

Processing Conditions

		Tecomid® NA (PA6.6)				Tecomid® NB (PA6)				Tecomid® NC (PA6.6/6)				Tecomid® NI (PA6.10)				Tecomid® NG (High Performance Polyamide)			Tecomid® HT (PPA)				Tecodur® PB (PBT)				Tecopet® PT (PET)			Tecoflex® TU & TH (TPU)		Tecojet® KT (PK)						
		Polyamide 6.6				Polyamide 6				Polyamide 6.6/6				Polyamide 6.10				High Performance Polyamide			Polyphthalamide				Polybutylene terephthalate				Polyethylene terephthalate			Thermoplastic polyurethane		Polyketone						
		Unreinforced	Impact Modified	Reinforced	Flame Retardant	Unreinforced	Impact Modified	Reinforced	Flame Retardant	Unreinforced	Impact Modified	Reinforced	Flame Retardant	Unreinforced	Impact Modified	Reinforced	Flame Retardant	Impact Modified	Reinforced	Flame Retardant	Unreinforced	Impact Modified	Reinforced	Flame Retardant	Unreinforced	Impact Modified	Reinforced	Flame Retardant	Impact Modified	Reinforced	Flame Retardant	Reinforced	Flame Retardant	Unreinforced	Reinforced	Flame Retardant				
Processing Temperature[°C]	min.	270	260	270	260	240	230	250	230	260	250	260	250	240	230	2		260	270	260	320	320	320	320	230	230	240	230	260	270	260	190	190	240	240	240				
	max.	290	290	300	280	260	260	270	250	280	280	290	270	260	260	2		290	300	280	340	330	340	330	270	270	280	260	280	290	280	250	250	260	260	250				
Mold Temperature [°C]	min.	50	50	70	50	40	40	60	40	50	50	70	70	40	40	60	40	50	70	50	70	70	140	140	50	50	50	50	90	90	90	15	15	80	80	80				
	max.	90	90	110	100	80	80	100	90	90	90	110	100	80	80	100	90	90	110	100	90	90	180	180	110	110	110	110	140	140	140	70	40	80	80	80				
Injection Speed		Med. Fast	Med. Fast	Fast	Med. Fast	Med. Fast	Med. Fast	Med. Fast	Med. Fast	Med. Fast	Med. Fast	Med. Fast	Med. Fast	Med. Fast	Med. Fast	F	Medium Fast	Fast	Medium Fast	Med. Fast	Slow Med.	Fast	Med. Fast	Med. Fast	Med. Fast	Med. Fast	Med. Fast	Med. Fast	Medium Fast	Fast	Medium Fast	Medium Fast	Medium Fast	Medium Medium	Medium Medium					
Maximum Screw Speed (mm/s)		400	400	200	200	400	400	200	200	400	400	200	200	400	400	200	200	400	200	200	400	400	200	200	300	300	200	200	200	200	200	200	200	400	200	200				
Drying [°C / Hour]		80 / 2				80 / 2				80 / 2				80 / 2				80 / 2			120 / 4				120 / 4				120 / 4			90 / 4*		80 / 2 - 4						
Maximum Moisture Content (%)		0.2				0.2				0.2				0.2				0.2			0.2				0.02				0.02			0.02		0.02						
Feed Throat Temperature [°C]		60 - 80				60 - 80				60 - 80				60 - 80				60 - 80			60 - 80				50 - 70				50 - 70			40 - 60		60 - 80						
Back Pressure		Low				Low				Low				Low				Low			Low				Low				Low			Low		Low						
Hold Pressure (MPa)		100 - 50				100 - 50				100 - 50				100 - 5				100 - 50			40 - 80				40 - 80				60 - 100			50 - 100		40 - 80						
Clamping Force (ton/cm²)		0.5 - 0.75				0.5 - 0.75				0.5 - 0.75				0.5 - 0.75				0.5 - 0.75			0.5 - 0.75				0.5 - 0.75				0.5 - 0.75				0.2 - 0.5			0.25 - 1				
Compression Ratio		2.5 - 3.5:1				2.5 - 3.5:1				2.5 - 3.5:1				2.5 - 3.5				2.5 - 3.5:1			2.5 - 3.5:1				2.5 - 3.5:1				2.0 - 3.5:1				2.0 - 3.5:1			2 - 3:1		2.5 - 3.5:1		
Length / Diameter Ratio (D)		18 - 22				18 - 22				18 - 22				18 - 22				18 - 22			18 - 22				18 - 22				17 - 23				17 - 23			18 - 22		18 - 22		
Shot/Barrel Capacity Ratio (%)		25 - 75				25 - 75				25 - 75				25 - 75				25 - 75			30 - 60				25 - 75				25 - 75				25 - 75			30 - 75		25 - 75		

*: please refer to the relevant technical data sheet for the recommended process conditions

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Processing Conditions

		Tecotron® XS (PPS)	Tecopeek® PK (PEEK)		Tecolen® HP & CP (PPHP & PPCP)				Tecoform® PO (POM)			Tecotek® PC (PC)				Tecotek® BC (PC/ABS)				Tecotek® OP (PPO/PS)			Tecotek® (PPO/PA)			Tecotek® EI (PEI)		Tecotek® ES (PESU)	
		Polyphenylene sulfide	Polyether ether ketone		Polypropylene				Polyacetal			Polycarbonate				Polycarbonate / Acrylonitrile butadiene styrene				Polyphenyleneoxide / Polystyrene			Polyphenyleneoxide / Polyamide			Polyetherimide		Polyethersulfone	
		Reinforced	Unreinforced	Reinforced	Unreinforced	Impact Modified	Reinforced	Flame Retardant	Unreinforced	Impact Modified	Reinforced	Unreinforced	Impact Modified	Reinforced	Flame Retardant	Unreinforced	Impact Modified	Reinforced	Flame Retardant	Impact Modified	Reinforced	Flame Retardant	Unreinforced	Reinforced	Flame Retardant	Unreinforced	Reinforced	Unreinforced	Reinforced
Processing Temperature(°C)	min.	290	350	350	200	200	200	200	180	170		240	240	240	240	240	240	240	240	270	280	270	270	280	270	350	350	350	350
	max.	340	390	390	240	240	240	240	220	210		300	300	310	290	300	300	280	280	300	300	290	300	300	290	400	400	400	400
Mold Temperature (°C)	min.	135	160	160	20	20	20	20	60	60	60	40	40	80	70	40	40	40	40	60	80	60	80	80	80	135	135	135	135
	max.	150	200	200	50	50	50	50	100	80	120	100	100	120	100	100	100	100	80	120	120	120	120	120	120	165	165	165	165
Injection Speed		Medium Fast	Fast	Fast	Med. Fast	Med. Fast	Med. Med.	Med.	Medium Fast	Medium Fast		Med. Fast	Med. Fast	Med. Fast	Med. Fast	Med. Fast	Med. Fast	Med. Fast	Med. Fast	Medium Fast	Medium Fast	Medium Fast	Medium Fast	Medium Fast	Medium Fast	Medium Fast	Medium Fast	Medium Fast	Medium Fast
Maximum Screw Speed (mm/s)		200	400	400	400	400	200	200	300	300	200	200	200	200	200	400	400	200	200	400	200	200	400	200	200	200	200	200	200
Drying (°C / Hour)		140 / 2 - 4	150 - 160 / 2 - 3		-				100 - 120			80 - 120 / 3 - 4				120 / 4				120 - 180 / 2 - 4*			100 - 120 / 2 - 4*			150 / 4 - 6		150 / 4 - 6	
Maximum Moisture Content (%)		0.02	0.02		-				0.02			0.02				0.2				0.02			0.02			0.02		0.02	
Feed Throat Temperature (°C)		80 - 100	80 - 100		<60				30 - 50			60 - 80				60 - 80				60 - 80			60 - 80			60 - 80		60 - 80	
Back Pressure		Low	Low		Low				Low			Low				Low				Low			Low			Low		Low	
Hold Pressure (MPa)		30 - 70	80 - 120		40 - 80				80 - 100			60 - 120				40 - 80				50 - 70			50 - 70			60 - 100		60 - 100	
Clamping Force (ton/cm²)		0.25 - 0.5	0.5 - 2		0.3 - 0.5				0.5 - 1			0.4 - 0.6				0.5 - 0.75				0.2 - 1			0.2 - 1			0.2 - 1		0.2 - 1	
Compression Ratio		2.5 - 3.0:1	2.0 - 2.5 :1		2.5 - 3.0:1				2.0 - 2.5			2.0 - 2.5:1				2.5 - 3.5:1				2.0 - 2.5:1			2.0 - 2.5:1			1.8 - 2.4:1		1.8 - 2.4:1	
Length / Diameter Ratio (D)		18 - 24	18 - 24		16 - 24				17 - 23			18 - 22				18 - 22				20			20			20		20	
Shot/Barrel Capacity Ratio (%)		30 - 70	30 - 70		30 - 70				20 - 80			25 - 75				30 - 60				30 - 70			30 - 70			30 - 70		30 - 70	

*: please refer to the relevant technical data sheet for the recommended process conditions

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