

FABRICATION GUIDELINES - TURNING AND DRILLING

MATERIALS	REL. MACHINABILITY 1 to 10 1 = easiest	TURNING			DRILLING	
		Dept of cut	Speed, Feet / Min.	Feed, In. / Rev.	Nominal Hole Diameter	Feed, In. / Rev.
Delrin®	1	.150"	500-600	.010 - .015	1/16"	.007 - .015
Delrin® AF	1	.025"	600-700	.004 - .007	1/8"	"
Nylon 101	1				1/4"	"
Nylatron® GS, GSM	1				1/2"	.015 - .025
Nylatron® NSM	1				3/4"	"
MC® 901, MC® 907	1				1"	.020 - .050
Nylon	3				1 1/2"	"
Polycarbonate	3				2" or >	"
Polysulfone	7					
Ultem® 1000 & 2300						
PEEK™, unfilled	5	.150"	600-1000	.010 - .015	1/16"	.002 - .005
PEEK 30% GF	7	.250"	600-700	.004 - .007	1/8"	"
PEEK 30% CF	7				1/4"	"
					1/2"	.004 - .008
					3/4"	"
					1"	.008 - .012
					1 1/2"	"
					2" or >	"
Ertalyte® PET-P		.150"	500-600	.010 - .015	1/16"	.002 - .005
Ertalyte® TX		.250"	600-700	.004 - .007	1/8"	"
Hydrex® 4101 PBT-P					1/4"	"
					1/2"	.015 - .025
					3/4"	"
					1"	.020 - .050
					1 1/2"	"
					2" or >	"
Techtron® PPS		.150"	100-300	.010 - .020	1/16"	.007 - .015
Ryton® PPS		.250"	250-500	.005 - .010	1/8"	"
					1/4"	"
					1/2"	.015 - .025
					3/4"	"
					1"	.020 - .050
					1 1/2"	"
					2" or >	"
Torlon® 4203 PAI		.025"	300-800	.004 - .025	1/16"	.007 - .015
Torlon® 4301 PAI					1/8"	"
Torlon® 5530 PAI					1/4"	"
Duratron® XP					1/2"	.015 - .025
Vespel® PI					3/4"	"
					1"	.020 - .050
					1 1/2"	"
					2" or >	"
Celazole® PBI		.150"	100-150	.005 - .010	1/16" to 1/4"	.005 - .015
		.025"	150-225	.002 - .006	1/2" or >	.015 - .025