



AVAILABLE STEEL MATERIALS

Steel Grade	S136		Supplier		ASSAB(UDDEHOLM)	
Steel Type	Plastic Mould Steel		Updating Price		<input type="button" value="Check"/>	
Standard and Certificate	420, ESR					
State as Delivered and Hardness	Annealed to HB 215(approx.)					
Typical Chemical Composition	Component	C	Si	Cr	Mn	V
	Percent	0.38	0.8	13.6	0.5	0.3
Steel Properties	High purity, high polishability to mirror finish, with good corrosion resistance and low distortion during heat treatment.					
Steel Applications	High quality mould inserts with mirror surface finish and good corrosion resistance, anti corrosive cooling channel, best suitable for plastic moulding of PVC, PP, EP, PC, PMMA, machine parts for food processing machinery.					
Austenitizing Temperature	1025		Quenching Method		Oil / Air	
Tempering Temperature and Hardness Cross Reference	180°C	225°C	300°C	570°C	610°C	
	54	53	-	-		

Steel Grade	S136H		Supplier		ASSAB(UDDEHOLM)	
Steel Type	Plastic Mould Steel		Updating Price		<input type="button" value="Check"/>	
Standard and Certificate	420, ESR					
State as Delivered and Hardness	Prehardened to HB 290 - 330					
Typical Chemical Composition	Component	C	Si	Cr	Mn	V
	Percent	0.38	0.8	13.6	0.5	0.3
Steel Properties	High purity, high polishability to mirror finish, with good corrosion resistance and low distortion during heat treatment.					
Steel Applications	High quality mould inserts with mirror surface finish and good corrosion resistance, anti-corrosive cooling channel, best suitable for plastic moulding of PVC, PP, EP, PC, PMMA, machine parts for food processing machinery.					
Austenitizing Temperature			Quenching Method			
Tempering Temperature and Hardness Cross Reference	180°C	225°C	300°C	570°C	610°C	
	Prehardened Condition					

Steel Grade	S50C-S55C		Supplier	ALCAN	
Steel Type	Plastic Mould Steel		Updating Price	<input type="button" value="Check"/>	
Standard and Certificate	1050-1055				
State as Delivered and Hardness	Annealed to HB 170-220				
Typical Chemical Composition	C:0.5;Si:0.35;Mn:0.8				
Steel Properties					
Steel Applications					
Austenitizing Temperature	800-860		Quenching Method	Water	
Tempering Temperature and Hardness Cross Reference	180°C	225°C	300°C	570°C	610°C
	56	52	49	24	

Steel Grade	SMV3W		Supplier	AUBERT and DUVAL			
Steel Type	Hot Working Steel		Updating Price	<input type="button" value="Check"/>			
Standard and Certificate	H11, ESR / DIN1.2343 ESR						
State as Delivered and Hardness	Annealed to HB 235(max)						
Typical Chemical Composition	Component	C	Si	Cr	Mn	Mo	V
	Percent	0.4	1.0	5.0	0.4	1.3	0.5
Steel Properties	The chemical composition and microstructure are controlled strictly. Unsurpassed material quality, higher purity, superior toughness, excellent resistance to crack propagation and heat checks.						
Steel Applications							
Austenitizing Temperature			Quenching Method				
Tempering Temperature and Hardness Cross Reference	180°C	225°C	300°C	570°C	610°C		
As to the heat treatment process, refer to the product's specification							

Steel Grade	S-Star	Supplier	DAIDO			
Steel Type	Plastic Mould Steel	Updating Price	<input type="button" value="Check"/>			
Standard and Certificate	SUS 420 J2 Modified, ESR					
State as Delivered and Hardness	Prehardened to HB 300 - 330					
Typical Chemical Composition	Component	C	Si	Cr	Mn	Mo
	Percent	0.38	0.9	13.5	0.1	0.3
Steel Properties	High mirror surface polishability with excellent corrosion resistance.					
Steel Applications	High precision plastic moulds with high mirror surface finishing.					
Austenitizing Temperature			Quenching Method			
Tempering Temperature and Hardness Cross Reference	180°C	225°C	300°C	570°C	610°C	
Prehardened Condition						

Steel Grade	S-Star(A)	Supplier	DAIDO			
Steel Type	Plastic Mould Steel	Updating Price	<input type="button" value="Check"/>			
Standard and Certificate	SUS 420 J2 Modified, ESR					
State as Delivered and Hardness	Annealed to HB 217(approx.)					
Typical Chemical Composition	Component	C	Si	Cr	Mn	Mo
	Percent	0.38	0.9	13.5	0.1	0.3
Steel Properties	High mirror surface polishability with excellent corrosion resistance.					
Steel Applications	High precision plastic moulds with high mirror surface finishing.					
Austenitizing Temperature			Quenching Method			
Tempering Temperature and Hardness Cross Reference	180°C	225°C	300°C	570°C	610°C	
As to the heat treatment process, refer to the product's specification						

Steel Grade	V-10	Supplier	ASSAB(UDDEHOLM)				
Steel Type	Cold Working Steel	Updating Price	<input type="button" value="Check"/>				
Standard and Certificate	High Performance Powder Metallurgical Cold Working Tool Steel						
State as Delivered and Hardness	Annealed to HB 280 - 310						
Typical Chemical Composition	Component	C	Si	Cr	Mn	Mo	V
	Percent	2.9	1.0	8.0	0.5	1.5	9.8
Steel Properties	Extremely high wear resistance, sufficient toughness with very high compressive strength and high dimensional stability during heat treatment.						
Steel Applications	High speed stamping of E.I. Core and lead frame.						
Austenitizing Temperature	1020	Quenching Method	Air				
Tempering Temperature and Hardness Cross Reference	180°C	225°C	300°C	570°C	610°C		
	-	62	62	-			

Steel Grade	WY2311	Supplier	WUYANG				
Steel Type	Plastic Mould Steel	Updating Price	<input type="button" value="Check"/>				
Standard and Certificate	AISI P20/DIN 1.2311						
State as Delivered and Hardness	Prehardened to HB 290-340						
Typical Chemical Composition	Component	C	Cr	Ni	Mn	Mo	
	Percent	0.37	1.9	0.3	1.1	0.4	
Steel Properties	Good machinability.						
Steel Applications	-						
Austenitizing Temperature	-	Quenching Method	-				
Tempering Temperature and Hardness Cross Reference	180°C	225°C	300°C	570°C	610°C		
	-	-	-	-			

Steel Grade	WY718	Supplier	WUYANG			
Steel Type	Plastic Mould Steel	Updating Price	<input type="button" value="Check"/>			
Standard and Certificate	AISI P20+Ni, DIN 1.2738					
State as Delivered and Hardness	Prehardened to HB 290-340					
Typical Chemical Composition	Component	C	Cr	Ni	Mn	Mo
	Percent	0.37	2.0	1.0	1.1	0.4
Steel Properties	Good machinability.					
Steel Applications	High quality mould base or ordinary plastic moulds.					
Austenitizing Temperature			Quenching Method			
Tempering Temperature and Hardness Cross Reference	180°C	225°C	300°C	570°C	610°C	
Prehardened Condition						

Steel Grade	X13T6W (236)	Supplier	AUBERT and DUVAL		
Steel Type	Plastic Mould Steel	Updating Price	<input type="button" value="Check"/>		
Standard and Certificate	420 Modified, ESR (Premium Grade)				
State as Delivered and Hardness	Annealed to HB 240(approx) or less than				
Typical Chemical Composition	Component	C	Cr	Mo	
	Percent	0.4	14.5	0.3	
Steel Properties	High purity, excellent polishability to mirror finish; the hardness can reach 52HRC after quenching and low temperature tempering. The polishability and corrosion resistance can be improved during heat treatment.				
Steel Applications	High quality mould inserts with mirror surface finish, best suitable for injection plastic moulding of medical fittings and PVC, PP, EP, PC, PMMA, etc acidity polymer, machine parts for food processing machinery.				
Austenitizing Temperature			Quenching Method		
Tempering Temperature and Hardness Cross Reference	180°C	225°C	300°C	570°C	610°C
As to the heat treatment process, refer to the product's specification					

Steel Grade	X13T6W (236H)	Supplier	AUBERT and DUVAL		
Steel Type	Plastic Mould Steel	Updating Price	<input type="button" value="Check"/>		
Standard and Certificate	420 Modified, ESR (Premium Grade)				
State as Delivered and Hardness	Prehardened to HB 290 - 330				
Typical Chemical Composition	Component	C	Cr	Mo	
	Percent	0.4	14.5	0.3	
Steel Properties	High purity, excellent polishability to mirror finish, the wear resistance and corrosion resistance are better than normal AISI420.				
Steel Applications	High quality mould inserts with mirror surface finish, best suitable for injection plastic mould of medical fittings and PVC, PP, EP, PC, PMMA ... etc acidity polymer, machine parts for food processing machinery.				
Austenitizing Temperature			Quenching Method		
Tempering Temperature and Hardness Cross Reference	180°C	225°C	300°C	570°C	610°C
Prehardened Condition					

RM1407,Platinum Hotel,BaoMin No.1 Road,BaoAn District,ShenZhen City,China
Tel: +86 0755 26098435 Fax: +86 0755 82320135
Email: market@sinoeng.cn