



Steel Grade: ASTM H42 | UNS T20842

CHEMICAL COMPOSITION

C(%)	Si(%)	Mn(%)	P(%) ≤	S(%)②	Cr(%)	Mo(%)	V(%)	W(%)	Other①
0.55~0.70	0.20~0.45	0.15~0.40	0.03	0.03	3.75~4.50	4.50~5.50	1.75~2.20	5.50~6.75	—

HARDNESS AND HEAT TREATMENT

Hardness HBS After Annealing	Hardness HBS After Cold Drawing	Preheating Temperature /°C	Quenching/ °C Salt-bath Furnace	Quenching/°C Atmosphere Furnace	Holding Time/min	Quenching Medium	Tempering/°C	Hardness ≥ HRC After Tempering
235	262	788	1191	1204	5~15	Air Cooling	552	60

Remark:

- ①, Residual elements content: Ni + Cu ≤ 0.75%.
- ②, A,D,H series to improve machinability, sulfur content can be increased to $\omega(S)$ 0.06%~0.15%.
- ③, Increase the H13 sulfur, the upper limit of manganese content can reach $\omega(Mn)$ 1.00%.
- ④, It also have Al which is $\omega(Al)$ 1.05%~1.25%.
- ⑤, P20 and P21 usually to pre hardened state supplies.
- ⑥, After tempering hardness L2 refers to the hardness of $\omega(C)$ 0.45%~0.55%.
- ⑦, It standard is ASTM A681-1999.

From: Jiangyou Hacer Technology Co., Limited
Factory Add: Jiangzhang Road, Jiangyou City, SC, China
Website: <https://www.jhacer.com/>
Email: sales@jhacer.com
Phone: +86-(0)816-3260757
Call: +86-13658128897(WhatsApp)