



List of recommended milling conditions for **ABM**

Work Material	Carbon Steels S45C.S50C HB150-250		Alloy Steels SCM.PDS5.PDS3 HRC20-35		Prehardened Steels NAK80.SKD11 HRC35-45		Hardened Steels SKD61 HRC45-55	
Velocity	V=80-120m/min		V=60-100m/min		V=40-80m/min		V=40m/min	
RADIUS	SPEED (mm ⁻¹)	FEED (mm/mim)	SPEED (mm ⁻¹)	FEED (mm/mim)	SPEED (mm ⁻¹)	FEED (mm/mim)	SPEED (mm ⁻¹)	FEED (mm/mim)
R0.1	30000	500-700	30000	450-600	25000	300-600	20000	200-400
R0.15	30000	500-700	30000	450-600	25000	300-600	20000	200-400
R0.2	30000	600-800	30000	500-700	25000	300-600	20000	200-400
R0.25	30000	600-800	30000	500-700	25000	300-600	20000	200-400
R0.3	25000	800-1000	25000	600-1000	20000	300-600	18000	200-400
R0.35	25000	800-1000	25000	600-1000	20000	300-600	18000	200-400
R0.4	20000	800-1000	20000	600-1000	20000	300-600	18000	200-400
R0.5	20000	800-1000	20000	600-1000	20000	300-600	18000	200-400
D : Diameter 	(Z) HRC45 below 0.05-0.15R HRC50 below 0.05-0.15R				(Z) HRC45 below 0.05-0.15R HRC50 below 0.05-0.08R			
Work Material	Copper		HRC20-30		HRC30-48			
Velocity	V=230m/min		V=100m/min		V=70m/min			
RADIUS	SPEED (mm ⁻¹)	FEED (mm/mim)	SPEED (mm ⁻¹)	FEED (mm/mim)	SPEED (mm ⁻¹)	FEED (mm/mim)		
R0.15	60000	600	60000	600	60000	500		
R0.2	60000	600	60000	600	45000	500		
R0.25	60000	600	45000	600	45000	500		
R0.3	60000	1000	45000	900	32000	600		
R0.35	60000	1200	45000	950	32000	650		
R0.4	60000	1200	36000	950	25000	650		
R0.5	60000	1800	32000	950	18500	650		
R0.75	49000	1800	21000	850	15000	550		
R1	36500	1800	16000	850	11000	550		
R1.5	24000	1800	10000	850	7400	550		
R2	18000	1800	8000	850	5500	550		
D : Diameter 	XY=0.1D Z=0.01D		XY=0.1D Z=0.01D		XY=0.1D Z=0.01D			