

Character comparison of steel used by HANSTOOLS

Material		HRC	Torque	Toughness	statement	characterization
	Low Carbon Steel	30-35	Bad	Bad	This steel is used in DIY tools and general tools.	900° Quenching 150°~250° Low Tempering 500°~600° High Tempering
	Midium Carbon Steel	30-45 (Highest 50)	Normal	Normal	This steel is used in mid-price products mostly, but it also was used in the DIY tools.	800°~850° Quenching 150°~250° Low Tempering 500°~600° High Tempering
	Cr. Alloy Steel (5140,5150)				This steel is more using in General Level and DIY level products, but also can be used in bolt cutter.	850° Quenching 600° Tempering
Carbon Steel	High Carbon Steel	48-52	Well	Well	Many famous tool makers in the international are used in this steels at present for cut tools.	800°~850° Quenching 150° Tempering
	High Alloy Steel	40-54	Well	Well		
	a. Cr-V-B Alloy Steel (50BV30) (Chromium-Vanadium) *Dura-Chr V. - special make for Hans Tools				Torque and toughness are well and this steel is suitable to produce the products which request the high torque and toughness. Example: small, medium size socket wrench & accessories, hammer, etc.	850° Quenching 600° Tempering
	b. Cr-V Alloy Steel (6140,6150) *Dura-Chr V.+ - special make for Hans Tools *Dura-Chr VH - special make for Hans Tools				For professional producing of high torqur and toughness tools Example: Sockets, Bits Sockets, Extention Bars, Pliers, Screwdrivers Wrenches, etc.	
	c. Cr-Mo Alloy Steel (SCM440, SCM440H)				Example: Impact Sockets, Wrenches, & Accessories, Slugging Wrenches, Pliers.	
	d. Ni-Cr-Mo Alloy Steel (8660, 8660H)				Example: Screwdrivers Go-Through, Hex Key Colory Handle.	
Special Alloy Steel						
S2 Modified Tool Steel	58-62	Great	Great	For high hardness and great toughness. This steel is suitable for high torque tools and impact products, like screwdriver bits, hex key wrenches, and Hi-Q screwdriver .	850° Quenching 600° Tempering	
* Only bold framed material is in use for HANSTOOLS						All steel material for forging need to "Spheroidizing"

⊗Concerning the matter of the "SKILL" and experience of how to apply the styles of heat treatment like "FLOW TYPE", "VACUUM-FURNACE"..., and or hardening with carburizing, nitriding, induction... herein no longer to give unnecessary details.