

# Accusonics, Inc.

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"Ultrasonic Tooling · Pre-owned Equipment · 5 Day Turnaround"

## Thermoplastic Compatibility

	ABS	ABS/Polycarbonate (Cycloloy)	Acetal (Delrin, Celcon)	Polymethyl Methacrylate (Acrylic)	Liquid Crystal Polymers (Xydar)	Polyamide (Nylon)	Phenylene - Oxide (Noryl)	Polycarbonate (Lexan)	Polycarbonate/Polyester (Xenoy)	Polyester PBT (Celanex, Valox)	Polyester PET (Rynite)	Polyetherether Ketone (PEEK)	Polyetherimide (Ultem)	Polyethylene (PE)	Polymethylpentene (TPX)	Polyphenylene Ether/Oxide (Prevex)	Polyphenylene Sulfide PPS (Ryton)	Polypropylene (PP)	Polystyrene (PS)	Polysulfone (Udel)	Polyvinylchloride (Rigid PVC)	SAN/NAS	Styrene Block Copolymers (K-Resin)	Microns	Thousandths	
ABS	X	X	X																					30-70	1.2-2.8	
ABS/Polycarbonate (Cycloloy)	X	X	O			O																			50-125	2.0-5.0
Acetal (Delrin, Celcon)			X																						75-125	3.0-5.0
Polymethyl Methacrylate (Acrylic)	X	O	X			X	O															O	O		40-70	1.6-2.8
Liquid Crystal Polymers (Xydar)				X																					60-125	2.4-5.0
Polyamide (Nylon)					X																				60-125	2.4-5.0
Phenylene - Oxide (Noryl)						X	O									X						O			50-90	2.0-3.6
Polycarbonate (Lexan)		X	X			X	O																		50-100	2.0-4.0
Polycarbonate/Polyester (Xenoy)		O	O			O	X	O																	50-100	2.0-4.0
Polyester PBT (Celanex, Valox)								O	X																60-125	2.4-5.0
Polyester PET (Rynite)									X																60-125	2.4-5.0
Polyetherether Ketone (PEEK)									X																60-125	2.4-5.0
Polyetherimide (Ultem)										X															60-125	2.4-5.0
Polyethylene (PE)											X														70-125	2.8-5.0
Polymethylpentene (TPX)												X													70-125	2.8-5.0
Polyphenylene Ether/Oxide (Prevex)													X												60-125	2.4-5.0
Polyphenylene Sulfide PPS (Ryton)														X											80-125	3.2-5.0
Polypropylene (PP)															X										70-125	2.8-5.0
Polystyrene (PS)	O					X										X					O	O			60-65	1.2-2.6
Polysulfone (Udel)																	X								65-100	2.6-4.0
Polyvinylchloride (Rigid PVC)	O																	X							40-75	1.6-3.0
SAN/NAS	O		O			O										O					X				30-65	1.2-2.6
Styrene Block Copolymers (K-Resin)	O		O												O							X			40-90	1.6-3.6

"X" is compatible, "O" is sometimes compatible depending on composition of the material

## Process Guide

	RESIN	HYGROSCOPIC	WELDING	STAKING	SWAGING	INSERTING	SPOT WELDING	DEGATING	LEGEND
ABS	A		G	G	G	G	G	G	A=Amorphous Resin
ABS/Polycarbonate (Cycloloy)	A	H	G	G	G	G	G	G	S= Semi-Crystalline Resin
Acetal (Delrin, Celcon)	S		G	F	F	G	F	G	G=Good
Polymethyl Methacrylate (Acrylic)	A		G	G	G	G	G	G	F=Fair
Liquid Crystal Polymers (Xydar)	S		G	F	F	G	G	G	H= Hygroscopic
Polyamide (Nylon)	S	H	G	F	F	G	G	G	
Phenylene - Oxide (Noryl)	A		G	G	G	G	G	G	
Polycarbonate (Lexan)	A	H	G	G	G	G	G	G	
Polycarbonate/Polyester (Xenoy)	A	H	G	G	G	G	G	G	
Polyester PBT (Celanex, Valox)	S		G	F	F	G	G	G	
Polyester PET (Rynite)	S		G	F	F	G	G	G	
Polyetherether Ketone (PEEK)	S		G	F	F	G	G	G	
Polyetherimide (Ultem)	S		G	F	F	G	G	G	
Polyethylene (PE)	S		G	G	G	G	G	F	
Polymethylpentene (TPX)	S		G	G	G	G	G	F	
Polyphenylene Ether/Oxide (Prevex)	S		G	G	G	G	G	G	
Polyphenylene Sulfide PPS (Ryton)	S		G	F	F	F	F	G	
Polypropylene (PP)	S		G	G	G	G	G	F	
Polystyrene (PS)	A		G	G	G	G	G	G	
Polysulfone (Udel)	A	H	G	G	G	G	G	G	
Polyvinylchloride (Rigid PVC)	A		G	G	G	G	G	G	
SAN/NAS	A		G	G	G	G	G	G	
Styrene Block Copolymers (K-Resin)	A		G	G	G	G	G	G	