

## Steel Name Antitheses for parts of Twin or Single Screw Extruder

Chinese name	Japonic name	Germanic name	Columbian name	Purpose	Characteristic
<b>4Cr5MoSiV1</b> (Nitriding Steel)	SKD61	X40CrMoV51 (No.1.2344)	T20813 (AISI: H13)	<b>Screw Element &amp; Kneading Disk &amp; Single Screw</b>	★(HV ≥ 840)
<b>38CrMoAl</b> (Nitriding steel)	SACM645	41CrAlMo7	( SAE ) 6470E		★+ (HV ≥ 950)
<b>Cr12MoV</b> (Vacuum hardened)	SKD11	X165CrMoV12 (No.1.2601)	T30402 ( AISI: D2 )		★★(HRC ≥ 58)
<b>Cr12Mo1V</b> (Vacuum hardened)	SKD11	X155CrVMo12 (No.1.2379)	T30402 ( AISI: D2 )		★★(HRC ≥ 59)
<b>W18Cr4V</b> (Vacuum hardened)	SKH2(SKH9)	S18-0-1 (No.1.3355)	T12001 ( AISI: T1 )		★★+(HRC ≥ 63)
<b>W6Mo5Cr4V2</b> (Vacuum hardened)	SKH51	S6-5-2 (No.1.3343)	T11302 (AISI: M2 )		★★★★(HRC ≥ 63)
<b>W6Mo5Cr4V3</b> (Vacuum hardened)	SKH52	S6-5-3 (No.1.3344)	T11313 (AISI: M3-1 )		★★★★(HRC ≥ 64)
<b>W2Mo9Cr4V2</b> (Vacuum hardened)	SKH58	S2-9-2 (No.1.3348)	T11307 (AISI: M3 )		★★★★★(HRC ≥ 65)
<b>00Cr17Ni14Mo2</b>	SUS316L	X2CrNiMo18.10(No.1.4404)	S31603 (AISI: 316L)	<b>Screw Shaft &amp; Base material of barrel</b>	For corrosion resistant
<b>40Cr</b>	SCr440	41Cr4 (No.1.7035)	G51400 (AISI: 5140)		★-
<b>42CrMo</b>	SCM440	42CrMo4 (No.1.7223)	G41400 (AISI: 4140)		★ Hardness after thermal refining: HB269
<b>40CrNiMoA</b>	SNCM439	36NiCrMo4 (No.1.6511)	G43400 (AISI: 4340)		★★Hardness after thermal refining: HB217
<b>45CrNiMoVA</b>	SNCM447	No the same	No the same		★★★
<b>45</b>	S45C	CK45 (No.1.1191)	G10450 (AISI: 1045)	<b>Base material of Extruder Barrel</b>	
Bimetallic “C” form: <b>Alpha 101</b>	Fe-base material with wear resistance feature, the same as Xaloy 102			<b>Liner inside Segment Barrel</b>	★★
PM-HIP Technology: <b>Alpha 101A</b>	Fe-base material with high wear resistance feature which meets needs of W&P company in Germany				★★★
PM-HIP Technology: <b>Alpha 201A</b>	Co-base material with corrosion resistant feature				★★
PM-HIP Technology: <b>Alpha 301A</b>	Co-base material with both wear and corrosion resistant feature				★★★
PM-HIP Technology: <b>SiC Composite Ceramics</b>	With much higher wear and corrosion resistant features				★★★★★

We also could deliver customers the through-hardened single screw, but the outside diameter range of screw is only from 18mm to 28mm right now, and its base material is **Cr12MoV** above, if out this range, nitride screw or normal bimetallic screw could be chosen.

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