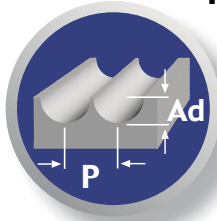




DM Series: Technical Data

High strength, high hardness solid carbide ball end mills for high-speed machining of hardened alloys up to 65HRc.



- Designed for milling complex contours and shapes
- Proprietary cemented carbide grade and coating
- Maximum tool life and performance in HSM applications
- Pitch (P) and Axial depth (Ad) are expressed in % of cutter diameter
- If recommended speed is higher than machine tool's capacity, run at maximum RPM and reduce feed appropriately



Material Hardness	30 - 40 HRc		40 - 45 HRc		45 - 55 HRc		55 - 60 HRc		60 - 65 HRc	
Depth of Cut	Ad = .1xD P=.2xD		Ad = .05xD P=.2xD		Ad = .03xD P=.1xD		Ad = .02xD P=.1xD		Ad = .01xD P=.1xD	
	Speed	Feed	Speed	Feed	Speed	Feed	Speed	Feed	Speed	Feed
Fractional Diameter	RPM	in/min	RPM	in/min	RPM	in/min	RPM	in/min	RPM	in/min
.032	38,800	39	38,800	39	38,800	39	38,800	34	37,600	21
.040	31,040	59	31,040	59	31,040	59	28,000	55	15,550	21
1/16"	31,040	74	31,040	74	31,040	74	28,000	70	15,550	23
.080	31,040	74	31,040	74	31,040	74	28,000	70	15,550	23
3/32"	31,040	74	31,040	74	31,040	74	28,000	70	15,550	23
1/8"	23,925	86	23,925	80	20,925	80	18,925	70	10,425	23
3/16"	14,550	97	14,550	91	12,550	83	11,050	75	6,400	23
1/4"	12,025	97	12,025	85	10,625	83	9,625	75	8,425	25
5/16"	9,300	72	9,300	72	8,100	62	7,300	56	4,100	19
3/8"	7,285	54	7,285	54	6,300	46	5,650	40	3,400	15
7/16"	6,425	49	6,425	49	5,600	43	5,100	39	3,000	14
1/2"	6,125	48	6,125	48	5,325	42	4,775	38	2,675	13

Specs (DM Series fractional end mills):
Cutting Diam +0.000 / -0.008
Shank Diam +0.000 / -0.0025
Radius ± .0004
SFR = Shrink Fit Ready

Material Hardness	30 - 40 HRc		40 - 45 HRc		45 - 55 HRc		55 - 60 HRc		60 - 65 HRc	
Depth of Cut	Ad = .1xD P=.2xD		Ad = .05xD P=.2xD		Ad = .03xD P=.1xD		Ad = .02xD P=.1xD		Ad = .01xD P=.1xD	
	Speed	Feed	Speed	Feed	Speed	Feed	Speed	Feed	Speed	Feed
Metric Mill Diameter	RPM	mm/min	RPM	mm/min	RPM	mm/min	RPM	mm/min	RPM	mm/min
0.50 mm	38,800	991	38,800	991	38,800	991	38,800	864	37,600	533
1.0 mm	31,040	1,499	31,040	1,499	31,040	1,499	28,000	1,397	15,550	533
1.5 mm	31,040	1,880	31,040	1,880	31,040	1,880	28,000	1,778	15,550	584
2.0 mm	31,040	1,880	31,040	1,880	31,040	1,880	28,000	1,778	15,550	584
3.0 mm	31,040	1,880	31,040	1,880	31,040	1,880	28,000	1,778	15,550	584
4.0 mm	23,925	2,184	23,925	2,032	20,925	2,032	18,925	1,778	10,425	584
5.0 mm	14,550	2,464	14,550	2,311	12,550	2,108	11,050	1,905	6,400	584
6.0 mm	12,025	2,464	12,025	2,159	10,625	2,108	9,625	1,905	8,425	635
8.0 mm	9,300	1,829	9,300	1,829	8,100	1,575	7,300	1,422	4,100	483
10.0 mm	7,285	1,372	7,285	1,372	6,300	1,168	5,650	1,016	3,400	381
12.0 mm	6,425	1,245	6,425	1,245	5,600	1,092	5,100	991	3,000	356

Specs (DM Series Metric size end mills):
Cutting Diam +0.000 / -0.021mm
Shank Diam +0.000 / -0.0064mm
Radius ± 0.010mm
SFR = Shrink Fit Ready

35% tighter shank tolerance than h6!
Shrink-Fit Ready!

