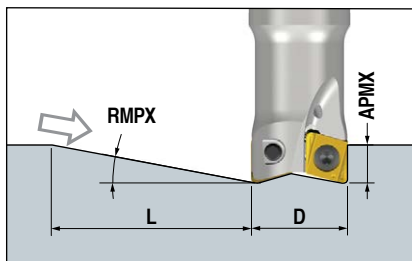
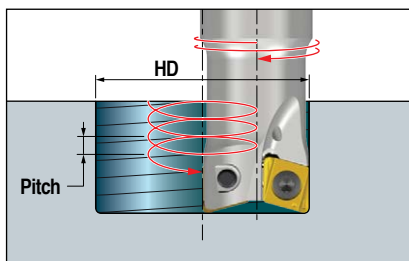


DIPOSDUO™ 09 RAMPING DATA USING MN_U09

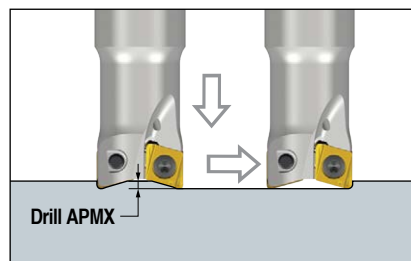
Straight Ramping



Helical Ramping



Drill Mill



USING MN_U09 (R.015")

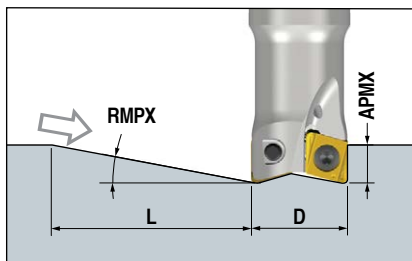
DC Cutter Diameter	Straight Ramp			Helical Ramp			Drill Mill
	RMPX Ramp Angle Max.	APMX Depth of Cut Max.	L Ramp Length Min.	HD Hole Dia. Min.	HD Hole Dia. Max.	Pitch Max.	Drill APMX Depth of Cut Max.
1.000	4.3	0.32	4.2	1.43	2.00	0.082 0.200	0.035
1.250	4.5	0.32	4.0	1.93	2.50	0.145 0.263	0.035
1.500	3.2	0.32	5.7	2.43	3.00	0.150 0.236	0.035
2.000	2.4	0.32	7.6	3.43	4.00	0.157 0.220	0.035
2.500	1.8	0.32	10.0	4.43	5.00	0.161 0.210	0.035
3.000	1.3	0.32	14.0	5.43	6.00	0.161 0.200	0.035
4.000	0.8	0.32	22.0	7.43	8.00	0.154 0.183	0.035

USING MN_U09 (R.031")

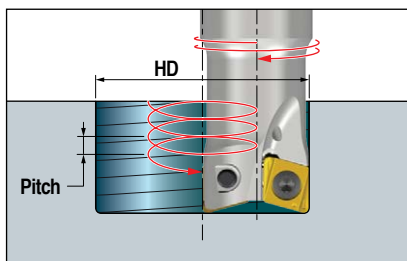
DC Cutter Diameter	Straight Ramp			Helical Ramp			Drill Mill
	RMPX Ramp Angle Max.	APMX Depth of Cut Max.	L Ramp Length Min.	HD Hole Dia. Min.	HD Hole Dia. Max.	Pitch Max.	Drill APMX Depth of Cut Max.
1.000	4.3	0.32	4.2	1.43	2.00	0.082 0.200	0.023
1.250	4.5	0.32	4.0	1.93	2.50	0.145 0.263	0.023
1.500	3.2	0.32	5.7	2.43	3.00	0.150 0.236	0.023
2.000	2.4	0.32	7.6	3.43	4.00	0.157 0.220	0.023
2.500	1.8	0.32	10.0	4.43	5.00	0.161 0.210	0.023
3.000	1.3	0.32	14.0	5.43	6.00	0.161 0.200	0.023
4.000	0.8	0.32	22.0	7.43	8.00	0.154 0.183	0.023

DIPOSDUO™ 09 RAMPING DATA USING MN_U09

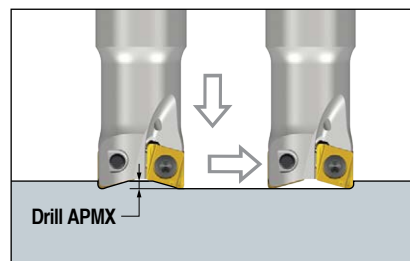
Straight Ramping



Helical Ramping



Drill Mill

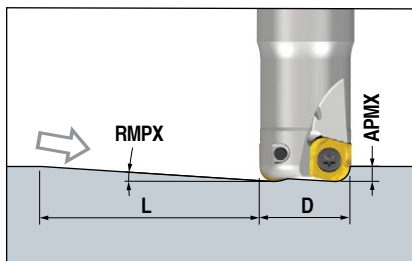


USING MN_U09 (R.062")

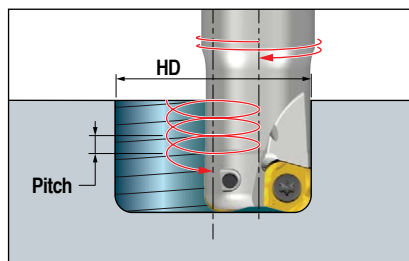
DC Cutter Diameter	Straight Ramp			Helical Ramp			Drill Mill
	RMPX Ramp Angle Max.	APMX Depth of Cut Max.	L Ramp Length Min.	HD Hole Dia. Min.	HD Hole Dia. Max.	Pitch Max.	Drill APMX Depth of Cut Max.
1.000	4.1	0.32	4.4	1.43	2.00	0.078 0.180	0.023
1.250	4.4	0.32	4.1	1.93	2.50	0.140 0.260	0.023
1.500	3.1	0.32	5.6	2.43	3.00	0.145 0.228	0.023
2.000	2.3	0.32	7.5	3.43	4.00	0.153 0.216	0.023
2.500	1.8	0.32	10.0	4.43	5.00	0.161 0.208	0.023
3.000	1.3	0.32	13.3	5.43	6.00	0.161 0.196	0.023
4.000	0.8	0.32	22.0	7.43	8.00	0.154 0.183	0.023

DIPOSDUO™ 09 RAMPING DATA USING UNHU09

Straight Ramping



Helical Ramping



USING UNHU09 (HI-FEED)

DC Cutter Diameter	Straight Ramp			Helical Ramp		
	RMPX Ramp Angle Max.	APMX Depth of Cut Max.	L Ramp Length Min.	HD Hole Dia. Min.	HD Hole Dia. Max.	Pitch Max.
1.000	1.2	0.059	2.8	1.41	2.00	0.023 0.059
1.250	2.4	0.059	1.4	1.91	2.50	0.059 0.059
1.500	2.3	0.059	1.4	2.41	3.00	0.059 0.059
2.000	1.7	0.059	1.9	3.41	4.00	0.059 0.059
2.500	1.3	0.059	2.6	4.41	5.00	0.059 0.059
3.000	1.0	0.059	3.3	5.41	6.00	0.059 0.059
4.000	0.5	0.059	6.7	7.41	8.00	0.059 0.059