SPECIFICATION FOR ASTM A582 TYPE 303 CONDITION A STAINLESS STEEL BARS

Rev	Reason of Change	Date	Made By	Reviewed By	Approved By	Status
0	Initial release	28-02-2018	MN	AS	KKD	Released

Summary: This specification covers ASTM A582 Type 303 (UNS S30300) hot finished or cold finished, free-machining austenitic stainless steel bars; including round, square and hex.

1.0 SCOPE

This specification covers 303 (UNS S30300) hot finished or cold finished austenitic stainless steel bars, including round, square, and hexagonal.

2.0 APPLICABLE SPECIFICATIONS

2.1 ASTM A582

3.0 CHEMICAL ANALYSIS

3.1 Bars shall conform to the following chemical requirements:

Carbon ..... 0.15% max
Manganese ..... 2.00 max
Phosphorus ..... 0.20 max
Sulfur ..... 0.15 min
Silicon ..... 1.00 max
Chromium 17.00/19.00
Nickel 8.00/10.00

4.0 MECHANICAL PROPERTIES

4.1 Hardness of bars shall be in the range of 160-262 HB. At least one hardness test shall be made midway between surface and center on each lot.
4.2 Material tensile and yield strength are not required to be reported.

Note: For design purposes use 90,000 psi for tensile strength and 35,000 psi for yield strength.