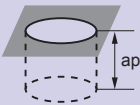


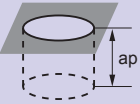
IMX-S3HV

Square head, 3 flute, Illegal helix

RECOMMENDED CUTTING CONDITIONS

Plunging

Work material	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					
Dia. (mm)	Cutting speed (m/min)	Revolution (min ⁻¹)	Feed (mm/rev)	Feed rate (mm/min)	Drilled Depth ap (mm)	Step ap (mm)	Cutting speed (m/min)	Revolution (min ⁻¹)	Feed (mm/rev)	Feed rate (mm/min)	Drilled Depth ap (mm)	Step ap (mm)	Cutting speed (m/min)	Revolution (min ⁻¹)	Feed (mm/rev)	Feed rate (mm/min)	Drilled Depth ap (mm)	Step ap (mm)
10	100	3200	0.14	450	5	2.5	70	2200	0.09	200	5	2	60	1900	0.03	57	5	0.6
12	100	2700	0.14	380	6	2.5	70	1900	0.09	170	6	2	60	1600	0.03	48	6	0.6
16	100	2000	0.14	280	8	2.5	70	1400	0.09	130	8	2	60	1200	0.03	36	8	0.6
20	100	1600	0.14	220	10	2.5	70	1100	0.09	100	10	2	60	950	0.03	29	10	0.6
25	100	1300	0.14	180	12.5	2.5	70	890	0.09	80	12.5	2	60	760	0.03	23	12.5	0.6
Depth of cut																		

Work material	Precipitation hardening stainless steel, Cobalt chromium alloy					
Dia. (mm)	Cutting speed (m/min)	Revolution (min ⁻¹)	Feed (mm/rev)	Feed rate (mm/min)	Drilled Depth ap (mm)	Step ap (mm)
10	40	1300	0.03	39	5	0.6
12	40	1100	0.03	33	6	0.6
16	40	800	0.03	24	8	0.6
20	40	640	0.03	19	10	0.6
25	40	510	0.03	15	12.5	0.6
Depth of cut						

- 1) For stainless steel, titanium alloy and heat resistant alloy, the use of water-soluble coolant is effective.
- 2) The irregular helix flute end mill has a larger 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.

SQUARE

BALL

RADIUS

INDEXABLE HEAD END MILLS