Table 2 - Hardness and minimum tensile properties

Condition	Tensile Strength ksi (MPa)	Yield Strength at 0.2% Offset ksi (MPa)	Elongation in 4D %	Reduction of Area %	Hardness (1) HB	Hardness (1) HRC	Temperature/ Time °F (°C)/Hours
H900	190 (1310)	170 (1172)	10	40 (2)	388-444	40-47	900 (482)/1 (3)
H925	170 (1172)	155 (1069)	10	44 (2)	375-429	38-45	925 (496)/4 (4)
H1025	155 (1069)	145 (1000)	12	45	331-401	34-42	1025 (552)/4 (4)
H1075	145 (1000)	125 (862)	13	45	311-375	31-38	1075 (579)/4 (4)
H1100	140 (965)	115 (793)	14	45	302-363	30-37	1100 (593)/4 (4)
H1150	135 (931)	105 (724)	16	50	277-352	28-37	1150 (621)/4 (4)
Solution Heat Treated					363 (5)	39 (5)	1900 (1038) (6)

NOTES:
1. Hardness shall not be the basis for rejection if tensile properties are acceptable, determined on specimens taken from the same sample as that with nonconforming hardness or from another sample with similar nonconforming hardness.
2. For sizes over 3 inches (76 mm), 35% for H900 condition and 38% for H925 condition.
3. Temperature tolerance ±10 °F (±6 °C); time tolerance +15 / -0 minutes; cool in air.
4. Temperature tolerance ±10 °F (±6 °C); time tolerance +30 / -0 minutes; cool in air.
5. Maximum; alternate for wire: 175 ksi (1207 MPa) or equivalent hardness (see 8.3).
6. Temperature tolerance ±25 °F (±14 °C); time commensurate with thickness, heating equipment, and procedure used, and cooling as required to below 90 °F (32 °C).

3.4.3.2.1.1 Unless otherwise specified, the strain rate shall be set at 0.005 in/in/min (0.005 mm/mm/min) and maintained within a tolerance of ±0.002 in/in/min (0.002 mm/mm/min) through 0.2% offset yield strain. After the yield strain, the speed of the testing machine shall be set between 0.05 and 0.5 in/in (0.05 and 0.5 mm/mm) of the length of the reduced section (or distance between the grips for specimens not having a reduced section) per min. Alternatively, an extensometer and strain rate indicator may be used to set the strain rate between 0.05 and 0.5 in/in/min (0.05 and 0.5 mm/mm/min).

3.4.3.2.2 Forging Stock

Specimens extracted from a forged test coupon and heat treated as in 3.3 and 3.4.3.2 shall conform to the requirements of Table 2. If specimens extracted directly from the stock and heat treated as in 3.3 and 3.4.3.2 conform to the requirements of Table 2, the test results shall be accepted in lieu of tests of a forged coupon.

3.4.3.2.3 Stock for Flash Welded Rings or Extruding

A sample of stock heat treated as in 3.3 and 3.4.3.2 shall conform to the requirements of Table 2.

3.5 Quality

The product, as received by purchaser, shall be uniform in quality and condition, sound, and free from foreign materials and from imperfections detrimental to usage of the product.

3.5.1 Grain flow of die forgings, except in areas which contain flash-line end grain, shall follow the general contour of the forgings showing no evidence of reentrant grain flow.

3.5.2 Bars shall be free from seams, laps, tears, and cracks after removal of the standard stock removal allowance in accordance with AS1182. Superficial surface imperfections such as scratches or pits shall not exceed applicable tolerances.

3.6 Tolerances

Shall conform to all applicable requirements of the following:

3.6.1 Bars and Wire

In accordance with AMS2241.