

MOULD STEEL PRODUCT SHEET

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CHEMICAL COMPOSITION

EST	DIII	ASTM	CHEMICAL COMPOSITION									PROPERTY	APPLICATION
			C	Si	Mn	P≤	S≤	Cr	Mo	V	Ni		
YTG136	1.2083		0.36-0.42	≤ 1.0	≤ 1.0	0.030	0.030	12.50-14-50		≤ 0.20	(0.60)	supreme polishability, good corrosion resistance, and good wear resistance. material of choice for the manufacture of plastic molding tools that require the highest lens-quality polished finishes	molds for compact disks (CDs), medical laboratory equipment, optical lenses, and other components, which require critical surface finishes.
YTG173	1.2316		0.33-0.45	≤ 1.0	≤ 1.50	0.030	0.030	15.5-17.5	0.80-1.30	-	≤ 1.00	high cleanliness/homogeneity, powerful in resistant to rust and corrosion, good polishability, usually supplied in quenched and tempered condition with a working hardness of approximately 300 HB.	For Mould with strong corrupt resisting used for camera lens, Dies for pressing chemically aggressive compounds
YTJ20A	1.2311	P20	0.35-0.45	0.20-0.40	1.30-1.60	0.030	0.030	1.80-2.10	0.15-0.25	-	-	Prehardened plastic mold steel, hardness in as-supplied condition 280-320 HB that is characterized by good toughness at moderate strength level good polishability and etching ability, adequate corrosion resistance, and cost efficient machining properties.	Plastic molds, Mold frames for plastic molds and pressure casting dies, Heated recipient casings and tooling and for die casting dies for zinc.
YTJ21	1.2738	P20+Ni	0.35-0.45	0.20-0.40	1.30-1.60	0.030	0.030	1.80-2.10	0.15-0.35	-	0.90-1.20	Prehardened plastic mold steel, hardness in as-supplied condition 280-320 HB The high nickel content (1%) is specially adapted to ensure a perfect homogeneity of structure and hardness through thickness even for very thick blocks, good polishability, adequate corrosion resistance, good machinability.	Large size Plastic Injection and blow moulding dies, mould frame for pressure casting dies, Heated recipient casings

HEAT TREATMENT

EST	DIII	ASTM	Density (g/cm3)	HEAT TREATMENT											
				Soft Annealing °C	Annealed Hardness HB	Hardening From °C	Quenching In	Hardened Hardness HRC	Tempering °C						
									100 °C	2400 °C	300 °C	400 °C	500 °C	550 °C	600 °C
HRC	HRC	HRC	HRC	HRC	HRC										
YTG136	1.2083		7.75	750-800	Max. 255	1000-1050	Oil, Hot Bath 500-550 °C	54	54	53	52	52.5	52.5	50	45
YTG173	1.2316		8.1	790-840	Max. 265	1200-1220	Oil, Hot Bath 500-550 °C	52	48	47	46	46	47	42	34
Pre-hardened steel, hardness in as-supplied condition 300-340 HB (HRC 34-38)															
YTJ20A	1.2311	P20	7.80	710-740	Max. 235	840-870	Oil, Hot Bath 180-220 °C	52	51	50	48	46	42	39	36
Pre-hardened steel, hardness in as-supplied condition 280-320 HB (HRC 29-35)															
YTJ21	1.2738	P20+Ni	7.80	710-740	Max. 235	840-870	Oil, Hot Bath 180-220 °C	52	52	51	48.5	46	42	38	33
Pre-hardened steel, hardness in as-supplied condition 280-320 HB (HRC 29-35)															