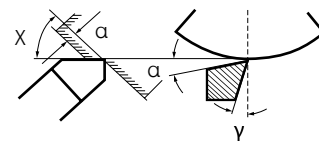


MACHINING RECOMMENDATIONS

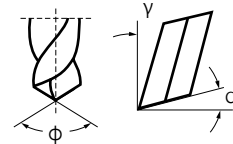
TURNING



α Setting Angle (°)
 γ Rake Angle (°)
 χ Recessing Angle (°)
 v Cutting Speed (U/mN)
 s Feed (mm/U)

Peak Radius r to be min. 0,5 mm

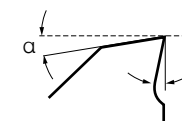
DRILLING



α Setting Angle (°)
 γ Rake Angle (°)
 φ Peak Angle (°)
 v Cutting Speed (m/mN)
 s Feed (mm/U)

Twisting Angle β to be ca. 12° to 16°

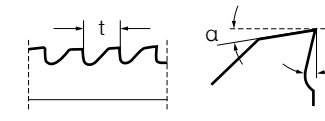
MILLING



α Setting Angle (°)
 γ Rake Angle (°)
 v Cutting Speed (m/mN)

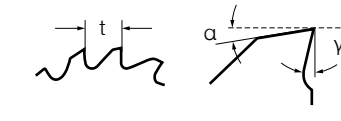
Allow feed up to 0,5 mm/tooth

BELT SAW



α Setting Angle (°)
 γ Rake Angle (°)
 v Cutting Speed (m/mN)
 t Tooth Pitch (mm)
 z Tooth per inch

CIRCULAR SAW



α Setting Angle (°)
 γ Rake Angle (°)
 v Cutting Speed (U/mN)
 t Tooth Pitch (mm)
 z Numbers of tooth (Ø 570 mm)

	α	γ	χ	v	s	α	γ	φ	v	s	α	γ	v	α	γ	v	t	z	α	γ	v	t	z
GEHR PVC-U®	8-10	0-5	50-60	200-750	0,3-0,5	5-10	3-5	60-100	30-120	0,1-0,5	5-10	0-15	300-1000	30-40	0-5	1200	3	2-3	5-10	0	3000	3-5	72
GEHR PE-HD®	6-10	0-5	45-60	250-500	0,1-0,5	5-15	10-20	60-90	50-150	0,1-0,3	10-20	5-15	250-500	20-30	2-5	500	3-8	2-3	20-30	6-10	2000	3-8	36
GEHR PP®	6-10	0-5	45-60	250-500	0,1-0,5	5-15	10-20	60-90	50-150	0,1-0,3	10-20	5-15	250-500	20-30	2-5	500	3-8	2-3	20-30	6-10	2000	3-8	36
GEHR ABS®	5-15	25-30	15	200-500	0,2-0,5	8-12	10-30	60-90	50-200	0,2-0,3	5-10	0-10	300-500	15-30	0-5	300	2-8	2-3	5-10	0-5	2400	2-5	36
GEHR PMMA®	5-10	0-4	15	200-300	0,1-0,2	3-8	0-4	60-90	20-60	0,1-0,5	2-10	2-10	2000	30-40	0-5	1200	3	2-3	5-10	0	3000	3-5	72
GEHR PA®	6-10	0-5	45-60	200-500	0,1-0,4	5-15	10-25	90	50-150	0,1-0,3	10-20	5-15	250-500	15-30	0-5	300-500	2-8	2-3	15-30	0-8	2200-2800	2-8	22
GEHR POM®	6-8	0-5	45-60	300-600	0,1-0,4	5-10	5-30	90	50-200	0,1-0,3	5-15	5-15	250-500	20-30	0-5	500-800	2-5	2-3	5-10	0-10	2800-3000	2-5	72
GEHR PET®	5-15	0-15	45-60	200-500	0,1-0,5	5-16	10-30	90-110	50-100	0,1-0,3	5-15	0-15	250-500	15-40	0-8	300	2-8	2-3	10-15	0-15	bis 3000	2-5	36
GEHR PBT®	5-15	0-15	45-60	200-500	0,1-0,5	5-16	10-30	90-110	50-100	0,1-0,3	5-15	0-15	250-500	15-40	0-8	300	2-8	2-3	10-15	0-15	bis 3000	2-5	36
GEHR PC®	5-12	6-8	45-60	200-350	0,1-0,5	8-10	10-20	90	50-100	0,1-0,3	5-20	5-15	250-350	15-30	5-8	300-500	2-8	2-3	15-30	5-8	bis 3000	2-8	72
GEHR PVDF®	5-12	5-15	10	150-500	0,1-0,3	10-16	5-20	110-130	150-300	0,1-0,3	5-15	5-15	250-500	20-30	5-8	300-500	2-5	2-3	5-10	0-10	2500-2800	2-5	36
GEHR E-CTFE®	6-10	0-5	45-60	250-500	0,1-0,5	5-15	10-20	60-90	50-150	0,1-0,3	10-20	5-15	250-500	20-30	2-8	500	3-8	2-3	20-30	6-10	2000	3-8	36
GEHR PSU®	5-10	0-5	45-60	250-400	0,2-0,3	5-15	10-20	60-90	30-90	0,1-0,3	5-15	0-10	250-500	15-30	0-4	500	2-5	2-3	15-30	0-15	2000	2-5	22
GEHR PPSU®	5-10	0-5	45-60	250-400	0,2-0,3	5-15	10-20	60-90	30-90	0,1-0,3	5-15	0-10	250-500	15-30	0-4	500	2-5	2-3	15-30	0-15	2000	2-5	22
GEHR PEI®	5-10	0-10	45-60	300-400	0,2-0,3	5-15	10-20	60-90	30-90	0,1-0,4	5-15	0-10	200-400	15-30	0-4	500	2-5	2-3	15-25	0-15	2000	2-5	22
GEHR PPS®	5-10	0-5	45-60	200-500	0,1-0,5	5-10	10-30	90	50-200	0,1-0,3	5-15	5-10	200-500	15-30	0-5	500-800	3-5	2-3	15-30	0-10	2800-3000	2-5	22
GEHR PEEK®	5-10	3-8	45-60	200-500	0,1-0,4	5-15	10-25	90-120	70-200	0,1-0,3	5-15	5-15	180-450	15-30	0-5	500-800	3-5	2-3	15-30	0-10	1800-2500	2-5	72

It is recommended to use only sharpened HSS tools (High Speed Steel).

- Due to the danger of stress cracking we don't recommend the use of cooling agents which are based on oil (or to clean the parts well after machining). Amorphous materials should be annealed during machining.
- To avoid treatment problems we recommend a heating up of the materials on approx. 120 °C. Use only sharpened tools with small feed.
- With these materials, close attention should be paid to the proper exhaust in machining area.