

**NEW**  
**PRODUCT!**

# D108钻头

## 8xDc通用硬质合金钻头

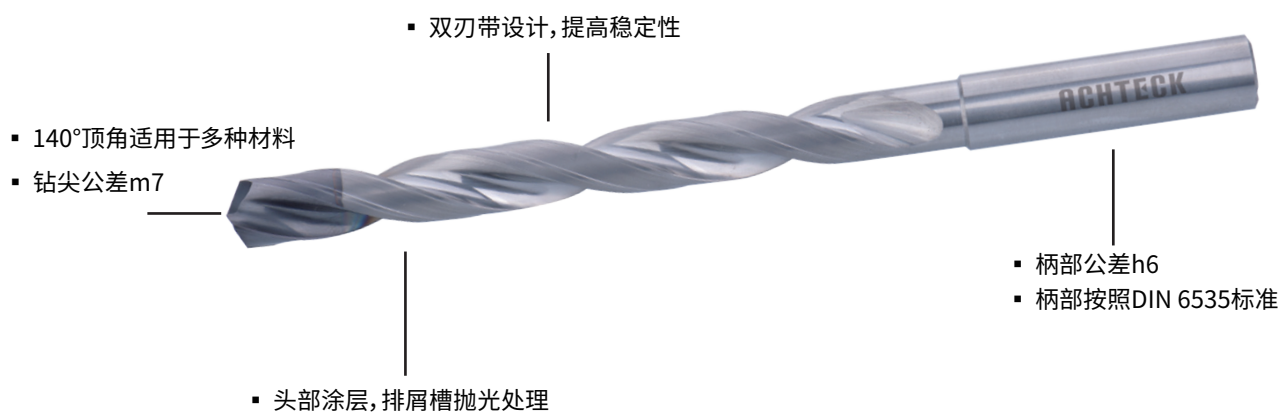


● 刀具特征:

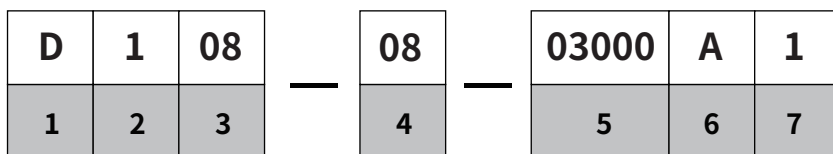
- 直径范围3-16mm
- 内冷
- 头部涂层, 排屑槽抛光处理
- 双刃带, 支撑更充分
- 140°顶角

● 应用范围:

- 适用加工材料:P,M,K,N,S,H,O
- 应用行业:通用机械行业、工程机械行业、能源行业、汽车行业



◆ **D108整体硬质合金钻头命名规则**



1-产品组别	
D	钻头

2-代次
1

3-刀具种类	
08	通用型

4-钻深	
08	~8xDc根据澳克泰标准

5-刀具直径	
03000	3.0mm
12100	12.1mm

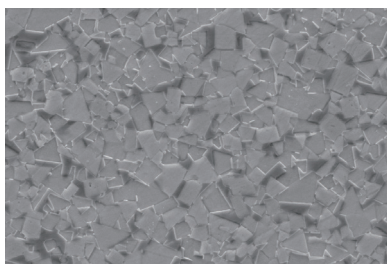
6-刀柄类型	
A	DIN 6535 HA 圆柱柄

7-冷却	
1	轴向内冷

◆ **基体介绍**

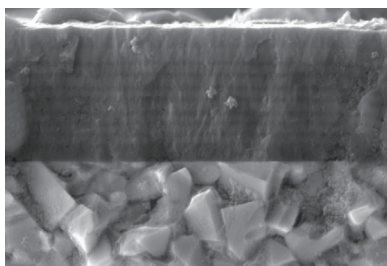
使用10%钴含量棒料,亚微细晶粒,兼顾了良好的耐磨性与韧性,保证刃口耐磨性的同时,提高了刀具抗冲击性,避免早期崩刃现象;

通用性牌号,满足各种工况,各种材料的加工。

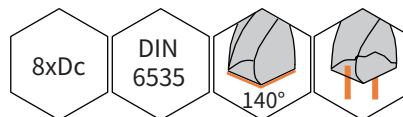
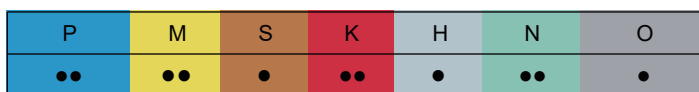
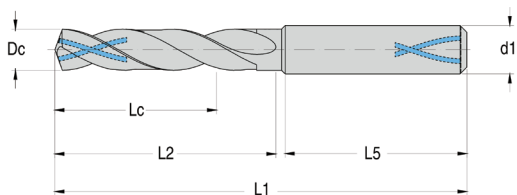


◆ **涂层介绍**

纳米层结构和多层结构,有效防止裂纹扩展,良好的耐磨性,使用寿命长,涂层表面光滑,减少切削阻力,排屑流畅无阻。



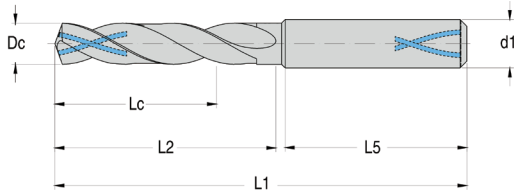
● 整体硬质合金内冷钻头 D108 8xDc



订货号	Dc(m7) mm	Dc inch/No.	Lc mm	L1 mm	L2 mm	L5 mm	d1(h6) mm	库存
D108-08-03000A1	3		28	74	34	36	4	●
D108-08-03100A1	3.1		28	74	34	36	4	●
D108-08-03175A1	3.175	1/8"	28	74	34	36	4	○
D108-08-03200A1	3.2		28	74	34	36	4	●
D108-08-03300A1	3.3		28	74	34	36	4	●
D108-08-03400A1	3.4		28	74	34	36	4	●
D108-08-03500A1	3.5		28	74	34	36	4	●
D108-08-03572A1	3.572	9/64"	28	74	34	36	4	○
D108-08-03600A1	3.6		28	74	34	36	4	●
D108-08-03700A1	3.7		28	74	34	36	4	●
D108-08-03800A1	3.8		35	81	42	36	4	●
D108-08-03900A1	3.9		35	81	42	36	4	●
D108-08-03969A1	3.969	5/32"	35	81	42	36	4	○
D108-08-04000A1	4		35	81	42	36	4	●
D108-08-04100A1	4.1		35	81	42	36	6	●
D108-08-04200A1	4.2		35	81	42	36	6	●
D108-08-04300A1	4.3		37	81	44	36	6	●
D108-08-04366A1	4.366	11/64"	37	81	44	36	6	○
D108-08-04400A1	4.4		37	81	44	36	6	●
D108-08-04500A1	4.5		37	81	44	36	6	●
D108-08-04600A1	4.6		37	81	44	36	6	●
D108-08-04700A1	4.7		37	81	44	36	6	●
D108-08-04763A1	4.763	3/16"	43	97	52	36	6	○
D108-08-04800A1	4.8		43	97	52	36	6	●
D108-08-04900A1	4.9		43	97	52	36	6	●
D108-08-05000A1	5		45	97	55	36	6	●
D108-08-05100A1	5.1		45	97	55	36	6	●
D108-08-05159A1	5.159	13/64"	45	97	55	36	6	○
D108-08-05200A1	5.2		45	97	55	36	6	●
D108-08-05300A1	5.3		45	97	55	36	6	●
D108-08-05400A1	5.4		48	97	57	36	6	●
D108-08-05500A1	5.5		48	97	57	36	6	●
D108-08-05556A1	5.556	7/32"	48	97	57	36	6	●
D108-08-05600A1	5.6		48	97	57	36	6	●
D108-08-05700A1	5.7		48	97	57	36	6	●
D108-08-05800A1	5.8		48	97	57	36	6	●
D108-08-05900A1	5.9		48	97	57	36	6	●
D108-08-05953A1	5.953	15/64"	48	97	57	36	6	○
D108-08-06000A1	6		48	97	57	36	6	●
D108-08-06100A1	6.1		53	106	64	36	8	●
D108-08-06200A1	6.2		53	106	64	36	8	●

接受非标定制

● 代表常规库存  
○ 代表按需生产

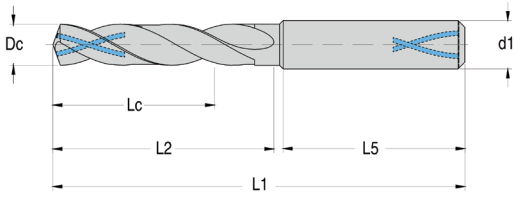


订货号	Dc(m7) mm	Dc inch/No.	Lc mm	L1 mm	L2 mm	L5 mm	d1(h6) mm	库存
D108-08-06300A1	6.3		53	106	64	36	8	●
D108-08-06350A1	6.35	1/4"	54	106	66	36	8	●
D108-08-06400A1	6.4		54	106	66	36	8	●
D108-08-06500A1	6.5		55	106	66	36	8	●
D108-08-06600A1	6.6		55	106	66	36	8	●
D108-08-06700A1	6.7		55	106	66	36	8	●
D108-08-06747A1	6.747	17/64"	55	106	66	36	8	○
D108-08-06800A1	6.8		55	106	66	36	8	●
D108-08-06900A1	6.9		55	106	66	36	8	●
D108-08-07000A1	7		55	106	66	36	8	●
D108-08-07100A1	7.1		60	116	74	36	8	●
D108-08-07144A1	7.144	9/32"	60	116	74	36	8	○
D108-08-07200A1	7.2		62	116	74	36	8	●
D108-08-07300A1	7.3		62	116	74	36	8	●
D108-08-07400A1	7.4		62	116	74	36	8	●
D108-08-07500A1	7.5		64	116	76	36	8	●
D108-08-07541A1	7.541	19/64"	64	116	76	36	8	○
D108-08-07600A1	7.6		64	116	76	36	8	●
D108-08-07700A1	7.7		64	116	76	36	8	●
D108-08-07800A1	7.8		64	116	76	36	8	●
D108-08-07900A1	7.9		64	116	76	36	8	●
D108-08-07938A1	7.938	5/16"	64	116	76	36	8	○
D108-08-08000A1	8		64	116	76	36	8	●
D108-08-08100A1	8.1		70	139	88	40	10	●
D108-08-08200A1	8.2		70	139	88	40	10	●
D108-08-08300A1	8.3		72	139	88	40	10	●
D108-08-08334A1	8.334	21/64"	72	139	88	40	10	○
D108-08-08400A1	8.4		72	139	88	40	10	●
D108-08-08500A1	8.5		72	139	88	40	10	●
D108-08-08600A1	8.6		72	139	88	40	10	●
D108-08-08700A1	8.7		74	139	90	40	10	●
D108-08-08731A1	8.731	11/32"	74	139	90	40	10	○
D108-08-08800A1	8.8		74	139	90	40	10	●
D108-08-08900A1	8.9		76	139	92	40	10	●
D108-08-09000A1	9		76	139	92	40	10	●
D108-08-09100A1	9.1		78	139	95	40	10	●
D108-08-09128A1	9.128	23/64"	78	139	95	40	10	○
D108-08-09200A1	9.2		80	139	95	40	10	●
D108-08-09300A1	9.3		80	139	95	40	10	●
D108-08-09400A1	9.4		80	139	95	40	10	●
D108-08-09500A1	9.5		80	139	95	40	10	●

接受非标定制

● 代表常规库存

○ 代表按需生产



订货号	Dc(m7) mm	Dc inch/No.	Lc mm	L1 mm	L2 mm	L5 mm	d1(h6) mm	库存
D108-08-09525A1	9.525	3/8"	80	139	95	40	10	●
D108-08-09600A1	9.6		80	139	95	40	10	●
D108-08-09700A1	9.7		80	139	95	40	10	●
D108-08-09800A1	9.8		80	139	95	40	10	●
D108-08-09900A1	9.9		80	139	95	40	10	●
D108-08-09922A1	9.922	25/64"	80	139	95	40	10	○
D108-08-10000A1	10		80	139	95	40	10	●
D108-08-10100A1	10.1		88	163	108	45	12	●
D108-08-10200A1	10.2		88	163	108	45	12	●
D108-08-10300A1	10.3		88	163	108	45	12	●
D108-08-10319A1	10.319	13/32"	88	163	108	45	12	○
D108-08-10400A1	10.4		90	163	110	45	12	●
D108-08-10500A1	10.5		90	163	110	45	12	●
D108-08-10700A1	10.7		90	163	110	45	12	●
D108-08-10716A1	10.716	27/64"	92	163	110	45	12	○
D108-08-10800A1	10.8		92	163	110	45	12	●
D108-08-10900A1	10.9		94	163	112	45	12	●
D108-08-11000A1	11		94	163	112	45	12	●
D108-08-11100A1	11.1		94	163	112	45	12	●
D108-08-11113A1	11.113	7/16"	94	163	112	45	12	○
D108-08-11200A1	11.2		96	163	114	45	12	●
D108-08-11300A1	11.3		96	163	114	45	12	●
D108-08-11500A1	11.5		96	163	114	45	12	●
D108-08-11600A1	11.6		96	163	114	45	12	●
D108-08-11700A1	11.7		96	163	114	45	12	●
D108-08-11800A1	11.8		96	163	114	45	12	●
D108-08-11900A1	11.9		96	163	114	45	12	●
D108-08-11906A1	11.906	15/32"	96	163	114	45	12	○
D108-08-12000A1	12		96	163	114	45	12	●
D108-08-12303A1	12.303	31/64"	106	182	125	45	14	○
D108-08-12500A1	12.5		106	182	125	45	14	●
D108-08-12700A1	12.7	1/2"	106	182	125	45	14	●
D108-08-13000A1	13		110	182	130	45	14	●
D108-08-13494A1	13.494	17/32"	115	182	133	45	14	○
D108-08-13500A1	13.5		115	182	133	45	14	●
D108-08-14000A1	14		119	182	133	45	14	●
D108-08-14288A1	14.288	9/16"	122	204	140	48	16	○
D108-08-14500A1	14.5		124	204	140	48	16	●
D108-08-15000A1	15		128	204	143	48	16	●
D108-08-15500A1	15.5		132	204	150	48	16	●
D108-08-15875A1	15.875	5/8"	134	204	150	48	16	○
D108-08-16000A1	16		136	204	152	48	16	●

接受非标定制

● 代表常规库存  
○ 代表按需生产

加工案例

工件：一体式换向主阀

材料：14Cr17Ni2

硬度：HB240-280

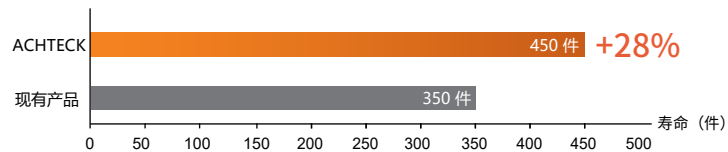
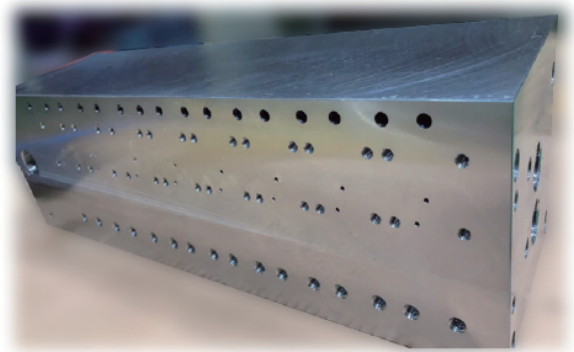
刀具型号：D108-08-06000A1

孔径：6mm

孔深：48mm

	澳克泰	现有产品
切削参数：Vc:	65	47
F:	350	250
f:	0.1	0.1
n:	3500	2500

冷却条件：内冷



D108与现有产品相比寿命提高28%，加工效率提升40%

工件：电梯基座

材料：QT450

硬度：HB230

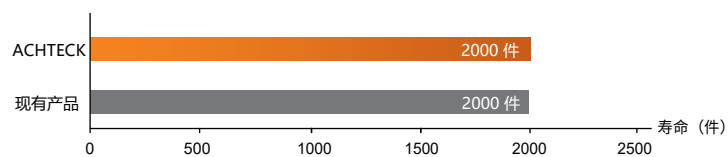
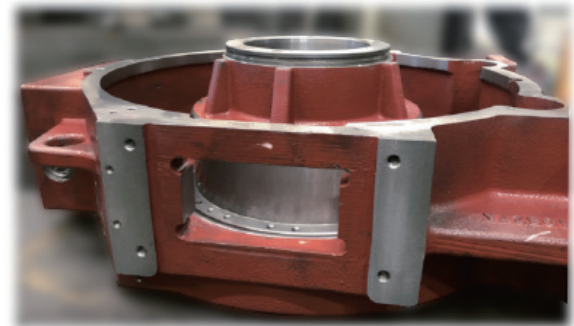
刀具型号：D108-08-08600A1

孔径：8.6mm

孔深：65mm

	澳克泰	现有产品
切削参数：Vc:	45	45
F:	420	420
f:	0.25	0.25
n:	1666	1666

冷却条件：内冷



客户2000件工件固定更换刀具，D108与现有产品寿命相同，但磨损轻微，刀具成本节约50%以上



● 硬质合金钻头D108系列切削参数

Vc=切削速度 Cutting speed (m/min) 进给代码=进给参考表见第8页				钴深		8xDc		
								
				产品系列		D108		
				直径范围(mm)		3.00-16.00		
				冷却		内冷		
应用范围材料				布氏硬度(HB)	抗拉强度Rm (N/mm <sup>2</sup> )	Vc	进给代码	
P	非合金钢	C≤0.25%	退火	125	428	90-115	F	
		0.25 < C ≤ 0.55%	退火	190	639	80-100	E	
		0.25 < C ≤ 0.55%	调质	210	708	80-100	E	
		C > 0.55%	退火	190	639	80-100	E	
		C > 0.55%	调质	300	1013	50-70	D	
		易切削钢 (短切屑)	退火	220	745	90-115	F	
	低合金钢	退火		175	591	80-110	E	
		调质		285	960	60-70	D	
		调质		380	1282	40-50	C	
		调质		430	1477	30-40	B	
	高合金钢和高合金工具钢	退火		200	675	60-80	D	
		淬火并回火		300	1013	40-60	C	
		淬火并回火		400	1361	45-50	C	
	不锈钢	铁素体/马氏体, 退火		200	675	60-80	D	
马氏体, 调质			330	1114	40-50	C		
M	不锈钢	奥氏体, 淬火		200	675	40-50	C	
		奥氏体, 沉淀弥散硬化不锈钢 (PH不锈钢)		300	1013	40-50	C	
		奥氏体_铁素体, 双相不锈钢		230	778	25-35	B	
K	可锻铸铁	铁素体		200	400	70-90	G	
		珠光体		260	700	60-80	G	
	灰口铸铁	低抗拉强度		180	200	80-110	H	
		高抗拉强度/奥氏体		245	350	70-90	G	
	球墨铸铁	铁素体		155	400	80-110	H	
		珠光体		265	700	60-80	F	
蠕墨铸铁GGV (CGI)		230	400	60-80	F			
N	锻造铝合金	非时效处理		30	-	300-400	G	
		可时效处理, 时效处理		100	340	300-400	G	
	铸造铝合金	≤12%硅, 非时效处理		75	260	180-240	H	
		≤12%硅, 可时效处理, 时效处理		90	310	180-200	H	
		> 12%硅, 非时效处理		130	450	140-180	G	
	镁合金		70	250				
	铜和铜合金 (青铜/黄铜)	非合金, 电解铜		100	340	140-170	D	
黄铜、青铜、红黄铜			90	310	120-140	E		
铜合金, 短切屑			110	380	140-180	F		
高强度的Ampco合金			300	1010	45-60	B		
S	高温合金	铁基	退火		200	680	30-40	B
			时效处理		280	940	20-25	A
		镍基或钴基	退火		250	840	20-30	B
			时效处理		350	1180	10-15	A
			铸造		320	1080	15-25	A
	钛合金	纯钛		200	680	40-50	C	
		α相和β相合金, 时效处理		375	1260	25-35	B	
		β相合金		410	1400	10-15	A	
	钨合金		300	1010				
	钼合金		300	1010				
H	淬硬钢	淬火并回火		50HRC		20-35	A	
		淬火并回火		55HRC				
		淬火并回火		60HRC				
	淬硬铸铁	淬火并回火		50HRC				

推荐的切削参数为理论值，特殊应用场合需要调整推荐值。



进给参数表

		每转进给表f(mm/转)							
		A	B	C	D	E	F	G	H
钻头直径 mm	3.0	0.03	0.04	0.05	0.06	0.08	0.10	0.12	0.14
	4.0	0.04	0.05	0.06	0.08	0.10	0.12	0.14	0.16
	5.0	0.05	0.06	0.07	0.09	0.10	0.12	0.16	0.18
	6.0	0.05	0.07	0.08	0.10	0.12	0.15	0.18	0.20
	8.0	0.06	0.08	0.10	0.12	0.15	0.18	0.20	0.23
	10.0	0.08	0.10	0.12	0.14	0.18	0.20	0.24	0.28
	12.0	0.10	0.12	0.14	0.18	0.20	0.24	0.28	0.32
	14.0	0.10	0.14	0.18	0.20	0.24	0.28	0.32	0.34
	16.0	0.12	0.15	0.18	0.20	0.25	0.30	0.34	0.36
20.0	0.15	0.16	0.20	0.25	0.30	0.34	0.37	0.40	

钻头磨损形式和解决措施

磨损形式	解决措施
后刀面磨损	降低切削速度 提高进给量 充分冷却
积屑瘤	提高切削速度 充分冷却
崩刃	检查夹具刚性 检查刀具跳动和冷却 降低进给量
塑性变形	降低进给量 充分冷却
月牙洼磨损	提高切削速度 提高进给量 充分冷却
裂纹痕	降低切削速度