

630 H1150M 與 630 H1150D 比較如下：

成分相同，因熱處理條件不同而有不同標示，機械性質要求範圍不同(有重疊區)

H1150M 衝擊值要求較高，

H1150D 機械強度要求較高，有硬度上限，較易加工，

ASTM A564 規定測溫度為常溫，規格如下：

ASTM A564/A564M – 10															
TABLE 4 Mechanical Test Requirements After Age Hardening Heat Treatment ^A															
Type	Condition	Suggested Hardening or Aging Treatment, or Both ^{B,C,D}			Applicable Thickness, in. and Test Direction ^E	Tensile Strength, min		Yield Strength, min ^F		Elongation in 2 in. [50 mm] or 4D, min. %	Reduction of area, min. %	Hardness ^G		Impact Charpy-V, min	
		Temperature, °F [°C]	Time, h	Quench ^H		ksi	[MPa]	ksi	[MPa]			Rockwell C, min	Brinell, min	ft.lbf	J
630	H900	900 [480]	1.0	air cool	Up to 3 in. incl [75 mm] (L)	190	[1310]	170	[1170]	10	40	40	388
					Over 3 in. [75 mm] to 8 in. incl [200 mm] (T)						35		
630	H925	925 [495]	4.0	air cool	Up to 3 in. incl [75 mm] (L)	170	[1170]	155	[1070]	10	44	38	375	5	6.8
					Over 3 in. [75 mm] to 8 in. incl [200 mm] (T)						38				
	H1025	1025 [550]	4.0	air cool	Up to 8 in. incl [200 mm] (L)	155	[1070]	145	[1000]	12	45	35	331	15	20
	H1075	1075 [580]				145	[1000]	125	[860]	13	45	32	311	20	27
	H1100	1100 [595]				140	[965]	115	[795]	14	45	31	302	25	34
	H1150	1150 [620]				135	[930]	105	[725]	16	50	28	277	30	41
	H1150M	1400 [760] for 2 h, air cool plus 1150 [620] for 4 h, air cool				115	[795]	75	[520]	18	55	24	255	55	75
	H1150D	1150 [620] for 4 h, air cool plus 1150 [620] for 4 h, air cool				125	[860]	105	[725]	16	50	24 33 max	255 311 max	30	41

尚智庫存 H1150D OD86 機械性質衝擊測試符合 H1150M 之要求範圍

TENSILE TEST 拉伸測試 (RT)				
	YIELD STRENGTH (Mpa) 降伏強度	TENSILE STRENGTH (Mpa) 拉伸強度	ELONGATION (%) 拉伸比	R.A. (%) 斷面減縮率
Probe1 test1	Rp0.2% ≥725	Rm ≥930	A4 2" ≥16%	Z ≥50%
Probe2 test1	817	967	26	65
MECHANICAL PROPERTIES 機械性質				
	Hardness 硬度測試	Impact test (J) 衝擊測試	later. expansion (mm)	shear fracture (%)
Probe 1	HRC HB	1/2RL (°C)	longitudinal (°C)	longitudinal (°C)
	≥24 ≥255	RT -46 -50 -101		
	≤33 ≤311	≥100 ≥41 ≥41 ≥41		
	test1	31 294	141 79	
test2	31 294	156 75		
test3	31 294	143 72		