



Cutable materials

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All these materials have already been cut by customers with POLAR high-speed cutters.

Category	Finishing	Detailed/ additional information	Recommended type of knife*	Recommended options
Cutting plastics	cutting plasticized PVC	cutting floor covering	as of tungsten carbide	swivel / tilting backgauge
		cutting wall tiles and slabs	as of tungsten carbide	swivel / tilting backgauge
	cutting polyethylene	cutting recording strip covers for folders	as of tungsten carbide	swivel / tilting backgauge
		cutting video covers	as of tungsten carbide	swivel / tilting backgauge
		cutting air-tight bags	as of HSS knives	
		cutting foils for switch boxes	as of HSS knives	
		cutting Acetate film	as of HSS knives	
		cutting adhesive film, e.g. nationality plates for cars	as of HSS knives	
		cutting sound insulation / dead sounding	as of HSS knives	
		cutting facing tiles	as of HSS knives	
		cutting polarization film	cutting reflecting film for speedometer (car industry)	as of tungsten carbide
		cutting of unexposed film	HSS	
		cutting general signs e.g. "no parking", "beware of dog", etc.	as of HSS knives	
Cutting housewares	cutting wafers		as of HSS knives	flexible false clamp plate to even out height variations
	cutting kitchen-equipment	cutting stove-enamel decoration for cooking pots and china	as of HSS knives	
		cutting aluminum foils	as of tungsten carbide	flexible false clamp plate
		cutting greaseproof paper		
		cutting coffee filter paper		
	cutting household wrapping paper	- various materials and sizes	HSS	
cutting non-woven pad	- e.g. for meat packaging	as of tungsten carbide		
Cutting rubber	cutting rubber	cutting rubber inserts for drawers	as of HSS knives	
		cutting rubber blankets for the printing industry	as of HSS knives	
		cutting rubber gaskets	as of HSS knives	
		cutting rubber doormats	as of HSS knives	
		cutting floor tiles and wall covering out of rubber	as of HSS knives	
	cutting raw rubber	cutting collars for drive shafts	HSS	
Cutting paper/ cardboard	cutting cardboard up to ~ 800 gr/m ²	- laminated & unlaminated	HSS	flexible false clamp plate, swivel / tilting backgauge
	cutting cardboard from ~ 800 gr/m ²	- laminated & unlaminated	HSS	
	cutting playing cards		HSS	flexible false clamp plate, swivel / tilting backgauge
	cutting security paper	cutting banknotes	as of tungsten carbide	TwinClamp, flexible false clamp plate
		cutting share certificate forms	as of tungsten carbide	
		cutting tax labels	as of tungsten carbide	
	cutting antirust paper	cutting waxed paper	as of HSS knives	
		cutting gas paper	as of HSS knives	
		cutting oiled paper	as of HSS knives	
	cutting post it's	cutting adhesive notepads	tungsten carbide	AntiStick Knife, flexible false clamp plate
cutting photo/ special papers		tungsten carbide		

Category	Finishing	Detailed/ additional information	Recommended type of knife*	Recommended options
Cutting leather	cutting leather and imitation leather	- various materials and sizes	as of HSS knives	
	cutting leather cardboard / brown board	- very rigid material	only HSS knives	flexible false clamp plate
Cutting filters	cutting paper and plate filters	cutting beverages industry	as of HSS knives	
	cutting medical filters	cutting dialysis filters	as of tungsten carbide	
		cutting blood filters	as of tungsten carbide	
Cutting pattern books	cutting color and wallpaper patterns		as of HSS knives	
	cutting external rendering and interior wall finish		only HSS knives	
Cutting metals	cutting aluminum sheets	cutting Offset printing plates	tungsten carbide	infinitely variably knife speed, lubrication, swivel / tilting backgauge
	cutting aluminum and brass foils	cutting bottleneck-wrappings	tungsten carbide	
Cutting insulating materials	cutting industrial felt	cutting felt sheets for insulating	only HSS knives	
	cutting other felt	cutting doormats	only HSS knives	
		cutting carpet tiles	only HSS knives	
		cutting furniture covers	only HSS knives	
	cutting cork	cutting floor covering	as of HSS knives	flexible false clamp plate
	cutting bitumen sheets		as of HSS knives	
	cutting glass wool		only HSS knives	
Cutting textiles	cutting cloth	cutting sew-in labels (shirts)	as of HSS knives	
		cutting info-labels for carpets	as of HSS knives	
	cutting linen	cutting household tape measures	as of HSS knives	
		cutting tailor's tape measures	as of HSS knives	
Cutting special materials	cutting gelatine plates		as of HSS knives	
	cutting laminate coating		as of HSS knives	
	cutting furniture industry	cutting veneers	tungsten carbide	
		cutting chequerboards	tungsten carbide	
	cutting grinding media	cutting abrasive paper	HSS	OptiKnife Plus for easy and fast knife changing (with this material knife needs to be changed frequently)
		cutting abrasive blocks	HSS	
		cutting rubber blocks	HSS	
	cutting abrasive cloth wet / dry	HSS		
Cutting labels	cutting smart labels			
	cutting flower stickers	cutting plastics		
	cutting PPT films	- for the beverages and food industry		
	cutting InMould-foil	- for the beverages and food industry		

Types of knives*
superspeed steel
tungsten carbide
finest-grain carbide
ultra finest grain carbide

Hardness
62-64 HRC
1100 HV 10
1330 HV 10
1500 HV 10