Technical Data

WIRE CLOTH: Wire cloth acts as a surface type filter (or strainer). It is usually specified by its mesh or what is referred to as mesh count. This indicates the number of openings per linear inch. It does not directly indicate the size of the openings, which can vary depending on the wire diameter. Wire cloth can be cleanable. *Terminology includes the following:*

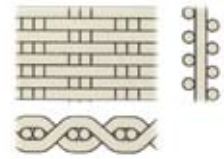
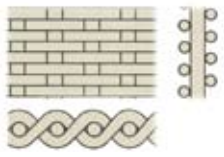
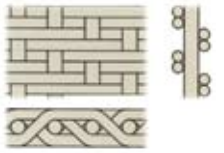
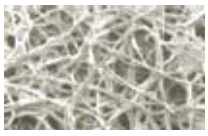
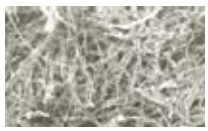
Space: Clear opening or space between parallel adjacent wires, expressed in inches.

Fill Wires: Wires running the short way of the cloth as woven. Also called "shute" or "shoot" wires.

Warp Wires: Wires running the long way of the cloth as woven.

Square Mesh: Wire cloth with the same mesh count in the fill as in the warp. Also called, "plain weave".

Rectangular Mesh: Wire cloth with a different mesh count in the fill and the warp. Also called "oblong mesh" or in finer meshes "off count".

PLAIN WEAVE:	The most popular wire cloth weave. Each warp wire passes alternately over and under each fill wire. Each fill wire passes alternately over and under each warp wire. Warp and fill wire diameters are generally the same.	
TWILLED WEAVE:	Each fill wire passes over and under two warp wires at a time, and each warp wire passes over and under two fill wires at a time.	
PLAIN DUTCH WEAVE:	The same pattern as plain weave, but the warp wires are of larger diameter than the fill wires. The fill wires are driven close to each other, making tapered or wedge shaped openings instead of square ones. The warp remains straight and the fill has all the crimps.	
TWILLED DUTCH WEAVE:	The same pattern as twilled weave but the warp wires are of larger diameter than the fill wires. The warp wires are straight and the fill wires, driven up tight, have all the crimps, both up and down and sideways. Openings are wedge shaped.	
CELLULOSE:	A porous paper used in the manufacture of filter media. Made from cellulose pulp derived mainly from wood or certain grasses.	
MICRO-GLASS:	Glass fibers fabricated in a unique manner by twisting, braiding, tapering, and splicing, with micronic precision to form filter media.	

Absolute Filtration Rating:	The diameter, usually in microns, of the largest solid particle which a specified filter media will pass.
Collapse Pressure:	The maximum differential pressure which a filter element will withstand without permanent deformation.
Differential Pressure:	The difference in pressure between two points in a fluid system usually as it relates to filtration. Expressed as ΔP (Delta P) between a housing inlet and housing outlet. This is important when it comes to proper filter maintenance.
Fluid Compatibility:	The suitability of using the materials of a filter assembly, filter element, or seal in conjunction with a specified fluid.
Mean Flow Pore Size:	Indicates that half the flow passes through openings of equal or smaller size and the rest flows through openings of larger sizes.
Mesh Rating:	Indicates the number of openings in wire cloth per linear inch.
Micron Rating:	A micron is equal to one millionth of a meter or .000039 (39 millionths of an inch). Expressed in convenient terms, 25 micron is equal to one thousandth of an inch (.001).
Nominal Filtration Rating:	An arbitrary micron value established by a filter manufacturer as a relative indication of average filtration capability. Based on Mean Flow Pore Size.
PSI:	Pounds per square inch. As it relates to filtration, it means the maximum operating pressure that a filter is capable of.
Rated Flow:	The optimum flow rate for which a filter is designed.
SUS:	Saybolt Universal Seconds. A measure of viscosity. The time in seconds for 60 cubic centimeters (CC) of fluid to flow through a standard orifice at a specific temperature.
Viscosity:	A measure of the internal friction or the resistance of a fluid to flow. The standard unit of measure is SUS or Centipoises.

Micron-Mesh-Inches Comparison

MICRON	MESH	INCHES
2,487	4	.0970
1,923	8	.0750
1,307	10	.0510
1,000	14	.0394
840	20	.0331
710	25	.0280
590	30	.0232
500	35	.0197
420	40	.0165
350	45	.0138
297	50	.0117
250	60	.0098
210	70	.0083
177	80	.0070
149	100	.0059
125	120	.0049
105	140	.0041
88	170	.0035
74	200	.0029
62	230	.0024
53	270	.0021
44	325	.0017
37	400	.0015
25	550	.0009
15	800	.0006
10	1,250	.0004
5	2,500	.0002

Flow Rate

GPM	GPH
10	600
12	720
15	900
20	1200
30	1800
40	2400
50	3000
60	3600
70	4200
80	4800
90	5400
100	6000
120	7200
150	9000
180	10,800
200	12,000
250	15,000
300	18,000
400	24,000
500	30,000
600	36,000
700	42,000
800	48,000
900	54,000
1000	60,000
1400	84,000
1500	90,000

Approximate Viscosity Sample Table @ Standard Operating Temperatures

FLUID	CENTIPOISE	SUS
Water @ 70°F	1	32
Crude Oil	10	60
Kerosene	10	60
Standard Fuel	12	71
Anti-Freeze	15	82
Fuel oil	20	97
Heavy Crude Oil	100	450
SAE 10 Wt. Oil	75	310
SAE 30 Wt. Oil	175	740
Standard Hydraulic Oil	32	150
Honey	2500	11,900
Asphalt @ 200°F	3000	14,000

Relative Size of Particles

SUBSTANCE	MICRON	INCH
Grain of Table Salt	100	.0039
Human Hair	70	.0027
Lower Limit of Visibility	40	.00158
White Blood Cell	25	.0010
Talcum Powder	10	.00039
Red Blood Cell	8	.0030
Bacteria (Average)	2	.000078

FLOW EZY is “ISO” CERTIFIED

NSF-ISR

QUALITY SYSTEM REGISTERED TO ISO 9001: 2000

ANSI-RAB QMS ACCREDITED