

Recommended Speeds and Feeds MX Series End mills "4 and 6 Flute"

CUTTING SPEEDS			1/8'	3/16"	1/4"	5/16'	3/8"	1/2"	5/8"	3/4	1"
WORK MATERIAL	SFM		ipt	ipt	ipt	ipt	ipt	ipt	ipt	ipt	ipt
Titanium Alloys	HIGH	250	0.0004	0.0004	0.0005	0.0008	0.001	0.0013	0.0014	0.0021	0.0025
	LOW	212	0.0005	0.0005	0.0006	0.0009	0.0011	0.0014	0.0015	0.0022	0.0026
High Temp. Alloys	HIGH	125	0.0003	0.0003	0.0006	0.001	0.001	0.0016	0.0018	0.0023	0.0023
	LOW	106	0.0004	0.0004	0.0007	0.0011	0.0011	0.0017	0.0019	0.0024	0.0024
Alloy Steels											
4140-4340	HIGH	575	0.0005	0.0009	0.0015	0.0019	0.0024	0.003	0.0034	0.0036	0.0039
Below 36Rc	LOW	450	0.0006	0.001	0.0016	0.002	0.0025	0.0031	0.0035	0.0037	0.004
4140-4340	HIGH	387	0.0005	0.0009	0.0015	0.0019	0.0024	0.003	0.0034	0.0036	0.0039
Above 36Rc	LOW	325	0.0006	0.001	0.0016	0.002	0.0025	0.0031	0.0035	0.0037	0.004
Grey Cast Iron											
	HIGH	700	0.0007	0.0007	0.0007	0.0011	0.0011	0.0017	0.0019	0.0023	0.0027
	LOW	575	0.0008	0.0008	0.0008	0.0012	0.0012	0.0018	0.002	0.0024	0.0028
Tool Steels											
Below 36Rc	HIGH	575	0.0004	0.0006	0.0013	0.0018	0.0019	0.0024	0.003	0.0031	0.0034
	LOW	450	0.0005	0.0007	0.0014	0.0019	0.002	0.0025	0.0031	0.0032	0.0035
Above 36Rc	HIGH	262	0.0004	0.0006	0.0013	0.0018	0.0019	0.0024	0.003	0.0031	0.0034
	LOW	211	0.0005	0.0007	0.0014	0.0019	0.002	0.0025	0.0031	0.0032	0.0035
Stainless Steels											
Hard to Machine	HIGH	362	0.0003	0.0003	0.0005	0.0009	0.0009	0.0015	0.0017	0.0021	0.0021
	LOW	325	0.0004	0.0004	0.0006	0.001	0.001	0.0016	0.0018	0.0022	0.0022
Mild to Machine	HIGH	375	0.0004	0.0004	0.0006	0.001	0.001	0.0016	0.0018	0.0022	0.0022
	LOW	337	0.0005	0.0005	0.0007	0.0011	0.0011	0.0017	0.0019	0.0023	0.0023
Easy to Machine	HIGH	487	0.0005	0.0005	0.0007	0.0011	0.0011	0.0017	0.0019	0.0023	0.0023
	LOW	387	0.0006	0.0006	0.0008	0.0012	0.0012	0.0018	0.002	0.0024	0.0024
Soft Steels											
	HIGH	762	0.0005	0.0007	0.0007	0.0011	0.0011	0.0017	0.0019	0.0023	0.0027
	LOW	637	0.0006	0.0008	0.0008	0.0012	0.0012	0.0018	0.002	0.0024	0.0028
Die Steels											
	HIGH	387	0.0005	0.0009	0.0015	0.0019	0.0024	0.003	0.0034	0.0036	0.0039
Below 37Rc	LOW	325	0.0006	0.001	0.0016	0.002	0.0025	0.0031	0.0035	0.0037	0.004

**MX
SERIES**

VMAX

* Above speed and feed recommendations are for *profile* milling (side cut) operations up to 20 % of the cutter diameter.

* Decrease values by 20% for *slotting operations*.

* Rates based on *HIGH* values are for optimum working conditions.

PLEASE NOTE: The above recommendations should be considered only as a starting point
"fine tuning" may be required in order to maximize performance

RPM – 3.82 x (SFM/Dia.)

ipm = ipt x # teeth x RPM

ipm: inches per minute

SFM = .262 x Dia. x RPM

ipt = ipm/(RPM x # teeth)

ipt: inches per tooth

