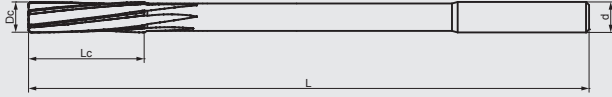


## R302 超微粒鑄鋼長柄機械鉸刀

## Machine Reamers

Designed with left helix and right cutting flutes. 左螺旋右刀刃設計。  
Downward chip evacuation. 排屑方向往下。  
Tolerance: Dc  
+0.004/+0.008: 0.5-3.0  
+0.005/+0.010: 3.0-6.0  
+0.006/+0.012: 6.0-10  
+0.008/+0.015: 10-18  
+0.009/+0.017: 18-30



**VHM Carbide** **HM Carbide Tipped** **Uncoated Bright**  7°  Z **Steel Cast Iron AL, Copper**

Application for reaming different steels below 48HRC, cast iron...and etc.

適用切削於48HRC以下各種鋼材及鑄鐵...等材料鉸孔應用。



**P**  
**H**  
**K**  
VHM

**P**  
**H**  
**K**  
HM

## Long Length

Dc H7	Lc mm	L mm	d mm	Z teeth	R302 Bright	R302 Bright
3	15	100	3	4	●	
3.5	18	112	3.5	4	●	
4	19	119	4	4	●	
4.5	21	126	4.5	4	●	
5	23	132	5	6	●	
6	26	139	6	6	●	
7	31	156	7	6	●	
8	33	165	8	6	●	
9	36	175	9	6	●	
10	38	184	10	6		●
11	41	195	10	6		●
12	44	205	10	6		●
13	44	205	10	6		●
14	47	214	12.5	6		●
15	50	220	12.5	6		●
16	52	227	12.5	6		●
17	54	235	14	6		●
18	56	241	14	6		●
19	58	247	16	6		●
20	60	254	16	6		●

Please refer to page 317 for parameters.

切削條件

Cutting Conditions

R300 R301 R302 R303		R300		R301		R302		R303	
		cutting speed Vc (m/min)	feed per tooth fz(mm)	cutting speed Vc (m/min)	feed per tooth fz(mm)	cutting speed Vc (m/min)	feed per tooth fz(mm)	cutting speed Vc (m/min)	feed per tooth fz(mm)
<b>Carbon Steel Materials</b>									
P	GR1 Carbon Steel	15	0.008xDc	15	0.008xDc	15	0.008xDc	15	0.007xDc
	GR2 <24HRC Low-alloyed Steel	15	0.008xDc	15	0.008xDc	15	0.008xDc	15	0.007xDc
	GR3 <30HRC Hi-alloyed Steel	12	0.006xDc	12	0.006xDc	12	0.006xDc	12	0.006xDc
<b>Hardened Steel Materials</b>									
H	GR4 30-38HRC Hardened Steel	8	0.005xDc	8	0.005xDc	8	0.005xDc	8	0.005xDc
	GR5 38-48HRC Hardened Steel	5	0.003xDc	5	0.003xDc	5	0.003xDc	5	0.003xDc
<b>Stainless Steel Materials</b>									
M	GR8-1 Ferritic、Martensitic	12	0.006xDc	12	0.006xDc	12	0.006xDc	12	0.006xDc
	GR8-2 Austenitic	12	0.006xDc	12	0.006xDc	12	0.006xDc	12	0.006xDc
	GR8-3 Austenitic-ferritic	12	0.006xDc	12	0.006xDc	12	0.006xDc	12	0.006xDc
	GR8-4 Austenitic-ferritic Heat-resistant	8	0.004xDc	8	0.004xDc	8	0.004xDc	8	0.004xDc
<b>Cast Iron Materials</b>									
K	GR9-1 Grey cast iron	15	0.006xDc	15	0.006xDc	15	0.006xDc	15	0.006xDc
	GR9-2 Nodular cast iron	15	0.006xDc	15	0.006xDc	15	0.006xDc	15	0.006xDc
<b>Aluminium Steel Materials</b>									
N	GR10-1 Wrought Aluminium alloys	20	0.006xDc	20	0.006xDc	20	0.006xDc	20	0.006xDc
	GR10-2 Aluminium cast alloys <10%	20	0.006xDc	20	0.006xDc	20	0.006xDc	20	0.006xDc
	GR10-3 Aluminium cast alloys >10%	20	0.006xDc	20	0.006xDc	20	0.006xDc	20	0.006xDc
<b>Copper Steel Materials</b>									
N	GR11-1 Pure Copper	15	0.006xDc	15	0.006xDc	15	0.006xDc	15	0.006xDc
	GR11-2 Brass	15	0.006xDc	15	0.006xDc	15	0.006xDc	15	0.006xDc
	GR11-2 Bronze	15	0.006xDc	15	0.006xDc	15	0.006xDc	15	0.006xDc

All cutting data serve for orientation only and should be adapted individually to the technical conditions on location

1. Please work with good rigidity / high precision facilities and collet chuck.
  2. Please choose proper cutting fluid.
  3. The cutting data is reference value only. Please adjust it according to your real working conditions.
  4. If RPM is lower the reference value, the Feed rate [fz] and RPM should be reduced by the same proportion.
  5. If vibration occurs during cutting, please reduce cutting parameter.
1. 請使用剛性好、精度高的設備和夾具。
  2. 請選擇適用於工件材料的切削液。
  3. 此切削條件表中的數值為切削條件的基準值，實際加工時，請考慮加工形狀、目的、使用機台等因素，對切削條件進行調整。
  4. 如果機台轉速低於表中所列數值，則進給速度應與轉速按同一比例降低。
  5. 切削加工時如果發生振顫，請降低切削條件。