

Molding Materials

The temperature gradient ΔT (cold, warm, hot) which is the thermal difference between the melt temperature and the cavity steel temperature determines the selection of the gate style or nozzle tip. The melt temperature is essentially the manifold set temperature or the barrel front zone temperature. The cavity steel temperature is essentially the mold temperature.

Structure	Material	Freeze Off Temperature (Tm)	$\Delta T = T_p - T_m$	Processing Temperature (Tp)	Mold Temperature (Tt)	Melt Flow Index			Nozzle Tip
						High	Medium	Low	
Amorphous	PPO	120	180	300	80	[Bar chart]			Type 1 Insert
	PEI	215	155	370	100	[Bar chart]			
	PMMA	100	145	245	70	[Bar chart]			
	ABS	110	140	250	75	[Bar chart]			
	SAN	115	140	255	80	[Bar chart]			
	PS	100	125	225	45	[Bar chart]			
	SB	100	125	225	70	[Bar chart]			
	PES	230	120	350	150	[Bar chart]			
	PSU	200	115	315	150	[Bar chart]			
	PVC	100	95	195	35	[Bar chart]			
	PC	220	80	300	90	[Bar chart]			
	CAB	140	75	215	55	[Bar chart]			
	TPU	150	60	210	35	[Bar chart]			
Crystalline	PE	140	110	250	25	[Bar chart]			Type 2, 3 and 4 Insert
	PP	165	90	255	35	[Bar chart]			
	LCP	330	70	400	175	[Bar chart]			
	PA11	175	55	230	60	[Bar chart]			
	PA12	175	55	230	60	[Bar chart]			
	FEP	290	50	340	150	[Bar chart]			
	PET	245	40	285	140	[Bar chart]			
	PBT	225	40	265	60	[Bar chart]			
	PPS	290	40	330	110	[Bar chart]			
	PEEK	334	36	370	160	[Bar chart]			
	PA610	215	35	250	90	[Bar chart]			
	PA6	220	30	250	90	[Bar chart]			
	PA6.6	255	30	285	90	[Bar chart]			
POM	181	19	200	100	[Bar chart]				

