



shaping your dreams



OSG GROUP COMPANY

CARBIDE HOLEMASTER DRILL RANGES



- 1 Improved Point and Fluting Geometry Convergence
- 2 New Coating Technology
Advanced Polishing Technology
- 3 Size Range 1 to 14mm
- 4 Jobber and Stub Length

Improved Manufacturing Process resulting in:

- ✓ Multiple Material Applications
- ✓ High Speed Drilling
- ✓ Accelerated Chip Evacuation
- ✓ High Wear Resistance

Introducing the Carbide HoleMaster Drill Ranges

- Recommended
- Suitable

P						M				K				Ti			Ni			Cu				N			Syn			H					
1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3	6.4	7.1	7.2	7.3	7.4	8.1	8.2	8.3	9.1	9.2	9.3	9.4	
●	●	●	●	●	●	○	○	○	○	●	●	●	●	●	○	○				●	●	●	○	●	●	○	○				●	○	○	○	○



Solid Carbide HoleMaster Jobber Drills

High production precision drilling in multiple materials.

mm	DIN 6537L	# WORKS STD.	SOLID CARBIDE	5xD	TYPE UNI	140°	SPLIT POINT	h8	30°	COATED
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Diameter	Shank Diameter	Flute Length	Overall Length	Drilling Depth	Code	Diameter	Shank Diameter	Flute Length	Overall Length	Drilling Depth	Code
#1	4	9	38	7	01HJ0100A	7	8	53	91	43	01HJ0700A
#1.5	4	12	45	9	01HJ0150A	7.5	8	53	91	43	01HJ0750A
#2	4	18	52	13	01HJ0200A	8	8	53	91	43	01HJ0800A
#2.5	4	22	56	17	01HJ0250A	8.5	10	61	103	49	01HJ0850A
3	6	28	66	23	01HJ0300A	9	10	61	103	49	01HJ0900A
3.3	6	28	66	23	01HJ0330A	9.5	10	61	103	49	01HJ0950A
3.5	6	28	66	23	01HJ0350A	10	10	61	103	49	01HJ1000A
4	6	36	74	29	01HJ0400A	10.2	12	71	118	56	01HJ1020A
4.2	6	36	74	29	01HJ0420A	10.5	12	71	118	56	01HJ1050A
4.5	6	36	74	29	01HJ0450A	11	12	71	118	56	01HJ1100A
5	6	44	82	35	01HJ0500A	11.5	12	71	118	56	01HJ1150A
5.5	6	44	82	35	01HJ0550A	12	12	71	118	56	01HJ1200A
6	6	44	82	35	01HJ0600A	12.5	14	77	124	60	01HJ1250A
6.5	8	53	91	43	01HJ0650A	13	14	77	124	60	01HJ1300A
6.8	8	53	91	43	01HJ0680A	14	14	77	124	60	01HJ1400A



Solid Carbide HoleMaster Stub Drills

High production precision drilling in multiple materials.

mm	DIN 6537K	# WORKS STD.	SOLID CARBIDE	3xD	TYPE UNI	140°	SPLIT POINT	h8	30°	COATED
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Diameter	Shank Diameter	Flute Length	Overall Length	Drilling Depth	Code	Diameter	Shank Diameter	Flute Length	Overall Length	Drilling Depth	Code
#1	4	7	35	6	01HS0100A	5.5	6	28	66	20	01HS0550A
#1.5	4	9	40	7	01HS0150A	6	6	28	66	20	01HS0600A
#2	4	13	45	10	01HS0200A	6.5	8	34	79	24	01HS0650A
#2.5	4	15	50	12	01HS0250A	6.8	8	34	79	24	01HS0680A
3	6	20	62	14	01HS0300A	7	8	34	79	24	01HS0700A
3.3	6	20	62	14	01HS0330A	7.5	8	41	79	29	01HS0750A
3.5	6	20	62	14	01HS0350A	8	8	41	79	29	01HS0800A
4	6	24	66	17	01HS0400A	8.5	10	47	89	35	01HS0850A
4.2	6	24	66	17	01HS0420A	9	10	47	89	35	01HS0900A
4.5	6	24	66	17	01HS0450A	9.5	10	47	89	35	01HS0950A
5	6	28	66	20	01HS0500A						

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CUTTING DATA

- Recommended
- Suitable

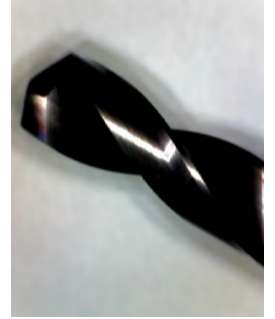
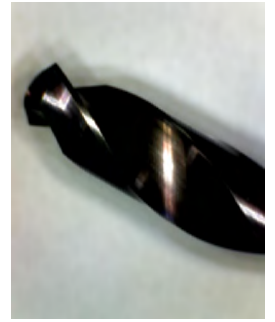
Parameters based on ideal conditions. Please adjust parameters accordingly to real applications.

	Material	Ø	Vc m/min	1	2	3	4	5	6	8	10	12	15
				F (mm/rev.)	F (mm/rev.)	F (mm/rev.)	F (mm/rev.)	F (mm/rev.)	F (mm/rev.)	F (mm/rev.)	F (mm/rev.)	F (mm/rev.)	F (mm/rev.)
P	● 1.1 Free Cutting Steel	< 120 HB	125	0.029-0.048	0.052-0.086	0.075-0.125	0.086-0.144	0.098-0.163	0.115-0.191	0.150-0.250	0.188-0.313	0.210-0.350	0.233-0.388
	● 1.2 Structural Steel	< 200 HB	110	0.029-0.048	0.052-0.086	0.075-0.125	0.086-0.144	0.098-0.163	0.115-0.191	0.150-0.250	0.188-0.313	0.210-0.350	0.233-0.388
	● 1.3 Plain Carbon Steel	< 250 HB	90	0.029-0.048	0.052-0.086	0.075-0.125	0.086-0.144	0.098-0.163	0.115-0.191	0.150-0.250	0.188-0.313	0.210-0.350	0.233-0.388
	● 1.4 Alloy Steel	< 250 HB	80	0.029-0.048	0.052-0.086	0.075-0.125	0.086-0.144	0.098-0.163	0.115-0.191	0.150-0.250	0.188-0.313	0.210-0.350	0.233-0.388
	● 1.5 Low Alloy Steel	250 - 350 HB	60	0.029-0.048	0.052-0.086	0.075-0.125	0.086-0.144	0.098-0.163	0.115-0.191	0.150-0.250	0.188-0.313	0.210-0.350	0.233-0.388
	● 1.6 Low Alloy Steel	> 350 HB	50	0.020-0.033	0.036-0.060	0.053-0.088	0.060-0.100	0.068-0.113	0.080-0.134	0.105-0.175	0.128-0.213	0.150-0.250	0.167-0.279
M	○ 2.1 Free Machining Stainless Steel	< 250 HB	45	0.020-0.033	0.036-0.060	0.053-0.088	0.060-0.100	0.068-0.113	0.080-0.134	0.105-0.175	0.128-0.213	0.150-0.250	0.167-0.279
	○ 2.2 Austenitic Stainless Steel	< 320 HB	40	0.011-0.019	0.021-0.035	0.030-0.050	0.038-0.063	0.045-0.075	0.053-0.088	0.068-0.113	0.083-0.138	0.098-0.163	0.120-0.200
	○ 2.3 Ferritic and Martensitic Stainless Steel	< 300 HB	35	0.011-0.019	0.021-0.035	0.030-0.050	0.038-0.063	0.045-0.075	0.053-0.088	0.068-0.113	0.083-0.138	0.098-0.163	0.120-0.200
	● 3.1 Lamellar Graphite Cast Iron	< 150 HB	90	0.037-0.061	0.067-0.111	0.098-0.163	0.113-0.188	0.128-0.213	0.150-0.250	0.195-0.325	0.248-0.413	0.285-0.475	0.314-0.523
	● 3.2 Lamellar Graphite Cast Iron	150 - 300 HB	90	0.037-0.061	0.067-0.111	0.098-0.163	0.113-0.188	0.128-0.213	0.150-0.250	0.195-0.325	0.248-0.413	0.285-0.475	0.314-0.523
K	● 3.3 Nodular Graphite, Malleable Cast Iron	< 200 HB	70	0.029-0.048	0.052-0.086	0.075-0.125	0.086-0.144	0.098-0.163	0.115-0.191	0.150-0.250	0.188-0.313	0.210-0.350	0.233-0.388
	● 3.4 Nodular Graphite, Malleable Cast Iron	200 - 300 HB	70	0.029-0.048	0.052-0.086	0.075-0.125	0.086-0.144	0.098-0.163	0.115-0.191	0.150-0.250	0.188-0.313	0.210-0.350	0.233-0.388
	● 4.1 Titanium unalloyed	< 200 HB	50	0.020-0.033	0.036-0.060	0.053-0.088	0.060-0.100	0.068-0.113	0.080-0.134	0.105-0.175	0.128-0.213	0.150-0.250	0.167-0.279
	○ 4.2 Titanium alloyed	< 270 HB	40	0.020-0.033	0.036-0.060	0.053-0.088	0.060-0.100	0.068-0.113	0.080-0.134	0.105-0.175	0.128-0.213	0.150-0.250	0.167-0.279
Ti	○ 4.3 Titanium alloyed	270 - 350 HB	35	0.011-0.019	0.021-0.035	0.030-0.050	0.038-0.063	0.045-0.075	0.053-0.088	0.068-0.113	0.083-0.138	0.098-0.163	0.120-0.200
	● 6.1 Copper	< 100 HB	100	0.029-0.048	0.052-0.086	0.075-0.125	0.086-0.144	0.098-0.163	0.115-0.191	0.150-0.250	0.188-0.313	0.210-0.350	0.233-0.388
	● 6.2 Beta Brass, Bronze	< 200 HB	200	0.029-0.048	0.052-0.086	0.075-0.125	0.086-0.144	0.098-0.163	0.115-0.191	0.150-0.250	0.188-0.313	0.210-0.350	0.233-0.388
Cu	● 6.3 Alpha Brass	< 200 HB	200	0.029-0.048	0.052-0.086	0.075-0.125	0.086-0.144	0.098-0.163	0.115-0.191	0.150-0.250	0.188-0.313	0.210-0.350	0.233-0.388
	● 6.4 High Strength Bronze	< 470 HB	80	0.020-0.033	0.036-0.060	0.053-0.088	0.060-0.100	0.068-0.113	0.080-0.134	0.105-0.175	0.128-0.213	0.150-0.250	0.167-0.279
N	○ 7.1 Aluminium Magnesium unalloyed	< 100 HB	225	0.037-0.061	0.067-0.111	0.098-0.163	0.113-0.188	0.128-0.213	0.150-0.250	0.195-0.325	0.248-0.413	0.285-0.475	0.314-0.523
	● 7.2 Aluminium Alloy ≤ 5% Si	< 150 HB	225	0.037-0.061	0.067-0.111	0.098-0.163	0.113-0.188	0.128-0.213	0.150-0.250	0.195-0.325	0.248-0.413	0.285-0.475	0.314-0.523
	○ 7.3 Aluminium Alloy 5 to 10% Si	< 120 HB	180	0.029-0.048	0.052-0.086	0.075-0.125	0.086-0.144	0.098-0.163	0.115-0.191	0.150-0.250	0.188-0.313	0.210-0.350	0.233-0.388
	○ 7.4 Aluminium Alloy > 10% Si	< 120 HB	120	0.029-0.048	0.052-0.086	0.075-0.125	0.086-0.144	0.098-0.163	0.115-0.191	0.150-0.250	0.188-0.313	0.210-0.350	0.233-0.388
H	● 9.1 Hardened Steel	< 32 HRC	20	0.011-0.019	0.021-0.035	0.030-0.050	0.038-0.063	0.045-0.075	0.053-0.088	0.068-0.113	0.083-0.138	0.098-0.163	0.120-0.200
	○ 9.2 Hardened Steel	33 - 41 HRC	15	0.011-0.019	0.021-0.035	0.030-0.050	0.038-0.063	0.045-0.075	0.053-0.088	0.068-0.113	0.083-0.138	0.098-0.163	0.120-0.200
	○ 9.3 Hardened Steel	42 - 50 HRC	15	0.006-0.010	0.011-0.018	0.015-0.025	0.019-0.031	0.023-0.038	0.028-0.046	0.038-0.063	0.060-0.100	0.075-0.125	0.092-0.154

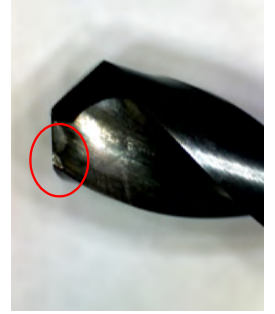
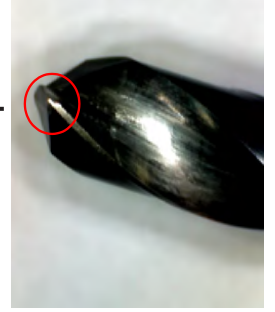
TEST RESULTS

10mm in M200 Alloy Steel drilling 5xD 50mm blind hole with coolant. Vc = 60m/min (1910rpm), Feed = 0.250mm/rev (477mm/min)

SOMTA after 400 holes



Competitor after 200 holes



Diameter	Shank Diameter	Flute Length	Overall Length	Drilling Depth	Code
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10	10	47	89	35	01HS1000A
10.2	12	55	102	40	01HS1020A
10.5	12	55	102	40	01HS1050A
11	12	55	102	40	01HS1100A

Diameter	Shank Diameter	Flute Length	Overall Length	Drilling Depth	Code
11.5	12	55	102	40	01HS1150A
12	12	55	102	40	01HS1200A
12.5	14	60	107	43	01HS1250A
13	14	60	107	43	01HS1300A
14	14	60	107	43	01HS1400A



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