

General processing recommendation for various plastics

Abbreviation	PE-LD		PE-HD		PP		PS		Units
Material	Polyethylene - low density		Polyethylene - high density		Polypropylene		Polystyrene		
amorphous/semicrystalline	semicrystalline		semicrystalline		semicrystalline		amorphous		
Process	Standard	High speed	Standard	High speed	Standard	High speed	Standard	High speed	
Pre-drying	no		no		no		1-3/60-80		h/°C
Barrel temperature feed throat EF	30-50	30-50	30-50	30-50	30-50	30-50	30-50	30-50	°C
Barrel temperature zone MH 1	180-230	210-250	180-230	200-280	190-230	210-280	160-220	210-280	°C
Barrel temperature zone MH 2	200-240	210-250	190-260	200-280	200-250	210-280	180-240	210-280	°C
Barrel temperature zone MH 3	210-250	210-250	200-280	200-280	210-280	210-280	210-280	180-240	°C
Barrel temperature zone MH 4	210-250	180-230	200-280	190-260	210-280	190-230	210-280	180-240	°C
Barrel temperature nozzle DH	210-250	180-230	200-280	190-260	210-280	190-230	210-280	180-240	°C
Screw back pressure	50-150		30-150		50-150		50-100		bars
Max. circumferential screw speed	1200	1500	1200	1500	1200	1500	1200	1200	mm/s

Abbreviation	ABS	ABS+PC	PA6	PA6+GF30	PA6.6	PA6.6+GF30	PBT	PBT+GF30	Units
Material	Acrylonitrile-butadiene-styrene	ABS+PC-Blend	Polyamide 6	Polyamide 6 + 30% fibre glass	Polyamide 6.6	Polyamide 6.6 + 30% fibre glass	Polybutylene terephthalate	polybutylene terephthalate + 30% fibre glass	
amorphous/semicrystalline	amorphous	amorphous	semicrystalline	semicrystalline	semicrystalline	semicrystalline	semicrystalline	semicrystalline	
Process	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	
Pre-drying	3-4/70-80	2-4/80-100	3-6/80-100	3-6/80-100	3-6/80-100	3-6/80-100	3-6/110-130	3-6/110-130	h/°C
Barrel temperature feed throat EF	40-80	50-70	60-90	60-90	60-90	60-90	50-80	50-80	°C
Barrel temperature zone MH 1	180-210	230-250	220-250	230-260	260-280	260-290	230-250	230-265	°C
Barrel temperature zone MH 2	200-220	240-260	230-260	240-270	270-290	270-300	240-260	240-275	°C
Barrel temperature zone MH 3	220-260	250-270	240-260	250-270	280-290	280-300	250-260	250-275	°C
Barrel temperature zone MH 4	220-260	250-270	240-260	250-270	280-290	280-300	250-260	250-275	°C
Barrel temperature nozzle DH	220-260	250-270	240-260	250-270	280-290	280-300	250-260	250-275	°C
Screw back pressure	50-150	50-100	20-80	20-60	20-80	20-60	50-100	20-70	bars
Max. circumferential screw speed	600	500	1000	600	1000	600	800	600	mm/s

Abbreviation	PC	PMMA	POM	PVC-h	PVC-w	SAN	TPE-s	TPU	Units
Material	Polycarbonate	Polymethyl methacrylate	Polyoxymethylene	Polyvinyl chloride - hard	Polyvinyl chloride - soft	Styrene-acrylonitrile	Thermoplastic elastomer	Thermoplastic polyurethane	
amorphous/semicrystalline	amorphous	amorphous	semicrystalline	amorphous	amorphous	amorphous	physically cross-linked	Domain structure	
Process	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	
Pre-drying	3-6/110-130	2-6/80-100	no	no	no	2-4/70-90	2-4/90-120	2-4/90-110	h/°C
Barrel temperature feed throat EF	70-90	60-80	30-50	30-50	30-50	30-60	30-60	30-60	°C
Barrel temperature zone MH 1	240-270	160-200	160-180	140-160	130-160	160-190	170-200	160-190	°C
Barrel temperature zone MH 2	260-310	180-220	170-205	165-180	150-180	190-230	180-215	180-210	°C
Barrel temperature zone MH 3	280-310	200-250	180-210	180-210	160-220	230-260	190-230	190-230	°C
Barrel temperature zone MH 4	280-310	200-250	180-215	180-210	160-220	230-260	190-230	190-230	°C
Barrel temperature nozzle DH	290-320	200-250	190-220	180-210	160-220	230-260	190-230	190-230	°C
Screw back pressure	100-150	100-250	50-100	50-250	50-100	50-100	20-60	50-150	bars
Max. circumferential screw speed	600	600	700	200	500	600	400	300	mm/s

Heating zone nomenclature

