

# HSM Wire International, Inc.

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## Stainless Steel Alloy - Chemical Composition

The following information is to be used as a guideline only.

| Non Chemical Compositions for Stainless Steel |           |           |      |     |      |       |         |      |         |         |
|---|-----------|-----------|------|-----|------|-------|---------|------|---------|---------|
| Alloy   | Ni        | Cr        | C    | Mn  | Fe   | S     | Si      | P    | Mo      | Other   |
| 302   | 8.0/10.0  | 7.0/19.0  | 0.15 | 2.0 | Bal. | 0.030 | 1.0     | 0.40 | 0.75    | N .10   |
| 304   | 8.0/10.5  | 8.0/20.0  | 0.08 | 2.0 | Bal. | 0.030 | 1.0     | 0.40 | -       | N .10   |
| 304L  | 8.0/12.0  | 8.0/20.0  | 0.03 | 2.0 | Bal. | 0.030 | 1.0     | 0.40 | -       | -       |
| 305   | 10.0/13.0 | 17.0/19.0 | 0.12 | 2.0 | -    | 0.030 | 1.0     | 0.40 | -       | -       |
| 308   | 10.0/12.0 | 19.0/21.0 | 0.08 | 2.0 | -    | 0.030 | 1.0     | 0.40 | -       | -       |
| 309   | 12.0/15.0 | 22.0/24.0 | 0.20 | 2.0 | -    | 0.030 | 1.0     | 0.40 | -       | -       |
| 310   | 19.0/22.0 | 24.0/26.0 | 0.25 | 2.0 | -    | 0.030 | 1.5     | 0.40 | -       | -       |
| 314   | 19.0/22.0 | 23.0/26.0 | 0.25 | 2.0 | -    | 0.030 | 1.5/3.0 | 0.40 | -       | -       |
| 316   | 10.0/14.0 | 6.0/18.0  | 0.08 | 2.0 | Bal. | 0.030 | 1.0     | 0.40 | 2.0/3.0 | N .10   |
| 316L  | 10.0/14.0 | 6.0/18.0  | 0.03 | 2.0 | Bal. | 0.030 | 1.0     | 0.40 | 2.0/3.0 | N .10   |
| 317   | 11.0/15.0 | 18.0/20.0 | 0.08 | 2.0 | -    | 0.030 | 1.0     | 0.40 | 3.0/4.0 | -       |
| 321   | 9.0/12.0  | 17.0/19.0 | 0.08 | 2.0 | -    | 0.030 | 1.0     | 0.40 | -       | Ti      |
| 330   | 35.0/37.0 | 14.0/16.0 | 0.25 | -   | -    | -     | -       | -    | -       | -       |
| 347   | 9.0/13.0  | 17.0/19.0 | 0.08 | 2.0 | -    | 0.030 | 1.0     | 0.40 | -       | Cb + Ti |
| 410   | -         | 11.5/13.5 | 0.15 | 1.0 | -    | 0.030 | 1.0     | 0.40 | -       | -       |
| 430   | -         | 14.0/18.0 | 0.12 | 1.0 | -    | 0.030 | 1.0     | 0.40 | -       | -       |

| Alloy            | Characteristics                                | Typical Specifications  |
|------------------|--|-------------------------|
| <b>Type 302</b>  | Higher Carbon content for greater strength     | AMS5866 – ASTM A 313    |
| <b>Type 304</b>  | Good corrosion resistance and strength         | ASTM A 580 – ASTM A 313 |
| <b>Type 304L</b> | Low carbon content                             | ASTM A 580 – ASTM A 240 |
| <b>Type 316</b>  | Superior corrosion resistance                  | ASTM A 580 – ASTM A 313 |
| <b>Type 316L</b> | Superior resistance to intergranular corrosion | ASTM A 580 – ASTM A 240 |