Application Tips for Buffing Wheels and Cones

Application	Material	Polishing wax	Buffing wheel, cone
Rough polishing	**Acetate, Optyl, Celluloid, Propionate**	**3120 00**	**3416 10, 3474 00**
Smooth polishing	**Acetate, Optyl, Celluloid, Propionate**	**3122 00, 3118 00**	**3416 10, 3474 00**
High gloss polishing	**Acetate, Optyl, Celluloid, Propionate**	**3125 00, 3118 00**	**3470 01, 3471 00, 3561 00, 3582 00, 3571 00**
Glass polishing	**Lens facet, Polycarbonate**	**3127 00**	**3457 00**
Rough polishing	**Lens facet CR 39, Trivex, PNX**	**3128 00, 3129 00**	**3455 10, 3450 00, 3456 00**
Smooth polishing	**Lens facet CR 39, Trivex, PNX**	**3128 00, 3129 00**	**3474 00, 3457 00**
Rough polishing	**Metals**	**3144 00**	**3471 00, 3470 01, 3474 00, 3416 10**
Smooth polishing	**Metals**	**3143 00**	**3471 00, 3470 01, 3474 00, 3416 10**
Various polishing	**Bakelite, Horn, caoutchouc, metals**	**without wax**	**3462 00**

For polishing plastics, the cutting speed should generally be between 6 and 24 m/s. Especially for TP polymers and other heatsensitive plastics, we recommend a speed of 15 m/s. TS polymers, primarily Optyl in the field of optics, can be polished at a speed of approx. 30 m/s.

The cutting speed is the speed at which the tool lip penetrates the material, also known as peripheral speed. For grinding and polishing machines, this speed is measured in m/s. The cutting speed is determined by the speed of the machine and the tool diameter. It is important for a smoothly processed surface.

It is calculated as follows:
Cutting speed (v) in meter per second (m/s) equals diameter (d) in meters (m) x π x times speed (n) divided by 60;

Formula: $v = d \times \pi \times n / 60$.

Cutting speed in m/s

Spindle speed (rpm)	Wheel diameter in mm												
	100	125	150	175	200	250	300	350	400	450	500	600	1,000
300													16
600								11	13	14	16	19	31
800						11	13	15	17	19	21	25	42
1,400			11	13	15	18	22	26	29	33	37	44	
1,600			13	15	17	21	25	29	33	38	42	50	
1,800		12	14	17	19	24	28	33	38	42	47	56	
2,000	11	13	16	18	21	26	31	36	42	47	52		
2,200	12	14	17	20	23	29	35	40	46	52	58		
2,400	13	15	19	22	25	31	38	44	50	57			
2,600	14	17	20	24	27	34	41	48	53				
2,800	15	18	22	26	29	37	44	51	58				
3,000	16	20	24	28	31	39	47	55					