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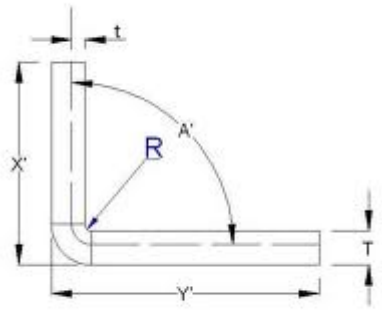
# Sample Bend Tables & Instructions for Assigning New Sheet Metal Rules in Inventor




To work out the flat sizes when using create flat pattern the following calculation has been used:

X + Y – MATERIAL THICKNESS x 2 + BA

eg. 2mm Aluminium would be 50mm + 50mm – ( 2 x 2 ) + 0.8mm = 96.8mm.
eg. 2mm Mild Steel would be 50mm + 50mm – ( 2 x 2 ) + 0.4mm = 96.4mm.

## Aluminium Bend Allowance (BA).

0.7mm = 0.2mm
1.0mm = 0.2mm
1.2mm = 0.4mm
1.5mm = 0.6mm
2.0mm = 0.8mm
2.5mm = 1.0mm
3.0mm = 1.0mm

## Mild Steel Bend Allowance (BA).

0.7mm = 0.2mm
1.0mm = 0.2mm
1.2mm = 0.2mm
1.5mm = 0.4mm
2.0mm = 0.4mm
2.5mm = 0.4mm
3.0mm = 0.4mm
4.0mm = 0.8mm
6.0mm = 1.0mm
8.0mm = 1.0mm
10.0mm = 1.0mm

5.0mm = 1.0mm

Then the tables below have been calculated using these values; One of these can be copied and pasted into each Unfold rule you create.

Aluminium 0.7mm Thick

| | 0.125 | 0.7 | 1 | 1.6 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 0.953926 | -0.113827 | -0.541467 | -1.20907 | -1.84856 | -3.08696 | -4.29725 | -5.49212 | -6.67724 |
| 1 | 0.957794 | -0.097639 | -0.51957 | -1.17791 | -1.80829 | -3.0287 | -4.22115 | -5.39827 | -6.5657 |
| 5 | 0.973262 | 0.061 | -0.431982 | -1.05327 | -1.64721 | -2.79566 | -3.91676 | -5.02289 | -6.11954 |
| 10 | 0.992597 | 0.12288 | -0.322496 | -0.897459 | -1.44586 | -2.50435 | -3.53629 | -4.55366 | -5.56184 |
| 15 | 1.01193 | 0.183992 | -0.213011 | -0.741651 | -1.24451 | -2.21305 | -3.15581 | -4.08444 | -5.00414 |
| 20 | 1.03127 | 0.246931 | -0.103526 | -0.585844 | -1.04316 | -1.92175 | -2.77533 | -3.61521 | -4.44644 |
| 25 | 1.0506 | 0.310871 | 0.005959 | -0.430036 | -0.841815 | -1.63044 | -2.39485 | -3.14599 | -3.88874 |
| 30 | 1.06994 | 0.374811 | 0.115444 | -0.274229 | -0.640466 | -1.33914 | -2.01437 | -2.67676 | -3.33103 |
| 35 | 1.08927 | 0.44175 | 0.22493 | -0.118421 | -0.439117 | -1.04783 | -1.63389 | -2.20754 | -2.77333 |
| 40 | 1.10861 | 0.50969 | 0.334415 | 0.037387 | -0.237768 | -0.756527 | -1.25341 | -1.73831 | -2.21563 |
| 45 | 1.12795 | 0.37963 | 0.4439 | 0.193194 | -0.036419 | -0.465222 | -0.872933 | -1.26909 | -1.65793 |
| 50 | 1.14728 | 0.45257 | 0.553385 | 0.349002 | 0.164929 | -0.173918 | -0.492454 | -0.799862 | -1.10023 |
| 55 | 1.16662 | 0.52851 | 0.66287 | 0.504809 | 0.366278 | 0.117387 | -0.111975 | -0.330636 | -0.542529 |
| 60 | 1.18595 | 0.60845 | 0.772355 | 0.660617 | 0.567627 | 0.408691 | 0.268504 | 0.138589 | 0.015173 |
| 65 | 1.20529 | 0.69239 | 0.881841 | 0.816425 | 0.768976 | 0.699996 | 0.648983 | 0.607815 | 0.572874 |
| 70 | 1.22462 | 0.78033 | 0.991326 | 0.972232 | 0.970325 | 0.9913 | 1.02946 | 1.07704 | 1.13058 |
| 75 | 1.24396 | 0.87427 | 1.10081 | 1.12804 | 1.17167 | 1.28261 | 1.40994 | 1.54627 | 1.68828 |
| 80 | 1.26329 | 0.97521 | 1.2103 | 1.28385 | 1.37302 | 1.57391 | 1.79042 | 2.01549 | 2.24598 |
| 85 | 1.28263 | 1.08315 | 1.31978 | 1.43965 | 1.57437 | 1.86521 | 2.1709 | 2.48472 | 2.80368 |
| 90 | 1.30196 | 1.2 | 1.42927 | 1.59546 | 1.77572 | 2.15652 | 2.55138 | 2.95394 | 3.36138 |
| 95 | 1.18325 | 1.07209 | 1.25428 | 1.38313 | 1.52526 | 1.82867 | 2.14537 | 2.46934 | 2.79792 |
| 100 | 1.07515 | 0.931445 | 1.10118 | 1.19912 | 1.30956 | 1.54847 | 1.79987 | 2.05813 | 2.32072 |
| 105 | 0.976059 | 0.775421 | 0.966634 | 1.03912 | 1.12333 | 1.30865 | 1.50569 | 1.70915 | 1.91667 |
| 110 | 0.884647 | 0.600443 | 0.847913 | 0.899606 | 0.962237 | 1.10327 | 1.25524 | 1.41321 | 1.57496 |
| 115 | 0.799806 | 0.402581 | 0.742731 | 0.77761 | 0.822644 | 0.927361 | 1.04223 | 1.16267 | 1.28663 |
| 120 | 0.720603 | 0.175305 | 0.649169 | 0.67065 | 0.701505 | 0.776738 | 0.861344 | 0.951088 | 1.04408 |
| 125 | 0.646246 | -0.08975 | 0.565591 | 0.576611 | 0.596225 | 0.647846 | 0.708061 | 0.772984 | 0.840886 |
| 130 | 0.576054 | -0.40274 | 0.490594 | 0.493677 | 0.504573 | 0.537631 | 0.578502 | 0.623653 | 0.671511 |
| 135 | 0.509434 | -0.77966 | 0.422959 | 0.420271 | 0.424613 | 0.44344 | 0.469296 | 0.499006 | 0.531151 |
| 140 | 0.445868 | -1.2464 | 0.361617 | 0.355008 | 0.354648 | 0.362943 | 0.377488 | 0.395457 | 0.415592 |
| 145 | 0.384895 | -1.83974 | 0.30562 | 0.296661 | 0.293171 | 0.294079 | 0.300456 | 0.309828 | 0.321096 |
| 150 | 0.326104 | -2.42438 | 0.254116 | 0.244131 | 0.238832 | 0.234997 | 0.235848 | 0.239268 | 0.244312 |
| 155 | 0.269119 | -3.51495 | 0.206336 | 0.196418 | 0.190407 | 0.184018 | 0.181535 | 0.181192 | 0.182203 |
| 160 | 0.213598 | -5.14 | 0.161571 | 0.152608 | 0.14677 | 0.139602 | 0.135558 | 0.133226 | 0.131977 |
| 165 | 0.15922 | -7.834 | 0.119163 | 0.111848 | 0.106877 | 0.100315 | 0.096096 | 0.093162 | 0.09104 |
| 170 | 0 | -13.202 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | -29.265 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Aluminium 1.0mm Thick

| | 0.7 | 1 | 1.2 | 1.5 | 2 | 2.5 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 0.301527 | -0.16261 | -0.453118 | -0.871708 | -1.54063 | -2.18754 | -2.82053 | -4.06025 | -5.27795 |
| 1 | 0.318741 | -0.139485 | -0.426156 | -0.839088 | -1.49874 | -2.1365 | -2.76041 | -3.98213 | -5.18196 |
| 5 | 0.387596 | 0.087018 | -0.318309 | -0.708605 | -1.33117 | -1.93233 | -2.51996 | -3.66968 | -4.79801 |
| 10 | 0.473665 | 0.174646 | -0.1835 | -0.545502 | -1.12171 | -1.67712 | -2.21938 | -3.27912 | -4.31806 |
| 15 | 0.559733 | 0.263274 | -0.048691 | -0.382399 | -0.912245 | -1.42191 | -1.91881 | -2.88856 | -3.83812 |
| 20 | 0.645802 | 0.352902 | 0.086118 | -0.219296 | -0.702783 | -1.1667 | -1.61824 | -2.498 | -3.35818 |
| 25 | 0.731871 | 0.44353 | 0.220927 | -0.056193 | -0.493321 | -0.911493 | -1.31767 | -2.10743 | -2.87824 |
| 30 | 0.817939 | 0.536158 | 0.355735 | 0.10691 | -0.283859 | -0.656284 | -1.0171 | -1.71687 | -2.39829 |
| 35 | 0.904008 | 0.630786 | 0.490544 | 0.270013 | -0.074397 | -0.401074 | -0.716535 | -1.32631 | -1.91835 |
| 40 | 0.990077 | 0.728414 | 0.625353 | 0.433116 | 0.135065 | -0.145865 | -0.415964 | -0.935746 | -1.43841 |
| 45 | 1.07614 | 0.628042 | 0.760162 | 0.596219 | 0.344527 | 0.109345 | -0.115394 | -0.545184 | -0.958463 |
| 50 | 1.76081 | 0.73221 | 0.99367 | 0.759322 | 0.553988 | 0.185176 | -0.154621 | -0.47852 | -0.792362 |
| 55 | 1.24828 | 0.8413 | 1.02978 | 0.922425 | 0.76345 | 0.619763 | 0.485746 | 0.235941 | 0.001423 |
| 60 | 1.33435 | 0.95493 | 1.16459 | 1.08553 | 0.972912 | 0.874973 | 0.786316 | 0.626503 | 0.481366 |
| 65 | 1.42042 | 1.07456 | 1.2994 | 1.24863 | 1.18237 | 1.13018 | 1.08689 | 1.01707 | 0.961309 |
| 70 | 1.50649 | 1.20018 | 1.43421 | 1.41173 | 1.39184 | 1.38539 | 1.38746 | 1.40763 | 1.44125 |
| 75 | 1.59256 | 1.33481 | 1.56902 | 1.57484 | 1.6013 | 1.6406 | 1.68803 | 1.79819 | 1.9212 |
| 80 | 1.67863 | 1.47844 | 1.70382 | 1.73794 | 1.81076 | 1.89581 | 1.9886 | 2.18875 | 2.40114 |
| 85 | 1.76469 | 1.63307 | 1.83863 | 1.90104 | 2.02022 | 2.15102 | 2.28917 | 2.57931 | 2.88108 |
| 90 | 1.85076 | 1.7997 | 1.77344 | 2.06415 | 2.22968 | 2.40623 | 2.58974 | 2.96988 | 3.36103 |
| 95 | 1.65236 | 1.61765 | 1.74011 | 1.80891 | 1.93713 | 2.07576 | 2.22096 | 2.52375 | 2.83694 |
| 100 | 1.47584 | 1.41635 | 1.5351 | 1.58585 | 1.68321 | 1.79035 | 1.90368 | 2.142 | 2.39011 |
| 105 | 1.31788 | 1.19389 | 1.35411 | 1.39009 | 1.46203 | 1.54315 | 1.63006 | 1.81483 | 2.00878 |
| 110 | 1.17574 | 0.944037 | 1.19359 | 1.2176 | 1.26878 | 1.32852 | 1.39368 | 1.5342 | 1.68329 |
| 115 | 1.04715 | 0.661 | 1.05059 | 1.06501 | 1.09942 | 1.14177 | 1.18915 | 1.29339 | 1.40558 |
| 120 | 0.930167 | 0.33586 | 0.922635 | 0.929515 | 0.950558 | 0.978938 | 1.01196 | 1.08675 | 1.16889 |
| 125 | 0.823172 | -0.04164 | 0.807598 | 0.808702 | 0.819321 | 0.836665 | 0.858265 | 0.909485 | 0.967431 |
| 130 | 0.724759 | -0.489052 | 0.703665 | 0.700508 | 0.703226 | 0.712059 | 0.72476 | 0.757453 | 0.796261 |
| 135 | 0.633708 | -1.0288 | 0.60926 | 0.603141 | 0.600124 | 0.60261 | 0.608577 | 0.627074 | 0.651075 |
| 140 | 0.548949 | -1.69514 | 0.522998 | 0.515027 | 0.508126 | 0.506116 | 0.507201 | 0.515203 | 0.528098 |
| 145 | 0.469535 | -2.5432 | 0.443653 | 0.434773 | 0.425559 | 0.420625 | 0.418399 | 0.419051 | 0.423984 |
| 150 | 0.394615 | -3.464 | 0.370124 | 0.361128 | 0.350923 | 0.344388 | 0.340173 | 0.336118 | 0.335732 |
| 155 | 0.323418 | -5.0214 | 0.301412 | 0.292958 | 0.282858 | 0.275815 | 0.270707 | 0.264135 | 0.260621 |
| 160 | 0.255237 | -7.3422 | 0.236603 | 0.229223 | 0.220114 | 0.213451 | 0.208335 | 0.20102 | 0.196151 |
| 165 | 0.189412 | -11.1913 | 0.174845 | 0.168953 | 0.161529 | 0.155939 | 0.15151 | 0.144838 | 0.140001 |
| 170 | 0 | -18.86 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | -41.808 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Aluminium 1.2mm Thick

| | 0.7 | 1 | 1.2 | 1.5 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 0.596282 | 0.107813 | -0.195132 | -0.628946 | -1.31749 | -2.62505 | -3.88439 | -5.11732 | -6.33354 |
| 1 | 0.614081 | 0.131658 | -0.167382 | -0.595452 | -1.27462 | -2.5638 | -3.80504 | -5.02 | -6.21835 |
| 5 | 0.685274 | 0.22704 | 0.104621 | -0.461475 | -1.10312 | -2.3188 | -3.4876 | -4.63073 | -5.75761 |
| 10 | 0.774267 | 0.346268 | 0.210375 | -0.294004 | -0.888744 | -2.01255 | -3.09082 | -4.14414 | -5.18168 |
| 15 | 0.863259 | 0.465495 | 0.316129 | -0.126534 | -0.674369 | -1.70629 | -2.69403 | -3.65754 | -4.60575 |
| 20 | 0.952251 | 0.584722 | 0.423247 | 0.040937 | -0.459995 | -1.40004 | -2.29724 | -3.17095 | -4.02981 |
| 25 | 1.04124 | 0.70395 | 0.531636 | 0.208408 | -0.24562 | -1.09379 | -1.90045 | -2.68436 | -3.45388 |
| 30 | 1.13024 | 0.823177 | 0.64339 | 0.375879 | -0.031245 | -0.787541 | -1.50366 | -2.19777 | -2.87795 |
| 35 | 1.21923 | 0.942405 | 0.757143 | 0.543349 | 0.18313 | -0.481289 | -1.10687 | -1.71118 | -2.30202 |
| 40 | 1.30822 | 1.06163 | 0.873897 | 0.71082 | 0.397505 | -0.175038 | -0.710084 | -1.22458 | -1.72609 |
| 45 | 1.39721 | 1.18086 | 0.593651 | 0.878291 | 0.61188 | 0.131213 | -0.313295 | -0.737991 | -1.15016 |
| 50 | 1.4862 | 1.30009 | 0.7194 | 1.04576 | 0.826254 | 0.437465 | 0.083494 | -0.251399 | -0.574224 |
| 55 | 1.5752 | 1.41931 | 0.84916 | 1.21323 | 1.04063 | 0.743716 | 0.480282 | 0.235193 | 0.001708 |
| 60 | 1.66419 | 1.53854 | 0.98591 | 1.3807 | 1.255 | 1.04997 | 0.877071 | 0.721786 | 0.577639 |
| 65 | 1.75318 | 1.65777 | 1.12866 | 1.54817 | 1.46938 | 1.35622 | 1.27386 | 1.20838 | 1.15357 |
| 70 | 1.84217 | 1.777 | 1.28042 | 1.71564 | 1.68375 | 1.66247 | 1.67065 | 1.69497 | 1.7295 |
| 75 | 1.93117 | 1.89622 | 1.44117 | 1.88312 | 1.89813 | 1.96872 | 2.06744 | 2.18156 | 2.30544 |
| 80 | 1.92016 | 2.01545 | 1.61393 | 2.05059 | 2.1125 | 2.27497 | 2.46423 | 2.66816 | 2.88137 |
| 85 | 2.10915 | 2.13468 | 1.79968 | 2.21806 | 2.32688 | 2.58122 | 2.86102 | 3.15475 | 3.4573 |
| 90 | 1.99814 | 2.25391 | 2 | 2.38553 | 2.54125 | 2.88748 | 3.2578 | 3.64134 | 4.03323 |
| 95 | 1.96919 | 2.00499 | 1.78058 | 2.10119 | 2.22015 | 2.49091 | 2.78444 | 3.09044 | 3.40433 |
| 100 | 1.7647 | 1.7844 | 1.53962 | 1.85161 | 1.94024 | 2.14842 | 2.37802 | 2.61936 | 2.86813 |
| 105 | 1.58096 | 1.58783 | 1.27186 | 1.63151 | 1.69527 | 1.85178 | 2.02837 | 2.21597 | 2.41053 |
| 110 | 1.4149 | 1.41173 | 0.972913 | 1.43653 | 1.48008 | 1.59422 | 1.72712 | 1.87028 | 2.01994 |
| 115 | 1.26397 | 1.25315 | 0.633139 | 1.26306 | 1.29038 | 1.37012 | 1.46728 | 1.57397 | 1.6867 |
| 120 | 1.12603 | 1.10961 | 0.24324 | 1.10804 | 1.12254 | 1.17473 | 1.24298 | 1.32004 | 1.40266 |
| 125 | 0.999241 | 0.978993 | -0.21057 | 0.968884 | 0.973506 | 1.004 | 1.04922 | 1.10252 | 1.16092 |
| 130 | 0.882047 | 0.859479 | -0.74726 | 0.843354 | 0.840621 | 0.854471 | 0.881713 | 0.916292 | 0.955513 |
| 135 | 0.773082 | 0.749493 | -1.39456 | 0.729517 | 0.721593 | 0.723132 | 0.736723 | 0.756918 | 0.78129 |
| 140 | 0.67115 | 0.64765 | -2.19397 | 0.625674 | 0.614411 | 0.607339 | 0.610981 | 0.620493 | 0.633718 |
| 145 | 0.57519 | 0.552723 | -3.2118 | 0.530318 | 0.517288 | 0.50475 | 0.501586 | 0.503559 | 0.508781 |
| 150 | 0.484254 | 0.463612 | -4.1574 | 0.442101 | 0.428626 | 0.413265 | 0.405939 | 0.403016 | 0.402878 |
| 155 | 0.397479 | 0.379319 | -6.0256 | 0.359798 | 0.346972 | 0.330978 | 0.321681 | 0.316052 | 0.312745 |
| 160 | 0.314074 | 0.298929 | -8.8106 | 0.282283 | 0.270993 | 0.256141 | 0.246646 | 0.240086 | 0.235382 |
| 165 | 0.233303 | 0.221589 | -13.4303 | 0.208511 | 0.199451 | 0.187127 | 0.17882 | 0.172714 | 0.168001 |
| 170 | 0 | 0 | -22.632 | 0 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | -50.169 | 0 | 0 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Aluminium 1.5mm Thick

| | 0.125 | 0.7 | 1 | 1.5 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 2.59715 | 1.0593 | 0.534334 | -0.243915 | -0.961902 | -2.31095 | -3.59973 | -4.85549 | -6.09037 |
| 1 | 2.60078 | 1.07786 | 0.559143 | -0.209227 | -0.917669 | -2.24811 | -3.51862 | -4.75629 | -5.9732 |
| 5 | 2.61529 | 1.1521 | 0.65838 | 0.130527 | -0.740738 | -1.99675 | -3.19418 | -4.35951 | -5.50452 |
| 10 | 2.63342 | 1.2449 | 0.782426 | 0.261969 | -0.519574 | -1.68256 | -2.78863 | -3.86352 | -4.91868 |
| 15 | 2.65156 | 1.33769 | 0.906472 | 0.395411 | -0.29841 | -1.36837 | -2.38308 | -3.36753 | -4.33284 |
| 20 | 2.66969 | 1.43049 | 1.03052 | 0.528853 | -0.077246 | -1.05418 | -1.97754 | -2.87155 | -3.74699 |
| 25 | 2.68783 | 1.52329 | 1.15457 | 0.665295 | 0.143918 | -0.739982 | -1.57199 | -2.37556 | -3.16115 |
| 30 | 2.70596 | 1.61608 | 1.27861 | 0.803737 | 0.365082 | -0.425789 | -1.16644 | -1.87958 | -2.57531 |
| 35 | 2.7241 | 1.70888 | 1.40266 | 0.946179 | 0.586246 | -0.111596 | -0.760893 | -1.38359 | -1.98946 |
| 40 | 2.74223 | 1.80168 | 1.5267 | 1.09162 | 0.80741 | 0.202597 | -0.355345 | -0.887605 | -1.40362 |
| 45 | 2.76037 | 1.89448 | 1.65075 | 0.64294 | 1.02857 | 0.51679 | 0.050203 | -0.391619 | -0.817776 |
| 50 | 2.7785 | 1.98727 | 1.7748 | 0.798809 | 1.24974 | 0.830983 | 0.455751 | 0.104367 | -0.231932 |
| 55 | 2.79664 | 2.08007 | 1.89884 | 0.96181 | 1.4709 | 1.14518 | 0.861299 | 0.600353 | 0.353911 |
| 60 | 2.81477 | 2.17287 | 2.02289 | 1.132 | 1.69207 | 1.45937 | 1.26685 | 1.09634 | 0.939755 |
| 65 | 2.8329 | 2.26566 | 2.14694 | 1.31083 | 1.91323 | 1.77356 | 1.6724 | 1.59233 | 1.5256 |
| 70 | 2.85104 | 2.35846 | 2.27098 | 1.50027 | 2.13439 | 2.08776 | 2.07794 | 2.08831 | 2.11144 |
| 75 | 2.86917 | 2.45126 | 2.39503 | 1.70172 | 2.35556 | 2.40195 | 2.48349 | 2.5843 | 2.69729 |
| 80 | 2.88731 | 2.44406 | 2.51907 | 1.91716 | 2.57672 | 2.71614 | 2.88904 | 3.08028 | 3.28313 |
| 85 | 2.90544 | 2.63685 | 2.64312 | 2.1486 | 2.79789 | 3.03033 | 3.29459 | 3.57627 | 3.86897 |
| 90 | 2.92358 | 2.52965 | 2.76717 | 2.40004 | 3.01905 | 3.34453 | 3.70014 | 4.07225 | 4.2 |
| 95 | 2.66979 | 2.45431 | 2.47287 | 2.12647 | 2.65453 | 2.9057 | 3.18533 | 3.48055 | 3.78563 |
| 100 | 2.43692 | 2.20728 | 2.21076 | 1.82452 | 2.33507 | 2.52481 | 2.74133 | 2.97252 | 3.213 |
| 105 | 2.22179 | 1.98428 | 1.97594 | 1.49033 | 2.05383 | 2.19305 | 2.35738 | 2.53546 | 2.72225 |
| 110 | 2.02179 | 1.78175 | 1.76439 | 1.11506 | 1.80516 | 1.90317 | 2.02461 | 2.1589 | 2.3013 |
| 115 | 1.83473 | 1.59675 | 1.57275 | 0.69133 | 1.58436 | 1.64912 | 1.73565 | 1.8341 | 1.94009 |
| 120 | 1.65877 | 1.42677 | 1.3982 | 0.20374 | 1.38749 | 1.42584 | 1.48428 | 1.55372 | 1.63013 |
| 125 | 1.49236 | 1.26973 | 1.23833 | -0.363 | 1.21117 | 1.22898 | 1.26521 | 1.31153 | 1.36423 |
| 130 | 1.33415 | 1.12378 | 1.09108 | -1.03342 | 1.05251 | 1.05484 | 1.0739 | 1.10214 | 1.13618 |
| 135 | 1.18298 | 0.987365 | 0.954651 | -2.043 | 0.90902 | 0.900185 | 0.906417 | 0.920903 | 0.940612 |
| 140 | 1.03783 | 0.859091 | 0.827481 | -3.0423 | 0.77848 | 0.762188 | 0.759288 | 0.763726 | 0.772805 |
| 145 | 0.897779 | 0.737734 | 0.70817 | -4.1147 | 0.658944 | 0.638338 | 0.62945 | 0.626983 | 0.628577 |
| 150 | 0.762027 | 0.622193 | 0.595468 | -5.196 | 0.548661 | 0.526385 | 0.514153 | 0.507424 | 0.504177 |
| 155 | 0.629835 | 0.511471 | 0.488242 | -7.532 | 0.446043 | 0.424287 | 0.410901 | 0.402101 | 0.396202 |
| 160 | 0.500524 | 0.40465 | 0.38545 | -11.0142 | 0.349633 | 0.330171 | 0.317405 | 0.308307 | 0.301531 |
| 165 | 0.373467 | 0.300879 | 0.286124 | -16.7876 | 0.258076 | 0.242294 | 0.231533 | 0.223525 | 0.217257 |
| 170 | 0 | 0 | 0 | -28.29 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | -62.711 | 0 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Aluminium 2.0mm Thick

| | 0.125 | 0.7 | 1 | 1.5 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 3.70669 | 1.87503 | 1.28923 | 0.441829 | -0.325221 | -1.74342 | -3.08126 | -4.37508 | -5.64105 |
| 1 | 3.70971 | 1.89461 | 1.3154 | 0.478263 | -0.278969 | -1.67818 | -2.99748 | -4.273 | -5.52082 |
| 5 | 3.72179 | 1.97294 | 1.42008 | 0.624001 | 0.175036 | -1.41721 | -2.66234 | -3.86466 | -5.03991 |
| 10 | 3.73688 | 2.07086 | 1.55094 | 0.806172 | 0.350292 | -1.09101 | -2.24342 | -3.35424 | -4.43877 |
| 15 | 3.75197 | 2.16877 | 1.68179 | 0.988343 | 0.526548 | -0.764799 | -1.82449 | -2.84382 | -3.83763 |
| 20 | 3.76706 | 2.26669 | 1.81265 | 1.17052 | 0.705804 | -0.438593 | -1.40557 | -2.33341 | -3.23649 |
| 25 | 3.78215 | 2.36461 | 1.9435 | 1.35269 | 0.88706 | -0.112387 | -0.986643 | -1.82299 | -2.63535 |
| 30 | 3.79724 | 2.46252 | 2.07436 | 1.53486 | 1.07132 | 0.213819 | -0.567719 | -1.31257 | -2.03421 |
| 35 | 3.81234 | 2.56044 | 2.20521 | 1.71703 | 1.06157 | 0.540025 | -0.148795 | -0.802149 | -1.43307 |
| 40 | 3.82743 | 2.65835 | 2.33607 | 1.8992 | 1.25583 | 0.866231 | 0.270129 | -0.29173 | -0.831929 |
| 45 | 3.84252 | 2.75627 | 2.46692 | 2.08137 | 0.856608 | 1.19244 | 0.689053 | 0.218689 | -0.230789 |
| 50 | 3.85761 | 2.85419 | 2.59778 | 2.26354 | 1.06534 | 1.51864 | 1.10798 | 0.729108 | 0.370352 |
| 55 | 3.8727 | 2.9521 | 2.72863 | 2.44571 | 1.2826 | 1.84485 | 1.5269 | 1.23953 | 0.971492 |
| 60 | 3.8878 | 3.05002 | 2.85949 | 2.62789 | 1.50899 | 2.17106 | 1.94582 | 1.74995 | 1.57263 |
| 65 | 3.90289 | 3.14793 | 2.99034 | 2.81006 | 1.74811 | 2.49726 | 2.36475 | 2.26037 | 2.17377 |
| 70 | 3.91798 | 3.24585 | 3.1212 | 2.99223 | 2.00037 | 2.82347 | 2.78367 | 2.77078 | 2.77491 |
| 75 | 3.93307 | 3.34376 | 3.25205 | 3.1744 | 2.26962 | 3.14967 | 3.2026 | 3.2812 | 3.37605 |
| 80 | 3.94816 | 3.34168 | 3.38291 | 3.35657 | 2.55688 | 3.47588 | 3.62152 | 3.79162 | 3.97719 |
| 85 | 3.96326 | 3.5396 | 3.51376 | 3.53874 | 2.86513 | 3.80209 | 4.04045 | 4.30204 | 4.57833 |
| 90 | 3.97835 | 3.43751 | 3.64461 | 3.72092 | 3.20039 | 4.12829 | 4.45937 | 4.81246 | 5.17947 |
| 95 | 3.63785 | 3.28362 | 3.27346 | 3.3174 | 2.83429 | 3.61781 | 3.87427 | 4.15151 | 4.44191 |
| 100 | 3.3247 | 2.96448 | 2.94092 | 2.95896 | 2.4327 | 3.1717 | 3.36641 | 3.58069 | 3.80735 |
| 105 | 3.03476 | 2.67483 | 2.64114 | 2.63872 | 1.98677 | 2.78018 | 2.92406 | 3.08629 | 3.26013 |
| 110 | 2.7646 | 2.4103 | 2.36928 | 2.35105 | 1.487 | 2.43519 | 2.53755 | 2.65704 | 2.78736 |
| 115 | 2.51135 | 2.16727 | 2.12131 | 2.09126 | 0.92123 | 2.13002 | 2.19883 | 2.28354 | 2.3783 |
| 120 | 2.27264 | 1.9427 | 1.89385 | 1.85539 | 0.27173 | 1.85903 | 1.90112 | 1.95788 | 2.02392 |
| 125 | 2.0464 | 1.73399 | 1.684 | 1.64008 | -0.48371 | 1.6174 | 1.63864 | 1.67333 | 1.71653 |
| 130 | 1.83089 | 1.5389 | 1.4893 | 1.44244 | -1.3781 | 1.40102 | 1.40645 | 1.42412 | 1.44952 |
| 135 | 1.62458 | 1.35551 | 1.30759 | 1.25995 | -2.4566 | 1.20628 | 1.20025 | 1.20522 | 1.21715 |
| 140 | 1.42614 | 1.18211 | 1.13698 | 1.09042 | -3.7903 | 1.03005 | 1.01625 | 1.01223 | 1.0144 |
| 145 | 1.23438 | 1.0172 | 0.975809 | 0.931892 | -5.4864 | 0.869546 | 0.851118 | 0.841251 | 0.836798 |
| 150 | 1.04823 | 0.85943 | 0.822567 | 0.782616 | -6.9279 | 0.722256 | 0.701847 | 0.688775 | 0.680345 |
| 155 | 0.866743 | 0.707571 | 0.675894 | 0.641006 | -10.0427 | 0.585917 | 0.565716 | 0.551631 | 0.541413 |
| 160 | 0.689022 | 0.560502 | 0.534543 | 0.505603 | -14.6854 | 0.458446 | 0.440228 | 0.426902 | 0.41667 |
| 165 | 0.514248 | 0.417176 | 0.397351 | 0.375053 | -22.3835 | 0.337907 | 0.323058 | 0.311878 | 0.303019 |
| 170 | 0 | 0 | 0 | 0 | -37.72 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | 0 | -83.615 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Aluminium 2.5mm Thick

| | 0.125 | 0.7 | 1 | 2 | 2.5 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 4.85932 | 2.73384 | 2.08722 | 0.354553 | -0.406526 | -1.13279 | -2.5197 | -3.85158 | -5.14864 |
| 1 | 4.86149 | 2.75421 | 2.11451 | 0.402583 | -0.348712 | -1.06539 | -2.43348 | -3.74685 | -5.0256 |
| 5 | 4.87017 | 2.83568 | 2.22368 | 0.594704 | 0.218544 | -0.795772 | -2.0886 | -3.32792 | -4.5334 |
| 10 | 4.88103 | 2.93752 | 2.36015 | 0.834856 | 0.437615 | -0.45875 | -1.6575 | -2.80427 | -3.91816 |
| 15 | 4.89188 | 3.03936 | 2.49661 | 1.07501 | 0.658685 | -0.121728 | -1.22639 | -2.28061 | -3.30292 |
| 20 | 4.90273 | 3.14119 | 2.63308 | 1.31516 | 0.881755 | 0.215294 | -0.795292 | -1.75696 | -2.68768 |
| 25 | 4.91358 | 3.24303 | 2.76955 | 1.55531 | 1.10882 | 0.552316 | -0.364189 | -1.2333 | -2.07244 |
| 30 | 4.92444 | 3.34487 | 2.90601 | 1.79546 | 1.3399 | 0.889338 | 0.066914 | -0.709649 | -1.4572 |
| 35 | 4.93529 | 3.44671 | 3.04248 | 2.03561 | 1.57697 | 1.22636 | 0.498017 | -0.185994 | -0.841962 |
| 40 | 4.94614 | 3.54854 | 3.17895 | 2.27576 | 1.82004 | 1.56338 | 0.92912 | 0.337661 | -0.226722 |
| 45 | 4.95699 | 3.65038 | 3.31541 | 2.51592 | 1.07111 | 1.9004 | 1.36022 | 0.861316 | 0.388518 |
| 50 | 4.96784 | 3.75222 | 3.45188 | 2.75607 | 1.33118 | 2.23743 | 1.79133 | 1.38497 | 1.00376 |
| 55 | 4.9787 | 3.85406 | 3.58834 | 2.99622 | 1.60325 | 2.57445 | 2.22243 | 1.90863 | 1.619 |
| 60 | 4.98955 | 3.9559 | 3.72481 | 3.23637 | 1.88632 | 2.91147 | 2.65353 | 2.43228 | 2.23424 |
| 65 | 5.0004 | 4.05773 | 3.86128 | 3.47652 | 2.18539 | 3.24849 | 3.08463 | 2.95594 | 2.84948 |
| 70 | 5.01125 | 4.15957 | 3.99774 | 3.71667 | 2.50146 | 3.58552 | 3.51574 | 3.47959 | 3.46472 |
| 75 | 5.0221 | 4.26141 | 4.13421 | 3.95682 | 2.83653 | 3.92254 | 3.94684 | 4.00325 | 4.07996 |
| 80 | 5.03296 | 4.26325 | 4.27068 | 4.19697 | 3.1956 | 4.25956 | 4.37794 | 4.5269 | 4.6952 |
| 85 | 5.04381 | 4.46508 | 4.40714 | 4.43713 | 3.58167 | 4.59658 | 4.80905 | 5.05056 | 5.31044 |
| 90 | 5.05466 | 4.36692 | 4.54361 | 4.67728 | 3.99974 | 4.9336 | 5.24015 | 5.57421 | 5.92568 |
| 95 | 4.62625 | 4.13328 | 4.09439 | 4.16441 | 3.54312 | 4.35027 | 4.58356 | 4.84283 | 5.11855 |
| 100 | 4.23164 | 3.74084 | 3.69024 | 3.70948 | 3.04087 | 3.83774 | 4.01065 | 4.20801 | 4.42085 |
| 105 | 3.86569 | 3.38333 | 3.3243 | 3.30367 | 2.48422 | 3.38527 | 3.50871 | 3.65508 | 3.81596 |
| 110 | 3.52416 | 3.0556 | 2.99093 | 2.93975 | 1.85909 | 2.98397 | 3.06726 | 3.17194 | 3.29017 |
| 115 | 3.20354 | 2.75336 | 2.68543 | 2.61166 | 1.15179 | 2.62649 | 2.67758 | 2.74854 | 2.83207 |
| 120 | 2.90086 | 2.47299 | 2.40386 | 2.31434 | 0.33966 | 2.30659 | 2.33232 | 2.3764 | 2.43207 |
| 125 | 2.6136 | 2.21142 | 2.14284 | 2.04344 | -0.6051 | 2.01899 | 2.02524 | 2.0483 | 2.082 |
| 130 | 2.33959 | 1.96599 | 1.89949 | 1.79526 | -1.7226 | 1.75916 | 1.75097 | 1.75807 | 1.77483 |
| 135 | 2.07695 | 1.73443 | 1.6713 | 1.56656 | -3.0715 | 1.52315 | 1.50485 | 1.50031 | 1.50447 |
| 140 | 1.82403 | 1.51471 | 1.45606 | 1.35452 | -4.7369 | 1.3075 | 1.28279 | 1.27031 | 1.26557 |
| 145 | 1.57935 | 1.30505 | 1.25183 | 1.15663 | -6.8575 | 1.10913 | 1.08116 | 1.0639 | 1.0534 |
| 150 | 1.34162 | 1.10385 | 1.05685 | 0.970635 | -8.6599 | 0.925309 | 0.896722 | 0.877308 | 0.863696 |
| 155 | 1.10964 | 0.909657 | 0.869532 | 0.794495 | -12.5534 | 0.753531 | 0.726516 | 0.707145 | 0.692609 |
| 160 | 0.882308 | 0.721142 | 0.688424 | 0.626338 | -18.356 | 0.591509 | 0.567839 | 0.550285 | 0.536598 |
| 165 | 0.658619 | 0.537063 | 0.512169 | 0.464419 | -27.9787 | 0.437111 | 0.418174 | 0.403823 | 0.392372 |
| 170 | 0 | 0 | 0 | 0 | -47.15 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | 0 | -104.519 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Aluminium 3.0mm Thick

| | 0.125 | 0.7 | 1 | 1.5 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.04629 | 3.627 | 2.91954 | 1.93384 | 1.06867 | -0.487831 | -1.9238 | -3.29373 | -4.62189 |
| 1 | 6.04743 | 3.64796 | 2.94777 | 1.9731 | 1.11829 | -0.418454 | -1.83534 | -3.18655 | -4.49622 |
| 5 | 6.05195 | 3.73181 | 3.06067 | 2.13013 | 1.31676 | 0.262053 | -1.48148 | -2.7578 | -3.99351 |
| 10 | 6.05761 | 3.83661 | 3.20179 | 2.32641 | 1.56485 | 0.524938 | -1.03915 | -2.22186 | -3.36512 |
| 15 | 6.06327 | 3.94142 | 3.34292 | 2.52269 | 1.81295 | 0.79018 | -0.15982 | -1.68592 | -2.73674 |
| 20 | 6.06893 | 4.04622 | 3.48404 | 2.71897 | 2.06104 | 1.05771 | -0.154492 | -1.14999 | -2.10835 |
| 25 | 6.07459 | 4.15103 | 3.62516 | 2.91525 | 2.30913 | 1.33059 | 0.287836 | -0.61405 | -1.47996 |
| 30 | 6.08024 | 4.25584 | 3.76629 | 3.11154 | 2.55722 | 1.60747 | 0.730164 | -0.078112 | -0.851578 |
| 35 | 6.0859 | 4.36064 | 3.90741 | 3.30782 | 2.80531 | 1.89136 | 1.17249 | 0.457825 | -0.223192 |
| 40 | 6.09156 | 4.46545 | 4.04854 | 3.5041 | 3.05341 | 2.18424 | 1.61482 | 0.993762 | 0.405194 |
| 45 | 6.09722 | 4.57025 | 4.18966 | 3.70038 | 3.3015 | 1.48513 | 2.05715 | 1.5297 | 1.03358 |
| 50 | 6.10288 | 4.67506 | 4.33078 | 3.89667 | 3.54959 | 1.79801 | 2.49947 | 2.06564 | 1.66196 |
| 55 | 6.10854 | 4.77986 | 4.47191 | 4.09295 | 3.79769 | 2.1239 | 2.9418 | 2.60157 | 2.29035 |
| 60 | 6.1142 | 4.88467 | 4.61303 | 4.28923 | 4.04578 | 2.46378 | 3.38413 | 3.13751 | 2.91874 |
| 65 | 6.11986 | 4.98947 | 4.75415 | 4.48551 | 4.29387 | 2.82266 | 3.82646 | 3.67345 | 3.54712 |
| 70 | 6.12551 | 5.09428 | 4.89528 | 4.68179 | 4.54196 | 3.20155 | 4.26879 | 4.20938 | 4.17551 |
| 75 | 6.13117 | 5.19908 | 5.0364 | 4.87807 | 4.79006 | 3.60443 | 4.71112 | 4.74532 | 4.80389 |
| 80 | 6.13683 | 5.20389 | 5.17753 | 5.07436 | 5.03815 | 4.03432 | 5.15344 | 5.28126 | 5.43228 |
| 85 | 6.14249 | 5.40869 | 5.31865 | 5.27064 | 5.28624 | 4.498 | 5.59577 | 5.81719 | 6.06067 |
| 90 | 6.14815 | 5.3135 | 5.45977 | 5.46692 | 5.53433 | 5 | 6.0381 | 6.35313 | 6.68905 |
| 95 | 5.63087 | 4.99916 | 4.93155 | 4.91018 | 4.94574 | 4.452 | 5.30906 | 5.55037 | 5.8114 |
| 100 | 5.15384 | 4.53245 | 4.45482 | 4.41138 | 4.42152 | 3.84905 | 4.67015 | 4.8506 | 5.04962 |
| 105 | 4.71092 | 4.10614 | 4.02176 | 3.96171 | 3.95188 | 3.18066 | 4.10766 | 4.23818 | 4.3861 |
| 110 | 4.29708 | 3.71426 | 3.62593 | 3.55392 | 3.52878 | 2.43111 | 3.61031 | 3.7002 | 3.80633 |
| 115 | 3.90813 | 3.35185 | 3.26195 | 3.18196 | 3.1455 | 1.58235 | 3.16872 | 3.22594 | 3.29825 |
| 120 | 3.54054 | 3.01473 | 2.92532 | 2.84077 | 2.79639 | 0.60759 | 2.77497 | 2.80636 | 2.85167 |
| 125 | 3.1913 | 2.69934 | 2.61218 | 2.526 | 2.47665 | -0.6741 | 2.42233 | 2.43377 | 2.45796 |
| 130 | 2.85784 | 2.40262 | 2.31922 | 2.23395 | 2.18215 | -1.8671 | 2.10503 | 2.10155 | 2.10968 |
| 135 | 2.53791 | 2.12193 | 2.04359 | 1.96138 | 1.9093 | -3.4854 | 1.81804 | 1.80398 | 1.80037 |
| 140 | 2.22955 | 1.85494 | 1.78277 | 1.70548 | 1.65496 | -5.4844 | 1.55696 | 1.53603 | 1.52438 |
| 145 | 1.93101 | 1.59957 | 1.53452 | 1.46371 | 1.41634 | -8.0296 | 1.31789 | 1.29322 | 1.27668 |
| 150 | 1.64073 | 1.35399 | 1.29685 | 1.23385 | 1.19094 | -10.3919 | 1.09732 | 1.07157 | 1.05277 |
| 155 | 1.3573 | 1.11651 | 1.06794 | 1.01384 | 0.976484 | -15.0641 | 0.892086 | 0.867429 | 0.848574 |
| 160 | 1.07941 | 0.885598 | 0.846121 | 0.801814 | 0.770899 | -22.0276 | 0.699266 | 0.677483 | 0.660342 |
| 165 | 0.805853 | 0.659812 | 0.629849 | 0.596026 | 0.572247 | -33.5748 | 0.516151 | 0.498629 | 0.484587 |
| 170 | 0 | 0 | 0 | 0 | 0 | -56.58 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | 0 | 0 | -125.423 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Aluminium 1.6mm Thick

| | 0.125 | 0.7 | 1 | 1.6 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 2.59715 | 1.0593 | 0.534334 | -0.243915 | -0.961902 | -2.31095 | -3.59973 | -4.85549 | -6.09037 |
| 1 | 2.60078 | 1.07786 | 0.559143 | -0.209227 | -0.917669 | -2.24811 | -3.51862 | -4.75629 | -5.9732 |
| 5 | 2.61529 | 1.1521 | 0.65838 | 0.139527 | -0.740738 | -1.99675 | -3.19418 | -4.35951 | -5.50452 |
| 10 | 2.63342 | 1.2449 | 0.782426 | 0.279969 | -0.519574 | -1.68256 | -2.78863 | -3.86352 | -4.91868 |
| 15 | 2.65156 | 1.33769 | 0.906472 | 0.421411 | -0.29841 | -1.36837 | -2.38308 | -3.36753 | -4.33284 |
| 20 | 2.66969 | 1.43049 | 1.03052 | 0.563853 | -0.077246 | -1.05418 | -1.97754 | -2.87155 | -3.74699 |
| 25 | 2.68783 | 1.52329 | 1.15457 | 0.709295 | 0.143918 | -0.739982 | -1.57199 | -2.37556 | -3.16115 |
| 30 | 2.70596 | 1.61608 | 1.27861 | 0.857737 | 0.365082 | -0.425789 | -1.16644 | -1.87958 | -2.57531 |
| 35 | 2.7241 | 1.70888 | 1.40266 | 1.00918 | 0.586246 | -0.111596 | -0.760893 | -1.38359 | -1.98946 |
| 40 | 2.74223 | 1.80168 | 1.5267 | 1.16462 | 0.80741 | 0.202597 | -0.355345 | -0.887605 | -1.40362 |
| 45 | 2.76037 | 1.89448 | 1.65075 | 0.72594 | 1.02857 | 0.51679 | 0.050203 | -0.391619 | -0.817776 |
| 50 | 2.7785 | 1.98727 | 1.7748 | 0.891809 | 1.24974 | 0.830983 | 0.455751 | 0.104367 | -0.231932 |
| 55 | 2.79664 | 2.08007 | 1.89884 | 1.06581 | 1.4709 | 1.14518 | 0.861299 | 0.600353 | 0.353911 |
| 60 | 2.81477 | 2.17287 | 2.02289 | 1.248 | 1.69207 | 1.45937 | 1.26685 | 1.09634 | 0.939755 |
| 65 | 2.8329 | 2.26566 | 2.14694 | 1.43883 | 1.91323 | 1.77356 | 1.6724 | 1.59233 | 1.5256 |
| 70 | 2.85104 | 2.35846 | 2.27098 | 1.64027 | 2.13439 | 2.08776 | 2.07794 | 2.08831 | 2.11144 |
| 75 | 2.86917 | 2.45126 | 2.39503 | 1.85572 | 2.35556 | 2.40195 | 2.48349 | 2.5843 | 2.69729 |
| 80 | 2.88731 | 2.44406 | 2.51907 | 2.08516 | 2.57672 | 2.71614 | 2.88904 | 3.08028 | 3.28313 |
| 85 | 2.90544 | 2.63685 | 2.64312 | 2.3326 | 2.79789 | 3.03033 | 3.29459 | 3.57627 | 3.86897 |
| 90 | 2.92358 | 2.52965 | 2.76717 | 2.60004 | 3.01905 | 3.34453 | 3.70014 | 4.07225 | 4.2 |
| 95 | 2.66979 | 2.45431 | 2.47287 | 2.30747 | 2.65453 | 2.9057 | 3.18533 | 3.48055 | 3.78563 |
| 100 | 2.43692 | 2.20728 | 2.21076 | 1.98652 | 2.33507 | 2.52481 | 2.74133 | 2.97252 | 3.213 |
| 105 | 2.22179 | 1.98428 | 1.97594 | 1.62933 | 2.05383 | 2.19305 | 2.35738 | 2.53546 | 2.72225 |
| 110 | 2.02179 | 1.78175 | 1.76439 | 1.23006 | 1.80516 | 1.90317 | 2.02461 | 2.1589 | 2.3013 |
| 115 | 1.83473 | 1.59675 | 1.57275 | 0.77733 | 1.58436 | 1.64912 | 1.73565 | 1.8341 | 1.94009 |
| 120 | 1.65877 | 1.42677 | 1.3982 | 0.25774 | 1.38749 | 1.42584 | 1.48428 | 1.55372 | 1.63013 |
| 125 | 1.49236 | 1.26973 | 1.23833 | -0.347 | 1.21117 | 1.22898 | 1.26521 | 1.31153 | 1.36423 |
| 130 | 1.33415 | 1.12378 | 1.09108 | -1.06242 | 1.05251 | 1.05484 | 1.0739 | 1.10214 | 1.13618 |
| 135 | 1.18298 | 0.987365 | 0.954651 | -1.925 | 0.90902 | 0.900185 | 0.906417 | 0.920903 | 0.940612 |
| 140 | 1.03783 | 0.859091 | 0.827481 | -2.9923 | 0.77848 | 0.762188 | 0.759288 | 0.763726 | 0.772805 |
| 145 | 0.897779 | 0.737734 | 0.70817 | -4.3487 | 0.658944 | 0.638338 | 0.62945 | 0.626983 | 0.628577 |
| 150 | 0.762027 | 0.622193 | 0.595468 | -5.543 | 0.548661 | 0.526385 | 0.514153 | 0.507424 | 0.504177 |
| 155 | 0.629835 | 0.511471 | 0.488242 | -8.034 | 0.446043 | 0.424287 | 0.410901 | 0.402101 | 0.396202 |
| 160 | 0.500524 | 0.40465 | 0.38545 | -11.7482 | 0.349633 | 0.330171 | 0.317405 | 0.308307 | 0.301531 |
| 165 | 0.373467 | 0.300879 | 0.286124 | -17.9066 | 0.258076 | 0.242294 | 0.231533 | 0.223525 | 0.217257 |
| 170 | 0 | 0 | 0 | -30.176 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | -66.892 | 0 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Mild Steel / Zintec / Galv 0.7mm Thick

| | 0.125 | 0.7 | 1 | 1.6 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 0.953926 | -0.113827 | -0.541467 | -1.20907 | -1.84856 | -3.08696 | -4.29725 | -5.49212 | -6.67724 |
| 1 | 0.957794 | -0.097639 | -0.51957 | -1.17791 | -1.80829 | -3.0287 | -4.22115 | -5.39827 | -6.5657 |
| 5 | 0.973262 | 0.061 | -0.431982 | -1.05327 | -1.64721 | -2.79566 | -3.91676 | -5.02289 | -6.11954 |
| 10 | 0.992597 | 0.12288 | -0.322496 | -0.897459 | -1.44586 | -2.50435 | -3.53629 | -4.55366 | -5.56184 |
| 15 | 1.01193 | 0.183992 | -0.213011 | -0.741651 | -1.24451 | -2.21305 | -3.15581 | -4.08444 | -5.00414 |
| 20 | 1.03127 | 0.246931 | -0.103526 | -0.585844 | -1.04316 | -1.92175 | -2.77533 | -3.61521 | -4.44644 |
| 25 | 1.0506 | 0.310871 | 0.005959 | -0.430036 | -0.841815 | -1.63044 | -2.39485 | -3.14599 | -3.88874 |
| 30 | 1.06994 | 0.374811 | 0.115444 | -0.274229 | -0.640466 | -1.33914 | -2.01437 | -2.67676 | -3.33103 |
| 35 | 1.08927 | 0.44175 | 0.22493 | -0.118421 | -0.439117 | -1.04783 | -1.63389 | -2.20754 | -2.77333 |
| 40 | 1.10861 | 0.50969 | 0.334415 | 0.037387 | -0.237768 | -0.756527 | -1.25341 | -1.73831 | -2.21563 |
| 45 | 1.12795 | 0.37963 | 0.4439 | 0.193194 | -0.036419 | -0.465222 | -0.872933 | -1.26909 | -1.65793 |
| 50 | 1.14728 | 0.45257 | 0.553385 | 0.349002 | 0.164929 | -0.173918 | -0.492454 | -0.799862 | -1.10023 |
| 55 | 1.16662 | 0.52851 | 0.66287 | 0.504809 | 0.366278 | 0.117387 | -0.111975 | -0.330636 | -0.542529 |
| 60 | 1.18595 | 0.60845 | 0.772355 | 0.660617 | 0.567627 | 0.408691 | 0.268504 | 0.138589 | 0.015173 |
| 65 | 1.20529 | 0.69239 | 0.881841 | 0.816425 | 0.768976 | 0.699996 | 0.648983 | 0.607815 | 0.572874 |
| 70 | 1.22462 | 0.78033 | 0.991326 | 0.972232 | 0.970325 | 0.9913 | 1.02946 | 1.07704 | 1.13058 |
| 75 | 1.24396 | 0.87427 | 1.10081 | 1.12804 | 1.17167 | 1.28261 | 1.40994 | 1.54627 | 1.68828 |
| 80 | 1.26329 | 0.97521 | 1.2103 | 1.28385 | 1.37302 | 1.57391 | 1.79042 | 2.01549 | 2.24598 |
| 85 | 1.28263 | 1.08315 | 1.31978 | 1.43965 | 1.57437 | 1.86521 | 2.1709 | 2.48472 | 2.80368 |
| 90 | 1.30196 | 1.2 | 1.42927 | 1.59546 | 1.77572 | 2.15652 | 2.55138 | 2.95394 | 3.36138 |
| 95 | 1.18325 | 1.07209 | 1.25428 | 1.38313 | 1.52526 | 1.82867 | 2.14537 | 2.46934 | 2.79792 |
| 100 | 1.07515 | 0.931445 | 1.10118 | 1.19912 | 1.30956 | 1.54847 | 1.79987 | 2.05813 | 2.32072 |
| 105 | 0.976059 | 0.775421 | 0.966634 | 1.03912 | 1.12333 | 1.30865 | 1.50569 | 1.70915 | 1.91667 |
| 110 | 0.884647 | 0.600443 | 0.847913 | 0.899606 | 0.962237 | 1.10327 | 1.25524 | 1.41321 | 1.57496 |
| 115 | 0.799806 | 0.402581 | 0.742731 | 0.77761 | 0.822644 | 0.927361 | 1.04223 | 1.16267 | 1.28663 |
| 120 | 0.720603 | 0.175305 | 0.649169 | 0.67065 | 0.701505 | 0.776738 | 0.861344 | 0.951088 | 1.04408 |
| 125 | 0.646246 | -0.08975 | 0.565591 | 0.576611 | 0.596225 | 0.647846 | 0.708061 | 0.772984 | 0.840886 |
| 130 | 0.576054 | -0.40274 | 0.490594 | 0.493677 | 0.504573 | 0.537631 | 0.578502 | 0.623653 | 0.671511 |
| 135 | 0.509434 | -0.77966 | 0.422959 | 0.420271 | 0.424613 | 0.44344 | 0.469296 | 0.499006 | 0.531151 |
| 140 | 0.445868 | -1.2464 | 0.361617 | 0.355008 | 0.354648 | 0.362943 | 0.377488 | 0.395457 | 0.415592 |
| 145 | 0.384895 | -1.83974 | 0.30562 | 0.296661 | 0.293171 | 0.294079 | 0.300456 | 0.309828 | 0.321096 |
| 150 | 0.326104 | -2.42438 | 0.254116 | 0.244131 | 0.238832 | 0.234997 | 0.235848 | 0.239268 | 0.244312 |
| 155 | 0.269119 | -3.51495 | 0.206336 | 0.196418 | 0.190407 | 0.184018 | 0.181535 | 0.181192 | 0.182203 |
| 160 | 0.213598 | -5.14 | 0.161571 | 0.152608 | 0.14677 | 0.139602 | 0.135558 | 0.133226 | 0.131977 |
| 165 | 0.15922 | -7.834 | 0.119163 | 0.111848 | 0.106877 | 0.100315 | 0.096096 | 0.093162 | 0.09104 |
| 170 | 0 | -13.202 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | -29.265 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Mild Steel / Zintec / Galv 1.0mm Thick

| | 0.7 | 1 | 1.2 | 1.5 | 2 | 2.5 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 0.301527 | -0.16261 | -0.453118 | -0.871708 | -1.54063 | -2.18754 | -2.82053 | -4.06025 | -5.27795 |
| 1 | 0.318741 | -0.139485 | -0.426156 | -0.839088 | -1.49874 | -2.1365 | -2.76041 | -3.98213 | -5.18196 |
| 5 | 0.387596 | 0.087018 | -0.318309 | -0.708605 | -1.33117 | -1.93233 | -2.51996 | -3.66968 | -4.79801 |
| 10 | 0.473665 | 0.174646 | -0.1835 | -0.545502 | -1.12171 | -1.67712 | -2.21938 | -3.27912 | -4.31806 |
| 15 | 0.559733 | 0.263274 | -0.048691 | -0.382399 | -0.912245 | -1.42191 | -1.91881 | -2.88856 | -3.83812 |
| 20 | 0.645802 | 0.352902 | 0.086118 | -0.219296 | -0.702783 | -1.1667 | -1.61824 | -2.498 | -3.35818 |
| 25 | 0.731871 | 0.44353 | 0.220927 | -0.056193 | -0.493321 | -0.911493 | -1.31767 | -2.10743 | -2.87824 |
| 30 | 0.817939 | 0.536158 | 0.355735 | 0.10691 | -0.283859 | -0.656284 | -1.0171 | -1.71687 | -2.39829 |
| 35 | 0.904008 | 0.630786 | 0.490544 | 0.270013 | -0.074397 | -0.401074 | -0.716535 | -1.32631 | -1.91835 |
| 40 | 0.990077 | 0.728414 | 0.625353 | 0.433116 | 0.135065 | -0.145865 | -0.415964 | -0.935746 | -1.43841 |
| 45 | 1.07614 | 0.628042 | 0.760162 | 0.596219 | 0.344527 | 0.109345 | -0.115394 | -0.545184 | -0.958463 |
| 50 | 1.76081 | 0.73221 | 0.99367 | 0.759322 | 0.553988 | 0.185176 | -0.154621 | -0.47852 | -0.792362 |
| 55 | 1.24828 | 0.8413 | 1.02978 | 0.922425 | 0.76345 | 0.619763 | 0.485746 | 0.235941 | 0.001423 |
| 60 | 1.33435 | 0.95493 | 1.16459 | 1.08553 | 0.972912 | 0.874973 | 0.786316 | 0.626503 | 0.481366 |
| 65 | 1.42042 | 1.07456 | 1.2994 | 1.24863 | 1.18237 | 1.13018 | 1.08689 | 1.01707 | 0.961309 |
| 70 | 1.50649 | 1.20018 | 1.43421 | 1.41173 | 1.39184 | 1.38539 | 1.38746 | 1.40763 | 1.44125 |
| 75 | 1.59256 | 1.33481 | 1.56902 | 1.57484 | 1.6013 | 1.6406 | 1.68803 | 1.79819 | 1.9212 |
| 80 | 1.67863 | 1.47844 | 1.70382 | 1.73794 | 1.81076 | 1.89581 | 1.9886 | 2.18875 | 2.40114 |
| 85 | 1.76469 | 1.63307 | 1.83863 | 1.90104 | 2.02022 | 2.15102 | 2.28917 | 2.57931 | 2.88108 |
| 90 | 1.85076 | 1.7997 | 1.77344 | 2.06415 | 2.22968 | 2.40623 | 2.58974 | 2.96988 | 3.36103 |
| 95 | 1.65236 | 1.61765 | 1.74011 | 1.80891 | 1.93713 | 2.07576 | 2.22096 | 2.52375 | 2.83694 |
| 100 | 1.47584 | 1.41635 | 1.5351 | 1.58585 | 1.68321 | 1.79035 | 1.90368 | 2.142 | 2.39011 |
| 105 | 1.31788 | 1.19389 | 1.35411 | 1.39009 | 1.46203 | 1.54315 | 1.63006 | 1.81483 | 2.00878 |
| 110 | 1.17574 | 0.944037 | 1.19359 | 1.2176 | 1.26878 | 1.32852 | 1.39368 | 1.5342 | 1.68329 |
| 115 | 1.04715 | 0.661 | 1.05059 | 1.06501 | 1.09942 | 1.14177 | 1.18915 | 1.29339 | 1.40558 |
| 120 | 0.930167 | 0.33586 | 0.922635 | 0.929515 | 0.950558 | 0.978938 | 1.01196 | 1.08675 | 1.16889 |
| 125 | 0.823172 | -0.04164 | 0.807598 | 0.808702 | 0.819321 | 0.836665 | 0.858265 | 0.909485 | 0.967431 |
| 130 | 0.724759 | -0.489052 | 0.703665 | 0.700508 | 0.703226 | 0.712059 | 0.72476 | 0.757453 | 0.796261 |
| 135 | 0.633708 | -1.0288 | 0.60926 | 0.603141 | 0.600124 | 0.60261 | 0.608577 | 0.627074 | 0.651075 |
| 140 | 0.548949 | -1.69514 | 0.522998 | 0.515027 | 0.508126 | 0.506116 | 0.507201 | 0.515203 | 0.528098 |
| 145 | 0.469535 | -2.5432 | 0.443653 | 0.434773 | 0.425559 | 0.420625 | 0.418399 | 0.419051 | 0.423984 |
| 150 | 0.394615 | -3.464 | 0.370124 | 0.361128 | 0.350923 | 0.344388 | 0.340173 | 0.336118 | 0.335732 |
| 155 | 0.323418 | -5.0214 | 0.301412 | 0.292958 | 0.282858 | 0.275815 | 0.270707 | 0.264135 | 0.260621 |
| 160 | 0.255237 | -7.3422 | 0.236603 | 0.229223 | 0.220114 | 0.213451 | 0.208335 | 0.20102 | 0.196151 |
| 165 | 0.189412 | -11.1913 | 0.174845 | 0.168953 | 0.161529 | 0.155939 | 0.15151 | 0.144838 | 0.140001 |
| 170 | 0 | -18.86 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | -41.808 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Mild Steel / Zintec / Galv 1.2mm Thick

| | 0.7 | 1 | 1.2 | 1.5 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 0.596282 | 0.107813 | -0.195132 | -0.628946 | -1.31749 | -2.62505 | -3.88439 | -5.11732 | -6.33354 |
| 1 | 0.614081 | 0.131658 | -0.167382 | -0.595452 | -1.27462 | -2.5638 | -3.80504 | -5.02 | -6.21835 |
| 5 | 0.685274 | 0.22704 | 0.104621 | -0.461475 | -1.10312 | -2.3188 | -3.4876 | -4.63073 | -5.75761 |
| 10 | 0.774267 | 0.346268 | 0.210375 | -0.294004 | -0.888744 | -2.01255 | -3.09082 | -4.14414 | -5.18168 |
| 15 | 0.863259 | 0.465495 | 0.316129 | -0.126534 | -0.674369 | -1.70629 | -2.69403 | -3.65754 | -4.60575 |
| 20 | 0.952251 | 0.584722 | 0.423247 | 0.040937 | -0.459995 | -1.40004 | -2.29724 | -3.17095 | -4.02981 |
| 25 | 1.04124 | 0.70395 | 0.531636 | 0.208408 | -0.24562 | -1.09379 | -1.90045 | -2.68436 | -3.45388 |
| 30 | 1.13024 | 0.823177 | 0.64339 | 0.375879 | -0.031245 | -0.787541 | -1.50366 | -2.19777 | -2.87795 |
| 35 | 1.21923 | 0.942405 | 0.757143 | 0.543349 | 0.18313 | -0.481289 | -1.10687 | -1.71118 | -2.30202 |
| 40 | 1.30822 | 1.06163 | 0.873897 | 0.71082 | 0.397505 | -0.175038 | -0.710084 | -1.22458 | -1.72609 |
| 45 | 1.39721 | 1.18086 | 0.793651 | 0.878291 | 0.61188 | 0.131213 | -0.313295 | -0.737991 | -1.15016 |
| 50 | 1.4862 | 1.30009 | 0.9194 | 1.04576 | 0.826254 | 0.437465 | 0.083494 | -0.251399 | -0.574224 |
| 55 | 1.5752 | 1.41931 | 1.04916 | 1.21323 | 1.04063 | 0.743716 | 0.480282 | 0.235193 | 0.001708 |
| 60 | 1.66419 | 1.53854 | 1.18591 | 1.3807 | 1.255 | 1.04997 | 0.877071 | 0.721786 | 0.577639 |
| 65 | 1.75318 | 1.65777 | 1.32866 | 1.54817 | 1.46938 | 1.35622 | 1.27386 | 1.20838 | 1.15357 |
| 70 | 1.84217 | 1.777 | 1.48042 | 1.71564 | 1.68375 | 1.66247 | 1.67065 | 1.69497 | 1.7295 |
| 75 | 1.93117 | 1.89622 | 1.64117 | 1.88312 | 1.89813 | 1.96872 | 2.06744 | 2.18156 | 2.30544 |
| 80 | 1.92016 | 2.01545 | 1.81393 | 2.05059 | 2.1125 | 2.27497 | 2.46423 | 2.66816 | 2.88137 |
| 85 | 2.10915 | 2.13468 | 1.99968 | 2.21806 | 2.32688 | 2.58122 | 2.86102 | 3.15475 | 3.4573 |
| 90 | 1.99814 | 2.25391 | 2.2 | 2.38553 | 2.54125 | 2.88748 | 3.2578 | 3.64134 | 4.03323 |
| 95 | 1.96919 | 2.00499 | 1.98058 | 2.10119 | 2.22015 | 2.49091 | 2.78444 | 3.09044 | 3.40433 |
| 100 | 1.7647 | 1.7844 | 1.73962 | 1.85161 | 1.94024 | 2.14842 | 2.37802 | 2.61936 | 2.86813 |
| 105 | 1.58096 | 1.58783 | 1.47186 | 1.63151 | 1.69527 | 1.85178 | 2.02837 | 2.21597 | 2.41053 |
| 110 | 1.4149 | 1.41173 | 1.17291 | 1.43653 | 1.48008 | 1.59422 | 1.72712 | 1.87028 | 2.01994 |
| 115 | 1.26397 | 1.25315 | 0.833139 | 1.26306 | 1.29038 | 1.37012 | 1.46728 | 1.57397 | 1.6867 |
| 120 | 1.12603 | 1.10961 | 0.44324 | 1.10804 | 1.12254 | 1.17473 | 1.24298 | 1.32004 | 1.40266 |
| 125 | 0.999241 | 0.978993 | -0.01057 | 0.968884 | 0.973506 | 1.004 | 1.04922 | 1.10252 | 1.16092 |
| 130 | 0.882047 | 0.859479 | -0.54726 | 0.843354 | 0.840621 | 0.854471 | 0.881713 | 0.916292 | 0.955513 |
| 135 | 0.773082 | 0.749493 | -1.19456 | 0.729517 | 0.721593 | 0.723132 | 0.736723 | 0.756918 | 0.78129 |
| 140 | 0.67115 | 0.64765 | -1.99397 | 0.625674 | 0.614411 | 0.607339 | 0.610981 | 0.620493 | 0.633718 |
| 145 | 0.57519 | 0.552723 | -3.0118 | 0.530318 | 0.517288 | 0.50475 | 0.501586 | 0.503559 | 0.508781 |
| 150 | 0.484254 | 0.463612 | -4.1574 | 0.442101 | 0.428626 | 0.413265 | 0.405939 | 0.403016 | 0.402878 |
| 155 | 0.397479 | 0.379319 | -6.0256 | 0.359798 | 0.346972 | 0.330978 | 0.321681 | 0.316052 | 0.312745 |
| 160 | 0.314074 | 0.298929 | -8.8106 | 0.282283 | 0.270993 | 0.256141 | 0.246646 | 0.240086 | 0.235382 |
| 165 | 0.233303 | 0.221589 | -13.4303 | 0.208511 | 0.199451 | 0.187127 | 0.17882 | 0.172714 | 0.168001 |
| 170 | 0 | 0 | -22.632 | 0 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | -50.169 | 0 | 0 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Mild Steel / Zintec / Galv 1.5mm Thick

| | 0.125 | 0.7 | 1 | 1.5 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 2.59715 | 1.0593 | 0.534334 | -0.243915 | -0.961902 | -2.31095 | -3.59973 | -4.85549 | -6.09037 |
| 1 | 2.60078 | 1.07786 | 0.559143 | -0.209227 | -0.917669 | -2.24811 | -3.51862 | -4.75629 | -5.9732 |
| 5 | 2.61529 | 1.1521 | 0.65838 | 0.130527 | -0.740738 | -1.99675 | -3.19418 | -4.35951 | -5.50452 |
| 10 | 2.63342 | 1.2449 | 0.782426 | 0.261969 | -0.519574 | -1.68256 | -2.78863 | -3.86352 | -4.91868 |
| 15 | 2.65156 | 1.33769 | 0.906472 | 0.395411 | -0.29841 | -1.36837 | -2.38308 | -3.36753 | -4.33284 |
| 20 | 2.66969 | 1.43049 | 1.03052 | 0.528853 | -0.077246 | -1.05418 | -1.97754 | -2.87155 | -3.74699 |
| 25 | 2.68783 | 1.52329 | 1.15457 | 0.665295 | 0.143918 | -0.739982 | -1.57199 | -2.37556 | -3.16115 |
| 30 | 2.70596 | 1.61608 | 1.27861 | 0.803737 | 0.365082 | -0.425789 | -1.16644 | -1.87958 | -2.57531 |
| 35 | 2.7241 | 1.70888 | 1.40266 | 0.946179 | 0.586246 | -0.111596 | -0.760893 | -1.38359 | -1.98946 |
| 40 | 2.74223 | 1.80168 | 1.5267 | 1.09162 | 0.80741 | 0.202597 | -0.355345 | -0.887605 | -1.40362 |
| 45 | 2.76037 | 1.89448 | 1.65075 | 0.84294 | 1.02857 | 0.51679 | 0.050203 | -0.391619 | -0.817776 |
| 50 | 2.7785 | 1.98727 | 1.7748 | 0.998809 | 1.24974 | 0.830983 | 0.455751 | 0.104367 | -0.231932 |
| 55 | 2.79664 | 2.08007 | 1.89884 | 1.16181 | 1.4709 | 1.14518 | 0.861299 | 0.600353 | 0.353911 |
| 60 | 2.81477 | 2.17287 | 2.02289 | 1.332 | 1.69207 | 1.45937 | 1.26685 | 1.09634 | 0.939755 |
| 65 | 2.8329 | 2.26566 | 2.14694 | 1.51083 | 1.91323 | 1.77356 | 1.6724 | 1.59233 | 1.5256 |
| 70 | 2.85104 | 2.35846 | 2.27098 | 1.70027 | 2.13439 | 2.08776 | 2.07794 | 2.08831 | 2.11144 |
| 75 | 2.86917 | 2.45126 | 2.39503 | 1.90172 | 2.35556 | 2.40195 | 2.48349 | 2.5843 | 2.69729 |
| 80 | 2.88731 | 2.44406 | 2.51907 | 2.11716 | 2.57672 | 2.71614 | 2.88904 | 3.08028 | 3.28313 |
| 85 | 2.90544 | 2.63685 | 2.64312 | 2.3486 | 2.79789 | 3.03033 | 3.29459 | 3.57627 | 3.86897 |
| 90 | 2.92358 | 2.52965 | 2.76717 | 2.60004 | 3.01905 | 3.34453 | 3.70014 | 4.07225 | 4.2 |
| 95 | 2.66979 | 2.45431 | 2.47287 | 2.32647 | 2.65453 | 2.9057 | 3.18533 | 3.48055 | 3.78563 |
| 100 | 2.43692 | 2.20728 | 2.21076 | 2.02452 | 2.33507 | 2.52481 | 2.74133 | 2.97252 | 3.213 |
| 105 | 2.22179 | 1.98428 | 1.97594 | 1.69033 | 2.05383 | 2.19305 | 2.35738 | 2.53546 | 2.72225 |
| 110 | 2.02179 | 1.78175 | 1.76439 | 1.31506 | 1.80516 | 1.90317 | 2.02461 | 2.1589 | 2.3013 |
| 115 | 1.83473 | 1.59675 | 1.57275 | 0.89133 | 1.58436 | 1.64912 | 1.73565 | 1.8341 | 1.94009 |
| 120 | 1.65877 | 1.42677 | 1.3982 | 0.40374 | 1.38749 | 1.42584 | 1.48428 | 1.55372 | 1.63013 |
| 125 | 1.49236 | 1.26973 | 1.23833 | -0.163 | 1.21117 | 1.22898 | 1.26521 | 1.31153 | 1.36423 |
| 130 | 1.33415 | 1.12378 | 1.09108 | -0.83342 | 1.05251 | 1.05484 | 1.0739 | 1.10214 | 1.13618 |
| 135 | 1.18298 | 0.987365 | 0.954651 | -1.643 | 0.90902 | 0.900185 | 0.906417 | 0.920903 | 0.940612 |
| 140 | 1.03783 | 0.859091 | 0.827481 | -2.6423 | 0.77848 | 0.762188 | 0.759288 | 0.763726 | 0.772805 |
| 145 | 0.897779 | 0.737734 | 0.70817 | -3.9147 | 0.658944 | 0.638338 | 0.62945 | 0.626983 | 0.628577 |
| 150 | 0.762027 | 0.622193 | 0.595468 | -5.196 | 0.548661 | 0.526385 | 0.514153 | 0.507424 | 0.504177 |
| 155 | 0.629835 | 0.511471 | 0.488242 | -7.532 | 0.446043 | 0.424287 | 0.410901 | 0.402101 | 0.396202 |
| 160 | 0.500524 | 0.40465 | 0.38545 | -11.0142 | 0.349633 | 0.330171 | 0.317405 | 0.308307 | 0.301531 |
| 165 | 0.373467 | 0.300879 | 0.286124 | -16.7876 | 0.258076 | 0.242294 | 0.231533 | 0.223525 | 0.217257 |
| 170 | 0 | 0 | 0 | -28.29 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | -62.711 | 0 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Mild Steel / Zintec / Galv 2.0mm Thick

| | 0.125 | 0.7 | 1 | 1.5 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 3.70669 | 1.87503 | 1.28923 | 0.441829 | -0.325221 | -1.74342 | -3.08126 | -4.37508 | -5.64105 |
| 1 | 3.70971 | 1.89461 | 1.3154 | 0.478263 | -0.278969 | -1.67818 | -2.99748 | -4.273 | -5.52082 |
| 5 | 3.72179 | 1.97294 | 1.42008 | 0.624001 | 0.175036 | -1.41721 | -2.66234 | -3.86466 | -5.03991 |
| 10 | 3.73688 | 2.07086 | 1.55094 | 0.806172 | 0.350292 | -1.09101 | -2.24342 | -3.35424 | -4.43877 |
| 15 | 3.75197 | 2.16877 | 1.68179 | 0.988343 | 0.526548 | -0.764799 | -1.82449 | -2.84382 | -3.83763 |
| 20 | 3.76706 | 2.26669 | 1.81265 | 1.17052 | 0.705804 | -0.438593 | -1.40557 | -2.33341 | -3.23649 |
| 25 | 3.78215 | 2.36461 | 1.9435 | 1.35269 | 0.88706 | -0.112387 | -0.986643 | -1.82299 | -2.63535 |
| 30 | 3.79724 | 2.46252 | 2.07436 | 1.53486 | 1.07132 | 0.213819 | -0.567719 | -1.31257 | -2.03421 |
| 35 | 3.81234 | 2.56044 | 2.20521 | 1.71703 | 1.06157 | 0.540025 | -0.148795 | -0.802149 | -1.43307 |
| 40 | 3.82743 | 2.65835 | 2.33607 | 1.8992 | 1.25583 | 0.866231 | 0.270129 | -0.29173 | -0.831929 |
| 45 | 3.84252 | 2.75627 | 2.46692 | 2.08137 | 1.25661 | 1.19244 | 0.689053 | 0.218689 | -0.230789 |
| 50 | 3.85761 | 2.85419 | 2.59778 | 2.26354 | 1.46534 | 1.51864 | 1.10798 | 0.729108 | 0.370352 |
| 55 | 3.8727 | 2.9521 | 2.72863 | 2.44571 | 1.6826 | 1.84485 | 1.5269 | 1.23953 | 0.971492 |
| 60 | 3.8878 | 3.05002 | 2.85949 | 2.62789 | 1.90899 | 2.17106 | 1.94582 | 1.74995 | 1.57263 |
| 65 | 3.90289 | 3.14793 | 2.99034 | 2.81006 | 2.14811 | 2.49726 | 2.36475 | 2.26037 | 2.17377 |
| 70 | 3.91798 | 3.24585 | 3.1212 | 2.99223 | 2.40037 | 2.82347 | 2.78367 | 2.77078 | 2.77491 |
| 75 | 3.93307 | 3.34376 | 3.25205 | 3.1744 | 2.66962 | 3.14967 | 3.2026 | 3.2812 | 3.37605 |
| 80 | 3.94816 | 3.34168 | 3.38291 | 3.35657 | 2.95688 | 3.47588 | 3.62152 | 3.79162 | 3.97719 |
| 85 | 3.96326 | 3.5396 | 3.51376 | 3.53874 | 3.26513 | 3.80209 | 4.04045 | 4.30204 | 4.57833 |
| 90 | 3.97835 | 3.43751 | 3.64461 | 3.72092 | 3.60039 | 4.12829 | 4.45937 | 4.81246 | 5.17947 |
| 95 | 3.63785 | 3.28362 | 3.27346 | 3.3174 | 3.23429 | 3.61781 | 3.87427 | 4.15151 | 4.44191 |
| 100 | 3.3247 | 2.96448 | 2.94092 | 2.95896 | 2.8327 | 3.1717 | 3.36641 | 3.58069 | 3.80735 |
| 105 | 3.03476 | 2.67483 | 2.64114 | 2.63872 | 2.38677 | 2.78018 | 2.92406 | 3.08629 | 3.26013 |
| 110 | 2.7646 | 2.4103 | 2.36928 | 2.35105 | 1.887 | 2.43519 | 2.53755 | 2.65704 | 2.78736 |
| 115 | 2.51135 | 2.16727 | 2.12131 | 2.09126 | 1.32123 | 2.13002 | 2.19883 | 2.28354 | 2.3783 |
| 120 | 2.27264 | 1.9427 | 1.89385 | 1.85539 | 0.67173 | 1.85903 | 1.90112 | 1.95788 | 2.02392 |
| 125 | 2.0464 | 1.73399 | 1.684 | 1.64008 | -0.08371 | 1.6174 | 1.63864 | 1.67333 | 1.71653 |
| 130 | 1.83089 | 1.5389 | 1.4893 | 1.44244 | -0.9781 | 1.40102 | 1.40645 | 1.42412 | 1.44952 |
| 135 | 1.62458 | 1.35551 | 1.30759 | 1.25995 | -2.0566 | 1.20628 | 1.20025 | 1.20522 | 1.21715 |
| 140 | 1.42614 | 1.18211 | 1.13698 | 1.09042 | -3.3903 | 1.03005 | 1.01625 | 1.01223 | 1.0144 |
| 145 | 1.23438 | 1.0172 | 0.975809 | 0.931892 | -5.0864 | 0.869546 | 0.851118 | 0.841251 | 0.836798 |
| 150 | 1.04823 | 0.85943 | 0.822567 | 0.782616 | -6.9279 | 0.722256 | 0.701847 | 0.688775 | 0.680345 |
| 155 | 0.866743 | 0.707571 | 0.675894 | 0.641006 | -10.0427 | 0.585917 | 0.565716 | 0.551631 | 0.541413 |
| 160 | 0.689022 | 0.560502 | 0.534543 | 0.505603 | -14.6854 | 0.458446 | 0.440228 | 0.426902 | 0.41667 |
| 165 | 0.514248 | 0.417176 | 0.397351 | 0.375053 | -22.3835 | 0.337907 | 0.323058 | 0.311878 | 0.303019 |
| 170 | 0 | 0 | 0 | 0 | -37.72 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | 0 | -83.615 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Mild Steel / Zintec / Galv 2.5mm Thick

| | 0.125 | 0.7 | 1 | 2 | 2.5 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 4.85932 | 2.73384 | 2.08722 | 0.354553 | -0.406526 | -1.13279 | -2.5197 | -3.85158 | -5.14864 |
| 1 | 4.86149 | 2.75421 | 2.11451 | 0.402583 | -0.348712 | -1.06539 | -2.43348 | -3.74685 | -5.0256 |
| 5 | 4.87017 | 2.83568 | 2.22368 | 0.594704 | 0.218544 | -0.795772 | -2.0886 | -3.32792 | -4.5334 |
| 10 | 4.88103 | 2.93752 | 2.36015 | 0.834856 | 0.437615 | -0.45875 | -1.6575 | -2.80427 | -3.91816 |
| 15 | 4.89188 | 3.03936 | 2.49661 | 1.07501 | 0.658685 | -0.121728 | -1.22639 | -2.28061 | -3.30292 |
| 20 | 4.90273 | 3.14119 | 2.63308 | 1.31516 | 0.881755 | 0.215294 | -0.795292 | -1.75696 | -2.68768 |
| 25 | 4.91358 | 3.24303 | 2.76955 | 1.55531 | 1.10882 | 0.552316 | -0.364189 | -1.2333 | -2.07244 |
| 30 | 4.92444 | 3.34487 | 2.90601 | 1.79546 | 1.3399 | 0.889338 | 0.066914 | -0.709649 | -1.4572 |
| 35 | 4.93529 | 3.44671 | 3.04248 | 2.03561 | 1.57697 | 1.22636 | 0.498017 | -0.185994 | -0.841962 |
| 40 | 4.94614 | 3.54854 | 3.17895 | 2.27576 | 1.82004 | 1.56338 | 0.92912 | 0.337661 | -0.226722 |
| 45 | 4.95699 | 3.65038 | 3.31541 | 2.51592 | 1.67111 | 1.9004 | 1.36022 | 0.861316 | 0.388518 |
| 50 | 4.96784 | 3.75222 | 3.45188 | 2.75607 | 1.93118 | 2.23743 | 1.79133 | 1.38497 | 1.00376 |
| 55 | 4.9787 | 3.85406 | 3.58834 | 2.99622 | 2.20325 | 2.57445 | 2.22243 | 1.90863 | 1.619 |
| 60 | 4.98955 | 3.9559 | 3.72481 | 3.23637 | 2.48632 | 2.91147 | 2.65353 | 2.43228 | 2.23424 |
| 65 | 5.0004 | 4.05773 | 3.86128 | 3.47652 | 2.78539 | 3.24849 | 3.08463 | 2.95594 | 2.84948 |
| 70 | 5.01125 | 4.15957 | 3.99774 | 3.71667 | 3.10146 | 3.58552 | 3.51574 | 3.47959 | 3.46472 |
| 75 | 5.0221 | 4.26141 | 4.13421 | 3.95682 | 3.43653 | 3.92254 | 3.94684 | 4.00325 | 4.07996 |
| 80 | 5.03296 | 4.26325 | 4.27068 | 4.19697 | 3.7956 | 4.25956 | 4.37794 | 4.5269 | 4.6952 |
| 85 | 5.04381 | 4.46508 | 4.40714 | 4.43713 | 4.18167 | 4.59658 | 4.80905 | 5.05056 | 5.31044 |
| 90 | 5.05466 | 4.36692 | 4.54361 | 4.67728 | 4.59974 | 4.9336 | 5.24015 | 5.57421 | 5.92568 |
| 95 | 4.62625 | 4.13328 | 4.09439 | 4.16441 | 4.14312 | 4.35027 | 4.58356 | 4.84283 | 5.11855 |
| 100 | 4.23164 | 3.74084 | 3.69024 | 3.70948 | 3.64087 | 3.83774 | 4.01065 | 4.20801 | 4.42085 |
| 105 | 3.86569 | 3.38333 | 3.3243 | 3.30367 | 3.08422 | 3.38527 | 3.50871 | 3.65508 | 3.81596 |
| 110 | 3.52416 | 3.0556 | 2.99093 | 2.93975 | 2.45909 | 2.98397 | 3.06726 | 3.17194 | 3.29017 |
| 115 | 3.20354 | 2.75336 | 2.68543 | 2.61166 | 1.75179 | 2.62649 | 2.67758 | 2.74854 | 2.83207 |
| 120 | 2.90086 | 2.47299 | 2.40386 | 2.31434 | 0.93966 | 2.30659 | 2.33232 | 2.3764 | 2.43207 |
| 125 | 2.6136 | 2.21142 | 2.14284 | 2.04344 | -0.0051 | 2.01899 | 2.02524 | 2.0483 | 2.082 |
| 130 | 2.33959 | 1.96599 | 1.89949 | 1.79526 | -1.1226 | 1.75916 | 1.75097 | 1.75807 | 1.77483 |
| 135 | 2.07695 | 1.73443 | 1.6713 | 1.56656 | -2.4715 | 1.52315 | 1.50485 | 1.50031 | 1.50447 |
| 140 | 1.82403 | 1.51471 | 1.45606 | 1.35452 | -4.1369 | 1.3075 | 1.28279 | 1.27031 | 1.26557 |
| 145 | 1.57935 | 1.30505 | 1.25183 | 1.15663 | -6.2575 | 1.10913 | 1.08116 | 1.0639 | 1.0534 |
| 150 | 1.34162 | 1.10385 | 1.05685 | 0.970635 | -8.6599 | 0.925309 | 0.896722 | 0.877308 | 0.863696 |
| 155 | 1.10964 | 0.909657 | 0.869532 | 0.794495 | -12.5534 | 0.753531 | 0.726516 | 0.707145 | 0.692609 |
| 160 | 0.882308 | 0.721142 | 0.688424 | 0.626338 | -18.356 | 0.591509 | 0.567839 | 0.550285 | 0.536598 |
| 165 | 0.658619 | 0.537063 | 0.512169 | 0.464419 | -27.9787 | 0.437111 | 0.418174 | 0.403823 | 0.392372 |
| 170 | 0 | 0 | 0 | 0 | -47.15 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | 0 | -104.519 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Mild Steel / Zintec / Galv 3.0mm Thick

| | 0.125 | 0.7 | 1 | 1.5 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.04629 | 3.627 | 2.91954 | 1.93384 | 1.06867 | -0.487831 | -1.9238 | -3.29373 | -4.62189 |
| 1 | 6.04743 | 3.64796 | 2.94777 | 1.9731 | 1.11829 | -0.418454 | -1.83534 | -3.18655 | -4.49622 |
| 5 | 6.05195 | 3.73181 | 3.06067 | 2.13013 | 1.31676 | 0.262053 | -1.48148 | -2.7578 | -3.99351 |
| 10 | 6.05761 | 3.83661 | 3.20179 | 2.32641 | 1.56485 | 0.524938 | -1.03915 | -2.22186 | -3.36512 |
| 15 | 6.06327 | 3.94142 | 3.34292 | 2.52269 | 1.81295 | 0.79018 | -0.15982 | -1.68592 | -2.73674 |
| 20 | 6.06893 | 4.04622 | 3.48404 | 2.71897 | 2.06104 | 1.05771 | -0.154492 | -1.14999 | -2.10835 |
| 25 | 6.07459 | 4.15103 | 3.62516 | 2.91525 | 2.30913 | 1.33059 | 0.287836 | -0.61405 | -1.47996 |
| 30 | 6.08024 | 4.25584 | 3.76629 | 3.11154 | 2.55722 | 1.60747 | 0.730164 | -0.078112 | -0.851578 |
| 35 | 6.0859 | 4.36064 | 3.90741 | 3.30782 | 2.80531 | 1.89136 | 1.17249 | 0.457825 | -0.223192 |
| 40 | 6.09156 | 4.46545 | 4.04854 | 3.5041 | 3.05341 | 2.18424 | 1.61482 | 0.993762 | 0.405194 |
| 45 | 6.09722 | 4.57025 | 4.18966 | 3.70038 | 3.3015 | 2.08513 | 2.05715 | 1.5297 | 1.03358 |
| 50 | 6.10288 | 4.67506 | 4.33078 | 3.89667 | 3.54959 | 2.39801 | 2.49947 | 2.06564 | 1.66196 |
| 55 | 6.10854 | 4.77986 | 4.47191 | 4.09295 | 3.79769 | 2.7239 | 2.9418 | 2.60157 | 2.29035 |
| 60 | 6.1142 | 4.88467 | 4.61303 | 4.28923 | 4.04578 | 3.06378 | 3.38413 | 3.13751 | 2.91874 |
| 65 | 6.11986 | 4.98947 | 4.75415 | 4.48551 | 4.29387 | 3.42266 | 3.82646 | 3.67345 | 3.54712 |
| 70 | 6.12551 | 5.09428 | 4.89528 | 4.68179 | 4.54196 | 3.80155 | 4.26879 | 4.20938 | 4.17551 |
| 75 | 6.13117 | 5.19908 | 5.0364 | 4.87807 | 4.79006 | 4.20443 | 4.71112 | 4.74532 | 4.80389 |
| 80 | 6.13683 | 5.20389 | 5.17753 | 5.07436 | 5.03815 | 4.63432 | 5.15344 | 5.28126 | 5.43228 |
| 85 | 6.14249 | 5.40869 | 5.31865 | 5.27064 | 5.28624 | 5.098 | 5.59577 | 5.81719 | 6.06067 |
| 90 | 6.14815 | 5.3135 | 5.45977 | 5.46692 | 5.53433 | 5.6 | 6.0381 | 6.35313 | 6.68905 |
| 95 | 5.63087 | 4.99916 | 4.93155 | 4.91018 | 4.94574 | 5.052 | 5.30906 | 5.55037 | 5.8114 |
| 100 | 5.15384 | 4.53245 | 4.45482 | 4.41138 | 4.42152 | 4.44905 | 4.67015 | 4.8506 | 5.04962 |
| 105 | 4.71092 | 4.10614 | 4.02176 | 3.96171 | 3.95188 | 3.78066 | 4.10766 | 4.23818 | 4.3861 |
| 110 | 4.29708 | 3.71426 | 3.62593 | 3.55392 | 3.52878 | 3.03111 | 3.61031 | 3.7002 | 3.80633 |
| 115 | 3.90813 | 3.35185 | 3.26195 | 3.18196 | 3.1455 | 2.18235 | 3.16872 | 3.22594 | 3.29825 |
| 120 | 3.54054 | 3.01473 | 2.92532 | 2.84077 | 2.79639 | 1.20759 | 2.77497 | 2.80636 | 2.85167 |
| 125 | 3.1913 | 2.69934 | 2.61218 | 2.526 | 2.47665 | 0.0741 | 2.42233 | 2.43377 | 2.45796 |
| 130 | 2.85784 | 2.40262 | 2.31922 | 2.23395 | 2.18215 | -1.2671 | 2.10503 | 2.10155 | 2.10968 |
| 135 | 2.53791 | 2.12193 | 2.04359 | 1.96138 | 1.9093 | -2.8854 | 1.81804 | 1.80398 | 1.80037 |
| 140 | 2.22955 | 1.85494 | 1.78277 | 1.70548 | 1.65496 | -4.8844 | 1.55696 | 1.53603 | 1.52438 |
| 145 | 1.93101 | 1.59957 | 1.53452 | 1.46371 | 1.41634 | -7.4296 | 1.31789 | 1.29322 | 1.27668 |
| 150 | 1.64073 | 1.35399 | 1.29685 | 1.23385 | 1.19094 | -10.3919 | 1.09732 | 1.07157 | 1.05277 |
| 155 | 1.3573 | 1.11651 | 1.06794 | 1.01384 | 0.976484 | -15.0641 | 0.892086 | 0.867429 | 0.848574 |
| 160 | 1.07941 | 0.885598 | 0.846121 | 0.801814 | 0.770899 | -22.0276 | 0.699266 | 0.677483 | 0.660342 |
| 165 | 0.805853 | 0.659812 | 0.629849 | 0.596026 | 0.572247 | -33.5748 | 0.516151 | 0.498629 | 0.484587 |
| 170 | 0 | 0 | 0 | 0 | 0 | -56.58 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | 0 | 0 | -125.423 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Mild Steel / Zintec / Galv 4.0mm Thick

| | 0.125 | 0.7 | 1 | 1.5 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.5018 | 5.49488 | 4.66576 | 3.54176 | 2.57846 | 0.883658 | -0.650441 | -2.09649 | -3.48683 |
| 1 | 8.5004 | 5.51658 | 4.6954 | 3.58319 | 2.6308 | 0.956527 | -0.557939 | -1.98484 | -3.35635 |
| 5 | 8.4948 | 5.60336 | 4.81394 | 3.74893 | 2.84017 | 1.248 | -0.250929 | -1.53825 | -2.83442 |
| 10 | 8.48781 | 5.71183 | 4.96211 | 3.95611 | 3.10188 | 1.61234 | 0.099583 | -0.980014 | -2.18201 |
| 15 | 8.48081 | 5.82031 | 5.11028 | 4.16328 | 3.36359 | 1.97669 | 0.453096 | -0.421778 | -1.5296 |
| 20 | 8.47382 | 5.92878 | 5.25846 | 4.37045 | 3.6253 | 2.34103 | 0.810608 | 0.136457 | -0.877185 |
| 25 | 8.46683 | 6.03726 | 5.40663 | 4.57763 | 3.887 | 2.70537 | 1.17312 | 0.694693 | -0.224773 |
| 30 | 8.45983 | 6.14573 | 5.5548 | 4.7848 | 4.14872 | 3.06972 | 1.54363 | 1.25293 | 0.427639 |
| 35 | 8.45284 | 6.25421 | 5.70298 | 4.99197 | 4.41042 | 3.43406 | 1.92215 | 1.81116 | 1.08005 |
| 40 | 8.44584 | 6.36268 | 5.85115 | 5.19915 | 4.67213 | 3.7984 | 2.31166 | 2.3694 | 1.73246 |
| 45 | 8.43885 | 6.47116 | 5.99932 | 5.40632 | 4.93384 | 4.16274 | 2.31417 | 2.92764 | 2.38488 |
| 50 | 8.43186 | 6.57964 | 6.1475 | 5.61349 | 5.19555 | 4.52709 | 2.73068 | 3.48587 | 3.03729 |
| 55 | 8.42486 | 6.68811 | 6.29567 | 5.82067 | 5.45726 | 4.89143 | 3.16419 | 4.04411 | 3.6897 |
| 60 | 8.41787 | 6.79659 | 6.44384 | 6.02784 | 5.71897 | 5.25577 | 3.61871 | 4.60234 | 4.34211 |
| 65 | 8.41087 | 6.90506 | 6.59202 | 6.23501 | 5.98068 | 5.62012 | 4.09622 | 5.16058 | 4.99452 |
| 70 | 8.40388 | 7.01354 | 6.74019 | 6.44219 | 6.24239 | 5.98446 | 4.60173 | 5.71881 | 5.64694 |
| 75 | 8.39688 | 7.12201 | 6.88836 | 6.64936 | 6.5041 | 6.3488 | 5.13824 | 6.27705 | 6.29935 |
| 80 | 8.38989 | 7.13049 | 7.03654 | 6.85653 | 6.76581 | 6.71314 | 5.71276 | 6.83529 | 6.95176 |
| 85 | 8.38289 | 7.33897 | 7.18471 | 7.06371 | 7.02752 | 7.07749 | 6.33027 | 7.39352 | 7.60417 |
| 90 | 8.3759 | 7.24744 | 7.33288 | 7.27088 | 7.28923 | 7.44183 | 6.99978 | 7.95176 | 8.25658 |
| 95 | 7.67864 | 6.76943 | 6.64437 | 6.5577 | 6.54691 | 6.63481 | 6.26927 | 7.00395 | 7.23562 |
| 100 | 7.03448 | 6.15193 | 6.02022 | 5.91532 | 5.88184 | 5.91791 | 5.4664 | 6.17202 | 6.3434 |
| 105 | 6.43536 | 5.58574 | 5.45067 | 5.333 | 5.28228 | 5.27743 | 4.57455 | 5.43835 | 5.56036 |
| 110 | 5.87463 | 5.06329 | 4.92765 | 4.80186 | 4.73856 | 4.70211 | 3.57515 | 4.78844 | 4.87038 |
| 115 | 5.34676 | 4.57828 | 4.44445 | 4.31452 | 4.24262 | 4.18253 | 2.44254 | 4.2102 | 4.26005 |
| 120 | 4.84707 | 4.12539 | 3.99542 | 3.86477 | 3.78769 | 3.71079 | 1.14346 | 3.69348 | 3.71806 |
| 125 | 4.37162 | 3.7001 | 3.57577 | 3.44733 | 3.368 | 3.28017 | -0.3676 | 3.22961 | 3.23481 |
| 130 | 3.91698 | 3.29854 | 3.18134 | 3.05765 | 2.9786 | 2.88488 | -2.1562 | 2.81118 | 2.80203 |
| 135 | 3.48021 | 2.91733 | 2.80858 | 2.69179 | 2.61518 | 2.5199 | -4.3142 | 2.43172 | 2.41256 |
| 140 | 3.05871 | 2.55352 | 2.45432 | 2.34629 | 2.27397 | 2.18084 | -6.9796 | 2.08558 | 2.06011 |
| 145 | 2.65018 | 2.20448 | 2.11578 | 2.01807 | 1.95162 | 1.86378 | -10.3728 | 1.76773 | 1.73909 |
| 150 | 2.25255 | 1.86787 | 1.79045 | 1.7044 | 1.64513 | 1.56523 | -14.4569 | 1.47367 | 1.44451 |
| 155 | 1.86395 | 1.54155 | 1.47608 | 1.40278 | 1.35179 | 1.28201 | -20.6854 | 1.19933 | 1.17183 |
| 160 | 1.48268 | 1.22357 | 1.17058 | 1.1109 | 1.06909 | 1.01121 | -29.9698 | 0.940943 | 0.916891 |
| 165 | 1.10712 | 0.912107 | 0.872005 | 0.826658 | 0.794701 | 0.750106 | -45.366 | 0.695038 | 0.675814 |
| 170 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Mild Steel / Zintec / Galv 5.0mm Thick

| | 0.125 | 0.7 | 1 | 1.5 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.0435 | 7.44894 | 6.49817 | 5.23586 | 4.17443 | 2.34133 | 0.709106 | -0.813051 | -2.26559 |
| 1 | 11.0391 | 7.47089 | 6.52873 | 5.279 | 4.22902 | 2.41721 | 0.805167 | -0.825423 | -2.13078 |
| 5 | 11.0214 | 7.5587 | 6.651 | 5.45153 | 4.44737 | 2.72074 | 1.18941 | -0.163423 | -1.59154 |
| 10 | 10.9994 | 7.66845 | 6.80382 | 5.6672 | 4.7203 | 3.10015 | 1.66971 | 0.275229 | -0.9175 |
| 15 | 10.9774 | 7.7782 | 6.95665 | 5.88287 | 4.99323 | 3.47955 | 2.15001 | 0.71637 | -0.243456 |
| 20 | 10.9553 | 7.88795 | 7.10948 | 6.09854 | 5.26616 | 3.85896 | 2.63032 | 1.16351 | 0.430588 |
| 25 | 10.9333 | 7.9977 | 7.26231 | 6.31421 | 5.53909 | 4.23837 | 3.11062 | 1.61665 | 1.10463 |
| 30 | 10.9112 | 8.10745 | 7.41514 | 6.52989 | 5.81203 | 4.61778 | 3.59092 | 2.07979 | 1.77868 |
| 35 | 10.8892 | 8.2172 | 7.56797 | 6.74556 | 6.08496 | 4.99718 | 4.07122 | 2.55293 | 2.45272 |
| 40 | 10.8672 | 8.32696 | 7.7208 | 6.96123 | 6.35789 | 5.37659 | 4.55153 | 3.04007 | 3.12676 |
| 45 | 10.8451 | 8.43671 | 7.87363 | 7.1769 | 6.63082 | 5.756 | 5.03183 | 3.14221 | 3.80081 |
| 50 | 10.8231 | 8.54646 | 8.02646 | 7.39257 | 6.90376 | 6.13541 | 5.51213 | 3.66335 | 4.47485 |
| 55 | 10.801 | 8.65621 | 8.17928 | 7.60824 | 7.17669 | 6.51481 | 5.99244 | 4.20549 | 5.1489 |
| 60 | 10.779 | 8.76596 | 8.33211 | 7.82391 | 7.44962 | 6.89422 | 6.47274 | 4.77363 | 5.82294 |
| 65 | 10.757 | 8.87571 | 8.48494 | 8.03958 | 7.72255 | 7.27363 | 6.95304 | 5.37077 | 6.49698 |
| 70 | 10.7349 | 8.98547 | 8.63777 | 8.25525 | 7.99549 | 7.65304 | 7.43334 | 6.00191 | 7.17103 |
| 75 | 10.7129 | 9.09522 | 8.7906 | 8.47092 | 8.26842 | 8.03244 | 7.91364 | 6.67305 | 7.84507 |
| 80 | 10.6908 | 9.10497 | 8.94343 | 8.68659 | 8.54135 | 8.41185 | 8.39395 | 7.39119 | 8.51912 |
| 85 | 10.6688 | 9.31472 | 9.09625 | 8.90226 | 8.81428 | 8.79126 | 8.87425 | 8.16333 | 9.19316 |
| 90 | 10.6467 | 9.22447 | 9.24908 | 9.11793 | 9.08722 | 9.17067 | 9.35455 | 9.00047 | 9.86721 |
| 95 | 9.7671 | 8.5804 | 8.39789 | 8.24591 | 8.18879 | 8.21137 | 8.32882 | 8.08724 | 8.70054 |
| 100 | 8.95343 | 7.80971 | 7.62394 | 7.45757 | 7.38048 | 7.35508 | 7.41895 | 7.08275 | 7.67549 |
| 105 | 8.19572 | 7.10126 | 6.91549 | 6.74019 | 6.64859 | 6.58612 | 6.60735 | 5.96744 | 6.77053 |
| 110 | 7.48571 | 6.44584 | 6.26289 | 6.08331 | 5.98185 | 5.89162 | 5.8795 | 4.71819 | 5.96795 |
| 115 | 6.81651 | 5.83583 | 5.65807 | 5.4782 | 5.37086 | 5.26083 | 5.22333 | 3.30358 | 5.25297 |
| 120 | 6.18234 | 5.26478 | 5.09426 | 4.91751 | 4.80772 | 4.68471 | 4.62867 | 1.67932 | 4.61318 |
| 125 | 5.57827 | 4.7272 | 4.56569 | 4.395 | 4.28568 | 4.15559 | 4.08688 | -0.2102 | 4.03799 |
| 130 | 5.00007 | 4.21839 | 4.0674 | 3.9053 | 3.79898 | 3.66685 | 3.59051 | -2.4452 | 3.51833 |
| 135 | 4.44406 | 3.73427 | 3.59511 | 3.44374 | 3.3426 | 3.21275 | 3.13312 | -5.142 | 3.0463 |
| 140 | 3.90703 | 3.27125 | 3.14501 | 3.00625 | 2.91212 | 2.78826 | 2.70904 | -8.4747 | 2.61499 |
| 145 | 3.3861 | 2.82614 | 2.71379 | 2.58919 | 2.50366 | 2.38893 | 2.31326 | -12.716 | 2.21827 |
| 150 | 2.87873 | 2.39611 | 2.29842 | 2.18932 | 2.11369 | 2.01074 | 1.94127 | -17.9209 | 1.85062 |
| 155 | 2.38258 | 1.97856 | 1.89619 | 1.80368 | 1.73906 | 1.65008 | 1.58899 | -25.7068 | 1.50706 |
| 160 | 1.89552 | 1.57112 | 1.50461 | 1.42957 | 1.37685 | 1.3036 | 1.25268 | -37.313 | 1.18302 |
| 165 | 1.41556 | 1.17158 | 1.12134 | 1.06447 | 1.02434 | 0.968218 | 0.928837 | -56.558 | 0.874223 |
| 170 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Mild Steel / Zintec / Galv 6.0mm Thick

| | 0.125 | 0.7 | 1 | 1.5 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.6539 | 9.47169 | 8.39925 | 6.99865 | 5.83909 | 3.86769 | 2.13733 | 0.539064 | -0.975662 |
| 1 | 13.6461 | 9.49351 | 8.43037 | 7.0431 | 5.89554 | 3.9462 | 2.23657 | 0.658291 | -0.830908 |
| 5 | 13.6149 | 9.58081 | 8.55483 | 7.22091 | 6.12134 | 4.26025 | 2.63352 | 1.1352 | -0.075908 |
| 10 | 13.5759 | 9.68993 | 8.71041 | 7.44317 | 6.40358 | 4.65282 | 3.12971 | 1.73134 | 0.449875 |
| 15 | 13.5369 | 9.79905 | 8.86598 | 7.66543 | 6.68583 | 5.04538 | 3.62589 | 2.32748 | 0.979644 |
| 20 | 13.4979 | 9.90817 | 9.02156 | 7.88769 | 6.96808 | 5.43794 | 4.12207 | 2.92361 | 1.51641 |
| 25 | 13.4589 | 10.0173 | 9.17713 | 8.10994 | 7.25033 | 5.83051 | 4.61826 | 3.51975 | 2.06018 |
| 30 | 13.4199 | 10.1264 | 9.33271 | 8.33221 | 7.53257 | 6.22307 | 5.11444 | 4.11589 | 2.61495 |
| 35 | 13.3809 | 10.2355 | 9.48829 | 8.55447 | 7.81482 | 6.61564 | 5.61063 | 4.71202 | 3.18372 |
| 40 | 13.3419 | 10.3446 | 9.64386 | 8.77673 | 8.09707 | 7.0082 | 6.10682 | 5.30816 | 3.76749 |
| 45 | 13.3029 | 10.4538 | 9.79944 | 8.99898 | 8.37932 | 7.40076 | 6.603 | 5.9043 | 3.97025 |
| 50 | 13.2639 | 10.5629 | 9.95502 | 9.22124 | 8.66156 | 7.79333 | 7.09919 | 6.50044 | 4.596 |
| 55 | 13.2249 | 10.672 | 10.1106 | 9.4435 | 8.94381 | 8.18589 | 7.59537 | 7.09657 | 5.2468 |
| 60 | 13.1859 | 10.7811 | 10.2662 | 9.66576 | 9.22606 | 8.57846 | 8.09156 | 7.69271 | 5.9286 |
| 65 | 13.1469 | 10.8902 | 10.4217 | 9.88802 | 9.50831 | 8.97102 | 8.58774 | 8.28885 | 6.6453 |
| 70 | 13.1079 | 10.9994 | 10.5773 | 10.1103 | 9.79055 | 9.36359 | 9.08393 | 8.88498 | 7.4021 |
| 75 | 13.0689 | 11.1085 | 10.7329 | 10.3325 | 10.0728 | 9.75615 | 9.58011 | 9.48112 | 8.2081 |
| 80 | 13.0299 | 11.1176 | 10.8885 | 10.5548 | 10.3551 | 10.1487 | 10.0763 | 10.0773 | 9.0696 |
| 85 | 12.9909 | 11.3267 | 11.0441 | 10.7771 | 10.6373 | 10.5413 | 10.5725 | 10.6734 | 9.9964 |
| 90 | 12.9519 | 11.2358 | 11.1996 | 10.9993 | 10.9195 | 10.9338 | 11.0687 | 11.2695 | 11.0002 |
| 95 | 11.888 | 10.4238 | 10.1838 | 9.96655 | 9.86309 | 9.82037 | 9.89148 | 10.025 | 9.90389 |
| 100 | 10.9029 | 9.49802 | 9.25817 | 9.03034 | 8.90963 | 8.82277 | 8.84303 | 8.922 | 8.6991 |
| 105 | 9.9847 | 8.64538 | 8.40893 | 8.17601 | 8.04352 | 7.92342 | 7.90376 | 7.93914 | 7.36132 |
| 110 | 9.12349 | 7.85511 | 7.62484 | 7.39147 | 7.25186 | 7.10784 | 7.05756 | 7.05865 | 5.86222 |
| 115 | 8.31106 | 7.11819 | 6.89649 | 6.66668 | 6.52391 | 6.36393 | 6.291 | 6.26576 | 4.1637 |
| 120 | 7.54049 | 6.42706 | 6.21599 | 5.99314 | 5.85063 | 5.68153 | 5.59278 | 5.54806 | 2.21519 |
| 125 | 6.8059 | 5.77528 | 5.5766 | 5.36365 | 5.22435 | 5.052 | 4.9533 | 4.89497 | -0.0518 |
| 130 | 6.10223 | 5.15733 | 4.97254 | 4.77202 | 4.63845 | 4.4679 | 4.3643 | 4.2974 | -2.7343 |
| 135 | 5.42508 | 4.56838 | 4.3988 | 4.21286 | 4.08719 | 3.92277 | 3.8186 | 3.74746 | -5.9708 |
| 140 | 4.7706 | 4.00424 | 3.85097 | 3.68147 | 3.56554 | 3.41095 | 3.30992 | 3.23825 | -9.9699 |
| 145 | 4.13538 | 3.46117 | 3.32515 | 3.17366 | 3.06905 | 2.92743 | 2.83268 | 2.76361 | -15.0592 |
| 150 | 3.51635 | 2.9358 | 2.81783 | 2.68568 | 2.5937 | 2.4677 | 2.38187 | 2.31806 | -21.3848 |
| 155 | 2.91074 | 2.42511 | 2.32584 | 2.21412 | 2.13588 | 2.02768 | 1.95297 | 1.8966 | -30.7282 |
| 160 | 2.31599 | 1.9263 | 1.84627 | 1.75587 | 1.69224 | 1.60363 | 1.5418 | 1.49465 | -44.655 |
| 165 | 1.72973 | 1.43678 | 1.37641 | 1.30801 | 1.2597 | 1.19205 | 1.14449 | 1.10794 | -67.749 |
| 170 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Mild Steel / Zintec / Galv 8.0mm Thick

| | 0.125 | 0.7 | 1 | 1.5 | 2 | 3 | 4 | 5 | 8 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.0377 | 13.6803 | 12.3645 | 10.6873 | 9.33153 | 7.08352 | 5.15692 | 3.40642 | -1.30088 |
| 1 | 19.0222 | 13.701 | 12.3959 | 10.7335 | 9.3908 | 7.16639 | 5.2616 | 3.53194 | -1.11588 |
| 5 | 18.9603 | 13.7836 | 12.5211 | 10.9182 | 9.62787 | 7.49787 | 5.68034 | 4.03402 | 0.098142 |
| 10 | 18.8829 | 13.887 | 12.6776 | 11.1492 | 9.92422 | 7.91221 | 6.20375 | 4.66162 | 0.800167 |
| 15 | 18.8054 | 13.9903 | 12.8342 | 11.3801 | 10.2206 | 8.32656 | 6.72717 | 5.28922 | 1.50619 |
| 20 | 18.728 | 14.0936 | 12.9907 | 11.611 | 10.5169 | 8.74091 | 7.25059 | 5.91682 | 2.22122 |
| 25 | 18.6505 | 14.1969 | 13.1473 | 11.8419 | 10.8133 | 9.15526 | 7.77401 | 6.54442 | 2.94724 |
| 30 | 18.5731 | 14.3003 | 13.3038 | 12.0728 | 11.1096 | 9.5696 | 8.29743 | 7.17202 | 3.687 |
| 35 | 18.4957 | 14.4036 | 13.4603 | 12.3037 | 11.406 | 9.98395 | 8.82085 | 7.79962 | 4.44429 |
| 40 | 18.4182 | 14.5069 | 13.6169 | 12.5346 | 11.7023 | 10.3983 | 9.34427 | 8.42722 | 5.22331 |
| 45 | 18.3408 | 14.6102 | 13.7734 | 12.7655 | 11.9986 | 10.8126 | 9.86769 | 9.05481 | 5.62734 |
| 50 | 18.1859 | 14.8169 | 14.0865 | 13.2273 | 12.5913 | 11.6413 | 10.9145 | 10.31 | 6.4614 |
| 55 | 18.1859 | 14.8169 | 14.0865 | 13.2273 | 12.5913 | 11.6413 | 10.9145 | 10.31 | 7.3295 |
| 60 | 18.1085 | 14.9202 | 14.243 | 13.4582 | 12.8877 | 12.0557 | 11.4379 | 10.9376 | 8.2375 |
| 65 | 18.031 | 15.0235 | 14.3996 | 13.6891 | 13.184 | 12.47 | 11.9614 | 11.5652 | 9.1935 |
| 70 | 17.9536 | 15.1269 | 14.5561 | 13.92 | 13.4804 | 12.8844 | 12.4848 | 12.1928 | 10.2035 |
| 75 | 17.8762 | 15.2302 | 14.7127 | 14.1509 | 13.7767 | 13.2987 | 13.0082 | 12.8204 | 11.2775 |
| 80 | 17.7987 | 15.2335 | 14.8692 | 14.3819 | 14.0731 | 13.7131 | 13.5316 | 13.448 | 12.4255 |
| 85 | 17.7213 | 15.4368 | 15.0257 | 14.6128 | 14.3694 | 14.1274 | 14.055 | 14.0756 | 13.6615 |
| 90 | 17.6439 | 15.3402 | 15.1823 | 14.8437 | 14.6658 | 14.5418 | 14.5785 | 14.7032 | 14.9996 |
| 95 | 16.2068 | 14.1876 | 13.8328 | 13.4849 | 13.2887 | 13.1154 | 13.0938 | 13.1554 | 11.9972 |
| 100 | 14.8744 | 12.9471 | 12.5991 | 12.2484 | 12.0405 | 11.8306 | 11.7637 | 11.775 | 8.8508 |
| 105 | 13.6306 | 11.8016 | 11.4638 | 11.1156 | 10.9013 | 10.666 | 10.5646 | 10.5365 | 5.2791 |
| 110 | 12.4625 | 10.7371 | 10.4122 | 10.0712 | 9.8553 | 9.60371 | 9.47711 | 9.419 | 1.2563 |
| 115 | 11.3591 | 9.7418 | 9.43224 | 9.10254 | 8.8889 | 8.62904 | 8.48524 | 8.40503 | -3.23907 |
| 120 | 10.3112 | 8.806 | 8.51382 | 8.19877 | 7.99085 | 7.72955 | 7.57538 | 7.47991 | -8.52509 |
| 125 | 9.31102 | 7.92129 | 7.64826 | 7.35079 | 7.15153 | 6.89466 | 6.736 | 6.63115 | -29.5171 |
| 130 | 8.35187 | 7.0805 | 6.82813 | 6.55077 | 6.36269 | 6.1153 | 5.95719 | 5.848 | -36.6284 |
| 135 | 7.4279 | 6.27739 | 6.04698 | 5.79189 | 5.61715 | 5.38358 | 5.23035 | 5.12116 | -45.2704 |
| 140 | 6.53401 | 5.50648 | 5.29914 | 5.06818 | 4.90863 | 4.69257 | 4.54793 | 4.44243 | -55.9531 |
| 145 | 5.66566 | 4.76293 | 4.5796 | 4.37433 | 4.23155 | 4.03615 | 3.90324 | 3.80457 | -69.5856 |
| 150 | 4.81879 | 4.04237 | 3.88384 | 3.70559 | 3.58091 | 3.4088 | 3.29027 | 3.20108 | -87.4758 |
| 155 | 3.98972 | 3.34086 | 3.2078 | 3.05766 | 2.95216 | 2.80555 | 2.70358 | 2.62606 | -112.431 |
| 160 | 3.17506 | 2.65479 | 2.54772 | 2.42658 | 2.34115 | 2.22181 | 2.13817 | 2.0741 | -149.558 |
| 165 | 2.37166 | 1.98078 | 1.90012 | 1.80868 | 1.74401 | 1.65332 | 1.5894 | 1.54017 | 1.43781 |
| 170 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

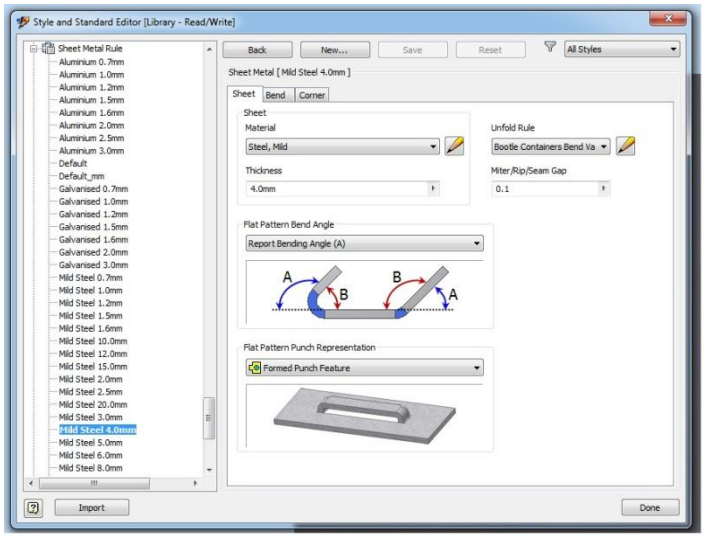
Mild Steel / Zintec / Galv 10.0mm Thick

| | 0.125 | 0.7 | 1 | 1.5 | 2 | 3 | 4 | 5 | 10 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.0377 | 13.6803 | 12.3645 | 10.6873 | 9.33153 | 7.08352 | 5.15692 | 3.40642 | -1.30088 |
| 1 | 19.0222 | 13.701 | 12.3959 | 10.7335 | 9.3908 | 7.16639 | 5.2616 | 3.53194 | -1.11588 |
| 5 | 18.9603 | 13.7836 | 12.5211 | 10.9182 | 9.62787 | 7.49787 | 5.68034 | 4.03402 | 0.273142 |
| 10 | 18.8829 | 13.887 | 12.6776 | 11.1492 | 9.92422 | 7.91221 | 6.20375 | 4.66162 | 1.15017 |
| 15 | 18.8054 | 13.9903 | 12.8342 | 11.3801 | 10.2206 | 8.32656 | 6.72717 | 5.28922 | 2.03319 |
| 20 | 18.728 | 14.0936 | 12.9907 | 11.611 | 10.5169 | 8.74091 | 7.25059 | 5.91682 | 2.92622 |
| 25 | 18.6505 | 14.1969 | 13.1473 | 11.8419 | 10.8133 | 9.15526 | 7.77401 | 6.54442 | 3.834 |
| 30 | 18.5731 | 14.3003 | 13.3038 | 12.0728 | 11.1096 | 9.5696 | 8.29743 | 7.17202 | 4.759 |
| 35 | 18.4957 | 14.4036 | 13.4603 | 12.3037 | 11.406 | 9.98395 | 8.82085 | 7.79962 | 5.70629 |
| 40 | 18.4182 | 14.5069 | 13.6169 | 12.5346 | 11.7023 | 10.3983 | 9.34427 | 8.42722 | 6.67931 |
| 45 | 18.3408 | 14.6102 | 13.7734 | 12.7655 | 11.9986 | 10.8126 | 9.86769 | 9.05481 | 7.28434 |
| 50 | 18.1859 | 14.8169 | 14.0865 | 13.2273 | 12.5913 | 11.6413 | 10.9145 | 10.31 | 8.3264 |
| 55 | 18.1859 | 14.8169 | 14.0865 | 13.2273 | 12.5913 | 11.6413 | 10.9145 | 10.31 | 9.4115 |
| 60 | 18.1085 | 14.9202 | 14.243 | 13.4582 | 12.8877 | 12.0557 | 11.4379 | 10.9376 | 10.5475 |
| 65 | 18.031 | 15.0235 | 14.3996 | 13.6891 | 13.184 | 12.47 | 11.9614 | 11.5652 | 11.7415 |
| 70 | 17.9536 | 15.1269 | 14.5561 | 13.92 | 13.4804 | 12.8844 | 12.4848 | 12.1928 | 13.0045 |
| 75 | 17.8762 | 15.2302 | 14.7127 | 14.1509 | 13.7767 | 13.2987 | 13.0082 | 12.8204 | 14.3465 |
| 80 | 17.7987 | 15.2335 | 14.8692 | 14.3819 | 14.0731 | 13.7131 | 13.5316 | 13.448 | 15.7815 |
| 85 | 17.7213 | 15.4368 | 15.0257 | 14.6128 | 14.3694 | 14.1274 | 14.055 | 14.0756 | 17.3265 |
| 90 | 17.6439 | 15.3402 | 15.1823 | 14.8437 | 14.6658 | 14.5418 | 14.5785 | 14.7032 | 18.9996 |
| 95 | 16.2068 | 14.1876 | 13.8328 | 13.4849 | 13.2887 | 13.1154 | 13.0938 | 13.1554 | 11.9972 |
| 100 | 14.8744 | 12.9471 | 12.5991 | 12.2484 | 12.0405 | 11.8306 | 11.7637 | 11.775 | 8.8508 |
| 105 | 13.6306 | 11.8016 | 11.4638 | 11.1156 | 10.9013 | 10.666 | 10.5646 | 10.5365 | 5.2791 |
| 110 | 12.4625 | 10.7371 | 10.4122 | 10.0712 | 9.8553 | 9.60371 | 9.47711 | 9.419 | 1.2563 |
| 115 | 11.3591 | 9.7418 | 9.43224 | 9.10254 | 8.8889 | 8.62904 | 8.48524 | 8.40503 | -3.23907 |
| 120 | 10.3112 | 8.806 | 8.51382 | 8.19877 | 7.99085 | 7.72955 | 7.57538 | 7.47991 | -8.52509 |
| 125 | 9.31102 | 7.92129 | 7.64826 | 7.35079 | 7.15153 | 6.89466 | 6.736 | 6.63115 | -29.5171 |
| 130 | 8.35187 | 7.0805 | 6.82813 | 6.55077 | 6.36269 | 6.1153 | 5.95719 | 5.848 | -36.6284 |
| 135 | 7.4279 | 6.27739 | 6.04698 | 5.79189 | 5.61715 | 5.38358 | 5.23035 | 5.12116 | -45.2704 |
| 140 | 6.53401 | 5.50648 | 5.29914 | 5.06818 | 4.90863 | 4.69257 | 4.54793 | 4.44243 | -55.9531 |
| 145 | 5.66566 | 4.76293 | 4.5796 | 4.37433 | 4.23155 | 4.03615 | 3.90324 | 3.80457 | -69.5856 |
| 150 | 4.81879 | 4.04237 | 3.88384 | 3.70559 | 3.58091 | 3.4088 | 3.29027 | 3.20108 | -87.4758 |
| 155 | 3.98972 | 3.34086 | 3.2078 | 3.05766 | 2.95216 | 2.80555 | 2.70358 | 2.62606 | -112.431 |
| 160 | 3.17506 | 2.65479 | 2.54772 | 2.42658 | 2.34115 | 2.22181 | 2.13817 | 2.0741 | -149.558 |
| 165 | 2.37166 | 1.98078 | 1.90012 | 1.80868 | 1.74401 | 1.65332 | 1.5894 | 1.54017 | 1.43781 |
| 170 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

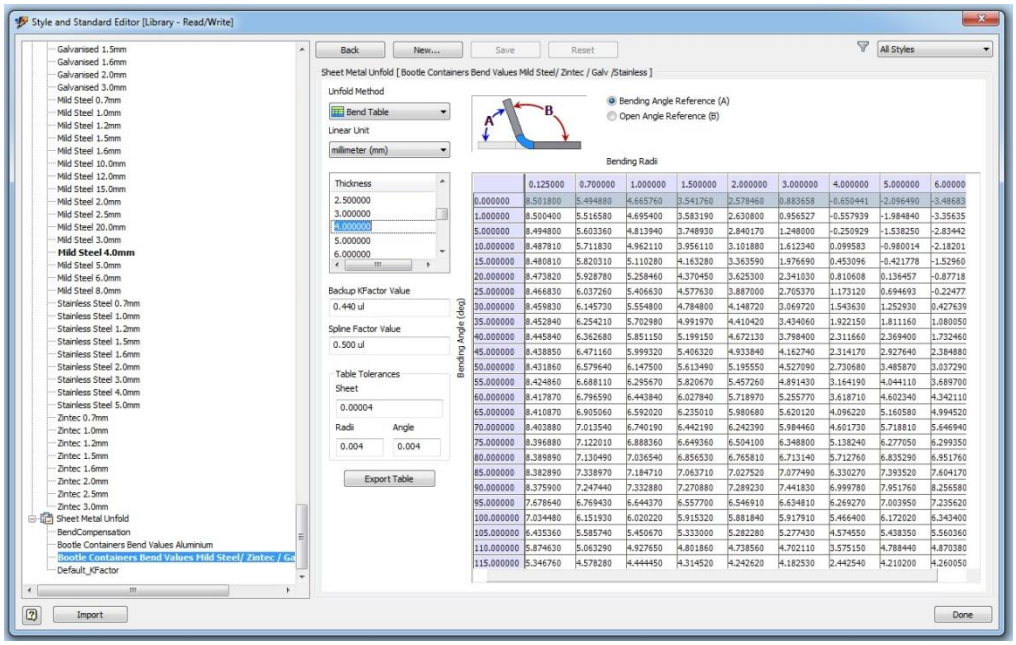
Mild Steel / Zintec / Galv 1.6mm Thick

| | 0.125 | 0.7 | 1 | 1.6 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 2.59715 | 1.0593 | 0.534334 | -0.243915 | -0.961902 | -2.31095 | -3.59973 | -4.85549 | -6.09037 |
| 1 | 2.60078 | 1.07786 | 0.559143 | -0.209227 | -0.917669 | -2.24811 | -3.51862 | -4.75629 | -5.9732 |
| 5 | 2.61529 | 1.1521 | 0.65838 | 0.139527 | -0.740738 | -1.99675 | -3.19418 | -4.35951 | -5.50452 |
| 10 | 2.63342 | 1.2449 | 0.782426 | 0.279969 | -0.519574 | -1.68256 | -2.78863 | -3.86352 | -4.91868 |
| 15 | 2.65156 | 1.33769 | 0.906472 | 0.421411 | -0.29841 | -1.36837 | -2.38308 | -3.36753 | -4.33284 |
| 20 | 2.66969 | 1.43049 | 1.03052 | 0.563853 | -0.077246 | -1.05418 | -1.97754 | -2.87155 | -3.74699 |
| 25 | 2.68783 | 1.52329 | 1.15457 | 0.709295 | 0.143918 | -0.739982 | -1.57199 | -2.37556 | -3.16115 |
| 30 | 2.70596 | 1.61608 | 1.27861 | 0.857737 | 0.365082 | -0.425789 | -1.16644 | -1.87958 | -2.57531 |
| 35 | 2.7241 | 1.70888 | 1.40266 | 1.00918 | 0.586246 | -0.111596 | -0.760893 | -1.38359 | -1.98946 |
| 40 | 2.74223 | 1.80168 | 1.5267 | 1.16462 | 0.80741 | 0.202597 | -0.355345 | -0.887605 | -1.40362 |
| 45 | 2.76037 | 1.89448 | 1.65075 | 0.92594 | 1.02857 | 0.51679 | 0.050203 | -0.391619 | -0.817776 |
| 50 | 2.7785 | 1.98727 | 1.7748 | 1.09181 | 1.24974 | 0.830983 | 0.455751 | 0.104367 | -0.231932 |
| 55 | 2.79664 | 2.08007 | 1.89884 | 1.26581 | 1.4709 | 1.14518 | 0.861299 | 0.600353 | 0.353911 |
| 60 | 2.81477 | 2.17287 | 2.02289 | 1.448 | 1.69207 | 1.45937 | 1.26685 | 1.09634 | 0.939755 |
| 65 | 2.8329 | 2.26566 | 2.14694 | 1.63883 | 1.91323 | 1.77356 | 1.6724 | 1.59233 | 1.5256 |
| 70 | 2.85104 | 2.35846 | 2.27098 | 1.84027 | 2.13439 | 2.08776 | 2.07794 | 2.08831 | 2.11144 |
| 75 | 2.86917 | 2.45126 | 2.39503 | 2.05572 | 2.35556 | 2.40195 | 2.48349 | 2.5843 | 2.69729 |
| 80 | 2.88731 | 2.44406 | 2.51907 | 2.28516 | 2.57672 | 2.71614 | 2.88904 | 3.08028 | 3.28313 |
| 85 | 2.90544 | 2.63685 | 2.64312 | 2.5326 | 2.79789 | 3.03033 | 3.29459 | 3.57627 | 3.86897 |
| 90 | 2.92358 | 2.52965 | 2.76717 | 2.80004 | 3.01905 | 3.34453 | 3.70014 | 4.07225 | 4.2 |
| 95 | 2.66979 | 2.45431 | 2.47287 | 2.50747 | 2.65453 | 2.9057 | 3.18533 | 3.48055 | 3.78563 |
| 100 | 2.43692 | 2.20728 | 2.21076 | 2.18652 | 2.33507 | 2.52481 | 2.74133 | 2.97252 | 3.213 |
| 105 | 2.22179 | 1.98428 | 1.97594 | 1.82933 | 2.05383 | 2.19305 | 2.35738 | 2.53546 | 2.72225 |
| 110 | 2.02179 | 1.78175 | 1.76439 | 1.43006 | 1.80516 | 1.90317 | 2.02461 | 2.1589 | 2.3013 |
| 115 | 1.83473 | 1.59675 | 1.57275 | 0.97733 | 1.58436 | 1.64912 | 1.73565 | 1.8341 | 1.94009 |
| 120 | 1.65877 | 1.42677 | 1.3982 | 0.45774 | 1.38749 | 1.42584 | 1.48428 | 1.55372 | 1.63013 |
| 125 | 1.49236 | 1.26973 | 1.23833 | -0.147 | 1.21117 | 1.22898 | 1.26521 | 1.31153 | 1.36423 |
| 130 | 1.33415 | 1.12378 | 1.09108 | -0.86242 | 1.05251 | 1.05484 | 1.0739 | 1.10214 | 1.13618 |
| 135 | 1.18298 | 0.987365 | 0.954651 | -1.725 | 0.90902 | 0.900185 | 0.906417 | 0.920903 | 0.940612 |
| 140 | 1.03783 | 0.859091 | 0.827481 | -2.7923 | 0.77848 | 0.762188 | 0.759288 | 0.763726 | 0.772805 |
| 145 | 0.897779 | 0.737734 | 0.70817 | -4.1487 | 0.658944 | 0.638338 | 0.62945 | 0.626983 | 0.628577 |
| 150 | 0.762027 | 0.622193 | 0.595468 | -5.543 | 0.548661 | 0.526385 | 0.514153 | 0.507424 | 0.504177 |
| 155 | 0.629835 | 0.511471 | 0.488242 | -8.034 | 0.446043 | 0.424287 | 0.410901 | 0.402101 | 0.396202 |
| 160 | 0.500524 | 0.40465 | 0.38545 | -11.7482 | 0.349633 | 0.330171 | 0.317405 | 0.308307 | 0.301531 |
| 165 | 0.373467 | 0.300879 | 0.286124 | -17.9066 | 0.258076 | 0.242294 | 0.231533 | 0.223525 | 0.217257 |
| 170 | 0 | 0 | 0 | -30.176 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | -66.892 | 0 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

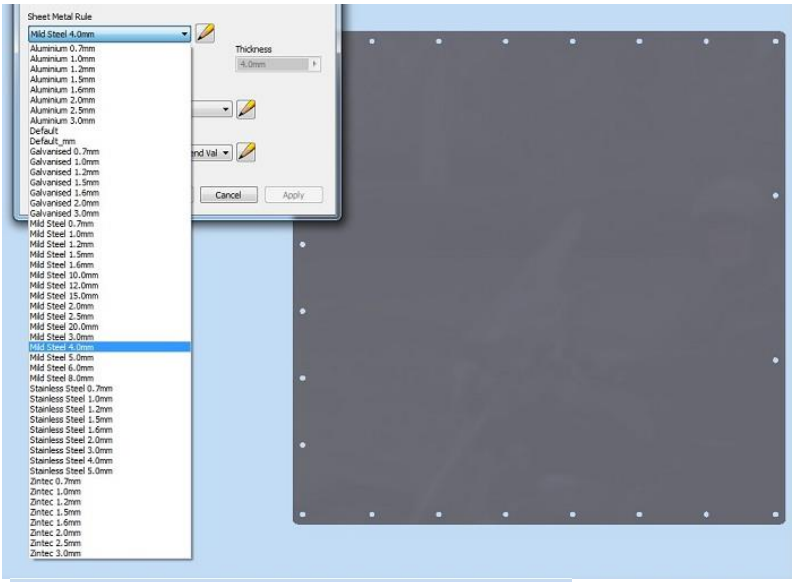
Then in the Style and Standard Editor set up each Sheet Metal Rule stating the thickness and whether it is Mild Steel, Zintec, Galvanised, Stainless Steel or Aluminium. Then set up an unfold rule for each Sheet Metal Rule (with the same name as the Rule) and make sure it is referenced by the correct Rule. Ensure that each unfold rule references one of the bend tables above.

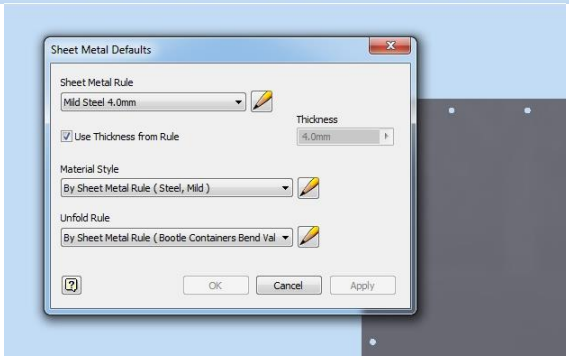



(Once each individual Sheet Metal Rule is set up copy and paste the correct table into correct unfold rule to give the correct blank size when unfolded)




When you pick the material you require it should look like the following. You will also need to check it has picked up your unfold rule!


Sheet Metal Rule
Mild Steel 4.0mm
Aluminium 0.7mm
Aluminium 1.0mm
Aluminium 1.2mm
Aluminium 1.5mm
Aluminium 1.6mm
Aluminium 2.0mm
Aluminium 2.5mm
Aluminium 3.0mm
Default
Default_mm
Galvanised 0.7mm
Galvanised 1.0mm
Galvanised 1.2mm
Galvanised 1.5mm
Galvanised 1.6mm
Galvanised 2.0mm
Galvanised 3.0mm
Mild Steel 0.7mm
Mild Steel 1.0mm
Mild Steel 1.2mm
Mild Steel 1.5mm
Mild Steel 1.6mm
Mild Steel 10.0mm
Mild Steel 12.0mm
Mild Steel 15.0mm
Mild Steel 2.0mm
Mild Steel 2.5mm
Mild Steel 20.0mm
Mild Steel 3.0mm
Mild Steel 4.0mm
Mild Steel 5.0mm
Mild Steel 6.0mm
Mild Steel 8.0mm
Stainless Steel 0.7mm
Stainless Steel 1.0mm
Stainless Steel 1.2mm
Stainless Steel 1.5mm
Stainless Steel 1.6mm
Stainless Steel 2.0mm
Stainless Steel 3.0mm
Stainless Steel 4.0mm
Stainless Steel 5.0mm
Zintec 0.7mm
Zintec 1.0mm
Zintec 1.2mm
Zintec 1.5mm
Zintec 1.6mm
Zintec 2.0mm
Zintec 2.5mm
Zintec 3.0mm
Thickness
4.0mm
Cancel
Apply


Sheet Metal Defaults
Sheet Metal Rule
Mild Steel 4.0mm
Use Thickness from Rule
Thickness
4.0mm
Material Style
By Sheet Metal Rule ( Steel, Mild )
Unfold Rule
By Sheet Metal Rule ( Bootle Containers Bend Val
OK
Cancel
Apply