

## Material properties

|                 |                                     |
|-----------------|-------------------------------------|
| <b>Material</b> | <b>410 (USA / AISI)</b>             |
| <b>Group</b>    | Stainless and heat resisting steels |
| <b>Subgroup</b> | SAE AMS-QQ-S-763                    |
| <b>Comment</b>  | Martensitic Stainless Steel         |

**Application** Corrosion-resistant steel bars, wire, shapes (sections), and forgings. The material may be made by one or more of the following processes: electric furnace, electric induction, vacuum furnace or other suitable commercial processes.

| Yield Stress[MPa]                     |     |     |        |
|---------------------------------------|-----|-----|--------|
| Dimension                             | Min | Max | Approx |
| > 12.5 mm, Bar - Intermediate temper  | 552 | -   | -      |
| > 12.5 mm, Bar, Forging - Hard temper | 621 | -   | -      |

| Tensile Stress[MPa]                      |     |      |        |
|--|-----|------|--------|
| Dimension                                | Min | Max  | Approx |
| > 12.5 mm, Bar, Forging, Wire - Annealed | -   | 793  | -      |
| > 12.5 mm, Bar - Intermediate temper     | 689 | -    | -      |
| < 12.5 mm, Bar - Intermediate temper     | 689 | -    | -      |
| < 12.5 mm, Bar - Hard temper             | 827 | 1034 | -      |
| > 12.5 mm, Bar, Forging - Hard temper    | 827 | -    | -      |
| < 12.5 mm, Bar, Forging, Wire - Annealed | -   | 792  | -      |

| Hardness                                 |          |
|--|----------|
| Dimension                                | Hardness |
| > 12.5 mm, Bar, Forging, Wire - Annealed | < 241 HB |

| Chemical Composition [%] |     |        |        |
|--------------------------|-----|--------|--------|
| Criterion                | Min | Max    | Approx |
| C                        | -   | 0.1500 | -      |
| Si                       | -   | 0.5000 | -      |
| Mn                       | -   | 1.0000 | -      |
| P                        | -   | 0.0400 | -      |
| S                        | -   | 0.0300 | -      |