

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS 5040B

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S T E E L S H E E T A N D S T R I P

Deep Drawing
Low Carbon

1. ACKNOWLEDGMENT: A vendor must mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.

2. COMPOSITION:

| | |
|------------|-----------|
| Carbon | .08 - .13 |
| Manganese | .30 - .50 |
| Phosphorus | .04 max |
| Sulphur | .05 max |

3. CONDITION: (a) Cold rolled and oiled conforming to a Rockwell hardness of B 38-52, or the equivalent.
 (b) Test specimens, cut transverse to the direction of rolling, shall withstand cold bending flat on themselves, without cracking, and without showing evidence of coarse grain.

4. FINISHED PARTS: Where severe working is necessary to fabricate particular parts, material may be ordered specially processed.

5. QUALITY: This material must be uniform in quality and temper, straight, flat, clean and smooth, free from seams, laminations, blisters, scale and other injurious defects within the limits of best commercial manufacturing methods. Material revealing defects during fabrication is subject to rejection.

6. TOLERANCE: The following variations in thickness are permissible for widths shown. All dimensions are in inches:

THICKNESS TOLERANCE, INCHES
WIDTH RANGE

| Thickness | Over | Over |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Inch | 12 | 15 | 20 | 24 | 32 | 40 | 48 | 60 | 70 | 80 | 90 |
| To & | to | - |
| From | 15 | 20 | 24 | 32 | 40 | 48 | 60 | 70 | 80 | 90 | |
| Incl. | Incl. | Incl. | Incl. | Incl. | Incl. | Incl. | Incl. | Incl. | Incl. | Incl. | |
| .1875 & over | .007 | .007 | .007 | .008 | .009 | .010 | .011 | .012 | .013 | .014 | .015 |
| .1874 | .1420 | .006 | .007 | .007 | .008 | .009 | .010 | .010 | .011 | .012 | .012 |
| .1419 | .0972 | .006 | .007 | .007 | .008 | .009 | .009 | .010 | .010 | .011 | .012 |
| .0971 | .0822 | .006 | .006 | .006 | .006 | .007 | .007 | .008 | .009 | .009 | -- |
| .0821 | .0710 | .005 | .005 | .005 | .006 | .006 | .006 | .007 | .007 | .007 | -- |
| .0709 | .0568 | .005 | .005 | .005 | .005 | .005 | .005 | .006 | .006 | .006 | -- |
| .0567 | .0509 | .005 | .005 | .005 | .005 | .005 | .005 | .005 | .006 | .006 | -- |
| .0508 | .0389 | .004 | .004 | .004 | .004 | .004 | .004 | .004 | .005 | .005 | -- |
| .0388 | .0314 | .003 | .003 | .003 | .003 | .0035 | .0035 | .0035 | .004 | .004 | -- |
| .0313 | .0255 | .003 | .003 | .003 | .003 | .003 | .003 | .0035 | .004 | .004 | -- |
| .0254 | .0195 | .003 | .003 | .003 | .003 | .003 | .003 | .003 | -- | -- | -- |
| .0194 | .0142 | .002 | .002 | .002 | .002 | .002 | .002 | .002 | -- | -- | -- |
| .0141 | .0113 | -- | -- | -- | -- | .002 | .002 | -- | -- | -- | -- |
| .0112 & under | -- | -- | -- | -- | -- | .0015 | -- | -- | -- | -- | -- |