

Group	Type	Feature	Flutes	Code	Shape	Coating	Substrate	Size range	Work material										Page number	
									P	H	M	S	N	Graphite	Dimensions	Cutting conditions				
									Carbon steel, Alloy steel, Cast iron Tool steel, Pre-Hardened steel, Hardened steel	Hardened steel(—55HRC)	Hardened steel(55HRC—)	Austenitic stainless steel	Titanium alloy, Heat resistant alloy				Copper alloy	Aluminium alloy		
	Roughing	Through coolant	4	VF5FPRCH				φ16 φ20					◎	◎				I165	I165	
			6	VF65VRCH				φ16 φ20					◎	◎				I166	I166	
VQ / For Stainless steel, Titanium alloy																				
	Square	Variable helix	3	VQMHZV				φ1 —φ20	◎	○			◎	◎	○			I211	I213	
				VQMHZVOH				φ6 —φ16	◎	○			◎	◎	○			I217	I218	
			3 4	VQXL				φ0.2 —φ1	◎	○			◎	◎	○			I226	I227	
				VQSVR				φ3 —φ20	◎	○			◎	◎	○			I229	I230	
			4	VQMHV				φ2 —φ25	◎	○			◎	◎	○			I220	I221	
	VQJHV						φ2 —φ20	◎	○			◎	◎	○			I224	I225		
	VQ45VB						R1 —R6	◎	○			◎	◎	○			I232	I233		
	Radius		VQMHVRB				φ2 —φ20	◎	○			◎	◎	○			I234	I236		
			VQMHVRBF				φ6 —φ16	◎	○			◎	◎	○			I239	I240		
	MIRACLE / For General material, Hardened material																			
	Ball	High precision	2	VC2P5BP				R0.02 —R6	◎	◎	◎		○	○				I242	I243	
				VC2P5B				R0.05 —R6	◎	◎	◎		○	○				I241	I243	
	Radius		2 4	VCPSRB				φ0.6 —φ12	◎	◎	◎	◎	○	○				I244	I247	
			4	VC45RB				φ4 —φ12	○	◎	◎	○	○	○				I250	I251	

◎ : 1st recommendation / ○ : 2nd recommendation