SHELBY OSTUCO OHIO

MILL STOCK at SHELBY, OHIO

Mechanical Seamless Steel Tubing

JANUARY, 1948

THE OHIO SEAMLESS TUBE CO.

Plant and Main Office - Shelby, Ohio

Manufacturers of

Seamless and Electric-Weld Steel Tubing

Printed in U. S. A.

To

L. A. Wilson, Eng. Works
Box 7
Enterprise, Utah

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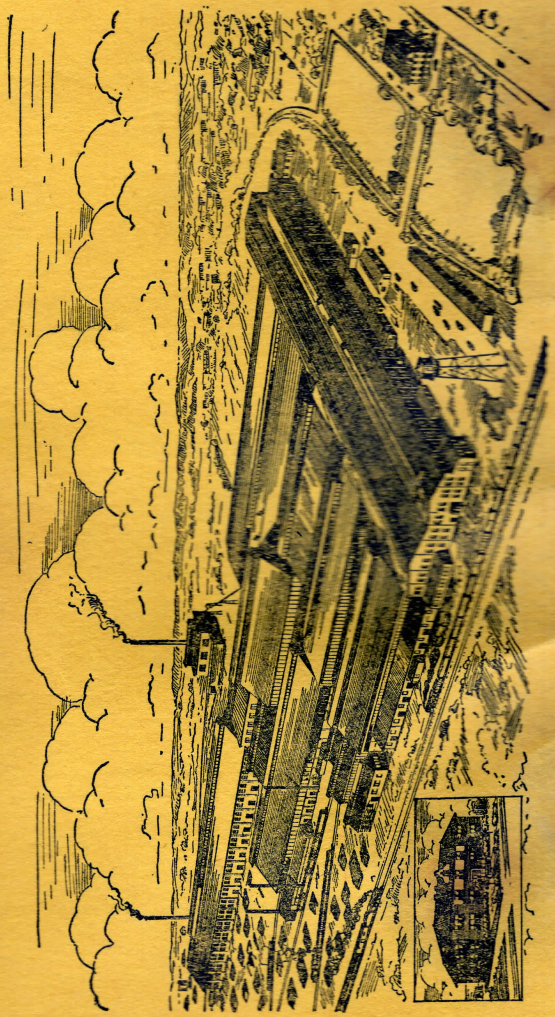

SALES OFFICES

CHICAGO 6, ILLINOIS
Civic Opera Bldg., (Room 1418)
20 N Wacker Drive Telephone - State 7966

CLEVELAND 14, OHIO
1328 Citizens' Bldg. Telephone Main 2153

DAYTON 6, OHIO
1517 East 3rd St. Telephone - Fulton 9640

DETROIT 2, MICHIGAN
2857 E. Grand Blvd. Telephone - Madison 5195

HOUSTON 2, TEXAS
P O. Box 981 Telephone Fairfax 9717

KANSAS CITY 6, MISSOURI
801 Oak St. Tel.: Victor 0266

LOS ANGELES, CALIFORNIA
(Beverly Hills)
170 So. Beverly Drive Tele. - Crestview 6-7614

LOUISVILLE 2, KENTUCKY
321 Citizens' Bldg. Telephone - Wabash 3250

MOLINE, ILLINOIS
309½ - 16th St. Telephone - 7700

NEW YORK 17, NEW YORK
70 E. 45th St. Telephone Murray Hill 6-3689

PHILADELPHIA 2, PENNSYLVANIA
Packard Bldg. (Room 1413) 15th & Chestnut Sts.

SEATTLE 4, WASHINGTON
3205 Smith Tower Telephone Seneca 5393

ST. LOUIS 6, MISSOURI
1230 N Main St. Telephone Garfield 2440

SYRACUSE 4, NEW YORK
501 Roberts Ave. Telephone - 5-5301

CANADA
Railway & Power Engineering Corp., Ltd

NOTE: Stock Represents 5-22 ft. Random

STOCK SIZES

O.D.	Ga.	Wall Dec.	Ft.
		SAE .1010 CARBON	
7/32	.045	.045	700*
	.047	.047	1,025*
	18	.048	360
1/4	22	.028	1,080
	21	.032	430*
	20	.035	2,741*
	17	.058	14,340*
	16	.065	361*
	16	.065	860**
17/64	.039	.039	675*
5/16	21	.032	195
	21	.032	504**
	20	.035	1,570*
	20	.035	356**
	16	.065	1,850*
11/32	18	.049	1,040*
	16	.065	195*
23/64	21	.032	770
3/8	21	.032	1,200**
	20	.035	3,310
	16	.065	5,000*
	15	.072	92*
25/64	.071	.071	800*
	.101	.101	2,401**
	.102	.102	1,822**
13/32	17	.058	640
	16	.065	42*
27/64	.055	.055	215*
	.055	.055	210**
7/16	18	.049	450*
29/64	.039	.039	2,589*
	.070	.070	240*
	.070	.070	3,975**
.494	15	.072	328*
1/2	20	.035	126**
	18	.048	480**
	18	.049	600*
	16	.065	225*
	16	.065	48**
	13	.095	1,280**
	12	.109	4,400*
	11	.120	45**
33/64	20	.035	670*
	.039	.039	300
.534	.050	.050	64*
	.054	.054	414*
	.106	.106	152
	12	.109	625*
	.110	.110	40*
.540	18	.049	1,070*
	11	.120	850*
9/16	24	.022	1,500**
	18	.049	260*
	16	.065	2,500**
	14	.83	161*
5/8	20	.035	239
	19	.042	220**
	19	.042	2,200
	18	.049	17*

* Soft Annealed

** Unannealed

O.D.	Ga.	Wall Dec.	Ft.
5/8	17	.058	43,800
	16	.065	145
	13	.095	349**
.635	18	.049	1,225
41/64	20	.035	450*
	20	.035	320**
21/32	13	.095	685
.665	.106	.106	367*
.668	.13	.095	448*
.670	.148	.148	24*
.675	13	.095	816*
	11	.120	232*
	1/8	.125	300
.678	.089	.089	75*
11/16	13	.095	500**
	9/64	.141	465
23/32	16	.065	2,750*
.746	.22	.028	750*
.747	11	.120	142**
3/4	22	.028	2,915
	20	.035	14,000**
	20	.035	905*
	20	.035	181
	19	.042	3,000*
	18	.049	102*
	16	.065	2,810*
	15	.072	113*
	14	.083	4,310*
	13	.095	3,550*
	11	.120	320*
	3/16	.187	117*

O.D.	Ga.	Wall Dec.	Ft.
.755	20	.035	790*
49/64	.039	.039	650*
.821	22	.028	3,213*
.828	15	.072	103*
.840	18	.049	350*
7/8	11	.120	42
.925	23	.025	4,500
1	18	.049	637*
	16	.065	410*
	16	.065	550**
	.070	.070	117*
	15	.072	12*
	14	.083	101*
	13	.095	77*
	12	.109	3,050*
	9	.148	875*
1.033	.132	.132	195
1.050	16	.015	740**
	13	.095	160*
	.113	.113	25*
1 1/16	9	.148	13*
	8	.165	34*
1.078	16	.065	270**
1.115	17	.058	315**
1 1/8	20	.035	205**
	18	.049	137**
1 9/64	.055	.055	69
1 1/4	20	.035	180*
	14	.083	110*
	13	.095	173**
	.140	.140	24*
	9	.148	236*

* Soft Annealed

** Unannealed

O.D.	Ga.	Wall Dec.	Ft.
1.310	.108	.108	70*
1 5/16	1/4	.250	225
1 11/32	7	.180	102*
1 3/8	14	.083	115*
1 7/16	1/8	.125	8*
1 1/2	18	.049	340*
	16	.065	110*
	8	.165	87*
	7	.180	125
	5/32	.156	16*
	.240	.240	47*
1.598	1/8	.125	22*
1 5/8	18	.049	225*
1.634	.106	.106	280*
1.640	9/64	.140	102*
1 11/16	.180	.180	35*
1.765	9/32	.281	75
1.870	.106	.106	377*
1 57/64	7/32	.218	47
2 1/8	11	.120	77*
	3/16	.187	135
2.240	16	.065	300*
2 1/4	18	.049	210**
	16	.065	180**
2.280	.060	.060	96
2.334	.106	.106	210*
2.338	.157	.157	74*
2.456	.138	.138	330*

O.D.	Ga.	Wall Dec.	Ft.
2.480	1/8	.125	138*
2 1/2	22	.028	155**
	1/8	.125	9*
	5/16	.187	320**
	.238	.238	15
	9/32	.281	110
2.580	.132	.132	545*
2 5/8	16	.065	45*
2.640	11/32	.343	25
2 3/4	5/32	.156	165
	11/32	.343	36
2.825	.132	.132	678*
2 13/16	11	.120	55*
2.850	.700	.700	40**
2 7/8	12	.109	10*
	3/16	.187	16
	.244	.244	35
1/4	1/4	.250	14**
2 7/8	.276	.276	37*
2.990	9/32	.281	16
2 15/16	17/32	.531	114**
3	16	.065	453
	7	.180	17
	3/4	.750	12*
3.018	9/32	.281	500
3.082	.291	.291	29
3 3/16	.323	.323	12
3 9/32	9/64	.140	24*

* Soft Annealed

** Unannealed

O.D.	Ga.	Wall Dec.	Ft.
3⅜	3/16	.187	36
3½	7/32	.218	151
3⅝	7/32	.218	17*
3.772	7/16	.437	75
4.430	11	.120	33*
4½	12	.109	11*
	11	.120	12
	10	.134	126*
4 25/32	39/64	.609	43*
4 15/16	8	.165	11*
5 13/16	21/32	.656	23*

SAE .1015 CARBON

¼	22	.028	325**
	17	.058	39*
	16	.065	143*
.266	13	.095	82
.300	.098	.098	63
5/16	17	.058	630
.320	.070	.070	176*
.328	.052	.052	20
	13	.095	369
.365	.115	.115	66
.367	12	.109	234
.381	16	.065	350
25/64	.102	.102	175*
7/16	20	.035	367**
½	16	.065	466*
	16	.065	280**
	15	.072	13
	11	.120	75**
.515	17	.058	13**
.517	.076	.076	19*
17/32	13	.095	68
.533	.132	.132	1,309*
.534	.106	.106	270*
.535	.099	.099	100
9/16	18	.049	77*
⅝	13	.095	59*
	12	.109	5*
.659	12	.109	30*
.666	.132	.132	26*
	.139	.139	23*
.675	5/32	.15625	60*
¾	19	.042	1,855*
	⅛	.125	17*
.754	16	.065	550
29/32	11/64	.171875	121
1.035	11/64	.171	65*
1.050	13	.095	76*
1⅛	1	.300	11
1 9/64	.055	.055	135*
1 5/32	16	.065	135*
1.165	.270	.270	18*
1.247	13	.095	115

* Soft Annealed

** Unannealed

O.D.	Ga.	Wall Dec.	Ft.
1¼	5/16	.3125	5**
1 11/32	7	.180	17
	6	.203	13*
1⅜	.215	.215	107*
1.385	21	.032	8*
1.640	9/64	.140625	185*
2 1/16	.274	.274	102**
2.218	13	.095	112*
2.270	5/32	.15625	60
2.280	.106	.106	18*
2.338	.132	.132	116*
2.367	.336	.336	8
2½	5/32	.15625	22
2¾	.594	.594	94
2 13/16	7/32	.21875	5*
2.825	13	.095	108*
2⅞	18	.049	72*
2 15/16	16	.065	61**
3	13	.095	12**
	¾	.750	97*
3 3/64	12	.109	30
3 1/16	6	.203	173
3⅛	14	.083	16
3 3/16	¾	.750	148
3.243	5/16	.3125	14*
3¼	17	.058	60**
3.440	.132	.132	107*
3 9/16	5/16	.312	9*
3 11/16	7/32	.218	9
3.968	.163	.163	29
4⅜	16	.065	31
4.430	19	.134	150*
4 23/32	39/64	.609	30*
4.930	.160	.160	8*
4.930	.247	.247	110*

1016 S R Q (CARBORIZING QUALITY)

.955	9	.148	400**
1.020	11	.120	490**
1.129	3/16	.187	210**
1.317	3/16	.187	425**
1.319	.192	.192	1,000**
1.333	.271	.271	900**
1 33/64	6	.203	420**
1¾	6	.203	80**
3¾	9/32	.281	24

* Soft Annealed

** Unannealed

.15/.25 CARBON (SAE 1020)

O.D.	Ga.	Wall Dec.	Ft.
5/32	21	.032	800**
1/4	23	.025	400**
	22	.028	1,400**
	17	.058	861**
	16	.065	500*
17/64	.039	.039	470**
.266	18	.048	690*
	18	.049	675**
9/32	18	.049	1,040
	12	.109	420**
	12	.109	700
.295	.060	.060	780
.310	17	.058	375
5/16	24	.022	70**
	21	.032	2,190**
5/16	20	.035	530**
	19	.042	1,080**
	17	.058	1,800
	16	.065	780**
	14	.083	915
	13	.095	3,411**
.328	13	.095	386
.330	16	.065	390
.333	16	.065	1,300**
11/32	13	.095	90
.354	17	.058	223
	.059	.059	797
	.059	.059	8,309**
.365	.115	.115	480**
3/8	21	.028	1,140**
	.040	.040	132
3/8	18	.049	1,070
	18	.049	2,110**
	17	.058	95
	16	.065	1,270**
	16	.065	586*
.405	.068	.068	220*
.411	16	.065	460**
7/16	12	.109	256
	1/8	.125	1,100
.494	16	.065	305*
1/2	22	.028	2,568
	22	.028	315**
	20	.035	650**
	19	.042	447
	19	.042	450**
	18	.049	405
1/2	18	.049	1,200**
	17	.058	143
	16	.065	560**
	16	.065	1,100*
	14	.083	1,200**
	12	.109	480
	11	.120	120**
	11	.120	8
	1/8	.125	484
.540	5/64	.078	121
.540	.088	.088	52*
	11	.120	446
	.176	.176	400*
.560	.030	.030	480**
	.090	.090	175**
9/16	21	.032	545**
	16	.065	2,400

* Soft Annealed ** Unannealed

O.D.	Ga.	Wall Dec.	Ft.
9/16	14	.083	1,000**
	13	.095	1,036*
5/8	21	.032	54*
	18	.049	40**
	16	.065	585
	13	.095	89
	13	.095	67*
	8	.165	77
	7/32	.218	428
.630	.066	.066	218
21/32	5/32	.156	100
.670	9	.148	150*
.675	16	.065	500
	.091	.091	426*
	11	.120	315*
	1/8	.125	189
	.150	.150	160*
.680	.129	.129	1,577**
11/16	5/64	.078	176
	14	.083	287**
	10	.134	70**
	9	.148	330**
	9/64	.140	93
	7/32	.219	103
.745	.176	.176	21
3/4	22	.028	2,500**
	20	.035	800**
	20	.035	170
	18	.049	400**
	17	.058	323**
	16	.065	720**
	14	.083	470**
	.087	.087	375**
	1/8	.125	105
	1/8	.125	445**
3/4	1/8	.125	50*
	11/64	.171	185**
.765	1/4	.250	128
25/32	16	.065	375**
.783	.054	.054	835**
13/16	16	.065	132*
	9	.148	468
	7/32	.218	850**
.840	.13	.095	120**
	12	.109	175*
	.147	.147	625**
	9	.148	190*
.860	.060	.060	780*
.873	.196	.196	120
7/8	21	.032	290*
	17	.058	600**
	16	.065	371
	.117	.117	51**
	11	.120	13
	5/32	.156	82**
	3/16	.187	69
	1/4	.250	146**
.925	.23	.025	600**
15/16	.024	.024	220
	16	.065	85**
	4	.238	200**
1	22	.028	1,305**
	22	.028	95
	19	.042	135**
	18	.049	330**
	17	.057	158
	11	.120	84**
	1/8	.125	20
	5/32	.156	200**

* Soft Annealed ** Unannealed

O.D.	Ga.	Wall Dec.	Ft.
1	3/16	.187	54
	3/16	.187	150**
1.010	.255	.255	32
1.013	.272	.272	276
1.018	.11	.120	40
1.050	16	.065	146*
	13	.095	56*
	.113	.113	130
1 1/16	20	.035	1,175
	16	.065	60
	11	.120	150
1.118	.185	.185	386
1 1/8	19	.042	80**
	18	.049	200**
1 1/8	13	.095	180
	5/32	.156	43
	7	.180	190**
	9/32	.281	26
	5/16	.314	65
1 3/16	5/32	.156	6
1.220	.193	.193	90
1.248	.298	.298	130
1 1/4	11	.120	356
	.300	.300	63
	5/16	.312	35**
1.260	3/8	.375	15*
1 9/32	11/64	.171	190
1 5/16	.024	.024	790
	13	.095	105**
	1/8	.125	10
	4	.238	60

* Soft Annealed

O.D.	Ga.	Wall Dec.	Ft.
1 5/16	1/4	.250	385
1.317	.023	.023	34
1 21/64	21	.032	275
1.339	.119	.119	66
1.365	3/16	.187	12
1 3/8	22	.028	600**
	13	.095	110**
	12	.109	270**
	10	.134	60**
	5/32	.156	41**
	.168	.168	6
	3/16	.187	35**
	7/32	.218	1,011
	7/32	.218	50**
	.227	.227	185**
1 7/16	13	.095	16
	11	.120	45
	5/32	.156	64
1 1/2	18	.049	76**
	16	.065	5
	13	.095	40**
	5/32	.156	63**
	5/32	.156	150
	.487	.487	7
1.509		.223	135
1 9/16	16	.065	300**
	.086	.086	256
	11/32	.343	6
1.581	.075	.075	150
1 5/8	20	.035	37**
	18	.049	48
	11	.120	153**
	1/8	.125	124
	1/8	.125	138*

** Unannealed

O.D.	Ga.	Wall Dec.	Ft.
1 5/8	10	.134	85**
	3/16	.187	45
	1/4	.250	50
1.634	20	.035	23
	.106	.106	32*
1.640	.216	.216	8,025
1.660	9/64	.140	76
1 43/64	20	.035	95
1.672	20	.035	320
1 11/16	14	.083	43
	5/32	.156	140
	5/16		51
1.740	11	.120	56**
1.745	17/64	.265	9
1 3/4	14	.083	240**
	14	.083	200
	12	.109	27
	1/8	.125	10
	6	.203	30**
	4	.238	64**
	1/4	.250	1,470**
	11/32	.344	86
	1/2	.500	28*
	1/2	.500	30
1.770	.197	.197	99
1.772	.059	.059	15
1 25/32	21/64	.328	64
1 13/16	1/8	.125	120
1.821	.285	.285	46
1.855	.401	.401	34**
1 7/8	17	.058	9
	9	.148	39

* Soft Annealed

O.D.	Ga.	Wall Dec.	Ft.
1 7/8	3/16	.187	32**
1.895	13	.095	13*
1.900	.145	.145	80
1.995	21	.032	32**
2	16	.065	229**
	11	.120	6
	11	.120	52**
	7/32	.218	7
	1/4	.250	529**
2 1/32	13	.095	17
	11/64	.171	153
	1/4	.250	26**
2.080	.615	.615	19
2 3/32	3/32	.093	70*
2 1/8	3/16	.187	220
	.258	.258	40
	9/32	.281	51
	11/32	.343	7
	3/8	.375	13
	13/32	.406	60
	13/32	.406	151**
	9/16	.562	84
	9/16	.562	130**
2 9/64	13	.095	16
2.140	.320	.320	175**
2 3/16	14	.083	65**
	3/16	.187	125
2 1/4	16		18
	14	.083	689
	11	.120	40**
	1/8	.125	115**
	8	.165	16
	3/16	.187	235**

** Unannealed

O.D.	Ga.	Wall Dec.	Ft.
2.280	.060	.060	23**
2 5/16	14	.083	371**
2⅜	13	.095	250
	5/32	.156	526**
	7/32	.218	120
	¼	.250	104**
2.479	16	.065	105**
2½	16	.065	136**
	3/16	.187	33*
	¼	.250	219
	9/32	.281	34
	5/16	.312	17**
	7/16	.437	15**
	½	.500	36**
	11/16	.687	35**
2 9/16	13	.095	36
2⅝	16	.065	95*
	11	.120	20
	7/16	.437	54**
2.642	19	.042	27
2 11/16	⅛	.125	65
	9/32	.281	32
2¾	⅛	.125	185**
	9/64	.140	220**
2.764	.132	.132	95
2 13/16	⅛	.125	19*
	½	.500	10
2 27/32	4	.238	107
2⅞	3/16	.187	5*
	¼	.250	102

* Soft Annealed

O.D.	Ga.	Wall Dec.	Ft.
2 15/16	9/32	.281	25**
3	12	.109	15**
	¼	.250	32
	.420	.420	9**
	⅝	.625	13
3.019	.400	.400	8*
3.043	.435	.435	12**
3 1/16	.594	.594	26*
3⅛	5/32	.156	28
	¼	.250	48
	½	.500	12
	25/32	.781	108**
3 9/64	4	.238	19**
3.150	14	.083	39
3 3/16	⅛	.125	7
	.356	.356	21
	11/16	.687	34
3.230	13/32	.406	14
3¼	11	.120	42**
	⅛	.125	359**
3¼	7/32	.218	24
	¼	.250	42**
	13/32	.406	102
	15/32	.468	17
3.268	9/32	.281	63
3 9/32	5/64	.078	15
	9/64	.140	34*
3 5/16	9/16	.562	6
3.335	29/64	.453	262*

** Unannealed

O.D.	Ga.	Wall Dec.	Ft.
3⅜	11	.120	22
	⅛	.125	25
	5/16	.312	28**
	⅜	.375	550**
	7/16	.437	18
3.422	.396	.396	25
3 7/16	.394	.394	178**
	13/32	.406	6**
3.490	.525	.525	28
3½	13	.095	10
	9	.148	131
	9	.148	112**
	3/16	.187	165
	5/16	.312	460*
3.602	9/32	.281	57**
3⅝	3/16	.187	38
	9/32	.281	8
	⅜	.375	17**
3¾	5/16	.312	23
3.900	.325	.325	77
4	3/16	.187	260**
	.226	.226	19*
4⅛	.680	.680	104**
4⅜	5/16	.312	60
	⅜	.375	40
	13/32	.406	11
	⅝	.625	23**
4 7/16	9/32	.281	39
4.459	.276	.276	50
	.25/.35 CARBON (SAE 1030)		
5/16	16	.065	1,105*
1.755	.217	.217	1,400

O.D.	Ga.	Wall Dec.	Ft.
4 31/64	.352	.352	65
4½	3/16	.187	170**
	.237	.237	16
	¼	.250	154**
	33/64	.515	35**
4⅝	⅜	.375	13
	.680	.680	54**
4¾	10	.134	8
	5/16	.312	13
	½	.500	53**
4.844	.446	.446	12**
5	¼	.250	6
	9/32	.281	8
5.093	.641	.641	15
5⅛	.700	.700	14
5¼	⅜	.375	20**
5 11/32	35/64	.546	32**
5½	¼	.250	230
5¾	¼	.250	14
1 7/16	¼	.250	158
6	⅜	.375	65
6¼	⅜	.375	41
6.415	5/16	.312	19
6¾	11/32	.343	12
7	½	.500	36
2	3/16	.187	54
4	¼	.250	32*

* Soft Annealed

** Unannealed

O.D.	Ga.	Wall Dec.	Ft.
.30/.40 CARBON (SAE 1035)			
7/32	16	.065	162*
5/16	16	.065	1,080
3/8	11	.120	36
5/8	3/16	.187	71
.665	.177	.177	300*
3/4	16	.065	312**
	16	.065	997
7/8	1/4	.250	129
.915	.215	.215	245
1	12	.109	119*
1 1/8	4	.234	190
	1/4	.250	72
1.260	.318	.318	34*
1 3/8	16	.065	28
1 7/16	9	.148	395
1 7/16	5/32	.156	54
1 1/2	11	.120	160
1.516	.128	.128	100
1 5/16	3/16	.187	35
.35/45 CARBON (SAE 1040)			
5/16	21	.032	2,550
	20	.035	260
1/2	18	.049	30
3/4	20	.035	785
1	7/32	.218	97
	4	.238	37
1 13/16	5/32	.156	27
1 27/32	16	.065	20
1.890	16	.065	824
1.910	.076	.076	16
2 1/4	12	.109	23
	11/64	.171	173
	3/8	.375	70*
	1/2	.500	95
2.296	9	.148	108
2 11/32	3/16	.188	77
2.647	.131	.131	81
2 15/16	5/8	.625	36
3	7/8	.875	7
3 3/8	5/16	.312	25
3.400		.132	100**
3 3/4	10	.134	86
4	1/4	.250	33
4 1/4	3/8	.375	19*
4 5/8	5/16	.312	22

* Soft Annealed ** Unannealed

O.D.	Ga.	Wall Dec.	Ft.
1 15/16	16	.065	350
2.015	.331	.331	31
2 1/4	9/32	.281	33
	1 1/16	.687	5
2 9/16	13/32	.406	9
2.583	.229	.229	7
2 5/8	3/16	.187	20
	.307	.307	64**
2 13/16	1/4	.250	5
2 27/32	31/64	.484	14
	.505	.505	12
2 7/8	9/32	.281	14
	1/2	.500	382
	.938	.938	55
2.946	.442	.442	189
3	5/32	.156	56
3 1/8	10	.134	43
3 13/32	.291	.291	20
3 1/2	5/32	.156	350
	9/32	.281	18
3 3/4	10	.134	65
4 1/4	14	.083	5
4 1/2	1/8	.125	35
	3/16	.187	11
5 7/16	3/16	.187	340
5 3/4	.230	.230	286
TYPE "EE" STEEL .35/.45 CARBON MANGANESE .70/.90			
.360	21	.032	1,568
7/16	21	.032	16
5/8	22	.028	2,642
	20	.035	266
	.080	.080	374
3/4	16	.065	12
	.139	.139	76
	7/32	.218	13
13/16	3/16	.187	96**
1	20	.035	10
	16	.065	28
	3/16	.187	14
	1/4	.250	65
	5/16	.312	195
1 1/8	13	.095	19
	1/4	.250	28**
	1/4	.250	9
1 1/4	21	.032	98
	.318	.318	110
1.260	.318	.318	92
	.318	.318	168*
1 5/16	13/32	.406	32
	7/16	.437	31
1 11/32	29/64	.453	149
1 3/8	17	.058	7
	1/2	.500	12
1 9/16	21	.032	13
1 41/64	3/16	.187	80

* Soft Annealed ** Unannealed

O.D.	Ga.	Wall Dec.	Ft.
1⅞	17/32	.531	5*
1.890	16	.065	40
	.510	.510	61*
1 15/16	16	.065	142*
1 31/32	.420	.420	25
1.990	.000	.425	15*
2 5/32	15/64	.234	13
2¼	16	.065	8
	14	.083	14
	⅛	.125	96
2.270	.154	.154	707
2 9/16	.450	.450	9
2.623	11	.120	80
2 21/32	.465	.465	22
2 11/16	21/32	.656	5
2.745	⅝	.625	5
	43/64	.671	7
2¾	16	.065	10
3 1/16	17	.058	27
3¼	9/32	.281	22
3.397	.131	.131	56
3 13/32	9/32	.281	66
3½	13	.095	39
3⅝	⅛	.125	17
3 11/16	5/32	.156	15
3¾	.085	.085	13
	⅛	.125	370*
3 13/16	9/16	.562	96*
3 63/64	11/32	.343	6*
4	5/32	.156	43
	7	.180	18
4⅜	10	.134	11
4 15/32	9/32	.281	13
4.525	.635	.635	52
4⅝	5/32	.156	12
	5/16	.312	15
4⅞	¼	.250	20**
5⅛	13/32	.406	10*
5¾	3/16	.187	12*

N. P. NO. 3 -- .35 -- .45 CARBON

Specially processed to give very fine grain structure with high and more uniform physical properties than regular .35 -- .45 CARBON.

1.025	.173	.173	93
1 1/16	16	.065	1,040
1.205	.253	.253	48
1 5/16	¼	.250	1,896
1 13/32	5/64	.078	398
1 7/16	11	.120	158
	¼	.250	77
1 9/16	16	.065	28

* Soft Annealed ** Unannealed

O.D.	Ga.	Wall Dec.	Ft.
1⅝	¼	.250	1,370
1 21/32	.150	.150	30
1 13/16	13	.095	2,787
1 13/16	9/64	.140	190
	3/16	.187	66
1⅞	5/64	.078	405
1 29/32	¼	.250	118
2	16	.065	489
	3/16	.187	32
2 3/16	.268	.268	63
2¼	⅛	.125	195
2 9/32	9/64	.140	98
2⅜	3/16	.187	40
2½	10	.134	240
2.575	.228	.228	7
2⅝	11	.120	15
2¾	.173	.173	6
	3/16	.187	260
2 27/32	9/64	.140	36
2⅞	6	.203	369
2 29/32	9/64	.140	210
3	10	.134	134
3⅛	5/32	.156	48
3 7/16	.259	.259	60
3 15/32	11	.120	144
3½	10	.134	155
	9	.148	70
	3/16	.187	16
	7/32	.218	110
	.259	.259	29
3.697	.161	.161	587
3¾	3/16	.187	30
4	⅛	.125	108
	9	.148	5
	8	.165	9
	3/16	.187	21
	.259	.259	52
4½	3/16	.187	372
	7/32	.218	80
	5/16	.312	17
5¼	3/16	.187	39

.40/.50 CARBON (SAE 1045)

9/16	14	.083	155*
¾	⅛	.125	159
1	22	.028	48
	11/64	.171	100
1¼	10	.134	153**
1 5/16	7/32	.218	501
1 11/16	5/16	.312	49
1⅞	.123	.123	180**
	⅛	.125	425**
2	13	.095	870
2 9/16	¼	.250	50
2¾	⅝	.625	29

* Soft Annealed ** Unannealed

O.D.	Ga.	Wall Dec.	Ft.	O.D.	Ga.	Wall Dec.	Ft.
$3\frac{13}{32}$	$\frac{37}{64}$	.578	9	$4\frac{3}{16}$	.311	.311	69*
				$4\frac{1}{4}$	$\frac{1}{16}$	.437	61
$3\frac{5}{8}$	$\frac{23}{32}$	.718	15		1.	1.0000	60
		.45/.55 CARBON (SAE 1050)					
$\frac{7}{16}$	16	.065	40*	3	½	.500	10
1	.166	.166	190				
		.55/.65 CARBON (SAE 1060)					
1	12	.109	95				
		.60/.70 CARBON (SAE 1065)					
$2\frac{3}{8}$	$\frac{3}{8}$	.375	46				
		.70/.80 CARBON (SAE 1075)					
$\frac{5}{8}$	15	.072	22	1.540	$\frac{9}{64}$	.140	64
$\frac{7}{8}$	$\frac{3}{16}$	.187	48	$2\frac{1}{2}$	$\frac{5}{16}$	.312	104**
		MOLY. 1½% NI. .10/.20 CARBON (SAE 4615)					
$\frac{19}{32}$	⅛	.125	63	2.451	.199	.199	210**
$\frac{5}{8}$	18	.049	98*	2.462	6	.203	358**
¾	12	.109	52	$2\frac{1}{2}$	$\frac{17}{64}$	.265	29*
	$\frac{7}{32}$	.218	9		$\frac{17}{64}$	.265	31
.997	.164	.164	10**	2.505	.271	.271	9**
$1\frac{1}{8}$	$\frac{9}{32}$	.281	10	2.509	.348	.348	80
					.358	.358	5
$1\frac{3}{16}$	11	.120	33	$2\frac{17}{32}$	.211	.211	91
$1\frac{3}{8}$	¼	.250	167**		.391	.391	42
$1\frac{3}{4}$	$\frac{3}{16}$	.187	12		.405	.405	14
$1\frac{13}{16}$	$\frac{5}{32}$	.156	36	$2\frac{5}{8}$	¼	.250	19
$2\frac{3}{32}$	.327	.327	15	$2\frac{11}{16}$	⅜	.375	12
2.100	.256	.256	22**	2.780	.390	.390	145

* Soft Annealed

** Unannealed

O.D.	Ga.	Wall Dec.	Ft.	O.D.	Ga.	Wall Dec.	Ft.
2.900	.300	.300	27	4.595	.579	.579	17
$2\frac{61}{64}$	.547	.547	14**	$4\frac{5}{8}$	$\frac{5}{16}$	.312	85
3	14	.083	675**	$4\frac{3}{4}$	$\frac{17}{32}$	.531	92
$3\frac{1}{16}$	13	.095	144	4.835	.583	.583	22
$3\frac{5}{16}$	$\frac{21}{32}$	.656	12	$5\frac{1}{8}$	$\frac{17}{32}$	.531	11
$3\frac{1}{2}$	$\frac{3}{16}$	.187	18	5.200	.590	.590	7
	$\frac{17}{64}$	.265	27**				
	$\frac{17}{64}$	.265	13	$5\frac{7}{8}$	¼	.250	9
	$\frac{5}{16}$	.312	34		$\frac{9}{32}$	.281	13
4	$\frac{11}{32}$	.343	14	6.424	.380	.380	10
$4\frac{7}{32}$	$\frac{17}{64}$	.265	15	$6\frac{17}{32}$	.575	.575	5
$4\frac{3}{8}$	$\frac{13}{32}$	.406	15				
		MOLY. 1½% NI. .15/.25 CARBON (SAE 4620)					
$1\frac{1}{4}$	⅛	.125	79	3.407	2	.284	28**
$2\frac{1}{8}$	⅜	.375	190**	$3\frac{1}{2}$	$\frac{9}{16}$	.562	14**
$2\frac{5}{16}$	¼	.125	10	$3\frac{7}{8}$	⅝	.875	20**
2.509	348	.348	7	4.437	.423	.423	36*
$2\frac{11}{16}$	$\frac{7}{16}$		7	5.391	.524		100
$2\frac{3}{4}$	⅝	.625	24				
		NI. MOLY. .15/.25 CARBON (RBEC 4720)					
1	¼	.250	218	2.540	.465	.465	77
1.855	.401	.401	49	$2\frac{5}{8}$	¼	.250	6
2.184	.492	.492	11	$5\frac{15}{64}$	.541	.541	5
		1½% NI. .12/.20 CARBON (SAE 3120)					
$\frac{3}{16}$	18	.049	58	$1\frac{1}{4}$	17	.058	80
¼	16	.065	40		16	.065	10
1.010	.255	.255	96	1.385	.130	.130	77

* Soft Annealed

** Unannealed

O.D.	Ga.	Wall Dec.	Ft.	O.D.	Ga.	Wall Dec.	Ft.
1½% NI. .25/.35 CARBON (SAE 3130)							
5/16	13	.095	144*	1⅞	7/32	.218	37
¾	10	.134	415**		11/32	.343	15
⅞	11	.120	42	2½	¼	.250	21
.895	.135	.135	21				
1½% NI. .30/.40 CARBON (SAE 3135)							
1⅜	14	.083	192*	2¼	5/32	.156	54
1½	14	.083	24*	3¼	23/32	.718	59
1½% NI. .35/.45 CARBON (SAE 3140)							
⅜	.101	.101	90*	2½	¼	.250	13*
					5/16	.312	7
½	6	.203	50	2 11/16	¼	.250	17
					5/16	.312	21
1	.210	.210	33	3	14	.083	18**
	4	.238	8*		5/16	.312	8
1⅜	⅜	.375	7	3⅛	11/32	.343	45
1¾	½	.500	15	4½	¼	.250	16
				4 19/32	.235	.235	227
1 13/16	3/16	.187	75	5	¾	.750	19
2⅜	12	.109	45	5½	3/16	.187	8
	11	.120	48	6¼	5/16	.312	76
					13/32	.406	11
1½% NI. .45/.55 CARBON (SAE 3150)							
5⅛	19/32	.593	9				

* Soft Annealed ** Unannealed

O.D.	Ga.	Wall Dec.	Ft.	O.D.	Ga.	Wall Dec.	Ft.
3½% NI. .10/.20 CARBON (SAE 2315)							
5⅛	18	.049	1,280**	2⅜	5/32	.156	30
	18	.049	57*	2½	1 1/16	.687	5
¾	14	.083	1,570**				
	14	.083	265*	2⅝	¼	.250	21
⅞	5/32	.156	52	2⅞	¼	.250	28
2 5/16	7/32	.218	27	3⅜	¼	.250	42
	¼	.250	18	3½	3/16	.187	140
3½% NI. .25/.35 CARBON (SAE 2330)							
⅜	18	.049	42	1⅜	9/32	.281	17
½	17	.058	66		7/16	.437	38
17/32	11	.120	10	1 7/16	18	.049	98
¾	5/32	.156	7	1 35/64	⅛	.125	25
13/16	12	.109	100	1 9/16	3/16	.187	12
850	9	.148	969*	1⅝	11/64	.171	16
	.152	.152	80*	1 21/32	17/64	.265	155
15/16	3/16	.187	5	2 3/16	⅛	.125	135
1	18	.049	65	2¼	⅛	.125	20
1.010	.158	.158	276	2 7/16	⅜	.375	429
	.158	.158	287*				
	.162	.162	140*	2½	⅜	.375	11
	.167	.167	15*				
	.170	.170	28*	3⅛	15/32	.468	6
1¼	11/32	.343	60	3½	13	.095	6
1.270	.416	.416	90	3.575	.350	.350	13

* Soft Annealed ** Unannealed

O.D.	Ga.	Wall Dec.	Ft.
3.595	.320	.320	14
3⅝	3/16	.187	7
	7/32	.218	15
3¾	9/16	.562	6
3 15/16	⅛	.125	16
4	13	.095	26
3½% NI. .30/.40 CARBON (SAE 2335).			
⅝	16	.065	150
	.082	.082	156
13/16	12	.109	201
1	13	.095	351**
LOW CARBON - LOW CHROME			
.266	13	.095	340*
5/16	13	.095	176
.328	13	.095	262
9/16	14	.083	54**
.710	⅛	.250	12
¾	18	.049	480**
	15	.072	975**
	12	.109	41*
	3/16	.187	4,520**
.767	10	.134	995
.772	10	.134	506**
	.136	.136	19
.791	.17	.058	345**
⅞	18	.049	2,260
	16	.065	2,463
	11	.120	700
	11	.120	308*
	11	.120	3,750**
	⅛	.125	150**
4	9/16	.562	24
4.226	.145	.145	7
5.345	.387	.387	5
4½	19/32	.593	116
6⅜	15/32	.468	13
1 1/4	.117	.117	210
1 5/16	⅛	.125	440
1 5/8	11	.120	76
1¾	.123	.123	300
15/16	13	.095	405
	13	.095	675**
1	18	.049	11,010
	16	.065	3,072*
	16	.065	1,785
1.050	.090	.090	1,750
	.113	.113	220**
1 1/16	12	.109	600*
1⅛	17	.058	10,300**
1¼	11	.120	250**
	3/16	.187	250
1⅜	14	.083	950**
	10	.134	36**
1½	16	.065	1,140*
	14	.083	40**
	9	.148	148
1⅝	11	.120	325**
	10	.134	750**

* Soft Annealed ** Unannealed

O.D.	Ga.	Wall Dec.	Ft.
2	11/64	.171	130
2¼	16	.065	11,000
	14	.083	150
2⅜	5/32	.156	32
2½	11	.120	65
2¾	14	.083	.350
MEDIUM CARBON - LOW CHROME			
¾	.100	.100	170
⅞	15	.072	92
	12	.109	92
.545	.275	.275	355
1	11	.120	33
HIGH CARBON - LOW CHROME			
.781	.141	.141	227
½% CHROME .20 CARBON (SAE 5120)			
1.520	.385	.385	120
2⅝	⅝	.625	17
3½	9/16	.562	27
VAN "A" 1% CHROME, VAN .15, CAR .17/.22 (SAE 6120)			
9/16	5/32	.156	13*
840	.147	.147	140*
	17/64	.265	32*
⅞	5/32	.156	9*
1⅛	16	.065	12*
1% CHROME VAN, .45/.55 CARBON (SAE 6150)			
½	18	.049	252**
	.050	.050	2,740
21/32	11	.120	12
2.991	5/32	.156	26
3	13	.095	90**
3½	13	.095	160
	11	.120	15**
4.011	3/16	.187	201
1	⅛	.125	2,500
1⅛	17	.058	110
1 5/16	7	.180	700
1½	5/32	.156	42
	5/16	.312	226
4⅞	9/16	.562	18
5½	¾	.750	7
1¼	⅛	.125	60
1⅜	3/16	.187	50*
1½	5/16	.312	43*
2⅜	5/16	.316	36*
3¾	9/16	.562	70*
1 3/32	.225	.225	1,478
1½	.419	.419	108
1.587	.379	.379	25*

* Soft Annealed ** Unannealed

O.D.	Ga.	Wall Dec.	Ft.	O.D.	Ga.	Wall Dec.	Ft.
1⅞	3/16	.187	12	4.570	.535	.535	79
CHROME MOLYBDENUM .35 TO .45 CARBON (SAE 4140)							
1 1/16	5/32	.156	104	2⅝	11	.120	18
	.195	.195	240		5/16	.312	88
1 5/16	¼	.250	14	2 29/32	5/16	.312	111
1 1/64	.297	.297	256	3½	.160	.160	13
1 5/64	.227	.227	82	3⅞	7/16	.437	26
1¼	11	.120	39	4	3/16	.187	60
1⅜	18	.049	52	4¼	19/32	.594	205
2½	16	.065	150	4⅝	9/16	.562	10
CHROME MOLYBDENUM .45 TO .55 CARBON (SAE 4150)							
⅝	3/16	.187	160	1 7/16	9/32	.281	6
1 1/16	16	.065	765	3 11/32	4	.238	13
1	12	.109	324				
CHROME MOLYBDENUM .50 TO .60 CARBON (SAE 4155)							
1 5/16	.149	.149	106	2⅝	.261	.261	129
1.650	7/32	.218	8	3⅛	7/32	.218	51
1 21/32	9/64	.141	45		4	.238	5
2 5/32	4	.238	31				
CHROME MOLYBDENUM .55 TO .65 CARBON (SAE 4160)							
2	11/64		90				
CHROME - NI - MOLYBDENUM .40 TO .47 CARBON (NE-8744) O. H.							
1 15/32	11/64	.172	96	4 21/64	.664	.664	13
MN - NI - CHROME MOLYBDENUM .28 TO .33 CARBON (NE-9430) O. H.							
1½	5/32	.156	27	2	11/64	.172	100
MN - NI - CHROME MOLYBDENUM .33 TO .38 CARBON (NE-9435) O. H.							
2 1/16	7/32	.218	350				

* Soft Annealed

** Unannealed