

# APGT 1003 PDER ALU LT 05

Material Group	Gr. N°	VDI Group	Material Examples*	Hardness	D.O.C. [mm]		Feed [mm/tooth]		V <sub>c</sub> [m/min]		Optimal cutting conditions			
					min	max	min	max	min	max	D.O.C	Feed	V <sub>c</sub>	
NF	Al (<8%Si)	13	21, 22	Si < 4 %	60 HB	0.3	9.0	0.12	0.20	400	1200	3.0	0.14	500
			23, 24	4% < Si < 8 %	100 HB		9.0	0.10	0.18	250	600			400
	Cooper Alloys	14	26,27,28	CuZn30	100 HB	0.3	9.0	0.10	0.18	100	800	3.0	0.14	300
	Non-Metallic	15	29	Fiber Plastics	-	0.3	9.0	0.12	0.20	80	500	3.0	0.12	200
			30	Hard Rubber	-		9.0		0.20	80	300			150
-			Graphite	-	9.0		0.20		100	200	150			
H.T.A.	Ti based Alloys	10	36	Ti 1	-	0.3	5.0	0.08	0.20	35	60	2.0	0.12	45
37	TiAl 6 V4	-	5.0	0.15	28		45		35					

# APGT 1604 PDER ALU LT 05

Material Group	Gr. N°	VDI Group	Material Examples*	Hardness	D.O.C. [mm]		Feed [mm/tooth]		V <sub>c</sub> [m/min]		Optimal cutting conditions			
					min	max	min	max	min	max	D.O.C	Feed	V <sub>c</sub>	
NF	Al (<8%Si)	13	21, 22	Si < 4 %	60 HB	0.5	15.0	0.15	0.32	400	1200	4.0	0.16	500
			23, 24	4% < Si < 8 %	100 HB		15.0	0.13	0.29	250	600			400
	Cooper Alloys	14	26,27,28	CuZn30	100 HB	0.5	15.0	0.13	0.29	100	800	4.0	0.16	300
	Non-Metallic	15	29	Fiber Plastics	-	0.5	15.0	0.15	0.32	80	500	4.0	0.14	200
			30	Hard Rubber	-		15.0		0.32	80	300			150
-			Graphite	-	15.0		0.32		100	200	150			
H.T.A.	Ti based Alloys	10	36	Ti 1	-	0.5	15.0	0.10	0.32	35	60	4.0	0.14	45
37	TiAl 6 V4	-	15.0	0.24	28		45		35					