

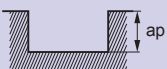
INDEXABLE HEAD END MILLS

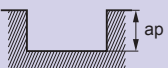
IMX-S3HV

Square head, 3 flute, Illegal helix

RECOMMENDED CUTTING CONDITIONS

Slotting

Dia. (mm)	Carbon steel, Alloy steel, Mild Steel, Copper, Copper alloys					Pre-hardened steel, Carbon steel, Alloy steel, Alloy tool steel					Austenitic stainless steel, Ferritic, Precipitation hardening stainless steel, Titanium alloy				
	Cutting speed (m/min)	Revolution (min ⁻¹)	Feed (mm/tooth)	Feed rate (mm/min)	Depth of cut ap (mm)	Cutting speed (m/min)	Revolution (min ⁻¹)	Feed (mm/tooth)	Feed rate (mm/min)	Depth of cut ap (mm)	Cutting speed (m/min)	Revolution (min ⁻¹)	Feed (mm/tooth)	Feed rate (mm/min)	Depth of cut ap (mm)
10	150	4800	0.06	860	5	120	3800	0.04	460	5	100	3200	0.05	480	5
12	150	4000	0.06	720	6	120	3200	0.045	430	6	100	2700	0.055	450	6
16	150	3000	0.07	630	8	120	2400	0.05	360	8	100	2000	0.06	360	8
20	150	2400	0.07	500	10	120	1900	0.05	290	10	100	1600	0.06	290	10
25	150	1900	0.08	460	12	120	1500	0.05	230	12	100	1300	0.06	230	12
Depth of cut															

Dia. (mm)	Precipitation hardening stainless steel, Cobalt chromium alloy					Heat resistant alloys Inconel718				
	Cutting speed (m/min)	Revolution (min ⁻¹)	Feed (mm/tooth)	Feed rate (mm/min)	Depth of cut ap (mm)	Cutting speed (m/min)	Revolution (min ⁻¹)	Feed (mm/tooth)	Feed rate (mm/min)	Depth of cut ap (mm)
10	60	1900	0.04	230	5	30	950	0.04	110	2
12	60	1600	0.045	220	6	30	800	0.045	110	2.4
16	60	1200	0.05	180	8	30	600	0.05	90	3.2
20	60	950	0.05	140	10	30	480	0.05	72	4
25	60	760	0.05	110	12	30	380	0.05	57	5
Depth of cut										

- 1) For stainless steel, titanium alloy and heat resistant alloy, the use of water-soluble coolant is effective.
- 2) If the depth of cut is shallow, the revolution and feed rate can be increased.
- 3) The irregular helix flute end mill has a large effect on controlling vibration when compared to standard end mills. However, if the rigidity of the machine or the workpiece installation is poor, vibration or abnormal sound can occur. In this case, please reduce the revolution and feed rate proportionately, or set a lower depth of cut.