

# Application Data for Cutting/Routing material with Zünd equipment

MATERIAL				CUTTER CONFIGURATION					SOFTWARE SETTINGS				REMARKS		
Type	Description	Brands	Thickness		Module	Tool	Blade / Bit		Part no.	Speed XY		Accel-eration	Z Speed (Plunge)		Remarks
			mm	inch			EUR	US		mm/s	inch/s		mm/s	inch/s	
Acrylic XT/GS	PMMA	Plexigals®, Perspex™	3	0.100	R45s	1kW	A 1 4/6-14-50		3910764	100	4	1	30	1	50000 rpm,
Acrylic XT/GS	PMMA	Plexigals®, Perspex™		0.125-0.187	R45s	1kW		IMC 2143			6	2		1	28000 rpm,
Acrylic XT/GS	PMMA	Plexigals®, Perspex™		0.250	R45s	1kW		IMC 2143			6	2		1	2 pass, 28000 rpm,
Acrylic XT/GS	PMMA	Plexigals®, Perspex™	6	0.200	R45s	1kW	A 1 4/6-14-50		3910764	80	3	1	30	1	50000 rpm,
Acrylic XT/GS	PMMA	Plexigals®, Perspex™		0.375-0.75	R45s	1kW		IMC 2143			6	2		1	3 pass, 28000 rpm,
Acrylic XT/GS	PMMA	Plexigals®, Perspex™	12	0.500	R45s	1kW	A 1 5/6-16-50		3910765	60	2	1	30	1	3 pass, 50000 rpm,
Acrylic XT/GS	PMMA	Plexigals®, Perspex™		1.000	R45s	1kW		IMC 2143			6	2		1	4 pass, 28000 rpm,
Cardboard	Display Board		2500 g/m²		Tz	SK	Z-12		3960322	400	15	4	300	12	Gliding Dlsc
Cardboard	Display Board		2500 g/m²		Tz	SK	Z-17		3910307	400	15	4	300	12	Gliding Dlsc
Cardboard	Mat Board		2	0.080	Tz	PPT	Z-30		3910330	1000	40	4	150	6	
Cardboard	Mat Board		3	0.120	Tz	PPT	Z-31		3910331	1000	40	4	150	6	
Cardboard	Mat Board		5	0.200	Tz	PPT	Z-33		3910333	1000	40	4	150	6	
Cardboard	Paper Stock		300-500g/m²		Tz	SK	Z-17		3910307	500	20	4	300	12	less overcut than Z-12 Knife, Gliding Dlsc
Cardboard	Paper Stocks		300-500g/m²		Tz	SK	Z-12		3960322	500	20	4	300	12	Gliding Dlsc
Composite	Alu Cover Sheet with PE Core	Dibond®, Aluicore	2-3	0.08-0.12	R45s	1kW	MP 1 4-6-14-50	ONS66315	3910744	100	5	1	30	1	50000 rpm,
Composite	Alu Cover Sheet with PE Core	Dibond®, Aluicore	4-6	0.16-0.24	R45s	1kW	MP 1 4-6-14-50	ONS66315	3910744	70	5	1	30	1	50000 rpm,
Composite	Glassfibre 1x woven		1	0.040	DRT	DRT	Z-51		3910336	1000	40	4	300	12	for small circles use EOT/POT Z42,
Composite	Kevlar		1.5	0.060	Tz	SK	Z-12		3910320	1000	40	4	300	12	Fibres,
Corrugated	B- + C-Flute		3-4	0.12-0.16	Tz	EOT	Z-20		3910313	200	8	3	300	12	Gliding Dlsc
Corrugated	B- + C-Flute		3-4	0.12-0.16	Tz	POT	Z-20		3910313	70	3	3	300	12	Gliding Dlsc
Corrugated	BC Flute		7	0.280	Tz	EOT	Z-20		3910313	200	8	3	300	12	Gliding Dlsc
Corrugated	BC Flute		7	0.280	Tz	POT	Z-20		3910313	70	3	3	300	12	Gliding Dlsc
Corrugated	E- + F-Flute (Micro)		1-1.5	0.04-0.06	Tz	EOT	Z-20		3910313	200	8	3	300	12	Gliding Dlsc
Corrugated	E- + F-Flute (Micro)		1-1.5	0.04-0.06	Tz	POT	Z-20		3910313	70	3	3	300	12	Gliding Dlsc
Corrugated	Sandwich board	X-board, Reboard	10-16	0.40-0.60	T75	V-Cut	Z-73		5005572	250	10	2	150	6	45° V-groove, Only straight lines
Corrugated	Sandwich board	X-board, Reboard	10-16	0.40-0.60	Tz	POT	Z-23		5005560	100	4	1	300	12	90° Through cut, liftup angle 25°
Fabric/Textile	Mesh	Ferrari Stamoid, Dickson, etc	0.5	0.020	Tz	DRT	Z-51		3910336	1000	40	4	300	12	
Fabric/Textile	PE Fabric, Poplin				Tz	DRT	Z-51		3910336	1000	40	4	300	12	
Fabric/Textile	Textile				Tz	DRT	Z-51		3910336	800	30	4	300	12	
Film/Foil	Diamond Grade	3M			C2		Z-4		3910116	1000	40	4			800 g, Gliding disc fix (kisscut)
Film/Foil	Label or Tag Stock				Tz	SK	Z13		3910321	1000	40	4	300	12	Gliding Dlsc
Film/Foil	Masking Film	3M			Tz	Vinyl	Z-3		3910115	1000	40	4	300	12	
Film/Foil	PVC Banner Vinyl	Ferrari Stamoid, Dickson, etc	0.2	0.008	Tz	SK	Z-12		3910320	1000	40	4	300	12	Gliding Dlsc
Film/Foil	Selfadhesive Vinyl	3M, Avery, FasCal			C2		Z-2		3910110	1000	40	4			90-130 g,
Hardfoam	Graphit-Gasket		3	0.120	Tz	POTva	Type 11		1506281	60	3	1	100	4	
Hardfoam	PS	Forex® Smart, Gatorfoam®	5-10	0.20-0.40	R45s	1kW	A 1 4-6-14-50		3910764	500	20	2	100	4	50000 rpm,
Hardfoam	PS	Gatorplast, Ultraboard, Duraplast	5	0.200	R45s	1kW	A 1 4-6-14-50		3910764	120	5	2	150	6	2 pass,
Hardfoam	PVC	Forex Classic, Sintra, Kömatex®	1-4	0.04-0.12	R45s	1kW	A 1 4-6-14-50	ONS52624	3910764	300	18	3	50	8	could also be cut with Z12, 50000 rpm,
Hardfoam	PVC	Forex Classic, Sintra, Kömatex®	5-8	0.20-0.32	R45s	1kW	A 1 4-6-14-50	ONS52624	3910764	200	18	3	50	8	50000 rpm,
Hardfoam	PVC	Forex Classic, Sintra, Kömatex®	10-13	0.40-0.51	R45s	1kW	A 1 4-6-14-50		3910764	150	6	2	50	2	50000 rpm,
Hardfoam	PVC	Forex Classic, Sintra, Kömatex®	19	0.750	R45s	1kW	A 1 6-6-22-50		3910766	80	3	2	50	2	2 pass, 50000 rpm,
Leather	Sole		3-7	0.12-0.28	Tz	POT	Z-62		5002488	200	8	2	150	6	
Leather	Upper		0.5-2	0.002-0.08	Tz	EOT	Z-42		3910324	500	20	3	300	12	Gliding Dlsc
Magnet	Magnet Stock				Tz	SK	Z-13		3910321	700	28	2	300	12	Gliding Dlsc
miscellaneous	Cork		3	0.125	Tz	EOT	Z-21		3910314	300	12	2	300	12	Gliding Dlsc
miscellaneous	Felt				Tz	DRT	Z-50		3910335	800	30		300	12	
miscellaneous	Sandblast Material				Tz	Vinyl	Z-4		3910116	1000	40	4	300	12	200-230 g,
Plastic	Engraving Board				R45s	1kW	Type 3		3910303	250	10	1	50	2	2 pass, 50000 rpm,
Plastic	Lenticular		2-4	0.08-0.16	R45s	1kW	A 1 4-6-14-50		3910764	300	12	2	50	2	
Plastic	PA		10	0.400	R45s	1kW	A 1 4-6-14-50		3910764	40	2	1	50	2	3 pass, 50000 rpm,
Plastic	PC	Lexan®	1-4	0.04-0.16	Tz	POT	Z-20		3910313	100	4	2	250	10	Gliding Dlsc
Plastic	PE	Dupont Mylar	0.25	0.010	Tz	SK	Z-12		3910320	1000	40	4	300	12	
Plastic	PET		0.2-0.8	0.008-0.03	Tz	SK	Z-13		3910321	800	30	4	300	12	
Plastic	PET		4	0.160	R45s	1kW	A 1 4-6-14-50		3910764	60	3	1	30	1	chance of melting, 28000 rpm,
Plastic	PP	Coroplast™	2-4	0.08-0.16	Tz	SK	Z-12		3910320	1000	40	3	300	12	Gliding Dlsc
Plastic	PS		6	0.240	R45s	1kW	A 1 4-6-14-50		3910764	150	6	1	50	2	50000 rpm,
Plastic	PVC		2	0.080	Tz	SK	Z-12		3910320	500	20	2	150	6	Gliding Dlsc
Preprag	Carbone		3	0.120	Tz	DRT	Z-51		3910336	100	4	1	100	4	Fibres,
Printing Blankets		ContiTech®, Day Int.®, Accupad®, Accupad®	2-4	0.08-0.16	Tz	SK	Z-16		3910306	1000	40	4	300	12	5000 g, Gliding disc fix, Kisscut
Printing Blankets		ContiTech®, Day Int.®, Accupad®, Accupad®	2-4	0.08-0.16	Tz	SK	Z-12		3910320	1000	40	4	300	12	Through cut
Rubber	Hardrubber		10	0.400	Tz	POTva	Z-21		3910314	60	2	2	100	4	Liftup angle 20° sometimes silikonoiil is helpful, 2 pass, Gliding Dlsc
Rubber	PUR		10	0.400	Tz	POTva	Z-21		3910314	70	3	2	100	4	Liftup angle 20° sometimes silikonoiil is helpful, Gliding Dlsc
Rubber	PUR		28	1.120	Tz	POTva	Z-28		3910318	80	3	2	100	4	Liftup angle 20° sometimes silikonoiil is helpful, Gliding Dlsc
Rubber	PUR		50	2.000	Tzs	POTva 1.5	Z-64		5002739	70	3	2	100	4	Liftup angle 20° sometimes silikonoiil is helpful, 2 pass, Gliding Dlsc
Softfoam	Extruded PS	Gatorlite, Structa-Board	5	0.200											
Softfoam	Lightweight board	Kapa®, Egafix®, FoamX, Foam Core®	5-10	0.20-0.40	Tz	POT	Z-21		3910314	100	4	1	300	12	
Softfoam	Lightweight board	Kapa®, Egafix®, FoamX, Foam Core®	5-10	0.20-0.40	Tz	EOT3 1.0	Z-21		3910314	200	8	2	300	12	
Softfoam	Lightweight board	Kapa®, Egafix®, FoamX, Foam Core®	5-10	0.20-0.40	Tz	V-Cut	Z-70		5005642	400	16	2	150	6	45° V-groove, Knife adaptor needed (5005782),
Softfoam	Lightweight board	Kapa®, Egafix®, FoamX, Foam Core®	5-10	0.20-0.40	Tz	SK	Z46		4800073	1000	40	4	300	12	Knife holder Type 5 needed, mainly straight lines,
Softfoam	Lightweight board	Kapa®, Egafix®, FoamX, Foam Core®	15-20	0.6-0.8	Tz	POT	Z-28		3910318	70	3	1	300	12	
Softfoam	Lightweight board	Kapa®, Egafix®, FoamX, Foam Core®	15-20	0.6-0.8	Tz	EOT3 1.0	Z-28		3910318	150	6	1	300	12	
Softfoam	Lightweight board	Gatorfoam®, Gatorplast®		0.187-0.5	R45s	1kW		IMC2140			5	4		9	1 pass, 50000 rpm,
Varnishing Blankets		Folex®, Kruse®, Nessmann®	2-4	0.08-0.16	Tz	SK	Z-16		3910306	1000	40	4	300	12	gliding disc fix, 5000 g, Gliding disc fix (kisscut)
Varnishing Blankets		Folex®, Kruse®, Nessmann®	2-4	0.08-0.16	Tz	SK	Z-12		3910320	1000	40	4	300	12	Through cut
Wood	MDF		8	0.300	R45s	1kW	MP 1 5/6-16-50	ONS55285	3910745	80	3	1	50	2	2 pass,
Wood	MDF		16	0.630	R45s	1kW	MP 1 6-6-22-50	ONS55285	3910746	50	2	1	50	2	3 pass,
Wood	MDF			0.750	R45s	1kW		ONS55285			2	1		1	4-5 pass,
Wood	Plywood, MDO	Lusterboard®, Omegaboard®	6	0.250	R45s	1kW	MP 1 4-6-14-50		3910744	100	4	1	50	2	50000 rpm,
Wood	Plywood, MDO	Lusterboard®, Omegaboard®	9	0.350	R45s	1kW	MP 1 4-6-14-50		3910744	80	3	1	50	2	50000 rpm,
Wood	Plywood, MDO	Lusterboard®, Omegaboard®	16	0.630	R45s	1kW	MP 1 6-6-22-50		3910746	50	2	1	50	2	3 pass, 50000 rpm,

## Definition

Tools	Materials	Additional Info
<b>DRT</b> Motor-driven rotary knife	<b>GS</b> Casted	<b>Routing</b> Max depth per pass 1.5 x ∅ Routerbit
<b>EOT</b> Electric oscillating tool	<b>MDF</b> Medium Density Fiberboard	<b>General</b> This Application Data is a summary of popular materials. Note that the recommended cutting methods, knife blades, router bits are recommendations only.
<b>POT</b> Pneumatic Oscillating Tool	<b>MDO</b> Medium Density Overlay	
<b>PPT</b> Mat-Cutting Tool (Passepartout)	<b>PA</b> Polyamide	
<b>SK</b> Static Knife / Insert Sleeve	<b>PC</b> Polycarbonate	
<b>Vinyl</b> Spring loaded Knife	<b>PE</b> Polyethylene	
<b>1Kw</b> Heavy Duty Router	<b>PET</b> Polyethylene terephthalate	
	<b>PMMA</b> Polymethyl methacrylate	
	<b>PP</b> Polypropylene	
	<b>PS</b> Polystyrene	
	<b>PUR</b> Polyurethane	
	<b>PVC</b> Polyvinyl chloride	
	<b>XT</b> Extrudet	

