3.3 Chemical Composition: The chemical composition of material procured to the requirements of this specification shall conform to the limits of Table I.

TABLE I

Chemical Composition

Element	Percent Composition (By Weight)	Check Analysis Under Min.	Check Analysis Over Max.
Carbon	0.42 - 0.48	0.01	0.01
Manganese	0.60 - 0.90	0.03	0.03
Silicon	0.15 - 0.30	0.05	0.05
Phosphorus	.010 Max.	---	0.005
Sulphur	.010 Max.	---	0.005
Chromium	0.90 - 1.20	0.05	0.05
Molybdenum	0.90 - 1.10	0.05	0.05
Vanadium	0.07 - 0.15	0.01	0.01
Nickel	0.40 - 0.70	0.03	0.03
Iron	Balance		

(C) 3.4 Surface Finish: Material shall be supplied with a surface finish equivalent to one of the following commercial steel finishes, as specified on the purchase order.

Forged Billets, Reforging Stock, Bars, Rod, Rolled Rings and Extrusions

(1) As forged or rolled or extruded
(2) Descaled and oiled
(3) Rough turned or ground
(4) Cold drawn
(5) Centerless ground

Plate Material - Hot rolled, descaled and oiled

Sheet Material - Hot rolled; machined, ground or sanded; and oiled

Note: For the purpose of this specification, material less than 0.188 inch thick shall be defined as sheet material.

(C) 3.5 Condition and Hardness

3.5.1 All products except sheet and stock for reforging or extrusion shall be supplied in the normalized and tempered condition with a maximum hardness not to exceed 327 Brinell or equivalent, unless otherwise specified on the purchase order.

Note: For the purposes of this specification, the term "normalized and tempered" is defined as the metallurgical structure resulting from the following process: