

## TYPE 301 HIGH YIELD STAINLESS STEEL STRIP

Type 301 High Yield, ASTM A-666, issued for special applications requiring extra high strength and hardness. This extra high strength material has a minimum tensile strength of 270,000 PSI. Gibbs stocks 301 High Yield Strip in gauges from .002 to .032 precision slit to widths from .022". Type 301 High Yield is sold to AMS5519 and ASTM A666 – Chemical properties only.

| Chemical Composition  | %                  | Thickness Tolerances < 6" |                | Tolerance (inch)             |
|---|--------------------|---------------------------|----------------|------------------------------|
|   |                    | AMS2242                   |                |                              |
| Carbon  | 0.15 max           | over .029 - .032 incl     |                | +/- .0020                    |
| Manganese   | 2.00 max           | over .020 - .029 incl     |                | +/- .0020                    |
| Silicon   | 1.00 max           | over .017 - .020 incl     |                | +/- .0015                    |
| Phosphorus  | .040 max           | over .013 - .017 incl     |                | +/- .0015                    |
| Sulfur  | .030 max           | over .011 - .013 incl     |                | +/- .0015                    |
| Chromium  | 16.00 – 18.00      | over .010 - .011 incl     |                | +/- .0015                    |
| Nickel  | 6.00 - 8.00        | under .010                |                | +/- 10%                      |
| Molybdenum  | .750 max           |                           |                |                              |
| Copper  | .750 max           |                           |                |                              |
| <b>Mechanical Properties</b>  |                    |                           |                |                              |
| Condition   | Tensile<br>Min PSI | Tensile<br>Max PSI        | Elong<br>% Min | Hardness<br>(Reference Only) |
| High Yield  | 270,000            | 300,000                   | ---            | RC47 – 52                    |
| Type 301 High Yield stainless steel strip is sold to AMS5519 and ASTM A666 chemical properties only. Mechanical properties listed are for general reference only. |                    |                           |                |                              |

| Additional Information |                                 |                 |
|------------------------|---------------------------------|-----------------|
| Width Tolerance        | +/- .003                        |                 |
| Camber Tolerance       | Up to and including 1.500" wide | .500" in 8 feet |
|                        | Over 1.500" wide                | .250" in 8 feet |
| Edges available        | #3 Slit edge                    |                 |
|                        | #5 Deburred edge                |                 |
|                        | #1 Round edge                   |                 |

The above charts are intended to provide general background information. You should also review the appropriate material specification. Please contact Gibbs if you have any questions.