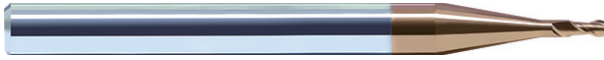


HMX series for machining high hardness steel

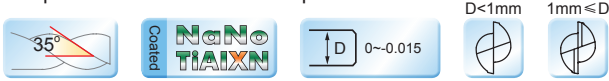
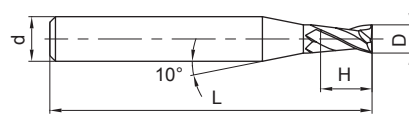
2-flute flattened end mills with straight shank and tiny diameter



HMX-2ES



Tiny diameter end mills can fully display high speed and high precision performances of machining center, often used for machining of precision components such as electronic part etc.



Type	Basic dimension(mm)				Number of teeth Z	Stock
	D	d	H	L		
HMX-2ES-D0.3	0.3	4	0.6	50	2	●
HMX-2ES-D0.4	0.4	4	0.8	50	2	●
HMX-2ES-D0.5	0.5	4	1.0	50	2	●
HMX-2ES-D0.6	0.6	4	1.2	50	2	●
HMX-2ES-D0.7	0.7	4	1.4	50	2	●
HMX-2ES-D0.8	0.8	4	1.6	50	2	●
HMX-2ES-D0.9	0.9	4	1.8	50	2	●
HMX-2ES-D1.0	1.0	4	2.0	50	2	●
HMX-2ES-D1.1	1.1	4	2.0	50	2	●
HMX-2ES-D1.2	1.2	4	2.5	50	2	●
HMX-2ES-D1.3	1.3	4	2.5	50	2	●
HMX-2ES-D1.4	1.4	4	3.0	50	2	●
HMX-2ES-D1.5	1.5	4	3.0	50	2	●
HMX-2ES-D1.6	1.6	4	3.5	50	2	●
HMX-2ES-D1.7	1.7	4	3.5	50	2	●
HMX-2ES-D1.8	1.8	4	4.0	50	2	●
HMX-2ES-D1.9	1.9	4	4.0	50	2	●
HMX-2ES-D2.0	2.0	4	4.0	50	2	●
HMX-2ES-D2.1	2.1	4	4.0	50	2	●
HMX-2ES-D2.2	2.2	4	4.5	50	2	●
HMX-2ES-D2.3	2.3	4	4.5	50	2	●
HMX-2ES-D2.4	2.4	4	5.0	50	2	●
HMX-2ES-D2.5	2.5	4	5.0	50	2	●
HMX-2ES-D2.6	2.6	4	5.0	50	2	●
HMX-2ES-D2.7	2.7	4	5.5	50	2	●
HMX-2ES-D2.8	2.8	4	5.5	50	2	●
HMX-2ES-D2.9	2.9	4	6.0	50	2	●
HMX-2ES-D3.0	3.0	4	6.0	50	2	●

● Stock available ○ Make-to-order

Applicable workpiece material table ○Very suitable ○Suitable

Workpiece material											
Carbon steel	Alloy steel	Pre-hardened steel, Hardened steel				Stainless steel	Cast iron, Nodular cast iron	Copper alloy	Aluminum alloy	Titanium alloy	Heat resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
			○	●	●		○				



Indexable milling tools  
Solid carbide end mills  
HMX series