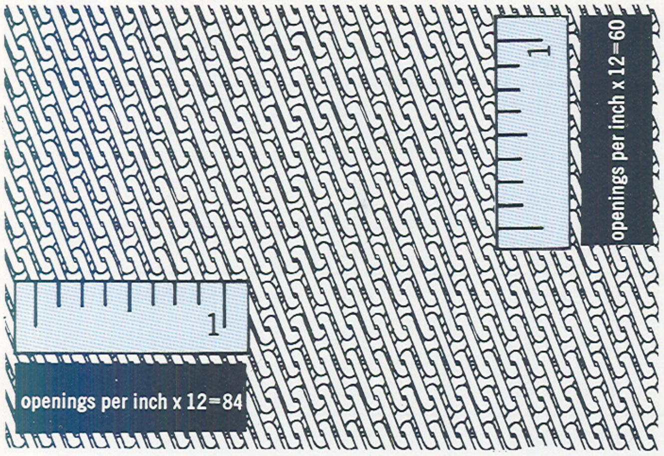
Double Weave
SPECIFICATIONS



CONSTRUCTION

Similar to the rod reinforced weave except that instead of reinforcing single spirals with a cross rod, pairs of spirals are reinforced, thereby, reducing the angle of the weave.

IDENTIFICATION

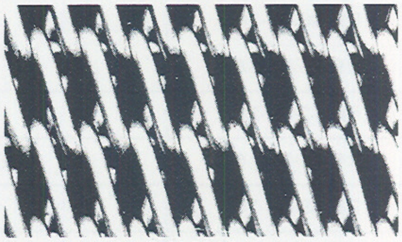
Example — D · 78 · 60 · 16

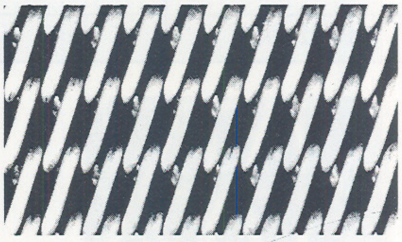
D = Double Weave Construction
78 = Number of openings per foot of width
60 = Number of reinforcing rods per foot of length
16 = Wire Diameter (.063″)

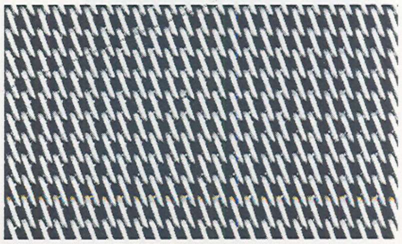
Like the rod reinforced, the double weave construction provides high tensile strength. It is a heavier mesh, however, affording greater density. The double weave is the most compact structure available in woven wire belting. By reducing the angle of the weave this design provides small openings together with a relatively smooth carrying surface. It is used in sintering operations where small parts must be processed through the furnace.

MESH DESIGNATION	APPROX. MESH	WIRE DIA.	APPROX. OPENING	C.S.A.	WEIGHT SQ. FT.
D-16-7½-4	¾	.225	.53 x 1.38	1.275	7.80
D-24-12-8	½	.162	.34 x .84	.989	6.10
D-28-15-10	⅜	.135	.29 x .67	.802	5.50
D-30-19-8/10	⅜	.162 .135	.27 x 1.47	.859	—
D-30-14-9	⅜	.148	.25 x .71	1.036	7.68
D-34-18-10	5/16	.135	.23 x .53	.937	6.90
D-46-23-12	4	.105	.16 x .42	.814	6.00
D48--32-10/12	4	.135 .105	.15 x .24	.839	7.38
D-58-35-10/14	5	.135 .080	.13 x .21	.580	5.63
D-59-38-14	5	.080	.12 x .24	.593	4.63
D-68-39½-14	6	.080	.10 x .22	.684	5.31
D-78-60-16	7	.063	.10 x .13	.479	3.75
D-106-58-18	9	.047	.07 x .16	.376	3.00
D-120-76-19	10	.041	.06 x .12	.317	2.50
D-136-94-20	12	.035	.05 x .08	.259	2.50
D-148-114-22/21	13	.0286 .032	.05 x .07	.234	2.13
D-264-178-22/28	23	.0286 .016	.03 x .04	.119	1.38


D-30-19-8/10


D-46-23-12


D-59-38-14


D-148-114-22/21

Single Weave
SPECIFICATIONS

CONSTRUCTION

Fabricated by weaving a given spiral into the preceeding one to form a continuous fabric similar to the chain link fence design. There are no connecting or reinforcing rods. The edges of the belt are finished welded or knuckled.

Example — 4 Mesh OF16 = 4 Openings per inch woven of 16 Gauge Wire.

Example — 1″ Mesh of 10 = 1″ Opening minus the wire diameter woven of 10 gauge wire.

Although this weave is low in cost initially, it is also low in tensile strength relative to any of the other weaves available. Also, the angular hinging action of the conventional belt causes side movement as it contacts the surface of the terminal pulleys. This will generally result in uncontrollable side creep. For this reason it is not recommended for a friction drive application.

MESH	GA	WIRE DIA.	WEIGHT SQ. FT.
3/8	17	.054	.57
3/8	18	.047	.45
3	13	.092	2.50
3	14	.080	1.80
3	15	.072	1.48
3	16	.063	1.25
3	17	.054	.75
3	18	.047	.65
4	14	.080	2.54
4	15	.072	2.05
4	16	.063	1.56
4	17	.054	1.12
4	18	.047	.80
4	19	.041	.65
5	16	.063	1.88
5	17	.054	1.55
5	18	.047	1.20
5	19	.041	.90
5	20	.035	.50
5	21	.032	.45
6	16	.063	2.56
6	17	.054	1.90
6	18	.047	1.40
6	19	.041	.95
6	20	.035	.70
6	21	.032	.55
6	22	.0286	.46
8	18	.047	2.30
8	19	.041	1.31
8	20	.035	1.00
8	21	.032	.75
8	22	.0286	.60
10	21	.032	.94
10	22	.0286	.75

MESH	GA	WIRE DIA.	WEIGHT SQ. FT.
2″	4	.225	2.10
2″	5	.207	1.80
2″	6	.192	1.40
2″	7	.177	1.20
2″	8	.162	1.00
2″	9	.148	.85
2″	10	.135	.75
2″	11	.120	.50
2″	12	.105	.45
1½″	4	.225	3.60
1½″	5	.207	2.80
1½″	6	.192	2.12
1½″	7	.177	1.80
1½″	8	.162	1.60
1½″	9	.148	1.50
1½″	10	.135	1.20
1½″	11	.120	.85
1½″	12	.105	.56
1″	6	.192	3.12
1″	7	.177	2.80
1″	8	.162	2.25
1″	9	.148	1.70
1″	10	.135	1.30
1″	11	.120	1.06
1″	12	.105	.88
1″	13	.092	.70
1″	14	.080	.44
1″	15	.072	.36
1″	16	.063	.28
7/8″	9	.148	1.95
7/8″	10	.135	1.52
7/8″	11	.120	1.30
7/8″	12	.105	.94
7/8″	13	.092	.85
7/8″	14	.080	.60
7/8″	15	.072	.45
7/8″	16	.063	.30
3/4″	10	.135	1.75
3/4″	11	.120	1.50
3/4″	12	.105	1.00
3/4″	13	.092	.90
3/4″	14	.080	.70
3/4″	15	.072	.50
5/8″	10	.135	2.35
5/8″	11	.120	1.75
5/8″	12	.105	1.30
5/8″	13	.092	1.05
5/8″	14	.080	.75
5/8″	15	.072	.65
5/8″	16	.063	.55
2 or ½″	11	.120	2.50
2 or ½″	12	.105	1.80
2 or ½″	13	.092	1.33
2 or ½″	14	.080	1.06
2 or ½″	15	.072	.80
2 or ½″	16	.063	.70
2 or ½″	17	.054	.50
3/8	12	.105	2.07
3/8	13	.092	1.65
3/8	14	.080	1.20
3/8	15	.072	.94
3/8	16	.063	.76

metal selection chart

typical composition of metals and alloys

Type or trade name	Aisi No.	application
PLAIN STEEL	C-1008	For use under ordinary conditions in dry atmospheres. Will handle light to medium loads.
BETHANIZED	C-1008	For use in moist or mildly corrosive atmospheres. Wiremation process belts in this analysis are always woven of electrolytic zinc coated wire. This type coating is preferred over the hot dip method. It forms a tighter bond with the wire which prevents cracking and peeling.
HIGH CARBON	C1040 C1065	For use in dry atmospheres conveying medium to heavy loads. Because of its increased carbon content, this analysis provides more strength and wear resistance than the C-1008 grade. When used above 1000°F. it is subject to excessive oxidation.
1% CHROME	—	Addition of chromium, molybdenum and silicon to this carbon steel wire provides greater strength and resistance to oxidation at temperatures up to 1150°F.
3% CHROME	—	Provides an increase in strength, resistance to oxidation and structural stability over high carbon and 1% chrome. Primarily used in glass decorating lehrs.
MONEL 400	—	This alloy is more resistant to corrosion than nickel under most reducing conditions. Provides excellent resistance to sulfuric acid as well as sodium chloride and other salts. Primarily used in chemical, marine and various food processing applications.
17% CHROME	430	This alloy represents the least expensive of the stainless steels available in wire mesh belting. It offers fair resistance to various industrial atmospheres including fresh water, food products and chemicals. Limited high temperature application as this stainless will show a definite deterioration in ductility in cycle heating applications up to 1200°F.
18-8	304	Most widely used of all the available stainless steels for resistance to various corrosive media. It is not recommended for high temperature applications.
18-12	316	When 304 stainless is not adequate due to corrosive attack, Type 316 should be considered. The addition of moly to this alloy increases its resistance to corrosive elements such as sodium chloride and other salts.
18-12	317	Similar to Type 316 with increased moly content. Better resistance to attack by sulfuri acid.
20 CB	—	The addition of molybdenum and copper to this nickel-chrome alloy provides excellent resistance to numerous corrosive elements. This alloy has been successfully used in textile processing applications in the presence of hot sulfuric acid.
18-10 CB	347	A good alloy for use in low temperature furnace applications. Addition of columbium helps resist carbide precipitation in the 800-1500°F range. This alloy also provides more strength than the regular 18-8 grade stainless.
25-20	314	The increased nickel content in this alloy provides good creep strength and resistance to oxidation at elevated temperatures. It is successfully used in oxidizing atmospheres carrying sulphur gases and is preferable to the higher nickel bearing materials in the presence of sulphur under reducing conditions. This alloy is being used almost exclusively in sintering applications. It is subject to carbide precipitation in the 1200-1600°F range.
35-19	330	Offers high strength and good serviceability in the 1800-1950°F range. Not recommended for use above 1950°F as large grain growth can develop.
35-19 CB	330 Cb	Same as 35-19 with the addition of columbium to prevent carbide precipitation in the 1200-1750°F range. This alloy represents the best selection for use under carburizing conditions up to 1800°F.
INCONEL 600	—	Provides excellent strength and resistance to oxidation at temperatures above 1800°F. Good resistance to carburization and nitriding. Subject to carbide precipitation in the 1200-1600°F.
INCONEL 604	—	Similar to inconel 600 with the addition of columbium to prevent carbide precipitation. This alloy is preferred over most when the atmosphere fluctuates slightly from reducing to oxidizing.
80-20 CB	—	High strength and excellent resistance to oxidation at temperatures up to 2150°F. Stabilized to prevent "green rot" under reducing conditions at temperatures between 1600-1800°F. This alloy performs well under carburizing conditions and is also the best choice for use in dissociated ammonia atmospheres. Should not be used in the presence of sulphur.
245 ALLOY	—	Specifically designed for operating temperatures up to 2300°F. Aluminum and silicon have been added to this alloy to give it increased properties and life at elevated temperatures. The aluminum forms a protective sheath of chrome-alumina oxide after the allo has reached operating temperatures for a short period of time and is highly stable ove long periods at elevated temperatures. The alloy retains its ductility at room temperature even after prolonged temp. at 2300°F. 245 alloy is not recommended for use under carburizing conditions or in the presence of sulphur.