GJET Operating Data

	Material	Process	Type	Cutting Tool dia.	Hardness	Pressure	Speed (n)	Ae (mm)	Ap (mm)	Fz (mm)
N	Al-Si 9%	Drilling	Drill	0.3	100-120 HB	20	33000	0.3	0.025	0.002
	Al-Si 9%	Drilling	Drill	0.3	100-120 HB	30	44000	0.3	0.027	0.002
	Al-Si 9%	Drilling	Drill	0.3	100-120 HB	40	55000	0.3	0.027	0.002
	Al-Si 9%	Drilling	Drill	0.5	100-120 HB	20	33000	0.5	0.05	0.002
	Al-Si 9%	Drilling	Drill	0.5	100-120 HB	30	44000	0.5	0.05	0.002
	Al-Si 9%	Drilling	Drill	0.5	100-120 HB	40	55000	0.5	0.1	0.002
	Al-Si 9%	Drilling	Drill	0.8	100-120 HB	20	33000	0.8	0.1	0.002
	Al-Si 9%	Drilling	Drill	0.8	100-120 HB	30	44000	0.8	0.15	0.002
	Al-Si 9%	Drilling	Drill	0.8	100-120 HB	40	55000	0.8	0.15	0.002
	Al-Si 9%	Drilling	Drill	1	100-120 HB	20	33000	1	0.3	0.003
	Al-Si 9%	Drilling	Drill	1	100-120 HB	30	44000	1	0.3	0.003
	Al-Si 9%	Drilling	Drill	1	100-120 HB	40	55000	1	0.3	0.003
	Al-Si 9%	Drilling	Drill	1.5	100-120 HB	20	33000	1.5	0.15	0.004
	Al-Si 9%	Drilling	Drill	1.5	100-120 HB	30	44000	1.5	0.2	0.004
	Al-Si 9%	Drilling	Drill	1.5	100-120 HB	40	55000	1.5	0.25	0.004
	Al-Si 9%	Drilling	Drill	2	100-120 HB	20	33000	2	0.2	0.004
	Al-Si 9%	Drilling	Drill	2	100-120 HB	30	44000	2	0.25	0.004
	Al-Si 9%	Drilling	Drill	2	100-120 HB	40	55000	2	0.3	0.004
	Al-Si 9%	Drilling	Drill	3	100-120 HB	20	33000	3	0.25	0.004
	Al-Si 9%	Drilling	Drill	3	100-120 HB	30	44000	3	0.3	0.004
	Al-Si 9%	Drilling	Drill	3	100-120 HB	40	55000	3	0.35	0.004
	Al-Si 9%	Drilling	Drill	4	100-120 HB	20	33000	4	0.2	0.005
	Al-Si 9%	Drilling	Drill	4	100-120 HB	30	44000	4	0.25	0.005
	Al-Si 9%	Drilling	Drill	4	100-120 HB	40	55000	4	0.25	0.005
	Al-Si 9%	Drilling	Drill	5	100-120 HB	20	33000	5	0.2	0.005
	Al-Si 9%	Drilling	Drill	5	100-120 HB	30	44000	5	0.2	0.005
	Al-Si 9%	Drilling	Drill	5	100-120 HB	40	55000	5	0.2	0.005
	Al-Si 9%	Drilling	Drill	6	100-120 HB	20	33000	6	0.3	0.005
	Al-Si 9%	Drilling	Drill	6	100-120 HB	30	44000	6	0.3	0.006
	Al-Si 9%	Drilling	Drill	6	100-120 HB	40	55000	6	0.3	0.006
	Al-Si 9%	Profile Milling	Ball Nose	0.5	100-120 HB	20	33000	0.06	0.05	0.008
	Al-Si 9%	Profile Milling	Ball Nose	0.5	100-120 HB	30	44000	0.06	0.05	0.01
	Al-Si 9%	Profile Milling	Ball Nose	0.5	100-120 HB	40	55000	0.07	0.13	0.012
	Al-Si 9%	Profile Milling	Ball Nose	0.8	100-120 HB	20	33000	0.06	0.05	0.008
	Al-Si 9%	Profile Milling	Ball Nose	0.8	100-120 HB	30	44000	0.06	0.05	0.01
	Al-Si 9%	Profile Milling	Ball Nose	0.8	100-120 HB	40	55000	0.07	0.13	0.012
	Al-Si 9%	Profile Milling	Ball Nose	1	100-120 HB	20	33000	0.1	0.075	0.004
	Al-Si 9%	Profile Milling	Ball Nose	1	100-120 HB	30	44000	0.1	0.075	0.004
	Al-Si 9%	Profile Milling	Ball Nose	1	100-120 HB	40	55000	0.11	0.15	0.004
	Al-Si 9%	Profile Milling	Ball Nose	1.5	100-120 HB	20	33000	0.12	0.08	0.006
	Al-Si 9%	Profile Milling	Ball Nose	1.5	100-120 HB	30	44000	0.13	0.09	0.006
	Al-Si 9%	Profile Milling	Ball Nose	1.5	100-120 HB	40	55000	0.15	0.15	0.006
	Al-Si 9%	Profile Milling	Ball Nose	2	100-120 HB	20	33000	0.15	0.05	0.003
	Al-Si 9%	Profile Milling	Ball Nose	2	100-120 HB	30	44000	0.16	0.05	0.003
	Al-Si 9%	Profile Milling	Ball Nose	2	100-120 HB	40	55000	0.2	0.13	0.003
	Al-Si 9%	Profile Milling	Ball Nose	2.5	100-120 HB	20	33000	0.15	0.05	0.003
	Al-Si 9%	Profile Milling	Ball Nose	2.5	100-120 HB	30	44000	0.16	0.05	0.003
	Al-Si 9%	Profile Milling	Ball Nose	2.5	100-120 HB	40	55000	0.25	0.13	0.003
	Al-Si 9%	Profile Milling	Ball Nose	3	100-120 HB	20	33000	0.22	0.075	0.004
	Al-Si 9%	Profile Milling	Ball Nose	3	100-120 HB	30	44000	0.25	0.075	0.004
	Al-Si 9%	Profile Milling	Ball Nose	3	100-120 HB	40	55000	0.25	0.15	0.004
	Al-Si 9%	Profile Milling	Ball Nose	4	100-120 HB	20	33000	0.2	0.08	0.006
	Al-Si 9%	Profile Milling	Ball Nose	4	100-120 HB	30	44000	0.25	0.09	0.006
	Al-Si 9%	Profile Milling	Ball Nose	4	100-120 HB	40	55000	0.27	0.15	0.006
	Al-Si 9%	Profile Milling	Ball Nose	5	100-120 HB	20	33000	0.25	0.075	0.004
	Al-Si 9%	Profile Milling	Ball Nose	5	100-120 HB	30	44000	0.26	0.075	0.004
	Al-Si 9%	Profile Milling	Ball Nose	5	100-120 HB	40	55000	0.28	0.15	0.004
	Al-Si 9%	Profile Milling	Ball Nose	6	100-120 HB	20	33000	0.23	0.08	0.006
	Al-Si 9%	Profile Milling	Ball Nose	6	100-120 HB	30	44000	0.25	0.09	0.006
	Al-Si 9%	Profile Milling	Ball Nose	6	100-120 HB	40	55000	0.25	0.15	0.006
	Al-Si 9%	Slot Milling	End-Mill	0.5	100-120 HB	20	33000	0.5	0.05	0.007
	Al-Si 9%	Slot Milling	End-Mill	0.5	100-120 HB	30	44000	0.5	0.05	0.007
	Al-Si 9%	Slot Milling	End-Mill	0.5	100-120 HB	40	55000	0.5	0.05	0.007
	Al-Si 9%	Slot Milling	End-Mill	0.8	100-120 HB	20	33000	0.8	0.08	0.008
	Al-Si 9%	Slot Milling	End-Mill	0.8	100-120 HB	30	44000	0.8	0.08	0.008
	Al-Si 9%	Slot Milling	End-Mill	0.8	100-120 HB	40	55000	0.8	0.08	0.008
	Al-Si 9%	Slot Milling	End-Mill	1	100-120 HB	20	33000	1	0.1	0.02
	Al-Si 9%	Slot Milling	End-Mill	1	100-120 HB	30	44000	1	0.1	0.02
	Al-Si 9%	Slot Milling	End-Mill	1	100-120 HB	40	55000	1	0.1	0.02
	Al-Si 9%	Slot Milling	End-Mill	1.5	100-120 HB	20	33000	1.5	0.15	0.02
	Al-Si 9%	Slot Milling	End-Mill	1.5	100-120 HB	30	44000	1.5	0.15	0.02
	Al-Si 9%	Slot Milling	End-Mill	1.5	100-120 HB	40	55000	1.5	0.15	0.02
	Al-Si 9%	Slot Milling	End-Mill	2	100-120 HB	20	33000	2	0.2	0.022
	Al-Si 9%	Slot Milling	End-Mill	2	100-120 HB	30	44000	2	0.2	0.022
	Al-Si 9%	Slot Milling	End-Mill	2	100-120 HB	40	55000	2	0.2	0.022
	Al-Si 9%	Slot Milling	End-Mill	2.5	100-120 HB	20	33000	2.5	0.25	0.025
	Al-Si 9%	Slot Milling	End-Mill	2.5	100-120 HB	30	44000	2.5	0.25	0.025
	Al-Si 9%	Slot Milling	End-Mill	2.5	100-120 HB	40	55000	2.5	0.25	0.025
	Al-Si 9%	Slot Milling	End-Mill	3	100-120 HB	20	33000	3	0.3	0.025
	Al-Si 9%	Slot Milling	End-Mill	3	100-120 HB	30	44000	3	0.3	0.025
	Al-Si 9%	Slot Milling	End-Mill	3	100-120 HB	40	55000	3	0.3	0.025
	Al-Si 9%	Slot Milling	End-Mill	3.5	100-120 HB	20	33000	3.5	0.25	0.025
	Al-Si 9%	Slot Milling	End-Mill	3.5	100-120 HB	30	44000	3.5	0.25	0.025
	Al-Si 9%	Slot Milling	End-Mill	3.5	100-120 HB	40	55000	3.5	0.25	0.025
	Al-Si 9%	Slot Milling	End-Mill	4	100-120 HB	20	33000	4	0.28	0.025
	Al-Si 9%	Slot Milling	End-Mill	4	100-120 HB	30	44000	4	0.28	0.025
	Al-Si 9%	Slot Milling	End-Mill	4	100-120 HB	40	55000	4	0.28	0.025
	Al-Si 9%	Slot Milling	End-Mill	4.5	100-120 HB	20	33000	4.5	0.32	0.025
	Al-Si 9%	Slot Milling	End-Mill	4.5	100-120 HB	30	44000	4.5	0.32	0.025
	Al-Si 9%	Slot Milling	End-Mill	4.5	100-120 HB	40	55000	4.5	0.32	0.025
	Al-Si 9%	Slot Milling	End-Mill	5	100-120 HB	20	33000	5	0.35	0.022
	Al-Si 9%	Slot Milling	End-Mill	5	100-120 HB	30	44000	5	0.35	0.022
	Al-Si 9%	Slot Milling	End-Mill	5	100-120 HB	40	55000	5	0.35	0.022
	Al-Si 9%	Slot Milling	End-Mill	5.5	100-120 HB	20	33000	5.5	0.39	0.022
	Al-Si 9%	Slot Milling	End-Mill	5.5	100-120 HB	30	44000	5.5	0.39	0.022
	Al-Si 9%	Slot Milling	End-Mill	5	100-120 HB	40	55000	5.5	0.39	0.022
	Al-Si 9%	Slot Milling	End-Mill	6	100-120 HB	20	33000	6	0.36	0.022
	Al-Si 9%	Slot Milling	End-Mill	6	100-120 HB	30	44000	6	0.36	0.022
	Al-Si 9%	Slot Milling	End-Mill	6	100-120 HB	40	55000	6	0.36	0.022
	Al-Si 9%	Shoulder Mill	End-Mill	1	100-120 HB	20	33000	0.3	0.1	0.015
	Al-Si 9%	Shoulder Mill	End-Mill	1	100-120 HB	30	44000	0.3	0.15	0.017
	Al-Si 9%	Shoulder Mill	End-Mill	1	100-120 HB	40	55000	0.3	0.15	0.017
	Al-Si 9%	Shoulder Mill	End-Mill	2	100-120 HB	20	33000	0.6	0.1	0.015
	Al-Si 9%	Shoulder Mill	End-Mill	2	100-120 HB	30	44000	0.6	0.1	0.015
	Al-Si 9%	Shoulder Mill	End-Mill	2	100-120 HB	40	55000	0.6	0.1	0.018
	Al-Si 9%	Shoulder Mill	End-Mill	3	100-120 HB	20	33000	0.9	0.1	0.02
	Al-Si 9%	Shoulder Mill	End-Mill	3	100-120 HB	30	44000	0.9	0.15	0.02
	Al-Si 9%	Shoulder Mill	End-Mill	3	100-120 HB	40	55000	0.9	0.25	0.025
	Al-Si 9%	Shoulder Mill	End-Mill	4	100-120 HB	20	33000	1.2	0.1	0.015
	Al-Si 9%	Shoulder Mill	End-Mill	4	100-120 HB	30	44000	1.2	0.1	0.015
	Al-Si 9%	Shoulder Mill	End-Mill	4	100-120 HB	40	55000	1.2	0.1	0.015
	Al-Si 9%	Shoulder Mill	End-Mill	5	100-120 HB	20	33000	1.5	0.1	0.02
	Al-Si 9%	Shoulder Mill	End-Mill	5	100-120 HB	30	44000	1.5	0.13	0.02
	Al-Si 9%	Shoulder Mill	End-Mill	5	100-120 HB	40	55000	1.5	0.15	0.025
	Al-Si 9%	Shoulder Mill	End-Mill	6	100-120 HB	20	33000	1.8	0.1	0.02
	Al-Si 9%	Shoulder Mill	End-Mill	6	100-120 HB	30	44000	1.8	0.1	0.02
	Al-Si 9%	Shoulder Mill	End-Mill	6	100-120 HB	40	55000	1.8	0.1	0.02

	Material	Process	Type	Cutting Tool dia.	Hardness	Pressure	Speed (n)	Ae (mm)	Ap (mm)	Fz (mm)
H	SAE 1.2316	Drilling	Drill	0.3	35 HRC	20	33000	0.3	0.07	0.002
	SAE 1.2316	Drilling	Drill	0.3	35 HRC	30	44000	0.3	0.07	0.002
	SAE 1.2316	Drilling	Drill	0.3	35 HRC	40	55000	0.3	0.07	0.002
	SAE 1.2316	Drilling	Drill	0.5	35 HRC	20	33000	0.5	0.1	0.002
	SAE 1.2316	Drilling	Drill	0.5	35 HRC	30	44000	0.5	0.1	0.002
	SAE 1.2316	Drilling	Drill	0.5	35 HRC	40	55000	0.5	0.1	0.002
	SAE 1.2316	Drilling	Drill	0.8	35 HRC	20	33000	0.8	0.1	0.002
	SAE 1.2316	Drilling	Drill	0.8	35 HRC	30	44000	0.8	0.1	0.002
	SAE 1.2316	Drilling	Drill	0.8	35 HRC	40	55000	0.8	0.1	0.002
	SAE 1.2316	Drilling	Drill	1	35 HRC	20	33000	1	0.1	0.003
	SAE 1.2316	Drilling	Drill	1	35 HRC	30	44000	1	0.1	0.003
	SAE 1.2316	Drilling	Drill	1	35 HRC	40	55000	1	0.1	0.003
	SAE 1.2316	Drilling	Drill	1.5	35 HRC	20	33000	1.5	0.1	0.004
	SAE 1.2316	Drilling	Drill	1.5	35 HRC	30	44000	1.5	0.1	0.004
	SAE 1.2316	Drilling	Drill	1.5	35 HRC	40	55000	1.5	0.1	0.004
	SAE 1.2316	Drilling	Drill	2	35 HRC	20	33000	2	0.1	0.004
	SAE 1.2316	Drilling	Drill	2	35 HRC	30	44000	2	0.1	0.004
	SAE 1.2316	Drilling	Drill	2	35 HRC	40	55000	2	0.1	0.004
	SAE 1.2316	Drilling	Drill	2.5	35 HRC	20	33000	2.5	0.1	0.004
	SAE 1.2316	Drilling	Drill	2.5	35 HRC	30	44000	2.5	0.1	0.004
	SAE 1.2316	Drilling	Drill	2.5	35 HRC	40	55000	2.5	0.1	0.004
	SAE 1.2316	Drilling	Drill	3	35 HRC	20	33000	3	0.1	0.005
	SAE 1.2316	Drilling	Drill	3	35 HRC	30	44000	3	0.1	0.005
	SAE 1.2316	Drilling	Drill	3	35 HRC	40	55000	3	0.1	0.005
	SAE 1.2316	Drilling	Drill	3.5	35 HRC	20	33000	3.5	0.1	0.005
	SAE 1.2316	Drilling	Drill	3.5	35 HRC	30	44000	3.5	0.1	0.005
	SAE 1.2316	Drilling	Drill	3.5	35 HRC	40	55000	3.5	0.1	0.005
	SAE 1.2316	Profile Milling	Ball Nose	0.3	35 HRC	20	33000	0.03	0.018	0.01
	SAE 1.2316	Profile Milling	Ball Nose	0.3	35 HRC	30	44000	0.03	0.018	0.01
	SAE 1.2316	Profile Milling	Ball Nose	0.3	35 HRC	40	55000	0.03	0.018	0.01
	SAE 1.2316	Profile Milling	Ball Nose	0.5	35 HRC	20	33000	0.05	0.03	0.012
	SAE 1.2316	Profile Milling	Ball Nose	0.5	35 HRC	30	44000	0.05	0.03	0.012
	SAE 1.2316	Profile Milling	Ball Nose	0.5	35 HRC	40	55000	0.05	0.03	0.012
	SAE 1.2316	Profile Milling	Ball Nose	1	35 HRC	20	33000	0.1	0.06	0.012
	SAE 1.2316	Profile Milling	Ball Nose	1	35 HRC	30	44000	0.1	0.06	0.012
	SAE 1.2316	Profile Milling	Ball Nose	1	35 HRC	40	55000	0.1	0.06	0.012
	SAE 1.2316	Profile Milling	Ball Nose	1.5	35 HRC	20	33000	0.15	0.09	0.012
	SAE 1.2316	Profile Milling	Ball Nose	1.5	35 HRC	30	44000	0.15	0.09	0.012
	SAE 1.2316	Profile Milling	Ball Nose	1.5	35 HRC	40	55000	0.15	0.09	0.012
	SAE 1.2316	Profile Milling	Ball Nose	2	35 HRC	20	33000	0.2	0.12	0.012
	SAE 1.2316	Profile Milling	Ball Nose	2	35 HRC	30	44000	0.2	0.12	0.012
	SAE 1.2316	Profile Milling	Ball Nose	2	35 HRC	40	55000	0.2	0.12	0.012
	SAE 1.2316	Profile Milling	Ball Nose	2.5	35 HRC	20	33000	0.25	0.15	0.012
	SAE 1.2316	Profile Milling	Ball Nose	2.5	35 HRC	30	44000	0.25	0.15	0.012
	SAE 1.2316	Profile Milling	Ball Nose	2.5	35 HRC	40	55000	0.25	0.15	0.012
	SAE 1.2316	Profile Milling	Ball Nose	3	35 HRC	20	33000	0.3	0.18	0.012
	SAE 1.2316	Profile Milling	Ball Nose	3	35 HRC	30	44000	0.3	0.18	0.012
	SAE 1.2316	Profile Milling	Ball Nose	3	35 HRC	40	55000	0.3	0.18	0.012
	SAE 1.2316	Profile Milling	Ball Nose	4	35 HRC	20	33000	0.1	0.1	0.006
	SAE 1.2316	Profile Milling	Ball Nose	4	35 HRC	30	44000	0.1	0.1	0.006
	SAE 1.2316	Profile Milling	Ball Nose	4	35 HRC	40	55000	0.1	0.1	0.006
	SAE 1.2316	Profile Milling	Ball Nose	5	35 HRC	20	33000	0.1	0.1	0.006
	SAE 1.2316	Profile Milling	Ball Nose	5	35 HRC	30	44000	0.1	0.1	0.006
	SAE 1.2316	Profile Milling	Ball Nose	5	35 HRC	40	55000	0.1	0.1	0.006
	SAE 1.2316	Profile Milling	Ball Nose	6	35 HRC	20	33000	0.1	0.1	0.006
	SAE 1.2316	Profile Milling	Ball Nose	6	35 HRC	30	44000	0.1	0.1	0.006
	SAE 1.2316	Profile Milling	Ball Nose	6	35 HRC	40	55000	0.1	0.1	0.006
	SAE 1.2316	Slot Milling	End-Mill	0.3	35 HRC	20	33000	1	0.1	0.006
	SAE 1.2316	Slot Milling	End-Mill	0.3	35 HRC	30	44000	1	0.1	0.006
	SAE 1.2316	Slot Milling	End-Mill	0.3	35 HRC	40	55000	1	0.15	0.006
	SAE 1.2316	Slot Milling	End-Mill	0.5	35 HRC	20	33000	1	0.1	0.007
	SAE 1.2316	Slot Milling	End-Mill	0.5	35 HRC	30	44000	1	0.1	0.007
	SAE 1.2316	Slot Milling	End-Mill	0.5	35 HRC	40	55000	1	0.15	0.007
	SAE 1.2316	Slot Milling	End-Mill	0.8	35 HRC	20	33000	2	0.12	0.01
	SAE 1.2316	Slot Milling	End-Mill	0.8	35 HRC	30	44000	2	0.14	0.01
	SAE 1.2316	Slot Milling	End-Mill	0.8	35 HRC	40	55000	2	0.14	0.01
	SAE 1.2316	Slot Milling	End-Mill	1	35 HRC	20	33000	3	0.12	0.01
	SAE 1.2316	Slot Milling	End-Mill	1	35 HRC	30	44000	3	0.12	0.01
	SAE 1.2316	Slot Milling	End-Mill	1	35 HRC	40	55000	3	0.15	0.01
	SAE 1.2316	Slot Milling	End-Mill	1.5	35 HRC	20	33000	0.5	0.5	0.014
	SAE 1.2316	Slot Milling	End-Mill	1.5	35 HRC	30	44000	0.5	0.5	0.017
	SAE 1.2316	Slot Milling	End-Mill	1.5	35 HRC	40	55000	0.5	0.5	0.018
	SAE 1.2316	Slot Milling	End-Mill	2	35 HRC	20	33000	4	0.08	0.009
	SAE 1.2316	Slot Milling	End-Mill	2	35 HRC	30	44000	4	0.08	0.009
	SAE 1.2316	Slot Milling	End-Mill	2	35 HRC	40	55000	4	0.09	0.009
	SAE 1.2316	Slot Milling	End-Mill	2.5	35 HRC	20	33000	1	0.1	0.01
	SAE 1.2316	Slot Milling	End-Mill	2.5	35 HRC	30	44000	1	0.1	0.013
	SAE 1.2316	Slot Milling	End-Mill	2.5	35 HRC	40	55000	1	0.15	0.013
	SAE 1.2316	Slot Milling	End-Mill	3	35 HRC	20	33000	2	0.12	0.01
	SAE 1.2316	Slot Milling	End-Mill	3	35 HRC	30	44000	2	0.14	0.01
	SAE 1.2316	Slot Milling	End-Mill	3	35 HRC	40	55000	2	0.14	0.01
	SAE 1.2316	Slot Milling	End-Mill	4	35 HRC	20	33000	3	0.12	0.01
	SAE 1.2316	Slot Milling	End-Mill	4	35 HRC	30	44000	3	0.12	0.01
	SAE 1.2316	Slot Milling	End-Mill	4	35 HRC	40	55000	3	0.15	0.01
	SAE 1.2316	Slot Milling	End-Mill	4.5	35 HRC	20	33000	3	0.12	0.01
	SAE 1.2316	Slot Milling	End-Mill	4.5	35 HRC	30	44000	3	0.12	0.01
	SAE 1.2316	Slot Milling	End-Mill	4.5	35 HRC	40	55000	3	0.15	0.01
	SAE 1.2316	Slot Milling	End-Mill	5	35 HRC	20	33000	0.5	0.5	0.012
	SAE 1.2316	Slot Milling	End-Mill	5	35 HRC	30	44000	0.5	0.5	0.017
	SAE 1.2316	Slot Milling	End-Mill	5	35 HRC	40	55000	0.5	0.5	0.018
	SAE 1.2316	Slot Milling	End-Mill	6	35 HRC	20	33000	4	0.08	0.009
	SAE 1.2316	Slot Milling	End-Mill	6	35 HRC	30	44000	4	0.08	0.009
	SAE 1.2316	Slot Milling	End-Mill	6	35 HRC	40	55000	4	0.09	0.009
	SAE 1.2316	Shoulder Mill	End-Mill	0.5	35 HRC	20	33000	0.18	0.3	0.009
	SAE 1.2316	Shoulder Mill	End-Mill	0.5	35 HRC	30	44000	0.2	0.3	0.009
	SAE 1.2316	Shoulder Mill	End-Mill	0.5	35 HRC	40	55000	0.2	0.35	0.01
	SAE 1.2316	Shoulder Mill	End-Mill	1	35 HRC	20	33000	0.5	0.5	0.015
	SAE 1.2316	Shoulder Mill	End-Mill	1	35 HRC	30	44000	0.5	0.5	0.017
	SAE 1.2316	Shoulder Mill	End-Mill	1	35 HRC	40	55000	0.5	0.5	0.018
	SAE 1.2316	Shoulder Mill	End-Mill	2	35 HRC	20	33000	4	0.08	0.009
	SAE 1.2316	Shoulder Mill	End-Mill	2	35 HRC	30	44000	4	0.08	0.009
	SAE 1.2316	Shoulder Mill	End-Mill	2	35 HRC	40	55000	4	0.09	0.009
	SAE 1.2316	Shoulder Mill	End-Mill	3	35 HRC	20	33000	0.5	0.5	0.015
	SAE 1.2316	Shoulder Mill	End-Mill	3	35 HRC	30	44000	0.5	0.5	0.017
	SAE 1.2316	Shoulder Mill	End-Mill	3	35 HRC	40	55000	0.5	0.5	0.018
	SAE 1.2316	Shoulder Mill	End-Mill	4	35 HRC	20	33000	2.2	0.08	0.009
	SAE 1.2316	Shoulder Mill	End-Mill	4	35 HRC	30	44000	2.2	0.08	0.009
	SAE 1.2316	Shoulder Mill	End-Mill	4	35 HRC	40	55000	2.2	0.09	0.009
	SAE 1.2316	Shoulder Mill	End-Mill	5	35 HRC	20	33000	3.2	0.08	0.009
	SAE 1.2316	Shoulder Mill	End-Mill	5	35 HRC	30	44000	3.2	0.08	0.009
	SAE 1.2316	Shoulder Mill	End-Mill	5	35 HRC	40	55000	3.2	0.09	0.009
	SAE 1.2316	Shoulder Mill	End-Mill	6	35 HRC	20	33000	3.8	0.1	0.015
	SAE 1.2316	Shoulder Mill	End-Mill	6	35 HRC	30	44000	3.8	0.1	0.017
	SAE 1.2316	Shoulder Mill	End-Mill	6	35 HRC	40	55000	3.8	0.1	0.018

	Material	Process	Type	Cutting Tool dia.	Hardness	Pressure	Speed (n)	Ae (mm)	Ap (mm)	Fz (mm)
M	SS 316	Drilling	Drill	0.5	220-240 HB	20	33000	1	0.1	0.002
	SS 316	Drilling	Drill	0.5	220-240 HB	30	44000	1	0.1	0.002
	SS 316	Drilling	Drill	0.5	220-240 HB	40	55000	1	0.1	0.002
	SS 316	Drilling	Drill	0.8	220-240 HB	20	33000	2	0.1	0.002
	SS 316	Drilling	Drill	0.8	220-240 HB	30	44000	2	0.1	0.002
	SS 316	Drilling	Drill	0.8	220-240 HB	40	55000	2	0.1	0.002
	SS 316	Drilling	Drill	1	220-240 HB	20	33000	1	0.1	0.002
	SS 316	Drilling	Drill	1	220-240 HB	30	44000	1	0.1	0.002
	SS 316	Drilling	Drill	1	220-240 HB	40	55000	1	0.1	0.002
	SS 316	Drilling	Drill	1.5	220-240 HB	20	33000	2	0.1	0.003
	SS 316	Drilling	Drill	1.5	220-240 HB	30	44000	2	0.1	0.003
	SS 316	Drilling	Drill	1.5	220-240 HB	40	55000	2	0.1	0.003
	SS 316	Drilling	Drill	2	220-240 HB	20	33000	1	0.1	0.004
	SS 316	Drilling	Drill	2	220-240 HB	30	44000	1	0.1	0.004
	SS 316	Drilling	Drill	2	220-240 HB	40	55000	1	0.1	0.004
	SS 316	Drilling	Drill	2.5	220-240 HB	20	33000	2	0.1	0.004
	SS 316	Drilling	Drill	2.5	220-240 HB	30	44000	2	0.1	0.004
	SS 316	Drilling	Drill	2.5	220-240 HB	40	55000	2	0.1	0.004
	SS 316	Drilling	Drill	3	220-240 HB	20	33000	1	0.1	0.004
	SS 316	Drilling	Drill	3	220-240 HB	30	44000	1	0.1	0.004
	SS 316	Drilling	Drill	3	220-240 HB	40	55000	1	0.1	0.004
	SS 316	Drilling	Drill	3.5	220-240 HB	20	33000	2	0.1	0.005
	SS 316	Drilling	Drill	3.5	220-240 HB	30	44000	2	0.1	0.005
	SS 316	Drilling	Drill	3.5	220-240 HB	40	55000	2	0.1	0.0054
	SS 316	Profile Milling	Ball Nose	0.5	220-240 HB	20	33000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	0.5	220-240 HB	30	44000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	0.5	220-240 HB	40	55000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	1	220-240 HB	20	33000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	1	220-240 HB	30	44000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	1	220-240 HB	40	55000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	1.5	220-240 HB	20	33000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	1.5	220-240 HB	30	44000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	1.5	220-240 HB	40	55000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	2	220-240 HB	20	33000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	2	220-240 HB	30	44000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	2	220-240 HB	40	55000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	2.5	220-240 HB	20	33000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	2.5	220-240 HB	30	44000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	2.5	220-240 HB	40	55000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	3	220-240 HB	20	33000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	3	220-240 HB	30	44000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	3	220-240 HB	40	55000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	4	220-240 HB	20	33000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	4	220-240 HB	30	44000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	4	220-240 HB	40	55000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	5	220-240 HB	20	33000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	5	220-240 HB	30	44000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	5	220-240 HB	40	55000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	6	220-240 HB	20	33000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	6	220-240 HB	30	44000	0.1	0.1	0.006
	SS 316	Profile Milling	Ball Nose	6	220-240 HB	40	55000	0.1	0.1	0.006
	SS 316	Slot Milling	End-Mill	0.5	220-240 HB	20	33000	1	0.1	0.008
	SS 316	Slot Milling	End-Mill	0.5	220-240 HB	30	44000	1	0.1	0.008
	SS 316	Slot Milling	End-Mill	0.5	220-240 HB	40	55000	1	0.15	0.009
	SS 316	Slot Milling	End-Mill	0.8	220-240 HB	20	33000	2	0.12	0.01
	SS 316	Slot Milling	End-Mill	0.8	220-240 HB	30	44000	2	0.14	0.01
	SS 316	Slot Milling	End-Mill	0.8	220-240 HB	40	55000	2	0.14	0.01
	SS 316	Slot Milling	End-Mill	1	220-240 HB	20	33000	3	0.12	0.01
	SS 316	Slot Milling	End-Mill	1	220-240 HB	30	44000	3	0.12	0.01
	SS 316	Slot Milling	End-Mill	1	220-240 HB	40	55000	3	0.15	0.01
	SS 316	Slot Milling	End-Mill	1.5	220-240 HB	20	33000	0.5	0.5	0.012
	SS 316	Slot Milling	End-Mill	1.5	220-240 HB	30	44000	0.5	0.5	0.017
	SS 316	Slot Milling	End-Mill	1.5	220-240 HB	40	55000	0.5	0.5	0.018
	SS 316	Slot Milling	End-Mill	2	220-240 HB	20	33000	4	0.08	0.009
	SS 316	Slot Milling	End-Mill	2	220-240 HB	30	44000	4	0.08	0.009
	SS 316	Slot Milling	End-Mill	2	220-240 HB	40	55000	4	0.09	0.009
	SS 316	Slot Milling	End-Mill	2.5	220-240 HB	20	33000	1	0.1	0.015
	SS 316	Slot Milling	End-Mill	2.5	220-240 HB	30	44000	1	0.1	0.015
	SS 316	Slot Milling	End-Mill	2.5	220-240 HB	40	55000	1	0.15	0.016
	SS 316	Slot Milling	End-Mill	3	220-240 HB	20	33000	2	0.12	0.01
	SS 316	Slot Milling	End-Mill	3	220-240 HB	30	44000	2	0.14	0.01
	SS 316	Slot Milling	End-Mill	3	220-240 HB	40	55000	2	0.14	0.01
	SS 316	Slot Milling	End-Mill	4	220-240 HB	20	33000	3	0.12	0.01
	SS 316	Slot Milling	End-Mill	4	220-240 HB	30	44000	3	0.12	0.01
	SS 316	Slot Milling	End-Mill	4	220-240 HB	40	55000	3	0.15	0.01
	SS 316	Slot Milling	End-Mill	4.5	220-240 HB	20	33000	3	0.12	0.01
	SS 316	Slot Milling	End-Mill	4.5	220-240 HB	30	44000	3	0.12	0.01
	SS 316	Slot Milling	End-Mill	4.5	220-240 HB	40	55000	3	0.15	0.01
	SS 316	Slot Milling	End-Mill	5	220-240 HB	20	33000	0.5	0.5	0.015
	SS 316	Slot Milling	End-Mill	5	220-240 HB	30	44000	0.5	0.5	0.017
	SS 316	Slot Milling	End-Mill	5	220-240 HB	40	55000	0.5	0.5	0.018
	SS 316	Slot Milling	End-Mill	6	220-240 HB	20	33000	4	0.08	0.009
	SS 316	Slot Milling	End-Mill	6	220-240 HB	30	44000	4	0.08	0.009
	SS 316	Slot Milling	End-Mill	6	220-240 HB	40	55000	4	0.09	0.009
	SS 316	Shoulder Mill	End-Mill	1	220-240 HB	20	33000	0.5	0.5	0.014
	SS 316	Shoulder Mill	End-Mill	1	220-240 HB	30	44000	0.5	0.5	0.017
	SS 316	Shoulder Mill	End-Mill	1	220-240 HB	40	55000	0.5	0.5	0.018
	SS 316	Shoulder Mill	End-Mill	2	220-240 HB	20	33000	4	0.08	0.009
	SS 316	Shoulder Mill	End-Mill	2	220-240 HB	30	44000	4	0.08	0.009
	SS 316	Shoulder Mill	End-Mill	2	220-240 HB	40	55000	4	0.09	0.009
	SS 316	Shoulder Mill	End-Mill	3	220-240 HB	20	33000	0.5	0.5	0.01
	SS 316	Shoulder Mill	End-Mill	3	220-240 HB	30	44000	0.5	0.5	0.017
	SS 316	Shoulder Mill	End-Mill	3	220-240 HB	40	55000	0.5	0.5	0.018
	SS 316	Shoulder Mill	End-Mill	4	220-240 HB	20	33000	4	0.08	0.009
	SS 316	Shoulder Mill	End-Mill	4	220-240 HB	30	44000	4	0.08	0.009
	SS 316	Shoulder Mill	End-Mill	4	220-240 HB	40	55000	4	0.09	0.009
	SS 316	Shoulder Mill	End-Mill	5	220-240 HB	20	33000	4	0.08	0.009
	SS 316	Shoulder Mill	End-Mill	5	220-240 HB	30	44000	4	0.08	0.009
	SS 316	Shoulder Mill	End-Mill	5	220-240 HB	40	55000	4	0.09	0.009
	SS 316	Shoulder Mill	End-Mill	6	220-240 HB	20	33000	0.5	0.5	0.013
	SS 316	Shoulder Mill	End-Mill	6	220-240 HB	30	44000	0.5	0.5	0.017
	SS 316	Shoulder Mill	End-Mill	6	220-240 HB	40	55000	0.5	0.5	0.018