DEPARTMENT OF COMMERCE AND LABOR

## CIRCULAR

#### OF THE

# BUREAU OF STANDARDS

S. W. STRATTON, DIRECTOR



### STANDARD GAGE FOR SHEET AND PLATE IRON AND STEEL

[2d Edition] Issued July 1, 1911



WASHINGTON GOVERNMENT PRINTING OFFICE

1911

#### STANDARD GAGE FOR SHEET AND PLATE IRON AND STEEL.

For the information of those concerned the provisions of an act of Congress approved March 3, 1893 (27 Stat. L., 746), establishing a uniform standard for sheet and plate iron and steel in the United States, are reprinted.

A variation of  $2\frac{1}{2}$  per cent either way is permitted, so that the excessive number of decimal places in the "approximate" equivalents is undue refinement for the practical purposes for which the act was established. Moreover, the values in some cases are beyond the limits of measurement of the highest precision. For these reasons and greater convenience in use, the figures not usually required in view of the tolerance are printed in smaller type.

> S. W. STRATTON, Director.

(2)

### AN ACT ESTABLISHING A STANDARD GAGE FOR SHEET AND PLATE IRON AND STEEL

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That for the purpose of securing uniformity, the following is established as the only standard gage for sheet and plate iron and steel in the United States of America, namely:

Number of gage	Approximate thickness in fractions of an inch	Approximate thickness in decimal parts of an inch	Approximate thickness in millimeters	Weight per square foot in ounces avoirdu- pois	Weight per square foot in pounds avoirdu- pois	Weight per square foot in kilograms	Weight per square meter in kilograms	Weight per square meter in pounds avoirdu- pois
0000000	1-2	.5	12.7	320	20.00	9.072	97.65	215.28
000000	1532	.46875	11,90625	300	18.75	8.505	91.55	201.82
00000	7–16	.4375	11.1125	280	17.50	7.983	85.44	1 <b>88.</b> 37
0000	1332	.40625	10.31875	260	16.25	7.371	79.33	1 <b>74.</b> 91
000	38	.375	9.525	240	15	6.804	73.24	161.46
00	11-32	<b>.343</b> 75	8.73125	220	13.75	6.237	67.13	148.00
0	5-16	.3125	7.9375	200	12.50	5.67	61.03	1 <b>34.</b> 55
1	9-32	.28125	7.14375	180	11.25	5.103	54.93	121.09
2	17-64	<b>.265</b> 625	<b>6.7</b> 46875	170	10.625	4.819	51.88	114.37
3	1-4	.25	6.35	160	10	4.536	48.82	107.64
4	1564	<b>.234</b> 375	5.953125	150	9.375	4.252	45.77	100.91
5	732	.21875	<b>5.</b> 55625	140	8.75	3.969	42.72	<b>94.</b> 18
6	13-64	.203125	5.159375	130	8.125	3.685	39.67	<b>87.</b> 45
7	3-16	.1875	4.7625	120	7.5	3.402	36.62	80.72
8	11-64	.171875	4.365625	110	<b>6.8</b> 75	3.118	33.57	74.00
9	5-32	.15625	3.96875	100	6.25	2.835	30.52	<b>67.</b> 27
10	9-64	.140625	<b>3.57</b> 1875	90	5.625	2.552	27.46	60.55
11	1-8	.125	3.175	80	5	2.268	24.41	5 <b>3.</b> 82
12	7-64	.109375	2.778125	70	4.375	1.984	21.36	47.09
13	3-32	.09375	2.38125	60	3.75	1.701	18.31	<b>40.</b> 36
14	5-64	.078125	1.984375	50	3.125	1.417	15.26	33.64
15	9–128	.0703125	1.7859375	45	2.8125	1.276	13.73	30.27
16	1-16	.0625	1.5875	40	2.5	1.134	12.21	26.91
17	9-160	.05625	1.42875	36	2.25	1.021	10.99	24.22
18	1-20	.05	1.27	32	2	.9072	9.765	21.53

Number of gage	Approximate thickness in fractions of an inch	Approximate thickness in decimal parts of an inch	Approximate thickness in millimeters	Weight per square foot in ounces avoirdu- pois	Weight per square foot in pounds avoirdu- pois	Weight per square foot in kilograms	Weight per square meter in kilograms	Weight per square meter in pounds avoirdu- pois
19	7–160	.04375	1.11125	28	1.75	.7988	8.544	18.84
20	380	.0375	.9525	24	1.50	.6804	7.324	16.15
21	11320	.034375	.873125	22	1.375	.6237	<b>6.7</b> 13	14.80
22	1–32	.03125	<b>.79</b> 3750	20	1.25	.567	6.103	13.46
23	9–320	.028125	.714375	18	1.125	.5103	5.493	12.11
24	1-40	.025	.635	16	1	.4536	4.882	1 <b>0.7</b> 6
25	7–320	.021875	.555625	14	.875	.3969	4.272	9.42
26	3–160	.01875	.47625	12	:75	.3402	3.662	8.07
27	11-640	.0171875	.4365625	11	.6875	.3119	3.357	7.40
28	1-64	.015625	.396875	10	.625	.2835	3.052	6.73
29	9-640	.0140625	.3571875	9	.5625	.2551	2.746	6.05
30	180	.0125	.3175	8	.5	<b>.226</b> 8	2,441	5.38
31	7–640	.0109375	.2778125	7	.4375	.1984	2.136	4.71
32	13-1280	.01015625	.25796875	$6\frac{1}{2}$	.40625	.1843	1.983	4.37
33	3–320	.009375	.238125	6	.375	.1701	1.831	4.04
34	11-1280	.00859375	.21828125	$5\frac{1}{2}$	.34375	.1559	1 <b>.67</b> 8	3.70
35	5-640	<b>.0078</b> 125	.1984375	5	.3125	.1417	1.526	3.36
36	9-1280	.00703125	.17859375	4 <u>1</u>	.28125	.1276	1.373	3.03
37	17-2560	.006640625	<b>.168</b> 671875	4 <u>1</u>	.265625	.1205	1.297	2.87
38	1–160	.00625	.15875	4	.25	.1134	1.221	2.69

And on and after July first, eighteen hundred and ninety-three, the same and no other shall be used in determining duties and taxes levied by the United States of America on sheet and plate iron and steel. But this act shall not be construed to increase duties upon any articles which may be imported.

SEC. 2. That the Secretary of the Treasury is authorized and required to prepare suitable standards in accordance herewith.

SEC. 3. That in the practical use and application of the standard gage hereby established a variation of two and one-half per cent either way may be allowed.

Approved, March 3, 1893.

4