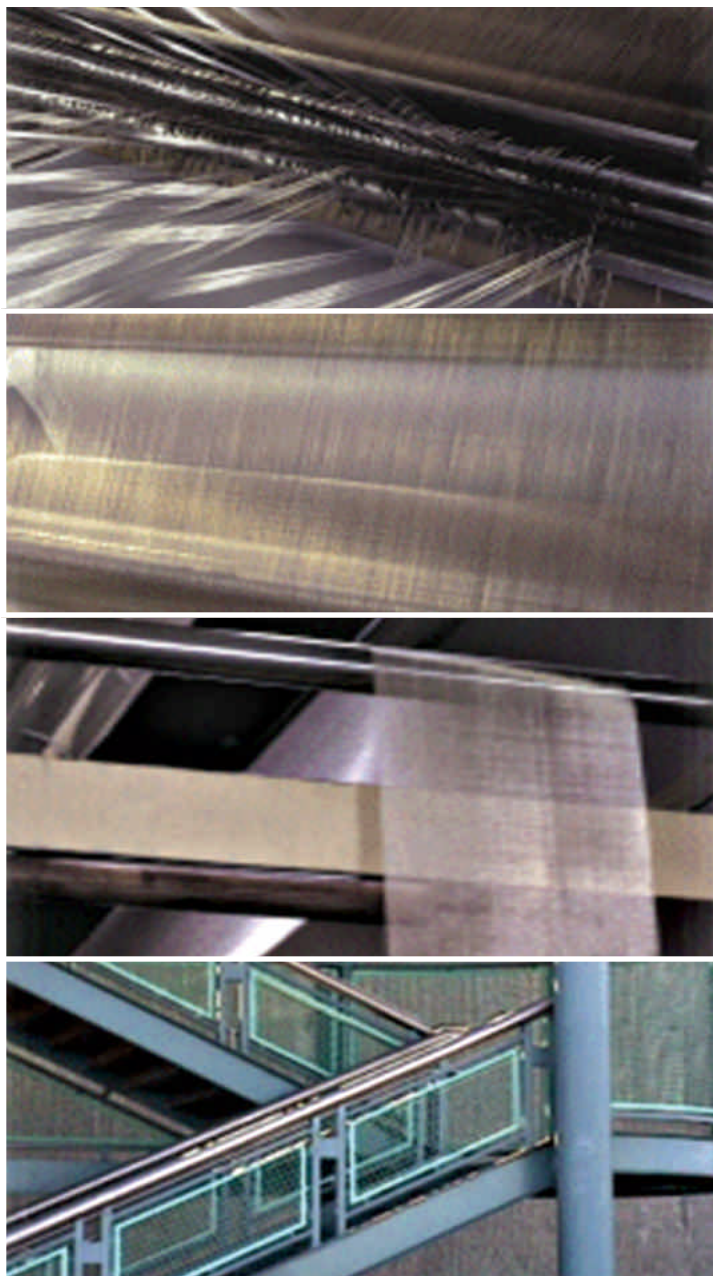
QUALITY • SERVICE • DEPENDABLE • UNDERSTANDING • COMMITTED • RELIABLE • TRUSTWORTHY



GERARD
DANIEL
WORLDWIDE

WIRE CLOTH • WIRE

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COMPANY OVERVIEW

GERARD DANIEL WORLDWIDE

We are the largest supplier of industrial wire cloth to the Filtration, Aerospace, Automotive, and Electronic industries. This leadership position has been built on our Inventory, Quality, Service, Competitive Pricing, Custom Weaving, and Manufacturing services.

INVENTORY

Gerard Daniel Worldwide maintains the world's largest inventory of wire cloth. With this expansive inventory, we are able to reduce customer inventory levels and incorporate "just-in-time" manufacturing techniques. Over 5,000 types of mesh are available from stock.



QUALITY & GLOBAL SOURCING

We have established exclusive, long-standing associations with leading weavers in Europe and the Far East, ensuring the availability of the best quality products. Quality control is maintained through every phase of processing. For the most demanding requirements, Gerard Daniel Worldwide's laboratory facility provides additional testing and analytical capabilities.

WEAVING & MANUFACTURING

We are the largest fully integrated domestic weaver of industrial wire cloth. The ability to weave long and short runs, custom jobs, and special alloys provides our customers with the widest range of products, domestically made. Our manufacturing and engineering teams will ensure that the right product is manufactured for your specific needs.

VENDOR MANAGED INVENTORY PROGRAMS

For those customers with manufacturing locations throughout the world, GDW can design a global program to ensure that the right product at the right price is delivered on time, and inventory is controlled to optimal levels.

REGIONAL LOCATIONS TO SERVE YOU BETTER

East Coast, West Coast, Southwest, Canada or Europe, we are strategically located to provide product and service to meet your needs. Our Corporate Offices, distribution and manufacturing operations are located in Hanover, Pennsylvania. We also have facilities in Fontana, California; Tulsa, Oklahoma; Toronto, Canada and Limerick, Ireland. Our personnel at any of these locations will be pleased to assist you with your wire, wire cloth, perforated or expanded metal requirements.

OUR HISTORY

Gerard Daniel Worldwide began as a wire cloth distributor in the Northeast United States in the 1950's. The business was founded on two principles: partnering with low cost and/or high quality mills throughout the world and offering customers products and services not otherwise available to them. Throughout the years, GDW has grown in size, geographic reach, manufacturing capability, and product range. Today, GDW is represented by five geographic divisions: Eastern, Western, and Southwestern U.S., Canada, and Europe. Each division has its own rich heritage and accumulated experiences.

Eastern U.S. Division: In the early 1990's GDW acquired their largest manufacturing operation, Keystone Wire Cloth. Keystone was one of the first wire weaving mills in the U.S., established in 1910, and was a fully integrated wire and weaving mill. During the end of the 1990's, two other manufacturing product lines were added to the Eastern Division: Specialty Products and Electro-Chemical Products (ECP). Specialty Products' emphasis is welded and inter-crimp custom meshes, louver screen, and drawn wire. ECP manufactures meshes for the specialized electro-chemical and hardboard industries. In addition to the manufacturing facilities, the Eastern Division includes a new 75,000 sq. ft. distribution facility that boasts the largest inventory in the wire cloth business and is the home of our corporate headquarters.

Western U.S. Division: In the 1960's GDW acquired what would become the basis for their Western U.S. division, City Wire Cloth. City Wire Cloth was established in 1909 and was a weaver and fabricator of specialty wire cloth. After they joined the GDW family, they also operated as the west coast distribution outlet for GDW. During the 1990's, Sunset Wire & Steel was added to the Western Division group, bringing twenty years of specialty wire drawing experience and capability. Today the Western Division operates from a modern 90,000 sq. ft. facility that is an integrated specialty wire mill, weaving operation, and distribution facility.

Southwestern Division: The Southwestern division is the newest facility in the GDW family. This facility was developed specifically with our customers in mind. In order to cut down on lead-time, this facility will have a full inventory as well as a complete slit fabrication shop to accommodate your every need.

Canadian Division: The Canadian division was previously known as Crooks Wire Cloth. Crooks also joined the GDW family during the late 1990's, offering similar services as the other divisions, with the addition of perforated and expanded metal products. In addition to their distribution facility, the Canadian division offers custom fabrication services.

European Division: Located in the Republic of Ireland, the European division was previously known as "The Wire Weavers Ireland" (TWWI). TWWI brings thirty years of fine mesh weaving experience and state of the art weaving equipment to the GDW family. In addition to their manufacturing facility, they also distribute all of the same products and services to the European market.

OUR HISTORY



GDW/Headquarters
& Eastern Division
Hanover, PA



Western Division
Fontana, CA



Canadian Division
Ontario, Canada



Southwestern Division
Tulsa, OK



European Division
Limerick, Ireland



WIRE CLOTH TERMINOLOGY

BOLTING CLOTH

Stainless steel mesh woven in plain weave construction using small wire diameter, thus providing a high percentage open area.

CALENDERED WIRE CLOTH

Wire cloth that has passed through a pair of heavy rolls to reduce the thickness of the fabric, or to flatten the intersections to provide a smooth surface.

CLEAR OPENING (Space)

Space between adjacent parallel wires.

COUNT (Mesh)

Number of openings in a linear inch.

CRIMP

Corrugations in wires to permit locking them in place when perpendicular to one another.

DOUBLE CRIMP

Warp and shute wires lay in each crimp.

DOUBLE INTERMEDIATE CRIMP

Usually the warp wires lay in every crimp in the shute wires, and the shute wires lay in every other crimp in the warp wires.

FILL WIRES (Shute Wires)

Wires running across the width of the cloth as a woven.

GAUGE (Wire Size)

To avoid possible errors, specify wire diameter in decimal sizes rather than gauge numbers.

INTERMEDIATE CRIMP

Warp and shute wires lay in every other crimp.

MARKET GRADES

Most commonly used sizes of industrial wire cloth specifications selected for general purpose work.

MESH

Number of openings in a linear inch measured from the center of one wire to a point 1" distant

OPENING (Space)

Clear opening between adjacent parallel wires; not affected by diameter of the wire.

PLAIN WEAVE

Each warp wire and each shute wire pass over one and under the next adjacent wire; wires are crimped in the weaving operation.

PLAIN DUTCH WEAVE

Warp wires are generally larger than the shute wires. Shute wires are closely spaced to provide a dense weave with wedge shaped openings.

SELVAGE

Finished edges running the length of the roll to prevent unraveling.

SHUTE WIRES

Wires running across the width of the cloth as woven.

SQUARE MESH

Wire cloth with mesh count the same in both directions.

TWILLED WEAVE

Each warp wire and each shute wire pass successively over two and under the next adjacent pair of wires.

TWILLED DUTCH WEAVE

Combination of Plain Dutch and Twilled weaves.

WARP WIRE

Wires running the length of the cloth as woven.

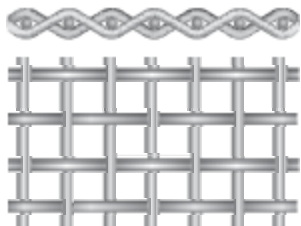
WELDED WIRE CLOTH

Warp and shute wires lay flat (no crimp), welded at the intersections.

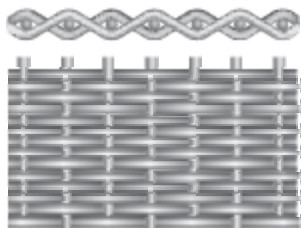
WIRE CLOTH TERMINOLOGY

WEAVES

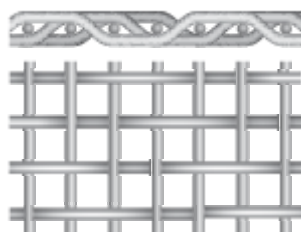
PLAIN WEAVE



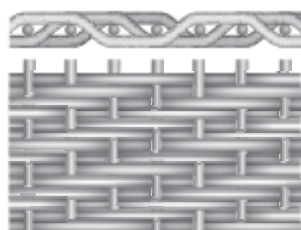
PLAIN BUTCH WEAVE



TWILL WEAVE

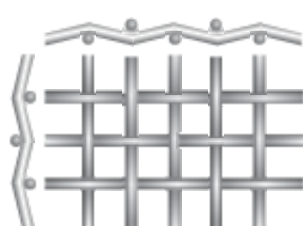


TWILLED BUTCH WEAVE



CRIMPS

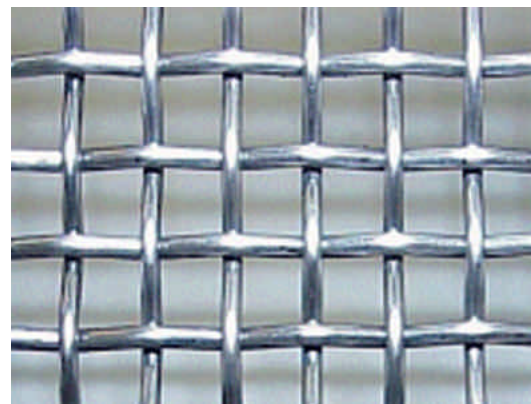
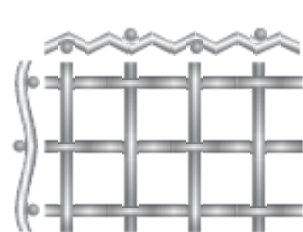
DOUBLE CRIMP



INTERMEDIATE CRIMP

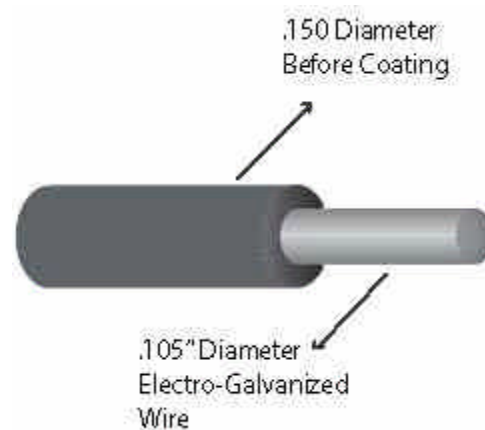


DOUBLE INTERMEDIATE CRIMP



PVC COATED WIRE MESH

is used for Machine Guarding and Automation Guarding applications. The thick coating of PVC makes it easy to handle and aesthetically pleasing.



WIRE CLOTH — METAL COMPARISON

The following general metal comparison is intended as a guide only to help you select the optimum metal for your application. Virtually all metals can be woven into wire cloth. For best results, please describe the application on your order and/or discuss it with one of our sales representatives.

HEAT RESISTING ALLOYS

High Nickel copper alloys such as Monel and Inconel can withstand temperatures up to 1800°F and resist corrosion in acids, sea water, and caustic solutions.

NICKEL

Excellent corrosion resistance in most environments except sulfurous conditions most commonly used in petrochemical and heat treating applications.

ALUMINUM

Light weight, good electrical conductor, and resists atmospheric corrosion; 5056 alloy is used for higher strength.

COPPER

Good formability with excellent electrical and thermal conductivity. Resists corrosion from fresh and salt water, alkaline solutions, and atmospheric conditions.

BRASS

Commonly 80% copper / 20% zinc. Good formability with lower thermal conductivity and higher tensile strength than copper, yet resists corrosion like copper.

BRONZE

Most common 90% copper / 10% zinc. Better corrosion resistance and lower strength than brass.

RARE METALS

Such as Tantalum, Molybdenum, Titanium, Silver, and Platinum can be furnished as specified.

STEEL

Low carbon (C1008) is most commonly used. For high tensile strength and good abrasion resistance, high carbon/hard drawn is recommended.

STAINLESS STEEL

The benefits of stainless steel are that it has high strength, good heat resistance and resists rusting.

Type 304

Stainless is the basic alloy of this group and is used extensively in the manufacturing of wire cloth. It contains nominally 18% Chromium and 8% Nickel.

Types 316

With its addition of 2% minimum Molybdenum, it provides considerable increased resistance to certain corrosive media. It also provides increased strength at high temperatures.

Types 304L & 316L

Lower in carbon content, these are frequently used to retain corrosion resisting properties after welding.

Type 321

Containing Titanium, it is frequently specified where there is a possibility of sensitization with a resulting loss of corrosion resistance.

Type 347

For welded assemblies which operate in corrosive environments, Type 347 is used to minimize sensitization.

Contains Columbium, which does not volatilize during welding.

Type 430

Stainless Steel contains 17% nominal Chromium and is more resistant to chemical attack and high temperature scaling. This alloy is magnetic and is not heat treatable.

WIRE CLOTH — ALLOY SELECTION CONSIDERATIONS

CORROSION RESISTANCE OF METALS

Chemical	Brass	Copper	Inconel	Monel	Nickel	Nichrome	Stainless Steel	Steel
Alcohol	E	E	E	F	G	G	G	G
Alkalis	F	X	E	E	E	G	E	E
Ammonia	X	X	E	G	F	E	G	G
Ammonia Salts	X	X	E	F	F	E	F	F
Brine	G	G	E	E	F	G	X	G
Cyanide	X	X	G	X	F	E	E	G
Hydrochloric	F	X	F	G	F	E	X	X
Hydrofluoric	X	F	G	E	F	F	X	X
Nitric	X	X	G	X	X	E	E	X
Sulfuric	F	F	F	G	F	E	X	X

E = Excellent G = Good F = Fair X = Not Recommended

CORROSION RESISTANT ALLOYS

MONEL® ALLOY 400

High strength, good weld ability, excellent corrosion resistance over a wide range of temperatures and conditions.

INCONEL® ALLOY 600

High nickel, high chromium content for resistance to oxidizing and reducing environments; for severely corrosive environments at elevated temperatures. Good oxidation resistance to 2150°F. Good formability.

HASTELLOY® ALLOY C-276

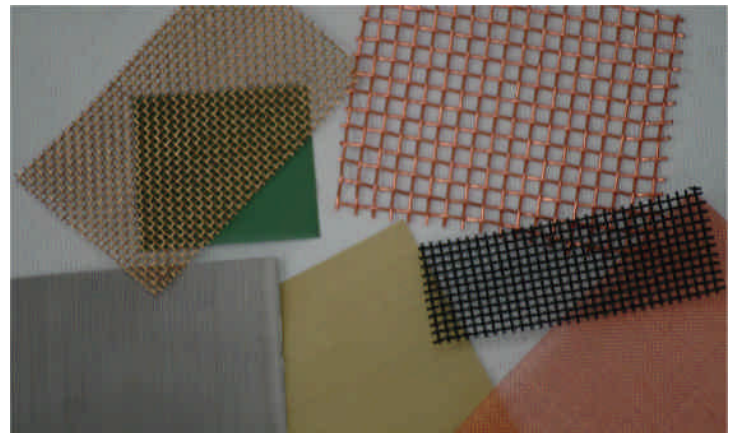
Outstanding corrosion resistance in reducing and oxidizing environment. Maintains corrosion resistance in welded condition. Excellent resistance to pitting and stress-corrosion cracking.

HASTELLOY® ALLOY C-22

Better corrosion than C-276 in select environments. Resistance to a wide range of organic acids and the resistance to chloride-induced SSC, and other reducing chemicals. Also has resistance to some oxidizing environments.

NICKEL 200/201

Commercially pure wrought nickel, good mechanical properties, excellent resistance to many corrosives. Nickel 201 has low carbon (0.02% max.) for applications over 600°F (315°C).



APPROXIMATE MAXIMUM OPERATING TEMPERATURES

Metal	Temperature
Stainless Steel 304	1500 °F
Incoloy	1600 °F
Stainless Steel 330	1650 °F
Nichrome	1700 °F
Inconel	1800 °F
Nichrome V	2000 °F
Nickel	2700 °F
Molybdenum	4700 °F

CONVERSION FACTORS

STAINLESS STEEL

The weight in pounds of any size wire per linear foot should be determined by the following formula:

$$\text{Weight per linear foot} = D^2 \times 12 \times 0.7854 \times 0.283$$

D = diameter in inches;

12 = length in inches;

0.7854 = conversion factor of the area of circles;

0.283 = density of steel in pounds per cubic inch

ALLOY OR NONFERROUS WIRE

The weight in pounds should be determined by the above formula, substituting the densities as indicated below:

DENSITY	Metal	Density
	Steel (including stainless)	0.283
	Copper	0.322
	High Brass (70/30)	0.308
	Brass (80/20)	0.313
	Commercial Bronze (90/10)	0.318
	Phosphor	0.318
	Monel	0.318
	Nickel	0.319
	Aluminum (50/56)	0.096

WIDTH OF OPENING

The width of opening of industrial wire cloth should be determined by the following formula:

$$\text{Width of opening} = (1 - DM/M)$$

D = wire diameter

M = mesh

OPEN AREA

The percentage of open area of industrial wire cloth, except space cloth (indicated below), should be determined by the following formula:

$$\text{Percentage of open area} = (OM)^2 \times 100$$

O = size of opening

M = mesh

OPEN AREA; SPACE CLOTH

The percentage of open area for space cloth should be determined by the following formula:

$$\text{Percentage of open area} = [O / (O + D)]^2 \times 100$$

O = size of opening

D = diameter

SPECIAL ALLOYS

Standard weights of wire cloth in any of the following metals will be found to be percentages, as noted, of the standard weights on Stainless Steel wire cloth.

STANDARD WEIGHTS

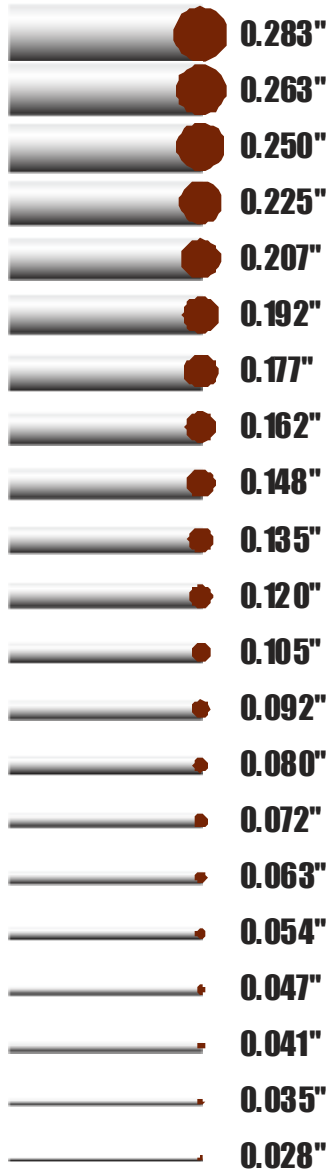
Metal	Factor of Stainless Steel
High Brass (70/30)	107.67
Commercial Bronze (90/10)	111.16
Phosphor Bronze	112.00
Plain Steel	99.03
Pure Nickel	111.75
Aluminum	33.84

COMPARATIVE DECIMAL DIAMETER

INDUSTRIAL WIRE CLOTH STANDARDS	Industrial Wire Cloth Standard Wire Sizes	Nearest Equivalent Steel Gauge (W & M Sizes)	Steel Gauge (W & M sizes)	Industrial Wire Cloth Standard Wire Sizes	Nearest Equivalent Steel Gauge (W & M Sizes)	Steel Gauge (W & M sizes)
		.307"	.3065"	0	.020"	.0204
	.283"	.2830"	1	.018"	.0181	26
	.263"	.2625"	2	.017"	.0173	27
	.250"	.2437"	3	.016"	.0162	28
		.2253"	4	.015"	.0150	29
	.225"	.2070"	5	.014"	.0140	30
	.207"	.1920"	6	.0135"		
	.192"	.1770"	7	.013"	.0132	31
	.177"	.1620"	8	.012"	.0128	32
	.162"	.1483"	9	0.11"		
	.148"	.1350"	10	.010"	.0104	34
	.135"	.1205"	11	.0095"	.0095	35
	.120"	.1055"	12	.009"	.0090	36
	.105"			.0085"	.0085	37
	.092"	.0915"	13	.0080"	.0080	38
	.080"	.0800"	14	.0075"	.0075	39
	.072"	.0720"	15	.007"	.0070	40
	.063"	.0625"	16	.0065"	.0066	41
	.054"	.0540"	17		.0062	42
		.0475"	18	.006"	.0060	43
	.047"	.0410"	19	.0055"	.0058	44
	.041"	.0348"	20	.005"	.0055	45
	.035"	.0317"	21		.0052	46
	.032"	.0286"	22		.0050	47
		.0258"	23	.0045"	.0048	48
	.028"	.0258"	23	.004"	.0046	49
	.025"	.0230"	24	.0035"		
	.023"			.003"		

CONVERSION FACTORS: 1 micron = 0.0000394 inches
25.4 mm = 1 inch

WIRE DIAMETERS / SPECIAL TREATMENTS AND SERVICES



OTHER SERVICES

Gerard Daniel Worldwide offers a variety of services to help its customers gain competitive advantages, or simply to aid in the manufacturing processes. These services include special treatment processes, value added fabrication, and customer intimacy programs.

SPECIAL TREATMENTS

Calendering

Thickness can be precisely controlled after weaving by calendering mesh.

Mesh crimps are flattened to create a smooth surface.

Cleaning

Wire cloth can be cleaned to remove oils, dirt, or debris.

Coatings

Coatings can be applied to wire before weaving or applied to wire cloth after weaving. Common coatings include nickel, copper, zinc, or tin.

ColdBond™

Wire cloth can be metallurgically bonded so that the wires are welded at their crossover points. This fusing enhances mesh rigidity, improves conductivity, and eliminates wire fraying.

Heat Treating

Mesh can be stress relieved, annealed, or sintered to alter the mechanical properties of material. Heat treatments can improve elongation, softness, or formability of material.

Surface Etching

The surface of the wire can be roughened to improve adhesion properties.

VALUE ADDED SERVICES

Mesh Lamination

Multiple layers of mesh can be laminated together for your specific needs.

Piece Cutting

Pieces can be supplied in any width or length.

Stamping or Forming

Mesh can be stamped or formed to fit your shape requirements.

CUSTOM SERVICES

CUSTOM WEAVING

Gerard Daniel Worldwide has custom weaving capabilities in its U.S. and European operations. The U.S. facility located in Hanover, PA, represents the largest domestic weaver of industrial wire cloth. The European facility, located in the Republic of Ireland, specializes in fine and ultra-fine mesh for a variety of industrial applications.

High speed, state-of-the-art precision looms are dedicated to industrial wire cloth production, so we can provide the response you require for any size order. Whether it's a large quantity or a very specialized product, Gerard Daniel Worldwide can manufacture to your specifications. And, to make sure you get what you want in form and finish, we offer the broadest possible range of processing operations. Our weaving operation provides the ability to manufacture short runs of specialty meshes and alloys, with quick turn around time, in addition to full roll runs of 100 linear feet and greater.

UNIQUE IN CAPABILITIES & COMMITMENT

The GDW companies can offer over 5,000 different items from stock or from standard production, by far the largest variety available from anyone. Regularly, however, our customers require a product which necessitates a custom production run. In the area of custom weaving, the GDW companies offer the widest choice of options. In analyzing a custom weaving job, several issues are considered including quality, lead time, domestic vs. foreign, size of production run, and cost.

Custom weaving at the GDW companies is based on what is best for our customers, not what we can or cannot do. Because we are the largest weaver of industrial wire cloth, we can consider each variable and ascertain the best production plan possible.

For long or short runs, our capacity provides the flexibility to create a wide range of meshes in all weavable metals and alloys. Looms with capacities to 114" wide permit custom weaving of virtually all metals and wire diameters.

Our companies also specialize in short runs of coarse mesh on pre-crimp looms in all weavable alloys including carbon steel, stainless steel, aluminum, high temperature and high nickel alloys.

GDW/European Division specializes in fine and ultra-fine weaving for a variety of industrial applications.

GDW/Gerard Daniel is the largest importer of industrial wire cloth. Our worldwide association with the best weavers in Europe and the Far East gives us great flexibility in sourcing a custom weaving job to meet our customers' requirements. It is our pleasure to provide these special orders from any of our divisions.

SQUARE MESH WIRE CLOTH

1 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.331	.669	44.8	745.9
	.307	.693	48.0	637.5
	.283	.717	51.4	603.8
	.263	.737	54.3	518.9
	.250	.750	56.3	416.5
	.225	.775	60.1	335.4
	.207	.793	62.9	282.9
	.192	.808	65.3	242.7
	.177	.823	67.7	205.7
	.162	.838	70.2	171.9
	.148	.852	72.6	143.1
	.135	.865	74.8	118.9
	.120	.880	77.4	93.7
	.105	.895	80.1	71.7
	.092	.908	82.4	54.9
	.080	.920	84.6	41.5
	.072	.928	86.1	33.6
	.063	.937	87.8	25.8
3/4" MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.307	.443	34.9	813.5
	.283	.467	38.8	737.6
	.263	.487	42.1	631.9
	.250	.500	44.1	567.9
	.225	.525	49.0	455.5
	.207	.543	52.4	383.2
	.192	.558	55.3	328.0
	.177	.573	58.3	277.5
	.162	.558	61.4	231.5
	.148	.602	64.4	192.4
	.135	.615	67.2	159.7
	.120	.630	70.5	125.6
	.105	.645	73.9	96.0
	.092	.658	76.9	73.5
	.080	.670	79.8	55.4
	.072	.678	81.7	44.9
	.063	.687	83.9	34.3
	.054	.696	86.1	25.2

2 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.250	.250	25.0	903.5
	.225	.275	30.3	717.7
	.207	.293	34.3	599.7
	.192	.308	37.9	510.6
	.177	.323	41.7	429.7
	.162	.338	45.7	356.8
	.148	.352	49.6	295.6
	.135	.365	53.3	244.1
	.120	.380	57.8	191.5
	.105	.395	62.4	145.6
	.092	.408	66.6	111.3
	.080	.420	70.6	83.8
	.072	.428	73.3	67.8
	.063	.437	76.4	51.7
	.054	.446	79.6	38.0
	.047	.453	82.1	28.7
	.041	.459	84.3	21.8
	.035	.465	84.3	15.9
3 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.162	.171	26.3	566.0
	.148	.185	30.8	464.8
	.135	.198	35.3	381.4
	.120	.213	40.8	296.8
	.105	.228	46.8	224.2
	.092	.241	52.3	170.4
	.080	.253	57.6	127.7
	.072	.261	61.3	102.9
	.063	.270	65.6	78.4
	.054	.279	70.1	57.3
	.047	.286	73.6	43.2
	.041	.292	76.7	32.8
	.035	.298	79.9	23.9
	.032	.304	81.5	19.9
4 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.148	.102	16.6	625.3
	.135	.115	21.2	508.8
	.120	.130	27.0	392.5
	.105	.145	33.6	309.3
	.092	.158	39.9	233.3
	.080	.170	46.2	173.8
	.072	.178	50.7	139.6
	.063	.187	56.0	105.8
	.054	.196	61.5	77.2
	.047	.203	65.9	58.2
	.041	.209	69.9	44.0
	.035	.215	74.0	32.0
	.032	.218	76.0	26.7
	.028	.222	78.9	20.4
	.025	.225	81.0	16.3

SQUARE MESH WIRE CLOTH

5 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.120	.080	16.0	515.7
	.105	.095	22.6	382.5
	.092	.108	29.2	286.2
	.080	.120	36.0	222.8
	.072	.128	41.0	178.2
	.063	.137	46.9	134.5
	.054	.146	53.3	97.7
	.047	.153	58.5	73.3
	.041	.159	63.2	55.4
	.035	.165	68.1	40.2
	.032	.168	70.6	33.5
	.028	.172	74.0	25.6
	.025	.175	76.6	20.4
	.023	.177	78.3	17.2
6 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.092	.075	20.2	356.3
	.080	.087	27.2	261.7
	.072	.095	32.5	219.1
	.063	.104	38.9	164.6
	.054	.113	46.0	118.9
	.047	.120	51.8	89.1
	.041	.126	57.2	67.2
	.035	.132	62.7	48.6
	.032	.135	65.6	40.4
	.028	.139	69.6	30.8
	.025	.142	72.6	24.5
	.023	.144	74.7	20.7
	.020	.147	77.8	15.7
7 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.080	.063	19.5	315.3
	.072	.071	24.7	249.7
	.063	.08	31.4	186.5
	.054	.089	38.8	141.1
	.047	.098	45.2	105.2
	.041	.102	51.0	79.2
	.035	.108	57.2	57.1
	.032	.111	60.4	47.5
	.028	.115	64.8	36.2
	.025	.118	68.2	28.7
	.023	.120	70.6	24.2
	.020	.123	74.1	18.3
	.018	.125	76.6	14.7

8 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.072	.053	18.0	294.0
	.063	.062	24.6	218.5
	.054	.071	32.3	164.3
	.047	.078	38.9	122.1
	.041	.084	45.2	91.5
	.032	.09	51.8	65.8
	.032	.093	55.4	54.6
	.028	.097	60.2	41.5
	.025	.100	64.0	32.9
	.023	.102	66.6	27.8
	.020	.105	70.6	20.9
	.018	.107	73.3	17.0
	.017	.108	74.6	15.0
9 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.072	.039	12.3	311.6
	.063	.048	18.7	252.3
	.054	.057	26.3	179.2
	.047	.064	33.2	139.6
	.041	.070	39.7	104.2
	.035	.076	46.8	74.7
	.032	.079	50.6	62.0
	.028	.083	55.8	47.1
	.025	.086	59.9	37.3
	.023	.088	62.7	31.4
	.020	.091	67.1	23.6
	.018	.093	70.1	19.1
	.017	.094	71.6	17.0
	.016	.095	73.1	15.1
10 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.063	.037	13.7	288.3
	.054	.046	21.2	203.5
	.047	.053	28.1	149.9
	.041	.059	34.8	117.5
	.035	.065	42.3	83.9
	.032	.068	46.2	69.5
	.028	.072	51.8	52.6
	.025	.075	56.3	41.6
	.023	.077	59.3	35.1
	.020	.080	64.0	26.4
	.018	.082	67.2	21.3
	.017	.083	68.9	19
	.016	.084	70.6	16.8
	.015	.085	72.3	14.8

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11 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.054	.037	16.6	229.2
	.047	.044	23.4	168.0
	.041	.050	30.3	124.5
	.035	.056	37.9	93.3
	.032	.059	42.1	77.2
	.028	.063	48.0	58.4
	.025	.066	52.7	46.1
	.023	.068	56.0	38.8
	.020	.071	61.0	29.1
	.018	.073	64.5	23.5
	.017	.074	66.3	20.9
	.016	.075	68.1	18.5
	.015	.076	69.9	16.3

12 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.047	.036	18.7	187.0
	.041	.042	25.4	138.1
	.035	.048	33.2	103.1
	.032	.051	37.5	85.1
	.028	.055	43.6	64.1
	.025	.058	48.4	50.6
	.023	.060	51.8	42.6
	.020	.063	57.2	31.9
	.018	.065	60.8	25.8
	.017	.066	62.7	22.9
	.016	.067	64.5	20.2
	.015	.068	66.6	17.8
	.014	.069	68.6	15.5

13 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.041	.036	21.9	152.1
	.035	.042	29.8	107.5
	.032	.045	34.2	93.2
	.028	.049	4.6	70.1
	.025	.052	45.7	55.3
	.023	.054	49.3	46.4
	.020	.057	54.9	34.7
	.018	.059	58.8	28.0
	.017	.060	60.8	24.9
	.016	.061	62.9	22.0
	.015	.062	65.0	19.3
	.014	.063	67.1	16.8

14 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.041	.030	17.6	166.7
	.032	.036	25.4	117.3
	.032	.039	29.8	101.5
	.028	.043	36.2	76.3
	.025	.046	41.5	59.9
	.023	.048	45.2	50.3
	.020	.051	51.0	37.6
	.018	.053	55.1	30.2
	.017	.054	57.2	26.9
	.016	.055	59.3	23.7
	.015	.056	61.5	20.8
	.014	.057	63.7	18.1
	.0135	.0575	64.8	16.8
	.013	.058	65.9	15.6
	.012	.059	68.2	13.2
	.011	.060	70.6	11.1
	.010	.061	72.9	9.1

15 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.041	.026	15.2	181.8
	.035	.032	23.0	127.5
	.032	.035	27.6	104.6
	.028	.039	34.2	78.4
	.025	.042	39.7	64.7
	.023	.044	43.6	54.2
	.020	.047	49.7	40.5
	.018	.049	54.0	32.5
	.017	.050	56.3	28.9
	.016	.051	58.5	25.8
	.015	.052	60.8	22.3
	.014	.053	63.2	19.4
	.0135	.0535	64.4	18.1
	.013	.054	65.6	16.7
	.012	.055	68.1	14.2
	.011	.056	70.6	11.9
	.010	.057	73.1	9.8

16 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.041	.022	11.8	197.6
	.035	.028	19.4	138.0
	.032	.031	23.8	113.0
	.028	.035	30.5	84.4
	.025	.038	36.0	69.6
	.023	.040	39.9	58.3
	.020	.043	46.2	43.4
	.018	.045	50.7	34.8
	.017	.046	53.0	31.0
	.016	.047	55.4	27.4
	.015	.048	57.8	23.9
	.014	.049	60.2	20.8
	.0135	.050	61.5	19.3
	.013	.050	62.7	17.9
	.012	.051	65.3	15.2
	.011	.052	67.9	12.7
	.010	.053	70.6	10.5
	.0095	.053	71.9	9.5

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18 MESH

Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
.035	.021	13.7	160.0
.032	.024	18.0	130.7
.028	.028	24.7	97.1
.025	.031	30.3	75.8
.023	.033	34.4	66.7
.020	.036	41.1	49.5
.018	.038	45.8	39.6
.017	.039	48.3	35.1
.016	.040	50.8	31
.015	.041	53.4	27.1
.014	.042	56.1	23.5
.0135	.042	57.4	21.8
.013	.043	58.8	20.2
.012	.044	61.6	17.2
.011	.045	64.4	14.3
.010	.046	67.4	11.8
.0095	.046	68.9	10.6
.009	.047	70.4	9.6

20 MESH

Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
.032	.018	13.0	149.4
.028	.022	19.4	110.4
.025	.025	25.0	85.9
.023	.027	29.2	71.5
.020	.030	36.0	55.8
.018	.032	41.0	44.5
.017	.033	43.6	39.5
.016	.034	46.2	34.7
.015	.035	49.0	30.4
.014	.036	51.8	26.4
.0135	.037	53.3	24.4
.013	.037	54.8	22.6
.012	.038	57.8	19.2
.011	.039	60.8	16.1
.010	.040	64.0	13.2
.0095	.041	65.6	11.9
.009	.041	67.2	10.6

22 MESH

Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
.028	.018	14.8	124.4
.025	.021	20.3	96.4
.023	.023	24.5	80.1
.020	.026	31.5	59.1
.018	.028	36.6	49.6
.017	.029	39.3	43.9
.016	.030	42.1	38.6
.015	.031	45.0	33.7
.014	.032	48.0	29.2
.0135	.032	49.6	27.1
.013	.033	51.1	25.0
.012	.034	54.3	21.2
.011	.035	57.6	17.7
.010	.036	61.0	14.5
.0095	.036	62.7	13.1
.009	.037	64.5	11.7

24 MESH

Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
.025	.017	16.1	107.5
.023	.019	20.1	89.1
.020	.022	27.1	65.4
.018	.024	32.4	52.0
.017	.025	35.1	48.5
.016	.026	38.0	42.5
.015	.027	41.1	37.1
.014	.028	44.2	32.1
.0135	.028	45.8	29.7
.013	.029	47.4	27.5
.012	.03	50.8	23.2
.011	.031	54.3	19.4
.010	.032	57.9	16.0
.0095	.032	59.7	14.3
.009	.033	61.6	12.8
.0085	.033	63.5	11.4
.008	.034	65.4	10.1
.0075	.034	67.4	8.9

26 MESH

Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
.020	.019	23.1	72.0
.018	.021	28.4	57.2
.017	.022	31.2	53.1
.016	.023	34.2	46.6
.015	.024	37.3	40.6
.014	.025	40.6	35.0
.0135	.025	42.3	32.4
.013	.026	44.0	30.0
.012	.027	47.5	25.4
.011	.028	51.1	21.1
.010	.029	54.9	17.4
.0095	.029	56.9	15.7
.009	.030	58.8	13.9
.0085	.030	60.8	12.4
.008	.031	62.9	11.0
.0075	.031	65	9.6

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SQUARE MESH WIRE CLOTH

28 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.018	.018	24.6	62.4
	.017	.019	27.4	55.0
	.016	.020	30.4	50.8
	.015	.021	33.6	44.1
	.0135	.022	36.9	38.1
	.014	.022	38.6	35.2
	.013	.023	40.4	32.5
	.012	.024	44.0	27.5
	.011	.025	47.8	22.9
	.010	.026	51.8	18.8
	.0095	.026	53.8	16.9
	.009	.027	55.9	15.2
	.0085	.027	58.0	13.4
	.008	.028	60.2	11.9
	.0075	.028	62.3	10.4

30 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.017	.016	23.9	69.8
	.016	.017	26.9	62.4
	.015	.018	30.4	47.9
	.014	.019	33.5	41.2
	.0135	.020	35.3	38.2
	.013	.020	37.1	35.1
	.012	.021	40.8	29.7
	.011	.022	44.8	24.7
	.010	.023	48.9	20.2
	.0095	.024	51.0	18.2
	.009	.024	53.1	16.3
	.0085	.025	55.4	14.4
	.008	.025	57.6	12.7
	.0075	.026	59.9	11.2

32 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.016	.015	24.0	56.6
	.015	.016	27.2	49.1
	.014	.017	30.6	44.4
	.0135	.018	32.4	41.1
	.013	.018	34.3	37.9
	.012	.019	36.9	31.9
	.011	.020	42.2	26.6
	.010	.021	46.5	21.7
	.0095	.022	48.7	19.5
	.009	.022	50.9	17.5
	.0085	.023	53.2	15.5
	.008	.023	55.6	13.6
	.0075	.024	58.0	11.9
	.007	.024	60.5	10.4

35 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.016	.013	19.4	63.0
	.015	.014	22.7	54.6
	.014	.015	26.1	47.0
	.0135	.015	27.9	45.7
	.013	.016	29.8	42.0
	.012	.017	33.8	35.4
	.011	.018	37.9	29.3
	.010	.019	42.4	23.9
	.0095	.019	44.7	21.5
	.009	.020	47.1	19.2
	.0085	.020	49.5	17.1
	.008	.021	52.0	15.0
	.0075	.021	54.5	13.1
	.007	.022	57.2	11.4

38 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.014	.012	21.8	51.8
	.014	.013	23.7	41.8
	.013	.013	25.5	44.0
	.012	.014	29.5	38.9
	.011	.015	33.8	32.2
	.010	.016	38.4	26.3
	.0095	.017	40.8	23.5
	.009	.017	43.2	21.0
	.0085	.018	45.8	18.7
	.008	.018	48.4	16.5
	.0075	.019	51.0	14.3
	.007	.019	53.8	12.4

40 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.0135	.012	21.2	53.5
	.013	.012	23.0	49.3
	.012	.013	27.0	41.3
	.011	.014	31.4	34.1
	.010	.015	36.0	27.9
	.0095	.016	38.4	24.9
	.009	.016	41.0	22.2
	.0085	.017	43.6	19.7
	.008	.017	46.2	17.4
	.0075	.018	49.0	15.2
	.007	.018	51.8	13.1

42 MESH	<u>Wire Diameter</u>	<u>Opening Width</u>	<u>Open Area %</u>	<u>Weight lbs/100 sq. ft. SS</u>
	.0135	.010	18.7	54.0
	.013	.011	20.6	52.3
	.012	.012	24.6	43.8
	.011	.013	28.9	36.2
	.010	.014	33.6	29.5
	.0095	.014	36.1	26.4
	.009	.015	38.6	23.5

SQUARE MESH WIRE CLOTH

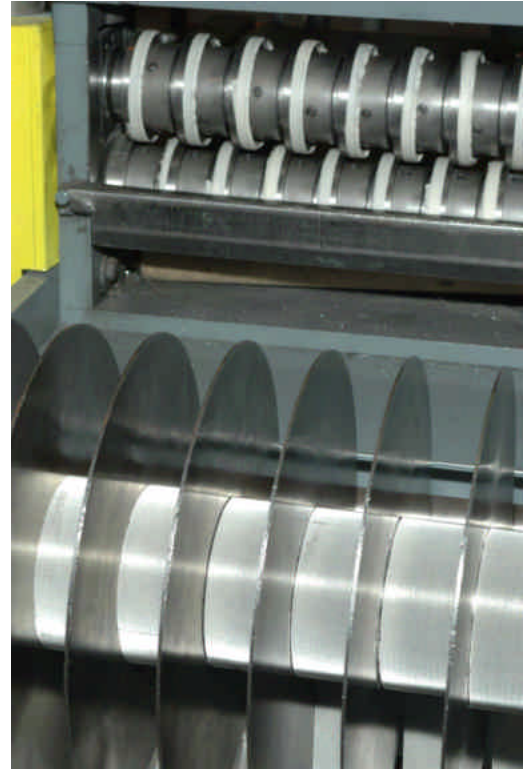
45 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.013	.009	17.1	54.1
	.012	.01	21.1	45.2
	.011	.011	25.4	37.3
	.010	.012	30.1	31.9
	.0095	.013	32.7	28.6
	.009	.013	35.3	25.5
	.008	.014	40.8	19.8
50 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.012	.008	16.0	51.6
	.011	.009	20.6	42.4
	.010	.010	25.0	34.3
	.0095	.011	27.6	32.3
	.009	.011	30.3	28.7
	.0085	.012	33.1	25.4
	.008	.012	36.0	22.3
	.0075	.013	39.1	19.4
55 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.011	.007	15.7	47.8
	.010	.008	20.3	38.6
	.010	.009	22.9	34.3
	.009	.009	25.6	30.5
	.009	.01	28.5	38.4
	.008	.01	31.5	24.8
	.008	.011	34.6	21.6
	.007	.011	37.9	18.7
60 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.011	.006	11.7	53.4
	.010	.007	16.2	43.0
	.00951	.007	18.7	38.3
	.009	.008	21.3	33.8
	.0085	.008	24.2	29.9
	.008	.009	27.2	27.6
	.0075	.009	30.5	23.9
	.007	.010	33.9	20.6
	.0065	.010	37.5	17.6
	.006	.011	41.2	14.8
65 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.0075	.008	26.4	26.3
	.007	.008	29.8	22.6
	.0065	.009	33.5	19.3
70 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.009	.005	13.8	41.1
	.0085	.006	16.5	36.2
	.008	.006	19.4	31.6
	.0075	.007	22.7	27.4
	.007	.007	26.1	23.5
	.0065	.008	29.8	21.0
	.006	.008	33.8	17.7

75 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.007	.006	22.3	25.6
	.0065	.007	26.0	22.8
	.006	.007	30.0	19.2
80 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.0075	.005	16.0	32.3
	.007	.006	19.4	27.7
	.0065	.006	23.0	23.4
	.006	.007	27.0	20.6
	.0055	.007	31.4	17.1
	.005	.008	36.0	13.9
90 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.006	.005	21.1	22.6
	.0055	.006	25.4	18.5
	.005	.006	30.1	16.0
100 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.005	.005	25.0	17.2
	.0045	.0055	30.3	14.3
	.004	.006	36.0	11.1
	.0035	.0065	42.3	8.4
120 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.004	.0043	26.6	13.2
	.0037	.0046	30.5	10.3
130 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.0038	.0039	25.7	12.9
	.0034	.0043	31.2	10.6
140 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.0033	.0038	28.3	10.5
	.0029	.0042	34.6	8.2
150 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.003	.0037	30.8	9.3
	.0026	.0041	37.8	7.2
160 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.0028	.0035	31.4	8.6
	.0024	.0038	37.0	7.1
170 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.0026	.0033	31.5	7.9
	.0024	.0035	35.4	6.9
180 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.0025	.0031	31.1	7.7
	.0024	.0032	33.2	7.3

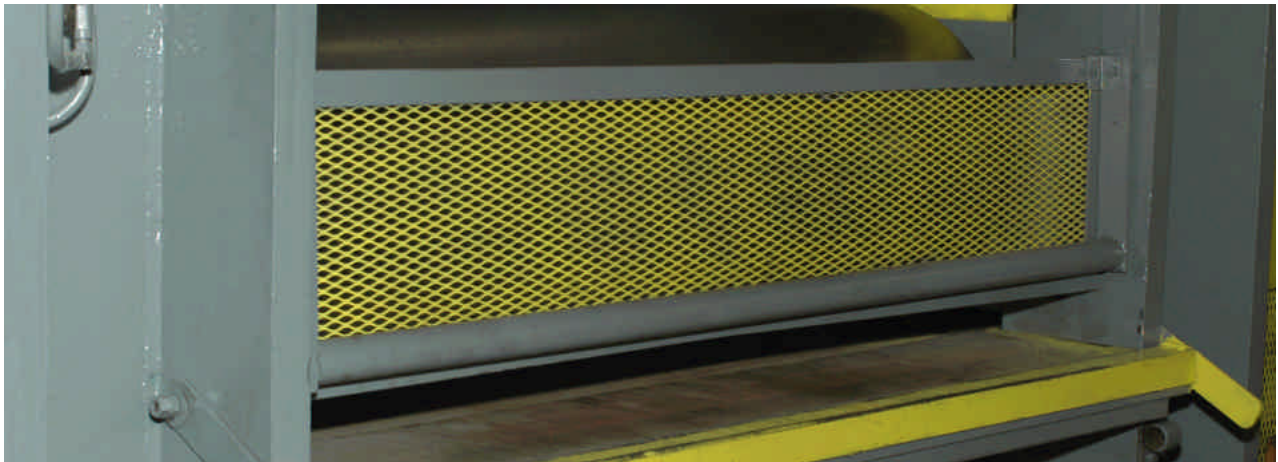
■ Denotes Market Grade

SQUARE MESH WIRE CLOTH

200 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.0023	.0027	29.2	7.3
	.0021	.0029	33.6	6.3
	.0016	.0034	46.2	3.6
230 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.0014	.0029	44.5	3.4
250 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.0016	.0024	36.0	4.3
	.0014	.0026	41.0	3.3
270 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.0016	.0022	32.1	4.8
	.0024	.0023	38.0	3.7
300 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.0015	.0018	29.2	4.7
	.0012	.0021	41.0	3.0
325 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.0014	.0017	30.5	4.3
	.0011	.0020	41.0	2.7
400 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.0011	.0014	31.4	3.4
	.0010	.0015	38.0	2.8
500 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.0085	.0010	25.0	—
508 MESH	Wire Diameter	Opening Width	Open Area %	Weight lbs/100 sq. ft. SS
	.0085	.00097	24.2	—



Rotary Knife Slitter



60" Calendar Mill

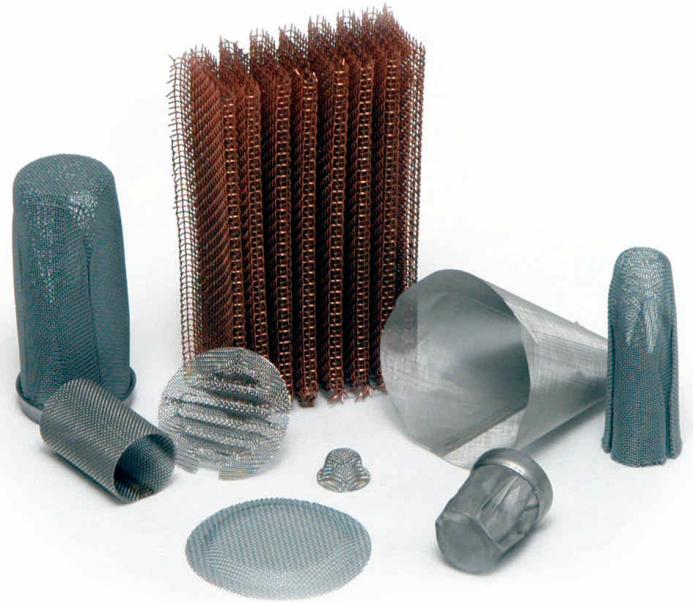
OTHER MESHES

SQUARE MESH BOLTING CLOTH

Mesh Per Lineal Inch	Wire Diameter Inches	Opening Width Inches	Open Area %	Weight Lbs/100 SS
16	0.009	0.535	73.3	8.6
18	0.009	0.0466	70.4	9.6
20	0.009	0.041	67.2	10.6
22	0.0075	0.038	69.7	8.2
24	0.0075	0.0342	67.2	8.9
26	0.0075	0.031	65	9.5
28	0.0075	0.0282	62.4	10.4
30	0.0065	0.0268	64.8	8.4
32	0.0065	0.0248	62.7	9
34	0.0065	0.0229	60.7	9.6
36	0.0065	0.0213	58.7	10.2
38	0.0065	0.0198	56.7	10.7
40	0.0065	0.0185	54.8	11.3
42	0.0055	0.0183	59.1	8.5
44	0.0055	0.0172	57.4	8.9
46	0.0055	0.0162	55.8	9.3
48	0.0055	0.0153	54.2	9.7
50	0.0055	0.0145	52.6	10.1
52	0.0055	0.0137	51	10.5
54	0.0055	0.013	49.4	10.9
58	0.0045	.0127	54.6	7.8
60	0.0045	0.0122	53.3	8.1
62	0.0045	0.0116	51.7	8.4
64	0.0045	0.0111	50.7	8.7
70	0.0037	0.0106	54.9	6
72	0.0037	0.0102	53.8	6.2
74	0.0037	0.0098	52.7	6.4
76	0.0037	0.0095	51.7	6.6
78	0.0037	0.0091	50.6	6.8
80	0.0037	0.0088	49.6	6.9
84	0.0035	0.0084	49.8	6.9
88	0.0035	0.0079	47.9	7.2
90	0.0035	0.0076	46.8	7.3
94	0.0035	0.0071	45.4	7.7
105	0.003	0.0065	46.9	6.3
120	0.0026	0.0057	48.4	5
135	0.0023	0.0051	47.4	4.8
145	0.0022	0.0047	46.4	4.9
165	0.0019	0.0042	47.1	4.2
200	0.0016	0.0034	46.2	3.6
230	0.0014	0.0029	44.5	3.4

STRAINER GRADES

Mesh Per Lineal Inch	Wire Diameter Inches	Opening Width Inches	Open Area %
40 x 36	0.01	.015 x .0178	38.4
40 x 36	0.0095	.0155 x .0183	40.8
50 x 36	0.007	.013 x .021	48.5
50 x 40	0.008	.012 x .017	40.6
50 x 40	0.009	.011 x .016	35
60 x 40	0.009	.0077 x .016	29.2
60 x 40	0.0065	.0102 x .0185	44.4
60 x 42	0.009	.0077 x .015	28.9
60 x 50	0.0075	.0092 x .0125	34.4
60 x 50	0.0065	.0102 x .0135	41.1
60 x 54	0.011	.0057 x .0075	13.9
80 x 70	0.0055	.007 x .0088	34.4
80 x 70	0.007	.0055 x .0073	22.5
100 x 90	0.0045	.0055 x .0066	32.6
120 x 108	0.0035	.0048 x .0058	35.7
200 x 190	0.0021	.0029 x .0032	35



SCREEN PRINTING

Gerard Daniel worldwide has long supplied the highest standards of screen print mesh.

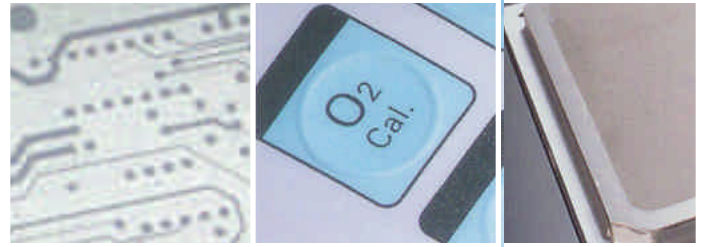
SCREEN PRINT APPLICATION

- Printed screen boards.
- Back-lit panels.
- Resistors and capacitors.
- Membrane keypads.
- Optical displays in membrane keypads.
- Decals.
- Scales.
- Multilayer.
- Thick film circuited.
- Soldering paste processing for SMD.
- Glass printing.
- Graphic and commercial screen printing .

SCREEN PRINT MESH SPECIFICATIONS

Mesh Count	Wire Diameter (mm)	Opening Size (mm)	% of Open Area	Mesh Thickness
80	.265	.050	71	.10
105	.165	.076	47	.31
145	.120	.056	45	.23
165	.105	.050	46	.21
180	.096	.045	46	.18
200	.087	.040	47	.16
200	.074	.053	33	.26
230	.075	.035	46	.15
250	.016	.040	37	.20
270	.054	.040	34	.22
280	.055	.035	38	.17
300	.055	.030	42	.14
325	.055	.023	50	.09
325	.050	.028	41	.13
400	.045	.018	51	.07
400	.038	.025	38	.13
500	.030	.020	36	.11

All meshes are plain-weave with thickness control +/- 2 micron



STAINLESS STEEL SCREENS OFFER A SIGNIFICANT TECHNICAL ADVANTAGE OVER POLYESTER

- Thin wires close diameter tolerance and offer very high tensile strength
- Firm and stable weave with precise openings for better registration
- Higher percentage open area
- Lowest possible distortion with the lowest possible snap-off
- No stretching under squeegee pressure means better registration and printing accuracy
- Structural stability up to 600°C
- Best level of abrasion resistance
- No tendency to creep
- No electrostatic charging
- No absorption of moisture or solvents
- No change in volume, loss of tension, or shrinkage tendencies
- Good release of media from the screen
- Service life several times longer, maximizing production and cost efficiency.



DUTCH WEAVES

Reverse Dutch Weave Type	Mesh Per Inch	Filter Opening Nominal um	Water Permeability (1/cm ² x min) at 2m WC Tap Water	Air Permeability (Nm ³ /h a. 20 cm ²) at 2 mbar
PZ 10	912 x 154	12 - 14	6.5	5
PZ 14	615 x 132	17 - 20	3.2	3.3
PZ 15L	733 x 152	17 - 20	7.3	4
PZ 17	615 x 128	22 - 25	6	4.3
PZ 25L	615 x 114	33 - 37	5.9	3.8
PZ 25S	615 x 102	40 - 48	7.5	8.4
PZ 40	287 x 71	50 - 55	6.2	8.4
PZ 50L	287 x 61	50 - 57	6.9	10
PZ 55	171 x 51	64 - 72	7.1	11.8
PZ 60	171 x 46	82-94	8.1	13.6
PZ 85	171 x 41	87 - 102	9.3	18
PZ 80S	128 x 36	98 - 106	7.1	11.4
PZ 100L	171 x 33	96 - 111	9.1	16.9
PZ 150L	86 x 24	180 - 190	11.1	21.9
PZ 150S	107 x 20	200 - 215	9.1	17.5
PZ 200L	86 x 21	205 - 215	11.3	26.5
PZ 200S	63 x 18	210 - 225	12	23.5
KPZ 55	325 x 99	64 - 70	7.3	14.5
KPZ 75	400 x 120	72 - 78	13.6	23
KPZ 130	260 x 40	120 - 132	12	24
KPZ 500	72 x 15	500 - 600	13.6	35

STAINLESS STEEL - MICRON RATED

Warp x Shute	Warp & Shute Inches	Nominal Micron Retention
12 x 64	.0230 / .0165	180
20 x 250	.0010 / .008	87
24 x 110	.0140 / .010	115
30 x 150	.0090 / .007	95
30 x 160	.0090 / .007	90
30 x 250	.0100 / .008	70
40 x 200	.0070 / .0055	75
50 x 250	.0055 / .0045	60
80 x 700	.0040 / .003	35
120 x 180	.0040 / .0035	75
120 x 200	.0040 / .0031	70
120 x 400	.0039 / .0026	40
120 x 600	.0039 / .0023	28
165 x 800	.0028 / .0020	25
165 x 1200	.0028 / .0016	19
165 x 1400	.0028 / .0016	14
200 x 600	.0024 / .0018	26
200 x 900	.0023 / .0016	23
200 x 1400	.0028 / .0016	10
250 x 1370	.0022 / .0015	8
250 x 1400	.0022 / .0015	8
250 x 1620	.0022 / .0015	7
325 x 1480	.0014 / .0012	7
325 x 1700	.0014 / .0012	6
325 x 1900	.0014 / .0011	5
325 x 2300	.0014 / .0010	5
325 x 2800	.0014 / .0010	4
375 x 2400	.0012 / .0009	4
400 x 2800	.0011 / .00078	2

REVERSE DUTCH WEAVE

A product in which the larger count of wires is found in the warp and the smaller count in the shute, thus reversing the method used in plain and twilled dutch weaves. *Specifications located to the left.*

PLAIN DUTCH WEAVE

Primarily used as a filter cloth. The openings slant diagonally through the cloth and cannot be seen by looking directly at the cloth. This weave has a coarser mesh and wire in the warp direction and a finer mesh and wire in the shute direction, giving a very compact, firm mesh with great strength.

TWILLED DUTCH WEAVE

Offers higher strength than regular dutch weaves. It packs even more wires in a given area. Generally, this weave has finer mesh counts and lower flow than regular dutch weaves and can be made to filter particles as fine as 2 microns in diameter.

ELECTRO-CHEMICAL PRODUCTS

INDUSTRY SPECIFIC MATERIALS

Our electro-chemical meshes are used in fuel cells, batteries, and electrolyzers. Uses for the mesh include membrane or electrode substrates, current collectors, flow field screens, and gas diffusion electrodes.

We offer our exclusive **ColdBond™** product, which provides performance benefits to the electro-chemical industry that other woven and non-woven products cannot offer.

STRUCTURAL ADVANTAGES

With our proprietary **ColdBond™** process, wire cloth can be metallurgically bonded so that the wires are welded at their crossover points. This fusing enhances mesh rigidity, improves conductivity, and eliminates wire fraying. These properties give woven wire cloth superior processing characteristics in tracking mechanical strength, and also eliminates dangerous sharp edges for handling that are common with expanded and perforated metals. Wire cloth thickness can be precisely controlled to provide very thin material that is ideal for electrodes.

UNIQUE VERSATILITY

Utilizing wire cloth as a current collector offers designers properties in battery and fuel cell electrodes that are not found in other grid structures. More surface area and a higher profile (knuckles) allow for better adhesion of active material and conductivity. Because the mesh is made of two separate wires, it can withstand more flexure without losing active material than alternative grids made from a single unit foil. By utilizing a mesh with open area (as opposed to a solid foil) for the substrate, a greater volume of active per inactive material is achieved, resulting in higher volumetric power densities.

CONFORMING TO YOUR REQUIREMENTS

At GDW, we provide expertise in processing wire mesh materials and guidance in selecting the appropriate product for your requirements. Because our wire cloth can be woven with different configurations and properties, we can tailor the product to your specific design or application. A multitude of meshes, weaves, and wire diameters are available. Mesh material can be coated—commonly with nickel, copper, zinc, or tin, and is available in cut pieces or in rolls. Special treatments after weaving, such as calendaring, annealing, bonding, or the GDW exclusive **ColdBond™** can be specified. To learn more, please speak with our technical staff.



WELDED WIRE MESH

INFORMATION NEEDED

Size of Opening - Measured either way (see diagrams A and B)

Wire Diameter - From 0.063" to 0.312"

Alloy - Choose from Plain Steel, T304 STST, T316 STST

Piece Size - Up to 60" wide and 50 feet long

Quantity of Pieces - Total Production Amount

Edge Requirements - Choose one (see diagrams C, D, and E)

HARDWARE CLOTH -GALVANIZED

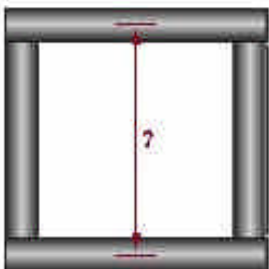
	<u>Welded</u>	<u>Gauge</u>
	2 x 2	16
	2 x 2	19
	4 x 4	23
	<u>Woven</u>	<u>Gauge</u>
	8 x 8	27

TYPE 304 STAINLESS STEEL

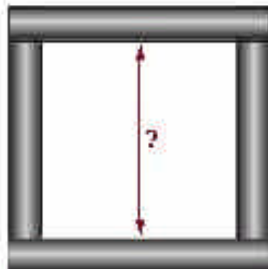
	<u>Mesh</u>	<u>Diameter</u>	<u>Gauge</u>
	1 x 1	0.080	14
	1 x 1	0.063	16
	2 x 2	0.063	16
	2 x 2	0.047	18
	3 x 3	0.047	18
	4 x 4	0.047	18
	4 x 4	0.032	21
	4 x 4	0.028	22

SIZE OF OPENING

A. Measured From Center-To-Center



B. Measured From Inside-To-Inside

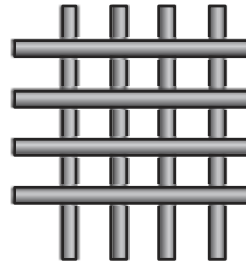


HEXNETTING

	<u>Mesh</u>	<u>Diameter</u>	<u>Gauge</u>
	1 Inch Hex	0.028	Stainless Steel
	1 Inch Hex	0.035	Stainless Steel
	1 Inch Hex	0.028	Monel

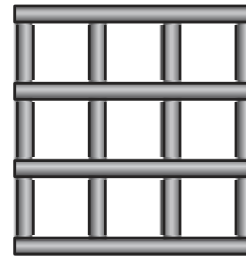
EDGE REQUIREMENTS

C. RANDOM TAILS



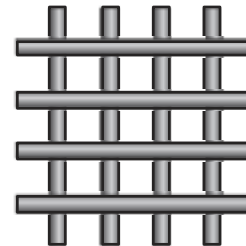
Edges have different length tails

D. FLUSH EDGE TRIMMED



Edges are flush

E. EQUAL TAILS



Tails are equal length

GALVANIZED HARDWARE CLOTH

CAGE WIRE AND NETTING

This galvanized fabric is generally used for all kinds of bird cage fabrications. The 2X2 mesh is commonly used for floors for birds and animals. This size does not become clogged. For baby birds, the 4 x 4 Mesh is recommended.

AVIARY NETTING

The preferred hexagonal wire netting for aviary is 1/2" Mesh, galvanized after weaving. Pheasants cannot stick their head through the wires. It is also sparrow-proof.

WELDED WIRE FABRIC

For construction of cages not requiring supporting frames, this heavy-duty, zinc-coated wire has been developed to fill many applications. For cage floors, 1" x 1/2" Mesh is recommended. 2" x 1" Mesh is used for sidewalls and covers. Birds up to quail size can reach their heads through the wire to feed from troughs hanging outside the cage.

POULTRY NETTING

Galvanized before weaving, hexagonal netting in larger mesh sizes is used for chicken, pheasant, and other bird enclosures. It can also be used for outdoor cage sidewalls.



<u>Application</u>	<u>Mesh</u>	<u>Gauge</u>
Apple Bins	3 x 3	21
	2 x 2	19
Ash Sifters	3 x 3	21
Cages	.500 x 1	16
	2 x 2	19
	3 x 3	21
Cellar Windows	3 x 3	21
	2 x 2	19
Chicken Runs - Floors	1 x 1	14
Water and Feed	.750 x .750	14, 16
Platforms	.625 x .625	16, 17
Chimney Spark Guards	2 x 2	16
Corn Crib Linings	3 x 3	21
	4 x 4	23
Display Shelves	2 x 2	19
	3 x 3	21
	4 x 4	23
Dog Pen Floors	.750 x .750	14
	1 x 1	14
Eaves Trough Guards	4 x 4	23
Factory Partitions	1 x 1	14
Factory Windows	.750 x .750	16
Fruit Evaporators	5 x 5	24
Grain Bin Linings	3 x 3	21
	4 x 4	23
Lathe - Plaster	3 x 3	21
Machinery Guards	.625 x .625	14
	.750 x .750	14
	2 x 2	16
Minnow Pails	4 x 4	23
Plaster	3 x 3	21
Rabbit Runs, Walls, Floors	.625 x .625	16,17
	.750 x .750	14
Rat-proofing Hen Houses	2 x 2	19
	3 x 3	21
	2 x 2	19
Screen Door Guards	3 x 3	21
	3 x 3	21
	4 x 4	23
Silo Linings	3 x 3	21
	4 x 4	23
Skylight Guards	.750 x .750	14
Snake Screen	4 x 4	23
Stucco	2 x 2	19
Tree Guards	3 x 3	21
Truck Cab Rear Window	1 x 1	14
Turkey, Poultry Floors	.750 x .750	14, 16
Ventilator Covers	1 x 1	14

FILTRATION FABRICS

Gerard Daniel Worldwide is a major supplier of synthetic fabrics to the filtration industry. Our products include a full line of monofilament filter fabrics using both nylon and polyester. These products are woven on the state of the art, precision looms, washed and heat set, to create a fabric that will meet your most demanding requirements.

INVENTORY

We stock a full range of products with openings between 40 and 1000 microns in both of our United States and European facilities. Our standard material widths are 66" and 72". Typical bolt lengths are 50 linear yards. Other widths and lengths are available.



NYLON/POLYESTER MONOFILAMENT SPECIFICATIONS

Product Number PMO or NMO	Mesh Opening		Mesh Count		Thread Diameter		Open Area %	Weight Oz. Per Sq. Yard**
	Inches	Microns	/In	/Cm	Inches	Microns		
40	0.0016	40	300	118	0.0018	45	22	1.3
50	0.0020	50	250	98	0.0018	45	24	1.1
60	0.0024	60	225	89	0.0020	50	28	1.3
75	0.0030	75	200	79	0.0020	50	35	1.0
100	0.0039	100	160	63	0.0024	60	40	1.3
125	0.0049	125	140	55	0.0033	85	47	2.2
150	0.0059	150	100	39	0.0039	100	35	2.5
175	0.0069	175	80	31	0.0047	120	30	2.8
200	0.0079	200	76	30	0.0047	120	36	2.6
250	0.0098	250	62	24	0.0059	150	37	3.5
300	0.0118	300	50	20	0.0079	200	35	4.8
400	0.0157	400	42	17	0.0079	200	44	3.8
500	0.0197	500	38	15	0.0063	160	56	2.1
600	0.0236	600	30	12	0.0098	250	50	4.0
800	0.0315	800	24	9	0.0098	250	57	3.3
1000	0.0394	1000	20	8	0.0126	320	62	4.7

PMO - Polyester Monofilament

NMO - Nylon Monofilament

WIRE PRODUCTS

...NOT JUST MESH

Through our wire division, we can provide products to meet your exact needs for Stainless Steel, Corrosion-Resistant, and High Temperature Alloy wire. Our wire division has a broad range of capabilities. Size ranges from .015" to .500", Rounds, Squares, Flats and Rectangles, in tempers annealed through full hard. We offer an ideal variety of packaging, including coils, spools, reels, and straightened and cut lengths. We are set up for short runs and are able to do most orders within days without minimum order quantities.

WIRE APPLICATIONS

- Antenna Wire
- Orthodontic Wire
- Belt Wire
- Pin Wire
- Brush Wire
- Safety Lock Wire
- Dental Wire
- Shaped Wire
- E.P.Q. Wire
- Spring Wire
- Filter Wire
- Tie Wire
- Forming Wire
- Weaving Wire
- House Wire
- Knitting Wire
- Rod Wire
- Medical Wire



QUALITY CONTROL PROGRAM

Gerard Daniel Worldwide strives to maintain and exceed the highest quality standards. We have actively sought and secured the following quality control programs: **ANSI/ASQC 9004 ASQC Q9004**

AVAILABLE ALLOYS

Stainless Steel		Nickel Alloys	
302	316	321	Nickel 200
304	316L	330	Nickel 201
304L	317	347	Alloy 400
305	317L	17-7Ph	Alloy 600
310			

SAFETY AND LOCK WIRE

Aircraft grade lock wire is available in 1, 5, 10, 15, 25 lb. spools and 1 lb. cans. All sizes and diameters are in stock for immediate shipment.

AVAILABLE LOCK WIRE SPECIFICATIONS

- MS20995C
- MS20995N
- MS9226
- AMS5689
- MS20995AB
- MS20995CY
- MS20995NC
- 302 Condition A
- 304 Condition A
- 305 Condition A
- 316 Condition A
- 321 Condition A
- QQ-W-423/ASTM-A58
- QQ-W-390/AMS-5697
- QQ-N-281
- Alloy 600 Annealed
- Alloy 600 Oxide Coated
- Alloy 400 Annealed
- Aluminum 5056
- Copper QQW-343 Type 5

PERFORATED METAL

DEFINITIONS

QUANTITY

State the number of perforated pieces, blanks, full sheets or lineal feet or coil required.

THICKNESS

Specify in gauge numbers or in decimal inches.

MATERIAL

State kind of metal or plastic required.

WIDTH & LENGTH

Unless otherwise specified, the length will be the long dimension of the sheet.

SIZE OF HOLE

Specify the size in inches.

SHAPE OF HOLE

Note the various types below.

SPACING OF PERFORATION

Spacing described below is standard.

PATTERN OF PERFORATION

Specify "staggered" or "straight line". Normally the straight row of a staggered pattern will run the long dimension of the sheet.

SLOTTED PERFORATION

Specify whether the long dimension of the slot is parallel to the long or the short dimension of the sheet or plate.

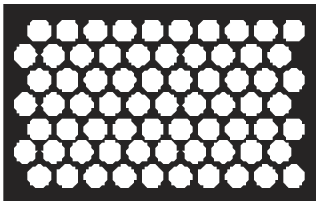
FLATNESS

Mill standard unless specified.

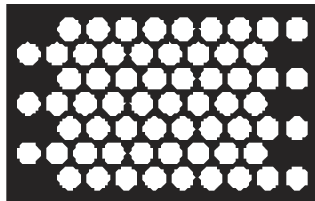
MARGINS

If margins are not important, specify "minimum" or "no margins". If margins are desired, state the margin required for each of the four sides of the sheet.

FINISHED END PATTERN

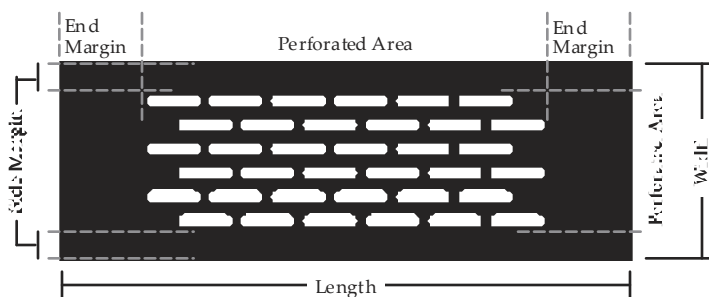


UNFINISHED END PATTERN



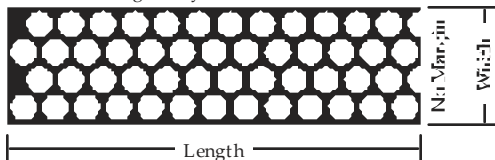
Width

SLOTTED PERFORATIONS



ROUND PERFORATIONS

Minimum margin may be 1/32" to hole diameter



PATTERN FORMATIONS

STAGGERED PERFORATIONS

Both round and square — direction of the stagger will normally be the short dimension of the sheet, as illustrated below. Straight row of holes is normally parallel to long dimension of sheet.

SLOTTED PERFORATIONS

The long dimension of the slots can be furnished parallel with either the width or length of the sheet in most cases.

UNFINISHED END PATTERN

Standard in the industry.

Note: See illustrations of Finished End Pattern and Unfinished End Pattern to left.

SEPARATOR SCREENS

PRETENSION SCREENS

Our Quality Pretension Screens are made to fit equipment manufactured by Sweco, Midwestern, Kason, Vibracon, TEA, and other original equipment producers. The tension of the screen is provided by epoxy resin or carefully controlled spot welds. Our entire range of round Pretension Screens are shipped with a gasket attached, made from approved FDA components, to speed screen changes.



Each of our Pretension Screens uses a rolled foundation ring made from high quality 304 stainless steel. The ring is seal welded to eliminate your product from getting trapped inside the rolled form which provides a cleaner contact surface for your finished product.

Our Pretension Screens are available in the following sizes: 18", 24", 30", 40", 48", 60" and 72". Other sizes are available upon request.

For a Quote please provide:

1. The ring size.
2. Epoxy or Spot weld mounting.
3. Make or model of the equipment used.
4. Mesh size, wire diameter, and alloy.
5. Center mounting hole requirements.



EDGED SCREENS

Our Edged Screens are made to fit virtually any type of rectangular or box sifter including equipment made by Rotex, Great Western, Gump and other OEM's. Screen sizes are available in 12" to 80" widths with lengths made to your specifications. Other shapes and sizes are available upon request.

Each screen can be provided with edge treatments made with white canvas, PVC or black high-temperature Nomex. Center wear strips and stainless steel grommets for automatic screen tension can be provided upon request.

For a Quote please provide:

1. Screen dimensions.
2. Mesh size, wire diameter, and alloy.
3. Make and model of equipment used.
4. Edge type.
5. Wear strip and/or grommet requirements.

SEPARATOR SCREENS

HOOKED SCREENS

Our Hooked Screens are made to fit various separator manufactured units. They include OEM companies like Tyler-Hummer, Derrick, Link-Belt, J&H, Midwestern, Triple S Dynamics, among others. Canvas inserts are provided for fine mesh screens for protection against premature screen wear.



Standard galvanized hooks are available in Type 2, Type 3, and Type 5 styles.

Stainless steel hooks are also available upon request. Screens can feature a single layer of mesh or a double layer using a coarser mesh for top screen support. A triple layer screen is also available for specialized applications.

For a quote please provide:

1. Screen dimensions along with the outside clamp with "OCW".
2. Mesh size, wire diameter, and alloy.
3. Make or model of equipment used.
4. Hook type.

PARTS AND ACCESSORIES

We can provide a wide variety of replacement parts as well as meeting your screen needs.

- Mesh cleaning balls.
- Flexible connectors.
- Tension clips.
- Bearings.
- Draglink assemblies.
- Clamp rings.
- Springs.
- Motors.

Call us for a complete list!



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