



SUMITOMO

CARBIDE - CBN - DIAMOND

GS Solid Carbide Drill Series



High Performance Drilling Systems

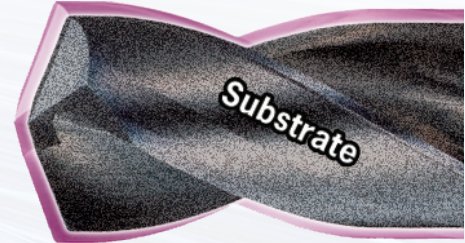
The **G**lobal Standard in solid carbide drills





Arriving 2010!

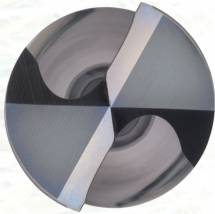
Newly developed PVD DEX coating provides improved heat and wear resistance at increased speeds.



DEX coating



Longer flute lengths for deeper hole capability and more material available for regrinding.



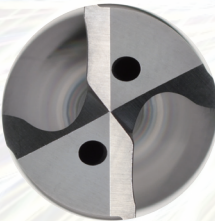
5XD

GS Series - External Coolant:

- GS2 (2XD) - Possible to drill to 3XD*
- GS4 (4XD) - Possible to drill to 5XD*



GS4



7XD

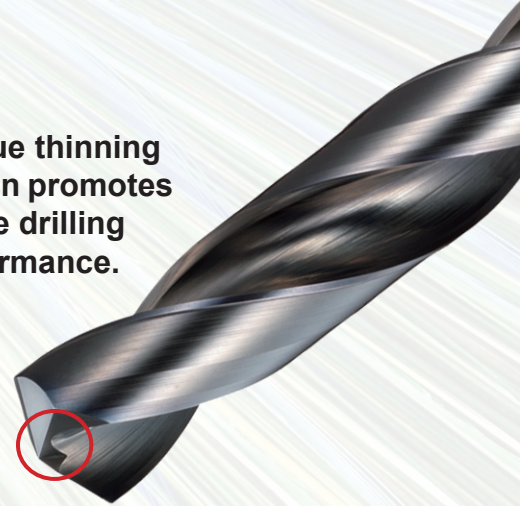
HGS Series - Internal Coolant:

- HGS3 (3XD) - Possible to drill to 4XD*
- HGS5 (5XD) - Possible to drill to 7XD*
- HGS8 (8XD) - Possible to drill to 10XD*

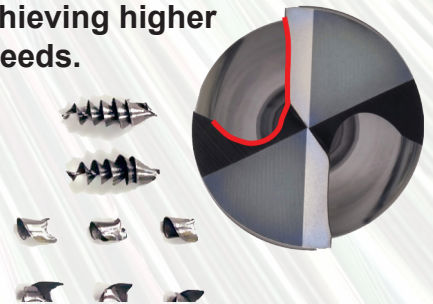


HGS5

Unique thinning design promotes stable drilling performance.



J-Flute design offers a wide chip pocket, producing more compact chips while achieving higher speeds.



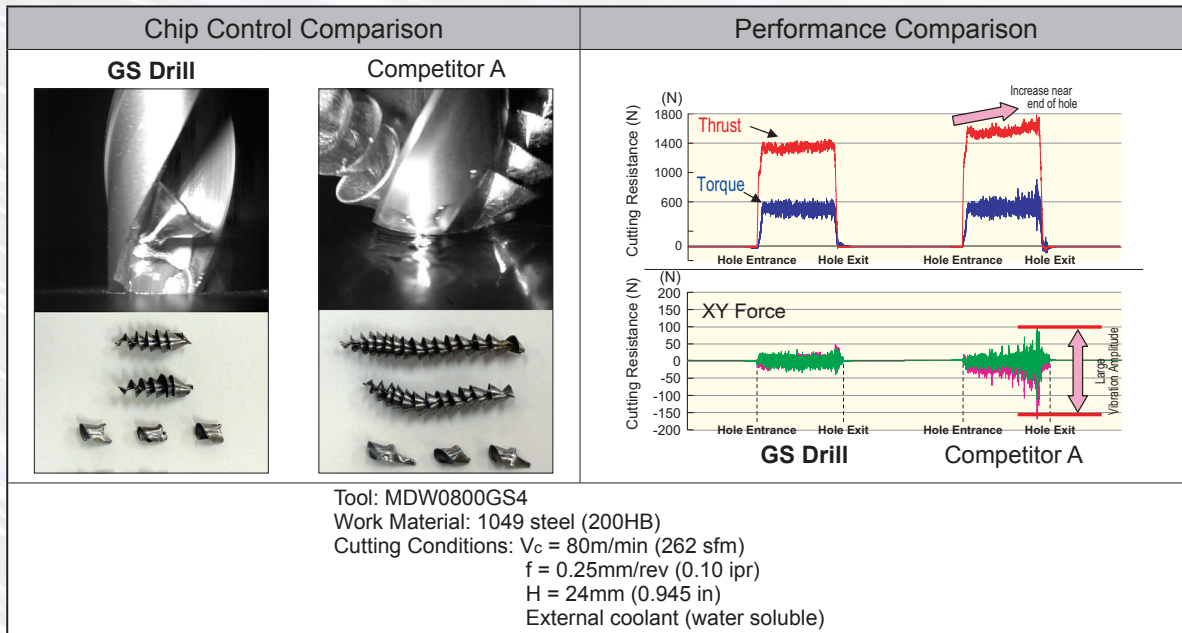
* Not all drills can achieve this depth and some drills may have even deeper capability. Always check for sufficient flute length.



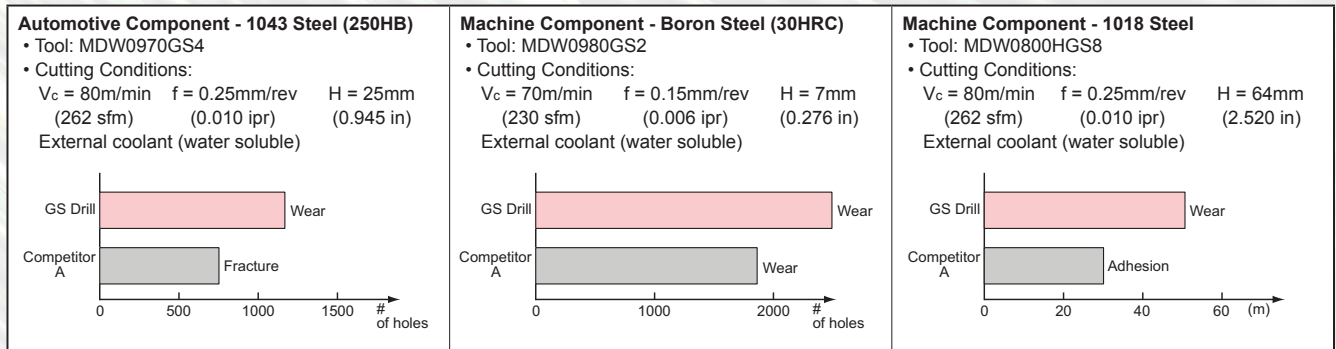
■ Features & Benefits

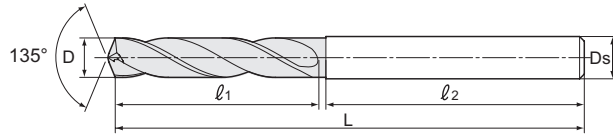
- **Long Tool Life**
New cutting edge design and special DEX coating provide long tool life in a wide variety of work materials
- **Stable Chip Evacuation**
New flute design and wide chip pocket allows for excellent chip management and evacuation
- **Quiet Cutting & Stable Cutting**
Stable drilling with minimal vibration even in small machine applications
- **Environmentally Friendly**
Compatible with MQL (Minimum Quantity Lubrication) Systems

■ Performance



■ Application Examples





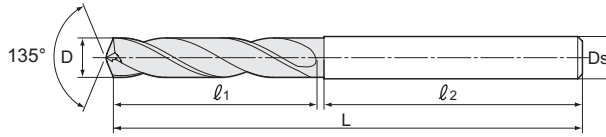
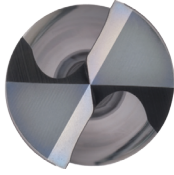
MDW-GS2 2XD drill for excellent chip management and long tool life (External coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length l_1 (in/mm)	Shank Length l_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW0200GS2	★		0.0787	2.00	45.0	8.0	34.0	3.0	
MDW0210GS2	★		0.0827	2.10	45.0	10.0	32.0	3.0	3-56
MDW0220GS2	★		0.0866	2.20	45.0	10.0	32.0	3.0	
MDW0230GS2	★		0.0906	2.30	45.0	10.0	32.0	3.0	
MDW00938GS2	●	3/32	0.0938	2.38	1.7717	0.3937	1.260	0.1250	
MDW0240GS2	★		0.0945	2.40	45.0	10.0	32.0	3.0	
MDW0250GS2	★		0.0984	2.50	45.0	10.0	32.0	3.0	
MDW0260GS2	★		0.1024	2.60	45.0	13.0	30.0	3.0	
MDW0270GS2	★		0.1063	2.70	45.0	13.0	30.0	3.0	6-32
MDW0280GS2	●		0.1102	2.80	45.0	13.0	30.0	3.0	
MDW01110GS2	●		0.1110	2.82	1.7717	0.5118	1.1811	0.1250	
MDW01130GS2	●		0.1130	2.87	1.7717	0.5118	1.1811	0.1250	6-40
MDW0290GS2	★		0.1142	2.90	45.0	13.0	30.0	3.0	3.5x.6
MDW01160GS2	●		0.1160	2.95	1.7717	0.5118	1.1811	0.1250	
MDW0300GS2	●		0.1181	3.00	45.0	13.0	30.0	3.0	
MDW01200GS2	●		0.1200	3.05	1.7717	0.5118	1.1811	0.1250	
MDW0310GS2	★		0.1220	3.10	54.0	19.0	33.0	4.0	
MDW01250GS2	●	1/8	0.1250	3.18	1.7717	0.5118	1.1811	0.1250	
MDW0320GS2	●		0.1260	3.20	54.0	19.0	33.0	4.0	
MDW01285GS2	●		0.1285	3.26	2.1260	0.7480	1.2992	0.1562	
MDW0330GS2	★		0.1299	3.30	54.0	19.0	33.0	4.0	M4x.7
MDW0340GS2	★		0.1339	3.40	54.0	19.0	33.0	4.0	
MDW01360GS2	●		0.1360	3.45	2.1260	0.7480	1.2992	0.1562	8-32/8-36
MDW0350GS2	●		0.1378	3.50	54.0	19.0	33.0	4.0	
MDW01405GS2	●		0.1405	3.57	2.1260	0.8268	1.2992	0.1562	
MDW01406GS2	●		0.1406	3.57	2.1260	0.8268	1.2992	0.1562	
MDW0360GS2	●		0.1417	3.60	54.0	21.0	33.0	4.0	
MDW01440GS2	●		0.1440	3.66	2.1260	0.8268	1.2992	0.1562	
MDW0370GS2	★		0.1457	3.70	54.0	21.0	33.0	4.0	M4.5x.7
MDW01470GS2	●		0.1470	3.73	2.1260	0.8268	1.2992	0.1562	
MDW01495GS2	●		0.1495	3.797	2.1260	0.8268	1.2992	0.1562	10-24
MDW0380GS2	★		0.1496	3.80	54.0	21.0	33.0	4.0	
MDW01520GS2	●		0.1520	3.86	2.1260	0.8268	1.2992	0.1562	
MDW0390GS2	★		0.1535	3.90	54.0	21.0	33.0	4.0	
MDW01540GS2	●		0.1540	3.91	2.1260	0.8268	1.2992	0.1562	
MDW01562GS2	●	5/32	0.1562	3.97	2.1260	0.8268	1.2992	0.1562	
MDW01570GS2	●		0.1570	3.99	2.4016	0.9055	1.4173	0.1875	
MDW0400GS2	●		0.1575	4.00	54.0	21.0	33.0	4.0	
MDW01590GS2	●	#21	0.1590	4.04	2.4016	0.9055	1.4173	0.1875	10-32
MDW01610GS2	●		0.1610	4.09	2.4016	0.9055	1.4173	0.1875	
MDW0410GS2	●		0.1614	4.10	61.0	23.0	36.0	5.0	
MDW0420GS2	★		0.1654	4.20	61.0	23.0	36.0	5.0	M5x.8
MDW01660GS2	●		0.1660	4.22	2.4016	0.9055	1.4173	0.1875	
MDW0430GS2	★		0.1693	4.30	61.0	23.0	36.0	5.0	
MDW01695GS2	●		0.1695	4.31	2.4016	0.9055	1.4173	0.1875	
MDW01719GS2	●	11/64	0.1719	4.37	2.4016	0.9055	1.4173	0.1875	
MDW01730GS2	●		0.1730	4.39	2.4016	0.9055	1.4173	0.1875	
MDW0440GS2	★		0.1732	4.40	61.0	23.0	36.0	5.0	
MDW01770GS2	●		0.1770	4.49	2.4016	0.9055	1.4173	0.1875	12-24

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Some drills can achieve greater depths. Always check for sufficient flute length. Note: Special diameters available upon request.

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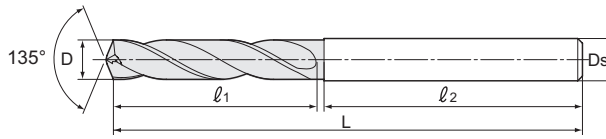
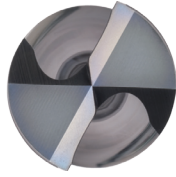
MDW-GS2 2XD drill for excellent chip management and long tool life (External coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length l_1 (in/mm)	Shank Length l_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW0450GS2	●		0.1772	4.50	61.0	23.0	36.0	5.0	
MDW01800GS2	●		0.1800	4.57	2.4016	0.9843	1.4173	0.1875	
MDW0460GS2	●		0.1811	4.60	61.0	25.0	36.0	5.0	
MDW01820GS2	●		0.1820	4.62	2.4016	0.9843	1.4173	0.1875	12-28
MDW01850GS2	●		0.1850	4.70	2.4016	0.9843	1.4173	0.1875	
MDW0470GS2	★		0.1850	4.70	61.0	25.0	36.0	5.0	
MDW01875GS2	●	3/16	0.1875	4.76	2.4016	0.9843	1.4173	0.1875	
MDW0480GS2	●		0.1890	4.80	61.0	25.0	36.0	5.0	
MDW01890GS2	●		0.1890	4.80	2.5591	0.9843	1.4961	0.2344	
MDW01910GS2	●		0.1910	4.85	2.5591	0.9843	1.4961	0.2344	
MDW0490GS2	★		0.1929	4.90	61.0	25.0	36.0	5.0	
MDW01935GS2	●		0.1935	4.91	2.5591	0.9843	1.4961	0.2344	
MDW01960GS2	●		0.1960	4.98	2.5591	0.9843	1.4961	0.2344	
MDW0500GS2	●		0.1969	5.00	61.0	25.0	36.0	5.0	M6x1
MDW0510GS2	★		0.2008	5.10	65.0	25.0	38.0	6.0	
MDW02010GS2	●	#7	0.2010	5.11	2.5591	0.9843	1.4961	0.2344	1/4-20
MDW02031GS2	●	13/64	0.2031	5.16	2.5591	0.9843	1.4961	0.2344	
MDW02040GS2	●		0.2040	5.18	2.5591	0.9843	1.4961	0.2344	
MDW0520GS2	★		0.2047	5.20	65.0	25.0	38.0	6.0	
MDW02055GS2	●		0.2055	5.22	2.5591	0.9843	1.4961	0.2344	
MDW0530GS2	★		0.2087	5.30	65.0	25.0	38.0	6.0	
MDW02090GS2	●		0.2090	5.31	2.5591	0.9843	1.4961	0.2344	
MDW0540GS2	●		0.2126	5.40	65.0	25.0	38.0	6.0	
MDW02130GS2	●	#3	0.2130	5.41	2.5591	0.9843	1.4961	0.2344	
MDW0550GS2	●		0.2165	5.50	65.0	25.0	38.0	6.0	
MDW02188GS2	●	7/32	0.2188	5.56	2.5591	1.0630	1.4961	0.2344	1/4-28
MDW0560GS2	●		0.2205	5.60	65.0	27.0	38.0	6.0	
MDW02210GS2	●	#2	0.2210	5.61	2.5591	1.0630	1.4961	0.2344	
MDW0570GS2	★		0.2244	5.70	65.0	27.0	38.0	6.0	
MDW02280GS2	●		0.2280	5.79	2.5591	1.0630	1.4961	0.2344	
MDW0580GS2	★		0.2283	5.80	65.0	27.0	38.0	6.0	
MDW0590GS2	★		0.2323	5.90	65.0	27.0	38.0	6.0	
MDW02340GS2	●		0.2340	5.94	2.5591	1.0630	1.4961	0.2344	
MDW02344GS2	●	15/64	0.2344	5.95	2.5591	1.0630	1.4961	0.2344	
MDW0600GS2	●		0.2362	6.00	65.0	27.0	38.0	6.0	M7x1
MDW02380GS2	●		0.2380	6.05	2.8740	1.2205	1.5748	0.2812	
MDW0610GS2	★		0.2402	6.10	73.0	31.0	40.0	7.0	
MDW02420GS2	●	#C	0.2420	6.15	2.8740	1.2205	1.5748	0.2812	
MDW0620GS2	★		0.2441	6.20	73.0	31.0	40.0	7.0	
MDW02460GS2	●		0.2460	6.25	2.8740	1.2205	1.5748	0.2812	
MDW0630GS2	★		0.2480	6.30	73.0	31.0	40.0	7.0	
MDW02500GS2	●	1/4	0.2500	6.35	2.8740	1.2205	1.5748	0.2812	
MDW0640GS2	★		0.2520	6.40	73.0	31.0	40.0	7.0	
MDW0650GS2	●		0.2559	6.50	73.0	31.0	40.0	7.0	
MDW02570GS2	●	#F	0.2570	6.53	2.8740	1.2992	1.5748	0.2812	5/16-18
MDW0660GS2	★		0.2598	6.60	73.0	33.0	40.0	7.0	
MDW02600GS2	●		0.2600	6.604	2.8740	1.2992	1.5748	0.2812	
MDW02610GS2	●		0.2610	6.63	2.8740	1.2992	1.5748	0.2812	

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Some drills can achieve greater depths. Always check for sufficient flute length. Note: Special diameters available upon request.

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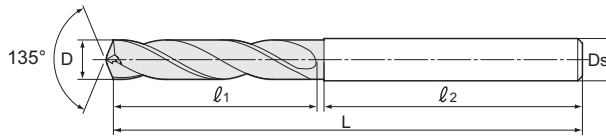
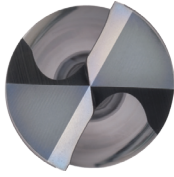
MDW-GS2 2XD drill for excellent chip management and long tool life (External coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length ℓ_1 (in/mm)	Shank Length ℓ_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW0670GS2	★		0.2638	6.70	73.0	33.0	40.0	7.0	
MDW02656GS2	●	17/64	0.2656	6.75	2.8740	1.2992	1.5748	0.2812	
MDW02660GS2	●	#H	0.2660	6.76	2.8740	1.2992	1.5748	0.2812	
MDW02677GS2	●		0.2677	6.80	2.8740	1.2992	1.5748	0.2812	
MDW0680GS2	★		0.2677	6.80	73.0	33.0	40.0	7.0	
MDW0690GS2	★		0.2717	6.90	73.0	33.0	40.0	7.0	
MDW02720GS2	●	#I	0.2720	6.91	2.8740	1.2992	1.5748	0.2812	5/16-24
MDW0700GS2	●		0.2756	7.00	73.0	33.0	40.0	7.0	
MDW02756GS2	●		0.2756	7.00	2.8740	1.2992	1.5748	0.2812	
MDW02770GS2	●	#J	0.2770	7.04	2.8740	1.2992	1.5748	0.2812	
MDW0710GS2	★		0.2795	7.10	78.0	33.0	43.0	8.0	
MDW02810GS2	●		0.2810	7.14	2.8740	1.2992	1.5748	0.2812	
MDW02812GS2	●	9/32	0.2812	7.142	2.8740	1.2992	1.5748	0.2812	
MDW0720GS2	★		0.2835	7.20	78.0	33.0	43.0	8.0	
MDW0730GS2	★		0.2874	7.30	78.0	33.0	43.0	8.0	
MDW02900GS2	●		0.2900	7.37	3.0709	1.2992	1.6929	0.3125	
MDW0740GS2	★		0.2913	7.40	78.0	33.0	43.0	8.0	
MDW02950GS2	●		0.2950	7.49	3.0709	1.2992	1.6929	0.3125	
MDW0750GS2	●		0.2953	7.50	78.0	33.0	43.0	8.0	
MDW02969GS2	●	19/64	0.2969	7.54	3.0709	1.4173	1.6535	0.3125	
MDW0760GS2	★		0.2992	7.60	78.0	36.0	42.0	8.0	
MDW03020GS2	●		0.3020	7.67	3.0709	1.4173	1.6535	0.3125	
MDW0770GS2	★		0.3031	7.70	78.0	36.0	42.0	8.0	
MDW0780GS2	●		0.3071	7.80	78.0	36.0	42.0	8.0	M9x1.25
MDW0790GS2	★		0.3110	7.90	78.0	36.0	42.0	8.0	
MDW03125GS2	●	5/16	0.3125	7.94	3.0709	1.4173	1.6535	0.3125	3/8-16
MDW0800GS2	●		0.3150	8.00	78.0	36.0	42.0	8.0	
MDW03160GS2	●		0.3160	8.03	3.2283	1.4173	1.7323	0.3594	
MDW0810GS2	●		0.3189	8.10	82.0	36.0	44.0	9.0	
MDW0820GS2	★		0.3228	8.20	82.0	36.0	44.0	9.0	
MDW03230GS2	●	#P	0.3230	8.204	3.2283	1.4173	1.7323	0.3594	
MDW0830GS2	★		0.3268	8.30	82.0	36.0	44.0	9.0	
MDW03281GS2	●	21/64	0.3281	8.33	3.2283	1.4173	1.7323	0.3594	
MDW03307GS2	●		0.3307	8.40	3.2283	1.4173	1.7323	0.3594	
MDW0840GS2	★		0.3307	8.40	82.0	36.0	44.0	9.0	
MDW03320GS2	●	#Q	0.3320	8.43	3.2283	1.4173	1.7323	0.3594	
MDW0850GS2	●		0.3346	8.50	82.0	36.0	44.0	9.0	M10x1.5
MDW0860GS2	★		0.3386	8.60	82.0	38.0	44.0	9.0	
MDW03386GS2	●		0.3386	8.60	3.2283	1.4961	1.7323	0.3594	
MDW03390GS2	●		0.3390	8.61	3.2283	1.4961	1.7323	0.3594	3/8-24
MDW0870GS2	★		0.3425	8.70	82.0	38.0	44.0	9.0	
MDW03438GS2	●	11/32	0.3438	8.73	3.2283	1.4961	1.7323	0.3594	
MDW0880GS2	★		0.3465	8.80	82.0	38.0	44.0	9.0	
MDW03475GS2	●		0.3475	8.83	3.2283	1.4961	1.7323	0.3594	
MDW03480GS2	●		0.3480	8.84	3.2283	1.4961	1.7323	0.3594	
MDW0890GS2	★		0.3504	8.90	82.0	38.0	44.0	9.0	
MDW0900GS2	●		0.3543	9.00	82.0	38.0	44.0	9.0	
MDW03580GS2	●		0.3580	9.09	3.2283	1.4961	1.7323	0.3594	

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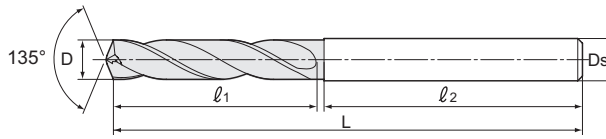
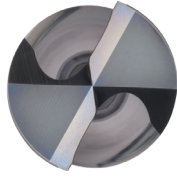
MDW-GS2 2XD drill for excellent chip management and long tool life (External coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length l_1 (in/mm)	Shank Length l_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW0910GS2	★		0.3583	9.10	87.0	38.0	47.0	10.0	
MDW03594GS2	●	23/64	0.3594	9.13	3.2283	1.4961	1.7323	0.3594	
MDW0920GS2	★		0.3622	9.20	87.0	38.0	47.0	10.0	
MDW0930GS2	★		0.3661	9.30	87.0	38.0	47.0	10.0	
MDW03680GS2	●	#U	0.3680	9.35	3.4252	1.4961	1.8504	0.3906	7/16-14
MDW0940GS2	★		0.3701	9.40	87.0	38.0	47.0	10.0	
MDW0950GS2	★		0.3740	9.50	87.0	38.0	47.0	10.0	
MDW03750GS2	●	3/8	0.3750	9.53	3.4252	1.6142	1.8110	0.3906	
MDW03770GS2	●		0.3770	9.58	3.4252	1.6142	1.8110	0.3906	
MDW0960GS2	★		0.3780	9.60	87.0	41.0	46.0	10.0	
MDW03780GS2	●		0.3780	9.60	3.4252	1.6142	1.8110	0.3906	
MDW0970GS2	●		0.3819	9.70	87.0	41.0	46.0	10.0	
MDW0980GS2	★		0.3858	9.80	87.0	41.0	46.0	10.0	
MDW03860GS2	●		0.3860	9.804	3.4252	1.6142	1.8110	0.3906	
MDW0990GS2	★		0.3898	9.90	87.0	41.0	46.0	10.0	
MDW03906GS2	●	25/64	0.3906	9.92	3.4252	1.6142	1.8110	0.3906	7/16-20
MDW1000GS2	●		0.3937	10.00	87.0	41.0	46.0	10.0	
MDW03970GS2	●		0.3970	10.08	3.6614	1.6142	1.9685	0.4375	
MDW1010GS2	★		0.3976	10.10	93.0	41.0	50.0	11.0	
MDW1020GS2	★		0.4016	10.20	93.0	41.0	50.0	11.0	M12x1.75
MDW04040GS2	●		0.4040	10.26	3.6614	1.6142	1.9685	0.4375	
MDW1030GS2	★		0.4055	10.30	93.0	41.0	50.0	11.0	
MDW04062GS2	●	13/32	0.4062	10.32	3.6614	1.6142	1.9685	0.4375	
MDW1040GS2	★		0.4094	10.40	93.0	41.0	50.0	11.0	
MDW04130GS2	●		0.4130	10.49	3.6614	1.6142	1.9685	0.4375	
MDW1050GS2	●		0.4134	10.50	93.0	41.0	50.0	11.0	
MDW1060GS2	★		0.4173	10.60	93.0	45.0	48.0	11.0	
MDW1070GS2	★		0.4213	10.70	93.0	45.0	48.0	11.0	
MDW04219GS2	●	27/64	0.4219	10.72	3.6614	1.7717	1.8898	0.4375	1/2-13
MDW1080GS2	★		0.4252	10.80	93.0	45.0	48.0	11.0	
MDW1090GS2	★		0.4291	10.90	93.0	45.0	48.0	11.0	
MDW1100GS2	●		0.4331	11.00	93.0	45.0	48.0	11.0	
MDW1110GS2	★		0.4370	11.10	100.0	45.0	53.0	12.0	
MDW04375GS2	●	7/16	0.4375	11.11	3.6614	1.7717	1.8898	0.4375	
MDW1120GS2	★		0.4409	11.20	100.0	45.0	53.0	12.0	
MDW1130GS2	★		0.4449	11.30	100.0	45.0	53.0	12.0	
MDW1140GS2	★		0.4488	11.40	100.0	45.0	53.0	12.0	
MDW1150GS2	★		0.4528	11.50	100.0	45.0	53.0	12.0	
MDW04531GS2	●	29/64	0.4531	11.51	3.9370	1.8504	2.0866	0.4688	1/2-20
MDW1160GS2	★		0.4567	11.60	100.0	47.0	53.0	12.0	
MDW04570GS2	●		0.4570	11.61	3.9370	1.8504	2.0866	0.4688	
MDW1170GS2	★		0.4606	11.70	100.0	47.0	53.0	12.0	
MDW1180GS2	★		0.4646	11.80	100.0	47.0	53.0	12.0	
MDW1190GS2	★		0.4685	11.90	100.0	47.0	53.0	12.0	
MDW04688GS2	●	15/32	0.4688	11.91	3.9370	1.8504	2.0866	0.4688	
MDW1200GS2	●		0.4724	12.00	100.0	47.0	53.0	12.0	M14x2
MDW1210GS2	★		0.4764	12.10	100.0	47.0	51.0	13.0	
MDW1220GS2	★		0.4803	12.20	100.0	47.0	51.0	13.0	

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Some drills can achieve greater depths. Always check for sufficient flute length. Note: Special diameters available upon request.

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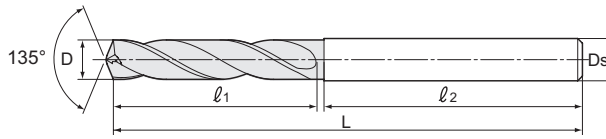
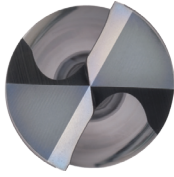
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MDW-GS2 2XD drill for excellent chip management and long tool life (External coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length l_1 (in/mm)	Shank Length l_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW1230GS2	★		0.4843	12.30	100.0	47.0	51.0	13.0	9/16-12
MDW04844GS2	●	31/64	0.4844	12.304	3.9370	1.8504	2.0079	0.5156	
MDW1240GS2	★		0.4882	12.40	100.0	47.0	51.0	13.0	
MDW1250GS2	●		0.4921	12.50	100.0	47.0	51.0	13.0	
MDW1260GS2	★		0.4961	12.60	100.0	49.0	51.0	13.0	
MDW1270GS2	★	1/2	0.5000	12.70	100.0	49.0	51.0	13.0	
MDW05000GS2	●	1/2	0.5000	12.70	3.9370	1.9291	2.0079	0.5156	
MDW1280GS2	★		0.5039	12.80	100.0	49.0	51.0	13.0	
MDW05050GS2	●		0.5050	12.83	3.9370	1.9291	2.0079	0.5156	
MDW1290GS2	★		0.5079	12.90	100.0	49.0	51.0	13.0	
MDW1300GS2	●		0.5118	13.00	100.0	49.0	51.0	13.0	
MDW05156GS2	●	33/64	0.5156	13.09	3.9370	1.9291	2.0079	0.5156	9/16-18
MDW1310GS2	★		0.5157	13.10	105.0	50.0	53.0	14.0	
MDW1320GS2	★		0.5197	13.20	105.0	50.0	53.0	14.0	
MDW1330GS2	★		0.5236	13.30	105.0	50.0	53.0	14.0	
MDW1340GS2	★		0.5276	13.40	105.0	50.0	53.0	14.0	
MDW05312GS2	●	17/32	0.5312	13.49	4.1339	1.9685	2.0866	0.5469	5/8-11
MDW1350GS2	●		0.5315	13.50	105.0	50.0	53.0	14.0	
MDW1360GS2	★		0.5354	13.60	105.0	52.0	53.0	14.0	
MDW1370GS2	★		0.5394	13.70	105.0	52.0	53.0	14.0	
MDW1380GS2	★		0.5433	13.80	105.0	52.0	53.0	14.0	
MDW05469GS2	●	35/64	0.5469	13.89	4.1339	2.0472	2.0866	0.5469	M16x2
MDW1390GS2	★		0.5472	13.90	105.0	52.0	53.0	14.0	
MDW1400GS2	●		0.5512	14.00	105.0	52.0	53.0	14.0	
MDW1410GS2	★		0.5551	14.10	108.0	52.0	55.0	15.0	
MDW1420GS2	★		0.5591	14.20	108.0	52.0	55.0	15.0	
MDW05625GS2	●	9/16	0.5625	14.29	4.2520	2.0472	2.1654	0.5937	
MDW1430GS2	★		0.5630	14.30	108.0	52.0	55.0	15.0	
MDW1440GS2	★		0.5669	14.40	108.0	52.0	55.0	15.0	
MDW1450GS2	●		0.5709	14.50	108.0	52.0	55.0	15.0	
MDW1460GS2	★		0.5748	14.60	108.0	53.0	55.0	15.0	
MDW05781GS2	●	37/64	0.5781	14.68	4.2520	2.0866	2.1654	0.5937	5/8-18
MDW1470GS2	★		0.5787	14.70	108.0	53.0	55.0	15.0	
MDW1480GS2	★		0.5827	14.80	108.0	53.0	55.0	15.0	
MDW1490GS2	★		0.5866	14.90	108.0	53.0	55.0	15.0	
MDW1500GS2	●		0.5906	15.00	108.0	53.0	55.0	15.0	
MDW05937GS2	●	19/32	0.5937	15.08	4.2520	2.0866	2.1654	0.5937	
MDW1510GS2	★		0.5945	15.10	112.0	53.0	57.0	16.0	
MDW1520GS2	★		0.5984	15.20	112.0	53.0	57.0	16.0	
MDW1530GS2	★		0.6024	15.30	112.0	53.0	57.0	16.0	
MDW1540GS2	★		0.6063	15.40	112.0	53.0	57.0	16.0	
MDW06094GS2	●	39/64	0.6094	15.48	4.4094	2.0866	2.2441	0.6250	11/16-12
MDW1550GS2	★		0.6102	15.50	112.0	53.0	57.0	16.0	M18x2.5
MDW1560GS2	★		0.6142	15.60	112.0	55.0	57.0	16.0	
MDW1570GS2	★		0.6181	15.70	112.0	55.0	57.0	16.0	
MDW1580GS2	★		0.6220	15.80	112.0	55.0	57.0	16.0	
MDW06250GS2	●	5/8	0.6250	15.88	4.4094	2.1654	2.2441	0.6250	11/16-16
MDW1590GS2	★		0.6260	15.90	112.0	55.0	57.0	16.0	
MDW1600GS2	●		0.6299	16.00	112.0	55.0	57.0	16.0	

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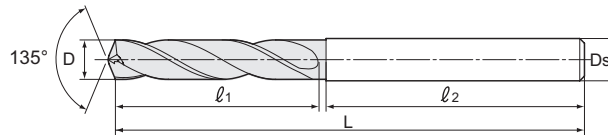
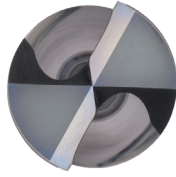
MDW-GS4 4XD drill for excellent chip management and long tool life (External coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length l_1 (in/mm)	Shank Length l_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW0200GS4	★		0.0787	2.00	49.0	15.0	31.0	3.0	
MDW0210GS4	★		0.0827	2.10	49.0	17.0	30.0	3.0	3-56
MDW0220GS4	★		0.0866	2.20	49.0	17.0	30.0	3.0	
MDW0230GS4	★		0.0906	2.30	49.0	17.0	30.0	3.0	
MDW0240GS4	★		0.0945	2.40	49.0	17.0	30.0	3.0	
MDW0250GS4	★		0.0984	2.50	49.0	17.0	30.0	3.0	
MDW0260GS4	★		0.1024	2.60	49.0	19.0	30.0	3.0	
MDW0270GS4	★		0.1063	2.70	49.0	19.0	30.0	3.0	6-32
MDW0280GS4	★		0.1102	2.80	49.0	19.0	30.0	3.0	
MDW0290GS4	★		0.1142	2.90	49.0	19.0	30.0	3.0	3.5x.6
MDW0300GS4	★		0.1181	3.00	49.0	19.0	30.0	3.0	
MDW0310GS4	★		0.1220	3.10	60.0	24.0	34.0	4.0	
MDW0320GS4	★		0.1260	3.20	60.0	24.0	34.0	4.0	
MDW0330GS4	★		0.1299	3.30	60.0	24.0	34.0	4.0	M4x.7
MDW0340GS4	★		0.1339	3.40	60.0	24.0	34.0	4.0	
MDW0350GS4	★		0.1378	3.50	60.0	24.0	34.0	4.0	
MDW0360GS4	★		0.1417	3.60	60.0	27.0	33.0	4.0	
MDW0370GS4	★		0.1457	3.70	60.0	27.0	33.0	4.0	M4.5x.7
MDW0380GS4	★		0.1496	3.80	60.0	27.0	33.0	4.0	
MDW0390GS4	★		0.1535	3.90	60.0	27.0	33.0	4.0	
MDW0400GS4	★		0.1575	4.00	60.0	27.0	33.0	4.0	
MDW0410GS4	★		0.1614	4.10	76.0	31.0	43.0	5.0	
MDW0420GS4	★		0.1654	4.20	76.0	31.0	43.0	5.0	M5x.8
MDW0430GS4	★		0.1693	4.30	76.0	31.0	43.0	5.0	
MDW0440GS4	★		0.1732	4.40	76.0	31.0	43.0	5.0	
MDW0450GS4	★		0.1772	4.50	76.0	31.0	43.0	5.0	
MDW0460GS4	★		0.1811	4.60	76.0	38.0	38.0	5.0	
MDW0470GS4	★		0.1850	4.70	76.0	38.0	38.0	5.0	
MDW0480GS4	★		0.1890	4.80	76.0	38.0	38.0	5.0	
MDW0490GS4	★		0.1929	4.90	76.0	38.0	38.0	5.0	
MDW0500GS4	●		0.1969	5.00	76.0	38.0	38.0	5.0	M6x1
MDW0510GS4	★		0.2008	5.10	81.0	39.0	40.0	6.0	
MDW02010GS4	●	#7	0.2010	5.11	3.1890	1.5354	1.5748	0.2344	1/4-20
MDW0520GS4	●		0.2047	5.20	81.0	39.0	40.0	6.0	
MDW0530GS4	★		0.2087	5.30	81.0	39.0	40.0	6.0	
MDW0540GS4	★		0.2126	5.40	81.0	39.0	40.0	6.0	
MDW0550GS4	★		0.2165	5.50	81.0	39.0	40.0	6.0	
MDW0560GS4	★		0.2205	5.60	81.0	41.0	40.0	6.0	
MDW0570GS4	★		0.2244	5.70	81.0	41.0	40.0	6.0	
MDW0580GS4	★		0.2283	5.80	81.0	41.0	40.0	6.0	
MDW0590GS4	★		0.2323	5.90	81.0	41.0	40.0	6.0	
MDW0600GS4	●		0.2362	6.00	81.0	41.0	40.0	6.0	M7x1
MDW0610GS4	★		0.2402	6.10	83.0	42.0	40.0	7.0	
MDW0620GS4	★		0.2441	6.20	83.0	42.0	40.0	7.0	
MDW02460GS4	●		0.2460	6.25	3.2677	1.6535	1.5748	0.2812	
MDW0630GS4	★		0.2480	6.30	83.0	42.0	40.0	7.0	
MDW02500GS4	●	1/4	0.2500	6.35	3.2677	1.6535	1.5748	0.2812	
MDW0640GS4	★		0.2520	6.40	83.0	42.0	40.0	7.0	
MDW0650GS4	●		0.2559	6.50	83.0	42.0	40.0	7.0	
MDW02570GS4	●	#F	0.2570	6.53	3.2677	1.6929	1.5748	0.2812	5/16-18
MDW0660GS4	★		0.2598	6.60	83.0	43.0	40.0	7.0	
MDW02610GS4	●		0.2610	6.63	3.2677	1.6929	1.5748	0.2812	
MDW0670GS4	★		0.2638	6.70	83.0	43.0	40.0	7.0	

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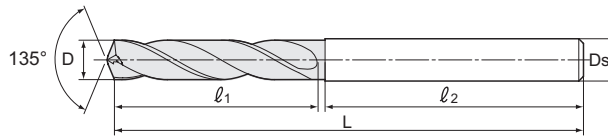
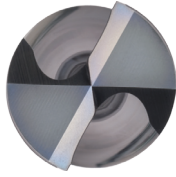
MDW-GS4 4XD drill for excellent chip management and long tool life (External coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length l_1 (in/mm)	Shank Length l_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW02656GS4	●	17/64	0.2656	6.75	3.2677	1.6929	1.5748	0.2812	
MDW02660GS4	●	#H	0.2660	6.76	3.2677	1.6929	1.5748	0.2812	
MDW0680GS4	★		0.2677	6.80	83.0	43.0	40.0	7.0	
MDW0690GS4	★		0.2717	6.90	83.0	43.0	40.0	7.0	
MDW02720GS4	●	#I	0.2720	6.91	3.2677	1.6929	1.5748	0.2812	5/16-24
MDW0700GS4	●		0.2756	7.00	83.0	43.0	40.0	7.0	
MDW02770GS4	●	#J	0.2770	7.04	3.2677	1.6929	1.5748	0.2812	
MDW0710GS4	★		0.2795	7.10	90.0	45.0	43.0	8.0	
MDW02810GS4	●		0.2810	7.14	3.2677	1.6929	1.5748	0.2812	
MDW02812GS4	●	9/32	0.2812	7.142	3.2677	1.6929	1.5748	0.2812	
MDW0720GS4	●		0.2835	7.20	90.0	45.0	43.0	8.0	
MDW0730GS4	★		0.2874	7.30	90.0	45.0	43.0	8.0	
MDW02900GS4	●		0.2900	7.37	3.5433	1.7717	1.6929	0.3125	
MDW0740GS4	★		0.2913	7.40	90.0	45.0	43.0	8.0	
MDW02950GS4	●		0.2950	7.49	3.5433	1.7717	1.6929	0.3125	
MDW0750GS4	★		0.2953	7.50	90.0	45.0	43.0	8.0	
MDW02969GS4	●	19/64	0.2969	7.54	3.5433	1.8898	1.6535	0.3125	
MDW0760GS4	★		0.2992	7.60	90.0	48.0	42.0	8.0	
MDW03020GS4	●		0.3020	7.67	3.5433	1.8898	1.6535	0.3125	
MDW0770GS4	★		0.3031	7.70	90.0	48.0	42.0	8.0	
MDW0780GS4	★		0.3071	7.80	90.0	48.0	42.0	8.0	M9x1.25
MDW0790GS4	★		0.3110	7.90	90.0	48.0	42.0	8.0	
MDW03125GS4	●	5/16	0.3125	7.94	3.5433	1.8898	1.6535	0.3125	3/8-16
MDW0800GS4	●		0.3150	8.00	90.0	48.0	42.0	8.0	
MDW03160GS4	●		0.3160	8.03	3.8583	2.0866	1.6929	0.3594	
MDW0810GS4	★		0.3189	8.10	98.0	53.0	43.0	9.0	
MDW0820GS4	★		0.3228	8.20	98.0	53.0	43.0	9.0	
MDW03230GS4	●	#P	0.3230	8.204	3.8583	2.0866	1.6929	0.3594	
MDW0830GS4	★		0.3268	8.30	98.0	53.0	43.0	9.0	
MDW03281GS4	●	21/64	0.3281	8.33	3.8583	2.0866	1.6929	0.3594	
MDW0840GS4	★		0.3307	8.40	98.0	53.0	43.0	9.0	
MDW03320GS4	●	#Q	0.3320	8.43	3.8583	2.0866	1.6929	0.3594	
MDW0850GS4	●		0.3346	8.50	98.0	53.0	43.0	9.0	M10x1.5
MDW0860GS4	★		0.3386	8.60	98.0	55.0	43.0	9.0	
MDW03390GS4	●		0.3390	8.61	3.8583	2.1654	1.6929	0.3594	3/8-24
MDW0870GS4	★		0.3425	8.70	98.0	55.0	43.0	9.0	
MDW03438GS4	●	11/32	0.3438	8.73	3.8583	2.1654	1.6929	0.3594	
MDW0880GS4	★		0.3465	8.80	98.0	55.0	43.0	9.0	
MDW03480GS4	●		0.3480	8.84	3.8583	2.1654	1.6929	0.3594	
MDW0890GS4	★		0.3504	8.90	98.0	55.0	43.0	9.0	
MDW0900GS4	●		0.3543	9.00	98.0	55.0	43.0	9.0	
MDW03580GS4	●		0.3580	9.09	3.8583	2.1654	1.6929	0.3594	
MDW0910GS4	★		0.3583	9.10	105.0	58.0	45.0	10.0	
MDW03594GS4	●	23/64	0.3594	9.13	3.8583	2.1654	1.6929	0.3594	
MDW0920GS4	★		0.3622	9.20	105.0	58.0	45.0	10.0	
MDW0930GS4	★		0.3661	9.30	105.0	58.0	45.0	10.0	
MDW03680GS4	●	#U	0.3680	9.35	4.1339	2.2835	1.7717	0.3906	7/16-14
MDW0940GS4	★		0.3701	9.40	105.0	58.0	45.0	10.0	
MDW0950GS4	★		0.3740	9.50	105.0	58.0	45.0	10.0	
MDW03750GS4	●	3/8	0.3750	9.53	4.1339	2.3622	1.7717	0.3906	
MDW03770GS4	●		0.3770	9.58	4.1339	2.3622	1.7717	0.3906	
MDW0960GS4	★		0.3780	9.60	105.0	60.0	45.0	10.0	

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Some drills can achieve greater depths. Always check for sufficient flute length. Note: Special diameters available upon request.

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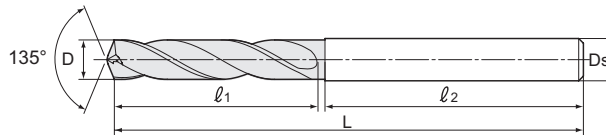
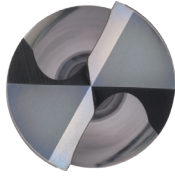
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MDW-GS4 4XD drill for excellent chip management and long tool life (External coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length l_1 (in/mm)	Shank Length l_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW0970GS4	●		0.3819	9.70	105.0	60.0	45.0	10.0	
MDW0980GS4	★		0.3858	9.80	105.0	60.0	45.0	10.0	
MDW03860GS4	●		0.3860	9.804	4.1339	2.3622	1.7717	0.3906	
MDW0990GS4	★		0.3898	9.90	105.0	60.0	45.0	10.0	
MDW03906GS4	●	25/64	0.3906	9.92	4.1339	2.3622	1.7717	0.3906	7/16-20
MDW1000GS4	●		0.3937	10.00	105.0	60.0	45.0	10.0	
MDW03970GS4	●		0.3970	10.08	4.4882	2.5984	1.8110	0.4375	
MDW1010GS4	★		0.3976	10.10	114.0	66.0	46.0	11.0	
MDW1020GS4	★		0.4016	10.20	114.0	66.0	46.0	11.0	M12x1.75
MDW04040GS4	●		0.4040	10.26	4.4882	2.5984	1.8110	0.4375	
MDW1030GS4	★		0.4055	10.30	114.0	66.0	46.0	11.0	
MDW04062GS4	●	13/32	0.4062	10.32	4.4882	2.5984	1.8110	0.4375	
MDW1040GS4	★		0.4094	10.40	114.0	66.0	46.0	11.0	
MDW04130GS4	●		0.4130	10.49	4.4882	2.5984	1.8110	0.4375	
MDW1050GS4	●		0.4134	10.50	114.0	66.0	46.0	11.0	
MDW1060GS4	★		0.4173	10.60	114.0	68.0	46.0	11.0	
MDW1070GS4	★		0.4213	10.70	114.0	68.0	46.0	11.0	
MDW04219GS4	●	27/64	0.4219	10.72	4.4882	2.6772	1.8110	0.4375	1/2-13
MDW1080GS4	★		0.4252	10.80	114.0	68.0	46.0	11.0	
MDW1090GS4	★		0.4291	10.90	114.0	68.0	46.0	11.0	
MDW1100GS4	●		0.4331	11.00	114.0	68.0	46.0	11.0	
MDW1110GS4	★		0.4370	11.10	121.0	71.0	48.0	12.0	
MDW04375GS4	●	7/16	0.4375	11.11	4.4882	2.6772	1.8110	0.4375	
MDW1120GS4	★		0.4409	11.20	121.0	71.0	48.0	12.0	
MDW1130GS4	★		0.4449	11.30	121.0	71.0	48.0	12.0	
MDW1140GS4	★		0.4488	11.40	121.0	71.0	48.0	12.0	
MDW1150GS4	●		0.4528	11.50	121.0	71.0	48.0	12.0	
MDW04531GS4	●	29/64	0.4531	11.51	4.7638	2.8740	1.8898	0.4688	1/2-20
MDW1160GS4	★		0.4567	11.60	121.0	73.0	48.0	12.0	
MDW1170GS4	★		0.4606	11.70	121.0	73.0	48.0	12.0	
MDW1180GS4	★		0.4646	11.80	121.0	73.0	48.0	12.0	
MDW1190GS4	★		0.4685	11.90	121.0	73.0	48.0	12.0	
MDW04688GS4	●	15/32	0.4688	11.91	4.7638	2.8740	1.8898	0.4688	
MDW1200GS4	●		0.4724	12.00	121.0	73.0	48.0	12.0	M14x2
MDW1210GS4	★		0.4764	12.10	137.0	76.0	59.0	13.0	
MDW1220GS4	★		0.4803	12.20	137.0	76.0	59.0	13.0	
MDW1230GS4	★		0.4843	12.30	137.0	76.0	59.0	13.0	9/16-12
MDW04844GS4	●	31/64	0.4844	12.308	5.3937	2.9921	2.3228	0.5156	
MDW1240GS4	★		0.4882	12.40	137.0	76.0	59.0	13.0	
MDW1250GS4	●		0.4921	12.50	137.0	76.0	59.0	13.0	
MDW1260GS4	★		0.4961	12.60	137.0	78.0	59.0	13.0	
MDW1270GS4	★	1/2	0.5000	12.70	137.0	78.0	59.0	13.0	
MDW05000GS4	●	1/2	0.5000	12.70	5.3937	3.0709	2.3228	0.5156	
MDW1280GS4	★		0.5039	12.80	137.0	78.0	59.0	13.0	
MDW05050GS4	●		0.5050	12.83	5.3937	3.0709	2.3228	0.5156	
MDW1290GS4	★		0.5079	12.90	137.0	78.0	59.0	13.0	
MDW1300GS4	●		0.5118	13.00	137.0	78.0	59.0	13.0	
MDW05156GS4	●	33/64	0.5156	13.09	5.3937	3.0709	2.3228	0.5156	9/16-18
MDW1310GS4	★		0.5157	13.10	147.0	84.0	61.0	14.0	
MDW1320GS4	★		0.5197	13.20	147.0	84.0	61.0	14.0	
MDW1330GS4	★		0.5236	13.30	147.0	84.0	61.0	14.0	
MDW1340GS4	★		0.5276	13.40	147.0	84.0	61.0	14.0	

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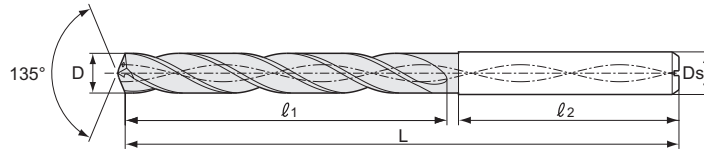
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MDW-GS4 4XD drill for excellent chip management and long tool life (External coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length l_1 (in/mm)	Shank Length l_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW05312GS4	●	17/32	0.5312	13.49	5.7874	3.3071	2.4016	0.5469	5/8-11
MDW1350GS4	●		0.5315	13.50	147.0	84.0	61.0	14.0	
MDW1360GS4	★		0.5354	13.60	147.0	86.0	61.0	14.0	
MDW1370GS4	★		0.5394	13.70	147.0	86.0	61.0	14.0	
MDW1380GS4	●		0.5433	13.80	147.0	86.0	61.0	14.0	
MDW05469GS4	●	35/64	0.5469	13.89	5.7874	3.3858	2.4016	0.5469	M16x2
MDW1390GS4	★		0.5472	13.90	147.0	86.0	61.0	14.0	
MDW1400GS4	●		0.5512	14.00	147.0	86.0	61.0	14.0	
MDW1410GS4	★		0.5551	14.10	153.0	89.0	62.0	15.0	
MDW1420GS4	★		0.5591	14.20	153.0	89.0	62.0	15.0	
MDW05625GS4	●	9/16	0.5625	14.29	6.0236	3.5039	2.4409	0.5937	
MDW1430GS4	★		0.5630	14.30	153.0	89.0	62.0	15.0	
MDW1440GS4	★		0.5669	14.40	153.0	89.0	62.0	15.0	
MDW1450GS4	★		0.5709	14.50	153.0	89.0	62.0	15.0	
MDW1460GS4	★		0.5748	14.60	153.0	91.0	62.0	15.0	
MDW05781GS4	●	37/64	0.5781	14.68	6.0236	3.5827	2.4409	0.5937	5/8-18
MDW1470GS4	★		0.5787	14.70	153.0	91.0	62.0	15.0	
MDW1480GS4	★		0.5827	14.80	153.0	91.0	62.0	15.0	
MDW1490GS4	★		0.5866	14.90	153.0	91.0	62.0	15.0	
MDW1500GS4	●		0.5906	15.00	153.0	91.0	62.0	15.0	
MDW05937GS4	●	19/32	0.5937	15.08	6.0236	3.5827	2.4409	0.5937	
MDW1510GS4	★		0.5945	15.10	160.0	94.0	64.0	16.0	
MDW1520GS4	★		0.5984	15.20	160.0	94.0	64.0	16.0	
MDW1530GS4	★		0.6024	15.30	160.0	94.0	64.0	16.0	
MDW1540GS4	★		0.6063	15.40	160.0	94.0	64.0	16.0	
MDW06094GS4	●	39/64	0.6094	15.48	6.2992	3.7008	2.5197	0.6250	11/16-12
MDW1550GS4	★		0.6102	15.50	160.0	94.0	64.0	16.0	M18x2.5
MDW1560GS4	★		0.6142	15.60	160.0	96.0	64.0	16.0	
MDW1570GS4	★		0.6181	15.70	160.0	96.0	64.0	16.0	
MDW1580GS4	★		0.6220	15.80	160.0	96.0	64.0	16.0	
MDW06250GS4	●	5/8	0.6250	15.88	6.2992	3.7795	2.5197	0.6250	11/16-16
MDW1590GS4	★		0.6260	15.90	160.0	96.0	64.0	16.0	
MDW1600GS4	●		0.6299	16.00	160.0	96.0	64.0	16.0	

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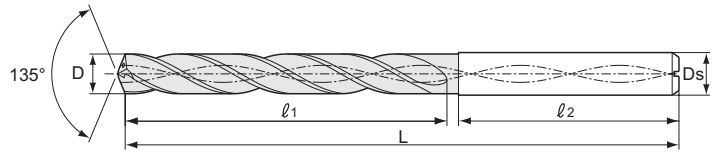


MDW-HGS3 3XD drill for excellent chip management and long tool life (Internal coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length l_1 (in/mm)	Shank Length l_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW0150HGS3	●		0.0591	1.50	63.0	10.0	50.0	3.0	
MDW0200HGS3	●		0.0787	2.00	63.0	12.5	48.0	3.0	
MDW0210HGS3	★		0.0827	2.10	68.0	15.0	51.0	3.0	3-56
MDW0220HGS3	★		0.0866	2.20	68.0	15.0	51.0	3.0	
MDW0230HGS3	★		0.0906	2.30	68.0	15.0	51.0	3.0	
MDW00938HGS3	●	3/32	0.0938	2.38	2.6772	0.5906	2.0079	0.1250	
MDW0240HGS3	★		0.0945	2.40	68.0	15.0	51.0	3.0	
MDW0250HGS3	●		0.0984	2.50	68.0	15.0	51.0	3.0	
MDW0260HGS3	★		0.1024	2.60	68.0	17.5	49.0	3.0	
MDW0270HGS3	★		0.1063	2.70	68.0	17.5	49.0	3.0	6-32
MDW01094HGS3	●	7/64	0.1094	2.78	2.6772	0.6890	1.9291	0.1250	
MDW0280HGS3	●		0.1102	2.80	68.0	17.5	49.0	3.0	
MDW0290HGS3	★		0.1142	2.90	68.0	17.5	49.0	3.0	3.5x.6
MDW0300HGS3	●		0.1181	3.00	68.0	17.5	49.0	3.0	
MDW0310HGS3	★		0.1220	3.10	72.0	20.0	50.0	4.0	
MDW01250HGS3	●	1/8	0.1250	3.18	2.6772	0.6890	1.9291	0.1250	
MDW0320HGS3	★		0.1260	3.20	72.0	20.0	50.0	4.0	
MDW0330HGS3	★		0.1299	3.30	72.0	20.0	50.0	4.0	M4x.7
MDW0340HGS3	★		0.1339	3.40	72.0	20.0	50.0	4.0	
MDW0350HGS3	★		0.1378	3.50	72.0	20.0	50.0	4.0	
MDW0360HGS3	★		0.1417	3.60	72.0	22.5	48.0	4.0	
MDW0370HGS3	★		0.1457	3.70	72.0	22.5	48.0	4.0	M4.5x.7
MDW0380HGS3	★		0.1496	3.80	72.0	22.5	48.0	4.0	
MDW0390HGS3	★		0.1535	3.90	72.0	22.5	48.0	4.0	
MDW01562HGS3	●	5/32	0.1562	3.97	2.8346	0.8858	1.8898	0.1562	
MDW0400HGS3	●		0.1575	4.00	72.0	22.5	48.0	4.0	
MDW01590HGS3	●	#21	0.1590	4.04	3.1496	0.9843	2.0866	0.1875	10-32
MDW0410HGS3	●		0.1614	4.10	80.0	25.0	53.0	5.0	
MDW0420HGS3	●		0.1654	4.20	80.0	25.0	53.0	5.0	M5x.8
MDW0430HGS3	★		0.1693	4.30	80.0	25.0	53.0	5.0	
MDW01719HGS3	●	11/64	0.1719	4.37	3.1496	0.9843	2.0866	0.1875	
MDW0440HGS3	★		0.1732	4.40	80.0	25.0	53.0	5.0	
MDW0450HGS3	●		0.1772	4.50	80.0	25.0	53.0	5.0	
MDW0460HGS3	★		0.1811	4.60	80.0	27.5	51.0	5.0	
MDW0470HGS3	★		0.1850	4.70	80.0	27.5	51.0	5.0	
MDW01875HGS3	●	3/16	0.1875	4.76	3.1496	1.0827	2.0079	0.1875	
MDW0480HGS3	●		0.1890	4.80	80.0	27.5	51.0	5.0	
MDW0490HGS3	★		0.1929	4.90	80.0	27.5	51.0	5.0	
MDW0500HGS3	●		0.1969	5.00	80.0	27.5	51.0	5.0	M6x1
MDW0510HGS3	●		0.2008	5.10	82.0	27.5	53.0	6.0	
MDW02010HGS3	●	#7	0.2010	5.11	3.2283	1.0827	2.0866	0.2344	1/4-20
MDW02031HGS3	●	13/64	0.2031	5.16	3.2283	1.0827	2.0866	0.2344	
MDW0520HGS3	●		0.2047	5.20	82.0	27.5	53.0	6.0	
MDW0530HGS3	●		0.2087	5.30	82.0	27.5	53.0	6.0	
MDW0540HGS3	★		0.2126	5.40	82.0	27.5	53.0	6.0	
MDW02130HGS3	●	#3	0.2130	5.41	3.2283	1.0827	2.0866	0.2344	
MDW0550HGS3	●		0.2165	5.50	82.0	27.5	53.0	6.0	
MDW02188HGS3	●	7/32	0.2188	5.56	3.2283	1.1811	2.0472	0.2344	1/4-28

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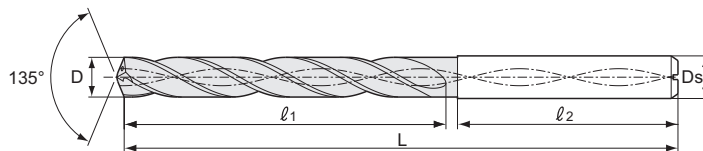
MDW-HGS3 3XD drill for excellent chip management and long tool life (Internal coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length l_1 (in/mm)	Shank Length l_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW0560HGS3	●		0.2205	5.60	82.0	30.0	52.0	6.0	
MDW02210HGS3	●	#2	0.2210	5.61	3.2283	1.1811	2.0472	0.2344	
MDW0570HGS3	●		0.2244	5.70	82.0	30.0	52.0	6.0	
MDW0580HGS3	●		0.2283	5.80	82.0	30.0	52.0	6.0	
MDW0590HGS3	★		0.2323	5.90	82.0	30.0	52.0	6.0	
MDW02344HGS3	●	15/64	0.2344	5.95	3.2283	1.1811	2.0472	0.2344	
MDW0600HGS3	●		0.2362	6.00	82.0	30.0	52.0	6.0	M7x1
MDW0610HGS3	●		0.2402	6.10	88.0	32.5	53.0	7.0	
MDW02420HGS3	●	#C	0.2420	6.15	3.4646	1.2795	2.0866	0.2812	
MDW0620HGS3	●		0.2441	6.20	88.0	32.5	53.0	7.0	
MDW0630HGS3	●		0.2480	6.30	88.0	32.5	53.0	7.0	
MDW02500HGS3	●	1/4	0.2500	6.35	3.4646	1.2795	2.0866	0.2812	
MDW0640HGS3	●		0.2520	6.40	88.0	32.5	53.0	7.0	
MDW0650HGS3	●		0.2559	6.50	88.0	32.5	53.0	7.0	
MDW02570HGS3	●	#F	0.2570	9.68	3.4646	1.3780	2.0866	0.2812	5/16-18
MDW0653HGS3	●		0.2571	6.53	88.0	35.0	53.0	7.0	
MDW0660HGS3	●		0.2598	6.60	88.0	35.0	53.0	7.0	
MDW0670HGS3	●		0.2638	6.70	88.0	35.0	53.0	7.0	
MDW02656HGS3	●	17/64	0.2656	6.75	3.4646	1.3780	2.0866	0.2812	
MDW02660HGS3	●		0.2660	6.76	3.4646	1.3780	2.0866	0.2812	
MDW0680HGS3	●		0.2677	6.80	88.0	35.0	53.0	7.0	
MDW0690HGS3	★		0.2717	6.90	88.0	35.0	53.0	7.0	
MDW02720HGS3	●	#I	0.2720	6.91	3.4646	1.3780	2.0866	0.2812	5/16-24
MDW0700HGS3	●		0.2756	7.00	88.0	35.0	53.0	7.0	
MDW02770HGS3	●	#J	0.2770	7.04	3.4646	1.3780	2.0866	0.2812	
MDW0710HGS3	●		0.2795	7.10	94.0	37.5	54.0	8.0	
MDW02812HGS3	●	9/32	0.2812	7.14	3.4646	1.3780	2.0866	0.2812	
MDW0720HGS3	●		0.2835	7.20	94.0	37.5	54.0	8.0	
MDW0730HGS3	★		0.2874	7.30	94.0	37.5	54.0	8.0	
MDW0740HGS3	●		0.2913	7.40	94.0	37.5	54.0	8.0	
MDW0750HGS3	●		0.2953	7.50	94.0	37.5	54.0	8.0	
MDW02969HGS3	●	19/64	0.2969	7.54	3.7008	1.5748	2.1260	0.3125	
MDW0760HGS3	★		0.2992	7.60	94.0	40.0	54.0	8.0	
MDW0770HGS3	★		0.3031	7.70	94.0	40.0	54.0	8.0	
MDW0780HGS3	●		0.3071	7.80	94.0	40.0	54.0	8.0	M9x1.25
MDW0790HGS3	★		0.3110	7.90	94.0	40.0	54.0	8.0	
MDW03125HGS3	●	5/16	0.3125	7.94	3.7008	1.5748	2.1260	0.3125	3/8-16
MDW0800HGS3	●		0.3150	8.00	94.0	40.0	54.0	8.0	
MDW0810HGS3	★		0.3189	8.10	100.0	42.5	55.0	9.0	
MDW0820HGS3	●		0.3228	8.20	100.0	42.5	55.0	9.0	
MDW03230HGS3	●	#P	0.3230	8.204	3.9370	1.6732	2.1654	0.3594	
MDW0830HGS3	●		0.3268	8.30	100.0	42.5	55.0	9.0	
MDW03281HGS3	●	21/64	0.3281	8.33	3.9370	1.6732	2.1654	0.3594	
MDW0840HGS3	★		0.3307	8.40	100.0	42.5	55.0	9.0	
MDW03320HGS3	●	#Q	0.3320	8.43	3.9370	1.6732	2.1654	0.3594	
MDW0850HGS3	●		0.3346	8.50	100.0	42.5	55.0	9.0	M10x1.5
MDW0860HGS3	●		0.3386	8.60	100.0	45.0	55.0	9.0	

● = USA Stocked item ★ = Worldwide Warehouse item available in 10 business days

Some drills can achieve greater depths. Always check for sufficient flute length. Note: Special diameters available upon request.

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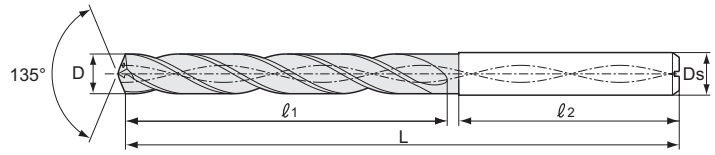
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MDW-HGS3 3XD drill for excellent chip management and long tool life (Internal coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length l_1 (in/mm)	Shank Length l_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW0870HGS3	★		0.3425	8.70	100.0	45.0	55.0	9.0	
MDW03438HGS3	●	11/32	0.3438	8.73	3.9370	1.7717	2.1654	0.3594	
MDW0880HGS3	★		0.3465	8.80	100.0	45.0	55.0	9.0	
MDW0890HGS3	★		0.3504	8.90	100.0	45.0	55.0	9.0	
MDW0900HGS3	●		0.3543	9.00	100.0	45.0	55.0	9.0	
MDW0910HGS3	★		0.3583	9.10	106.0	47.5	56.0	10.0	
MDW03594HGS3	●	23/64	0.3594	9.13	3.9370	1.7717	2.1654	0.3594	
MDW0920HGS3	★		0.3622	9.20	106.0	47.5	56.0	10.0	
MDW0930HGS3	●		0.3661	9.30	106.0	47.5	56.0	10.0	
MDW03680HGS3	●	#U	0.3680	9.35	4.1732	1.8701	2.2047	0.3906	7/16-14
MDW0940HGS3	●		0.3701	9.40	106.0	47.5	56.0	10.0	
MDW0950HGS3	●		0.3740	9.50	106.0	47.5	56.0	10.0	
MDW03750HGS3	●	3/8	0.3750	9.53	4.1732	1.9685	2.2047	0.3906	
MDW0960HGS3	●		0.3780	9.60	106.0	50.0	56.0	10.0	
MDW0970HGS3	●		0.3819	9.70	106.0	50.0	56.0	10.0	
MDW0980HGS3	●		0.3858	9.80	106.0	50.0	56.0	10.0	
MDW0990HGS3	★		0.3898	9.90	106.0	50.0	56.0	10.0	
MDW03906HGS3	●	25/64	0.3906	9.92	4.1732	1.9685	2.2047	0.3906	7/16-20
MDW1000HGS3	●		0.3937	10.00	106.0	50.0	56.0	10.0	
MDW1010HGS3	★		0.3976	10.10	116.0	52.5	61.0	11.0	
MDW1020HGS3	●		0.4016	10.20	116.0	52.5	61.0	11.0	M12x1.75
MDW1030HGS3	●		0.4055	10.30	116.0	52.5	61.0	11.0	
MDW04062HGS3	●	13/32	0.4062	10.32	4.5669	2.0669	2.4016	0.4375	
MDW1040HGS3	●		0.4094	10.40	116.0	52.5	61.0	11.0	
MDW1050HGS3	●		0.4134	10.50	116.0	52.5	61.0	11.0	
MDW1060HGS3	●		0.4173	10.60	116.0	55.0	61.0	11.0	
MDW1070HGS3	●		0.4213	10.70	116.0	55.0	61.0	11.0	
MDW04219HGS3	●	27/64	0.4219	10.72	4.5669	2.1654	2.4016	0.4375	1/2-13
MDW1080HGS3	★		0.4252	10.80	116.0	55.0	61.0	11.0	
MDW1090HGS3	★		0.4291	10.90	116.0	55.0	61.0	11.0	
MDW1100HGS3	●		0.4331	11.00	116.0	55.0	61.0	11.0	
MDW1110HGS3	★		0.4370	11.10	122.0	57.5	62.0	12.0	
MDW04375HGS3	●	7/16	0.4375	11.11	4.5669	2.1654	2.4016	0.4375	
MDW1120HGS3	●		0.4409	11.20	122.0	57.5	62.0	12.0	
MDW1130HGS3	★		0.4449	11.30	122.0	57.5	62.0	12.0	
MDW1140HGS3	★		0.4488	11.40	122.0	57.5	62.0	12.0	
MDW1150HGS3	●		0.4528	11.50	122.0	57.5	62.0	12.0	
MDW04531HGS3	●	29/64	0.4531	11.51	4.8031	2.3622	2.4409	0.4688	1/2-20
MDW1160HGS3	★		0.4567	11.60	122.0	60.0	62.0	12.0	
MDW1170HGS3	★		0.4606	11.70	122.0	60.0	62.0	12.0	
MDW1180HGS3	★		0.4646	11.80	122.0	60.0	62.0	12.0	
MDW1190HGS3	★		0.4685	11.90	122.0	60.0	62.0	12.0	
MDW04688HGS3	●	15/32	0.4688	11.91	4.8031	2.3622	2.4409	0.4688	
MDW1200HGS3	●		0.4724	12.00	122.0	60.0	62.0	12.0	M14x2
MDW1210HGS3	★		0.4764	12.10	128.0	62.5	63.0	13.0	
MDW1220HGS3	★		0.4803	12.20	128.0	62.5	63.0	13.0	
MDW1230HGS3	★		0.4843	12.30	128.0	62.5	63.0	13.0	9/16-12

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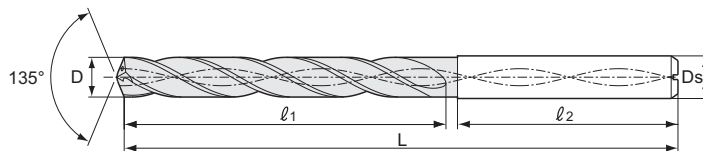
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MDW-HGS3 3XD drill for excellent chip management and long tool life (Internal coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length l_1 (in/mm)	Shank Length l_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW04844HGS3	●	31/64	0.4844	12.304	5.0394	2.4606	2.4803	0.5156	
MDW1240HGS3	★		0.4882	12.40	128.0	62.5	63.0	13.0	
MDW1250HGS3	●		0.4921	12.50	128.0	62.5	63.0	13.0	
MDW1260HGS3	★		0.4961	12.60	128.0	65.0	63.0	13.0	
MDW1270HGS3	★	1/2	0.5000	12.70	128.0	65.0	63.0	13.0	
MDW05000HGS3	●	1/2	0.5000	12.70	5.0394	2.5591	2.4803	0.5156	
MDW1280HGS3	●		0.5039	12.80	128.0	65.0	63.0	13.0	
MDW1283HGS3	●		0.5051	12.83	128.0	65.0	63.0	13.0	
MDW1290HGS3	★		0.5079	12.90	128.0	65.0	63.0	13.0	
MDW1300HGS3	●		0.5118	13.00	128.0	65.0	63.0	13.0	
MDW05156HGS3	●	33/64	0.5156	13.09	5.0394	2.5591	2.4803	0.5156	9/16-18
MDW1310HGS3	★		0.5157	13.10	134.0	67.5	64.0	14.0	
MDW1320HGS3	★		0.5197	13.20	134.0	67.5	64.0	14.0	
MDW1330HGS3	●		0.5236	13.30	134.0	67.5	64.0	14.0	
MDW1340HGS3	★		0.5276	13.40	134.0	67.5	64.0	14.0	
MDW05312HGS3	●	17/32	0.5312	13.49	5.2756	2.6575	2.5197	0.5469	5/8-11
MDW1350HGS3	●		0.5315	13.50	134.0	67.5	64.0	14.0	
MDW1360HGS3	★		0.5354	13.60	134.0	70.0	64.0	14.0	
MDW1370HGS3	★		0.5394	13.70	134.0	70.0	64.0	14.0	
MDW1380HGS3	●		0.5433	13.80	134.0	70.0	64.0	14.0	
MDW05469HGS3	●	35/64	0.5469	13.89	5.2756	2.7559	2.5197	0.5469	M16x2
MDW1390HGS3	★		0.5472	13.90	134.0	70.0	64.0	14.0	
MDW1400HGS3	●		0.5512	14.00	134.0	70.0	64.0	14.0	
MDW1410HGS3	★		0.5551	14.10	140.0	72.5	65.0	15.0	
MDW1420HGS3	★		0.5591	14.20	140.0	72.5	65.0	15.0	
MDW05625HGS3	●	9/16	0.5625	14.29	5.5118	2.8543	2.5591	0.5937	
MDW1430HGS3	★		0.5630	14.30	140.0	72.5	65.0	15.0	
MDW1440HGS3	★		0.5669	14.40	140.0	72.5	65.0	15.0	
MDW1450HGS3	★		0.5709	14.50	140.0	72.5	65.0	15.0	
MDW1460HGS3	★		0.5748	14.60	140.0	75.0	65.0	15.0	
MDW05781HGS3	●	37/64	0.5781	14.68	5.5118	2.9528	2.5591	0.5937	5/8-18
MDW1470HGS3	★		0.5787	14.70	140.0	75.0	65.0	15.0	
MDW1480HGS3	★		0.5827	14.80	140.0	75.0	65.0	15.0	
MDW1490HGS3	★		0.5866	14.90	140.0	75.0	65.0	15.0	
MDW1500HGS3	●		0.5906	15.00	140.0	75.0	65.0	15.0	
MDW05937HGS3	●	19/32	0.5937	15.08	5.5118	2.9528	2.5591	0.5937	
MDW1510HGS3	★		0.5945	15.10	146.0	77.5	66.0	16.0	
MDW1520HGS3	★		0.5984	15.20	146.0	77.5	66.0	16.0	
MDW1530HGS3	★		0.6024	15.30	146.0	77.5	66.0	16.0	
MDW1540HGS3	★		0.6063	15.40	146.0	77.5	66.0	16.0	
MDW06094HGS3	●	39/64	0.6094	15.48	5.7480	3.0512	2.5984	0.6250	11/16-12
MDW1550HGS3	★		0.6102	15.50	146.0	77.5	66.0	16.0	M18x2.5
MDW1560HGS3	★		0.6142	15.60	146.0	80.0	66.0	16.0	
MDW1570HGS3	★		0.6181	15.70	146.0	80.0	66.0	16.0	
MDW1580HGS3	★		0.6220	15.80	146.0	80.0	66.0	16.0	
MDW06250HGS3	●	5/8	0.6250	15.88	5.7480	3.1496	2.5984	0.6250	11/16-16
MDW1590HGS3	★		0.6260	15.90	146.0	80.0	66.0	16.0	
MDW1600HGS3	★		0.6299	16.00	146.0	80.0	66.0	16.0	

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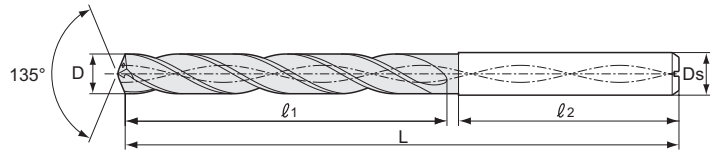


MDW-HGS5 5XD drill for excellent chip management and long tool life (Internal coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length l_1 (in/mm)	Shank Length l_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW0200HGS5	★		0.0787	2.00	70.0	19.0	49.0	3.0	
MDW0210HGS5	★		0.0827	2.10	78.0	24.0	52.0	3.0	3-56
MDW0220HGS5	★		0.0866	2.20	78.0	24.0	52.0	3.0	
MDW0230HGS5	★		0.0906	2.30	78.0	24.0	52.0	3.0	
MDW0240HGS5	★		0.0945	2.40	78.0	24.0	52.0	3.0	
MDW0250HGS5	★		0.0984	2.50	78.0	24.0	52.0	3.0	
MDW0260HGS5	★		0.1024	2.60	78.0	28.0	48.0	3.0	
MDW0270HGS5	★		0.1063	2.70	78.0	28.0	48.0	3.0	6-32
MDW0280HGS5	★		0.1102	2.80	78.0	28.0	48.0	3.0	
MDW0290HGS5	★		0.1142	2.90	78.0	28.0	48.0	3.0	3.5x.6
MDW0300HGS5	★		0.1181	3.00	78.0	28.0	48.0	3.0	
MDW0310HGS5	★		0.1220	3.10	86.0	32.0	52.0	4.0	
MDW01250HGS5	●	1/8	0.1250	3.18	3.0709	1.1024	1.8898	0.1250	
MDW0320HGS5	★		0.1260	3.20	86.0	32.0	52.0	4.0	
MDW0330HGS5	★		0.1299	3.30	86.0	32.0	52.0	4.0	M4x.7
MDW0340HGS5	★		0.1339	3.40	86.0	32.0	52.0	4.0	
MDW0350HGS5	★		0.1378	3.50	86.0	32.0	52.0	4.0	
MDW01406HGS5	●		0.1406	3.57	3.3858	1.4173	1.8898	0.1562	
MDW0360HGS5	★		0.1417	3.60	86.0	36.0	48.0	4.0	
MDW0370HGS5	★		0.1457	3.70	86.0	36.0	48.0	4.0	M4.5x.7
MDW0380HGS5	★		0.1496	3.80	86.0	36.0	48.0	4.0	
MDW0390HGS5	★		0.1535	3.90	86.0	36.0	48.0	4.0	
MDW01562HGS5	●	5/32	0.1562	3.97	3.3858	1.4173	1.8898	0.1562	
MDW0400HGS5	●		0.1575	4.00	86.0	36.0	48.0	4.0	
MDW01590HGS5	●	#21	0.1590	4.04	3.8583	1.5748	2.2047	0.1875	10-32
MDW0410HGS5	●		0.1614	4.10	98.0	40.0	56.0	5.0	
MDW0420HGS5	●		0.1654	4.20	98.0	40.0	56.0	5.0	M5x.8
MDW0430HGS5	★		0.1693	4.30	98.0	40.0	56.0	5.0	
MDW01719HGS5	●	11/64	0.1719	4.37	3.8583	1.5748	2.2047	0.1875	
MDW0440HGS5	★		0.1732	4.40	98.0	40.0	56.0	5.0	
MDW0450HGS5	●		0.1772	4.50	98.0	40.0	56.0	5.0	
MDW0460HGS5	★		0.1811	4.60	98.0	44.0	52.0	5.0	
MDW0470HGS5	★		0.1850	4.70	98.0	44.0	52.0	5.0	
MDW01875HGS5	●	3/16	0.1875	4.76	3.8583	1.7323	2.0472	0.1875	
MDW0480HGS5	●		0.1890	4.80	98.0	44.0	52.0	5.0	
MDW0490HGS5	★		0.1929	4.90	98.0	44.0	52.0	5.0	
MDW0500HGS5	●		0.1969	5.00	98.0	44.0	52.0	5.0	M6x1
MDW0510HGS5	●		0.2008	5.10	100.0	44.0	54.0	6.0	
MDW02031HGS5	●	13/64	0.2031	5.16	3.9370	1.7323	2.1260	0.2344	
MDW0520HGS5	●		0.2047	5.20	100.0	44.0	54.0	6.0	
MDW0530HGS5	●		0.2087	5.30	100.0	44.0	54.0	6.0	
MDW0540HGS5	★		0.2126	5.40	100.0	44.0	54.0	6.0	
MDW02130HGS5	●	#3	0.2130	5.41	3.9370	1.7323	2.1260	0.2344	
MDW0550HGS5	●		0.2165	5.50	100.0	44.0	54.0	6.0	
MDW02188HGS5	●	7/32	0.2188	5.56	3.9370	1.8898	2.0472	0.2344	1/4-28
MDW0560HGS5	●		0.2205	5.60	100.0	48.0	52.0	6.0	
MDW02210HGS5	●	#2	0.2210	5.61	3.9370	1.8898	2.0472	0.2344	
MDW0570HGS5	●		0.2244	5.70	100.0	48.0	52.0	6.0	
MDW0580HGS5	●		0.2283	5.80	100.0	48.0	52.0	6.0	
MDW0590HGS5	★		0.2323	5.90	100.0	48.0	52.0	6.0	
MDW02344HGS5	●	15/64	0.2344	5.95	3.9370	1.8898	2.0472	0.2344	
MDW0600HGS5	●		0.2362	6.00	100.0	48.0	52.0	6.0	M7x1
MDW0610HGS5	●		0.2402	6.10	109.0	52.0	53.0	7.0	
MDW0620HGS5	●		0.2441	6.20	109.0	52.0	53.0	7.0	

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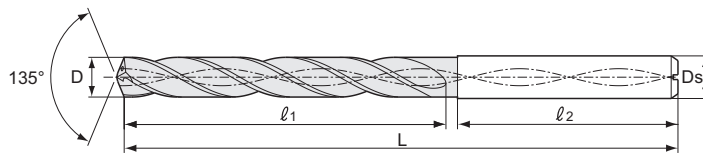
MDW-HGS5 5XD drill for excellent chip management and long tool life (Internal coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length l_1 (in/mm)	Shank Length l_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW0630HGS5	★		0.2480	6.30	109.0	52.0	53.0	7.0	
MDW02500HGS5	●	1/4	0.2500	6.35	4.2913	2.0472	2.0866	0.2812	
MDW0640HGS5	●		0.2520	6.40	109.0	52.0	53.0	7.0	
MDW0650HGS5	●		0.2559	6.50	109.0	52.0	53.0	7.0	
MDW02570HGS5	●	#F	0.2570	6.53	4.2913	2.2047	2.0866	0.2812	5/16-18
MDW0653HGS5	★		0.2571	6.53	109.0	56.0	53.0	7.0	
MDW0660HGS5	●		0.2598	6.60	109.0	56.0	53.0	7.0	
MDW0670HGS5	●		0.2638	6.70	109.0	56.0	53.0	7.0	
MDW02656HGS5	●	17/64	0.2656	6.75	4.2913	2.2047	2.0866	0.2812	
MDW02660HGS5	●	#H	0.2660	6.76	4.2913	2.2047	2.0866	0.2812	
MDW0680HGS5	●		0.2677	6.00	109.0	56.0	53.0	7.0	
MDW0690HGS5	●		0.2717	6.90	109.0	56.0	53.0	7.0	
MDW02720HGS5	●	#I	0.2720	6.91	4.2913	2.2047	2.0866	0.2812	5/16-24
MDW0700HGS5	●		0.2756	7.00	109.0	56.0	53.0	7.0	
MDW02770HGS5	●	#J	0.2770	7.04	4.2913	2.2047	2.0866	0.2812	
MDW0710HGS5	★		0.2795	7.10	118.0	60.0	54.0	8.0	
MDW02812HGS5	●	9/32	0.2812	7.14	4.2913	2.2047	2.0866	0.2812	
MDW0720HGS5	●		0.2835	7.20	118.0	60.0	54.0	8.0	
MDW0730HGS5	★		0.2874	7.30	118.0	60.0	54.0	8.0	
MDW0740HGS5	●		0.2913	7.40	118.0	60.0	54.0	8.0	
MDW0750HGS5	●		0.2953	7.50	118.0	60.0	54.0	8.0	
MDW02969HGS5	●	19/64	0.2969	7.54	4.6457	2.5197	2.1260	0.3125	
MDW0760HGS5	★		0.2992	7.60	118.0	64.0	54.0	8.0	
MDW0770HGS5	★		0.3031	7.70	118.0	64.0	54.0	8.0	
MDW0780HGS5	★		0.3071	7.80	118.0	64.0	54.0	8.0	M9x1.25
MDW0790HGS5	★		0.3110	7.90	118.0	64.0	54.0	8.0	
MDW03125HGS5	●	5/16	0.3125	7.94	4.6457	2.5197	2.1260	0.3125	3/8-16
MDW0800HGS5	●		0.3150	8.00	118.0	64.0	54.0	8.0	
MDW0810HGS5	★		0.3189	8.10	127.0	68.0	55.0	9.0	
MDW0820HGS5	●		0.3228	8.20	127.0	68.0	55.0	9.0	
MDW03230HGS5	●	#P	0.3230	8.204	5.0000	2.6772	2.1654	0.3594	
MDW0830HGS5	●		0.3268	8.30	127.0	68.0	55.0	9.0	
MDW03281HGS5	●	21/64	0.3281	8.33	5.0000	2.6772	2.1654	0.3594	
MDW0840HGS5	★		0.3307	8.40	127.0	68.0	55.0	9.0	
MDW03320HGS5	●	#Q	0.3320	8.43	5.0000	2.6772	2.1654	0.3594	
MDW0850HGS5	●		0.3346	8.50	127.0	68.0	55.0	9.0	M10x1.25
MDW0860HGS5	●		0.3386	8.60	127.0	72.0	55.0	9.0	
MDW0870HGS5	★		0.3425	8.70	127.0	72.0	55.0	9.0	
MDW03438HGS5	●	11/32	0.3438	8.73	5.0000	2.8346	2.1654	0.3594	
MDW0880HGS5	●		0.3465	8.80	127.0	72.0	55.0	9.0	
MDW0890HGS5	★		0.3504	8.90	127.0	72.0	55.0	9.0	
MDW0900HGS5	●		0.3543	9.00	127.0	72.0	55.0	9.0	
MDW0910HGS5	★		0.3583	9.10	136.0	76.0	56.0	10.0	
MDW03594HGS5	●	23/64	0.3594	9.13	5.0000	2.8346	2.1654	0.3594	
MDW0920HGS5	★		0.3622	9.20	136.0	76.0	56.0	10.0	
MDW0930HGS5	★		0.3661	9.30	136.0	76.0	56.0	10.0	
MDW03680HGS5	●	#U	0.3680	9.35	5.3543	2.9921	2.2047	0.3906	7/16-14
MDW0940HGS5	●		0.3701	9.40	136.0	76.0	56.0	10.0	
MDW0950HGS5	●		0.3740	9.50	136.0	76.0	56.0	10.0	
MDW03750HGS5	●	3/8	0.3750	9.53	5.3543	3.1496	2.2047	0.3906	
MDW0960HGS5	●		0.3780	9.60	136.0	80.0	56.0	10.0	
MDW0970HGS5	●		0.3819	9.70	136.0	80.0	56.0	10.0	

● = USA Stocked item ★ = Worldwide Warehouse item available in 10 business days

Some drills can achieve greater depths. Always check for sufficient flute length. Note: Special diameters available upon request.

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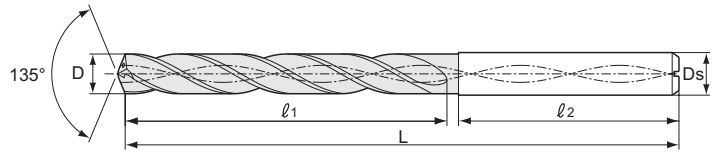
MDW-HGS5 5XD drill for excellent chip management and long tool life (Internal coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length l_1 (in/mm)	Shank Length l_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW0980HGS5	●		0.3858	9.80	136.0	80.0	56.0	10.0	
MDW0990HGS5	●		0.3898	9.90	136.0	80.0	56.0	10.0	
MDW03906HGS5	●	25/64	0.3906	9.92	5.3543	3.1496	2.2047	0.3906	7/16-20
MDW1000HGS5	●		0.3937	10.00	136.0	80.0	56.0	10.0	
MDW1010HGS5	★		0.3976	10.10	149.0	84.0	61.0	11.0	
MDW1020HGS5	●		0.4016	10.20	149.0	84.0	61.0	11.0	M12x1.75
MDW1030HGS5	★		0.4055	10.30	149.0	84.0	61.0	11.0	
MDW04062HGS5	●	13/32	0.4062	10.32	5.8661	3.3071	2.4016	0.4375	
MDW1040HGS5	★		0.4094	10.40	149.0	84.0	61.0	11.0	
MDW1050HGS5	●		0.4134	10.50	149.0	84.0	61.0	11.0	
MDW1060HGS5	★		0.4173	10.60	149.0	88.0	61.0	11.0	
MDW1070HGS5	●		0.4213	10.70	149.0	88.0	61.0	11.0	
MDW04219HGS5	●	27/64	0.4219	10.72	5.8661	3.4646	2.4016	0.4375	1/2-13
MDW1080HGS5	●		0.4252	10.80	149.0	88.0	61.0	11.0	
MDW1090HGS5	★		0.4291	10.90	149.0	88.0	61.0	11.0	
MDW1100HGS5	●		0.4331	11.00	149.0	88.0	61.0	11.0	
MDW1110HGS5	★		0.4370	11.10	158.0	92.0	62.0	12.0	
MDW04375HGS5	●	7/16	0.4375	11.11	5.8661	3.4646	2.4016	0.4375	
MDW1120HGS5	●		0.4409	11.20	158.0	92.0	62.0	12.0	
MDW1130HGS5	★		0.4449	11.30	158.0	92.0	62.0	12.0	
MDW1140HGS5	★		0.4488	11.40	158.0	92.0	62.0	12.0	
MDW1150HGS5	●		0.4528	11.50	158.0	92.0	62.0	12.0	
MDW04531HGS5	●	29/64	0.4531	11.51	6.2205	3.7795	2.4409	0.4688	1/2-20
MDW1160HGS5	★		0.4567	11.60	158.0	96.0	62.0	12.0	
MDW1170HGS5	★		0.4606	11.70	158.0	96.0	62.0	12.0	
MDW1180HGS5	●		0.4646	11.80	158.0	96.0	62.0	12.0	
MDW1190HGS5	★		0.4685	11.90	158.0	96.0	62.0	12.0	
MDW04688HGS5	●	15/32	0.4688	11.91	6.2205	3.7795	2.4409	0.4688	
MDW1200HGS5	●		0.4724	12.00	158.0	96.0	62.0	12.0	M14x2
MDW1210HGS5	★		0.4764	12.10	167.0	100.0	63.0	13.0	
MDW1220HGS5	★		0.4803	12.20	167.0	100.0	63.0	13.0	
MDW1230HGS5	★		0.4843	12.30	167.0	100.0	63.0	13.0	9/16-12
MDW04844HGS5	●	31/64	0.4844	12.304	6.5748	3.9370	2.4803	0.5156	
MDW1240HGS5	★		0.4882	12.40	167.0	100.0	63.0	13.0	
MDW1250HGS5	●		0.4921	12.50	167.0	100.0	63.0	13.0	
MDW1260HGS5	★		0.4961	12.60	167.0	104.0	63.0	13.0	
MDW1270HGS5	★	1/2	0.5000	12.70	167.0	104.0	63.0	13.0	
MDW05000HGS5	●	1/2	0.5000	12.70	6.5748	4.0945	2.4803	0.5156	
MDW1280HGS5	●		0.5039	12.80	167.0	104.0	63.0	13.0	
MDW1283HGS5	●		0.5051	12.83	167.0	104.0	63.0	13.0	
MDW1290HGS5	★		0.5079	12.90	167.0	104.0	63.0	13.0	
MDW1300HGS5	●		0.5118	13.00	167.0	104.0	63.0	13.0	
MDW05156HGS5	●	33/64	0.5156	13.09	6.5748	4.0945	2.4803	0.5156	9/16-18
MDW1310HGS5	★		0.5157	13.10	176.0	108.0	64.0	14.0	
MDW1320HGS5	★		0.5197	13.20	176.0	108.0	64.0	14.0	
MDW1330HGS5	★		0.5236	13.30	176.0	108.0	64.0	14.0	
MDW1340HGS5	★		0.5276	13.40	176.0	108.0	64.0	14.0	
MDW05312HGS5	●	17/32	0.5312	13.49	6.9291	4.2520	2.5197	0.5469	5/8-11
MDW1350HGS5	★		0.5315	13.50	176.0	108.0	64.0	14.0	
MDW1360HGS5	★		0.5354	13.60	176.0	112.0	64.0	14.0	
MDW1370HGS5	★		0.5394	13.70	176.0	112.0	64.0	14.0	
MDW1380HGS5	●		0.5433	13.80	176.0	112.0	64.0	14.0	
MDW05469HGS5	●	35/64	0.5469	13.89	6.9291	4.4094	2.5197	0.5469	M16x2
MDW1390HGS5	★		0.5472	13.90	176.0	112.0	64.0	14.0	

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Some drills can achieve greater depths. Always check for sufficient flute length. Note: Special diameters available upon request.

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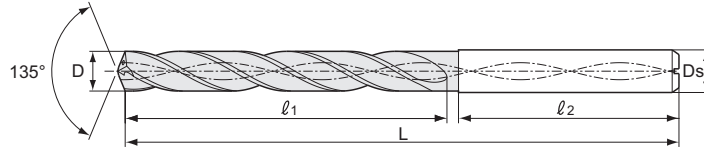
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MDW-HGS5 5XD drill for excellent chip management and long tool life (Internal coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length l_1 (in/mm)	Shank Length l_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW1400HGS5	●		0.5512	14.00	176.0	112.0	64.0	14.0	
MDW1410HGS5	★		0.5551	14.10	185.0	116.0	65.0	15.0	
MDW1420HGS5	★		0.5591	14.20	185.0	116.0	65.0	15.0	
MDW05625HGS5	●	9/16	0.5625	14.29	7.2835	4.5669	2.5591	0.5937	
MDW1430HGS5	★		0.5630	14.30	185.0	116.0	65.0	15.0	
MDW1440HGS5	★		0.5669	14.40	185.0	116.0	65.0	15.0	
MDW1450HGS5	★		0.5709	14.50	185.0	116.0	65.0	15.0	
MDW1460HGS5	★		0.5748	14.60	185.0	120.0	65.0	15.0	
MDW05781HGS5	●	37/64	0.5781	14.68	7.2835	4.7244	2.5591	0.5937	5/8-18
MDW1470HGS5	★		0.5787	14.70	185.0	120.0	65.0	15.0	
MDW1480HGS5	★		0.5827	14.80	185.0	120.0	65.0	15.0	
MDW1490HGS5	★		0.5866	14.90	185.0	120.0	65.0	15.0	
MDW1500HGS5	★		0.5906	15.00	185.0	120.0	65.0	15.0	
MDW05937HGS5	●	19/32	0.5937	15.08	7.2835	4.7244	2.5591	0.5937	
MDW1510HGS5	★		0.5945	15.10	194.0	124.0	66.0	16.0	
MDW1520HGS5	★		0.5984	15.20	194.0	124.0	66.0	16.0	
MDW1530HGS5	★		0.6024	15.30	194.0	124.0	66.0	16.0	
MDW1540HGS5	★		0.6063	15.40	194.0	124.0	66.0	16.0	
MDW06094HGS5	●	39/64	0.6094	15.48	7.6378	4.8819	2.5984	0.6250	11/16-12
MDW1550HGS5	★		0.6102	15.50	194.0	124.0	66.0	16.0	M18x2.5
MDW1560HGS5	★		0.6142	15.60	194.0	128.0	66.0	16.0	
MDW1570HGS5	★		0.6181	15.70	194.0	128.0	66.0	16.0	
MDW1580HGS5	★		0.6220	15.80	194.0	128.0	66.0	16.0	
MDW06250HGS5	●	5/8	0.6250	15.88	7.6378	5.0394	2.5984	0.6250	11/16-16
MDW1590HGS5	★		0.6260	15.90	194.0	128.0	66.0	16.0	
MDW1600HGS5	★		0.6299	16.00	194.0	128.0	66.0	16.0	

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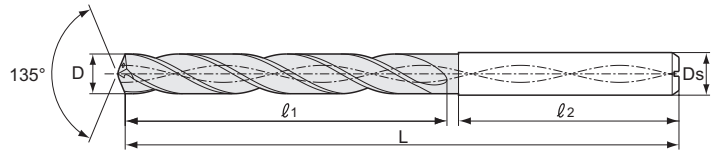


MDW-HGS8 8XD drill for excellent chip management and long tool life (Internal coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length l_1 (in/mm)	Shank Length l_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW0200HGS8	★		0.0787	2.00	76.00	24.00	50.00	3.00	
MDW0210HGS8			0.0827	2.10	81.00	27.50	52.00	3.00	3-56
MDW0220HGS8			0.0866	2.20	81.00	27.50	52.00	3.00	
MDW0230HGS8			0.0906	2.30	81.00	27.50	52.00	3.00	
MDW0240HGS8			0.0945	2.40	81.00	27.50	52.00	3.00	
MDW0250HGS8	★		0.0984	2.50	81.00	27.50	52.00	3.00	
MDW0260HGS8			0.1024	2.60	81.00	33.00	48.00	3.00	
MDW0270HGS8			0.1063	2.70	81.00	33.00	48.00	3.00	6-32
MDW0280HGS8			0.1102	2.80	81.00	33.00	48.00	3.00	
MDW0290HGS8			0.1142	2.90	81.00	33.00	48.00	3.00	3.5x6
MDW0300HGS8	★		0.1181	3.00	81.00	33.00	48.00	3.00	
MDW0310HGS8			0.1220	3.10	92.00	38.50	52.00	4.00	
MDW01250HGS8		1/8	0.1250	3.18	3.1890	1.2992	1.8898	0.1250	
MDW0320HGS8			0.1260	3.20	92.00	38.50	52.00	4.00	
MDW0330HGS8			0.1299	3.30	92.00	38.50	52.00	4.00	M4x.7
MDW0340HGS8			0.1339	3.40	92.00	38.50	52.00	4.00	
MDW0350HGS8	★		0.1378	3.50	92.00	38.50	52.00	4.00	
MDW01406HGS8			0.1406	3.57	3.6220	1.7323	1.8898	0.1562	
MDW0360HGS8			0.1417	3.60	92.00	44.00	48.00	4.00	
MDW0370HGS8			0.1457	3.70	92.00	44.00	48.00	4.00	M4.5x.7
MDW0380HGS8			0.1496	3.80	92.00	44.00	48.00	4.00	
MDW0390HGS8			0.1535	3.90	92.00	44.00	48.00	4.00	
MDW01562HGS8		5/32	0.1562	3.97	3.6220	1.7323	1.8898	0.1562	
MDW0400HGS8	○		0.1575	4.00	92.00	44.00	48.00	4.0	
MDW01590HGS8		#21	0.1590	4.04	4.1339	1.9488	2.1260	0.1875	10-32
MDW0410HGS8			0.1614	4.10	105.00	49.50	54.00	5.00	
MDW0420HGS8	○		0.1654	4.20	105.00	49.50	54.00	5.00	M5x.8
MDW0430HGS8			0.1693	4.30	105.00	49.50	54.00	5.00	
MDW01719HGS8		11/64	0.1719	4.37	4.1339	1.9488	2.1260	0.1875	
MDW0440HGS8			0.1732	4.40	105.00	49.50	54.00	5.00	
MDW0450HGS8	○		0.1772	4.50	105.00	49.50	54.00	5.00	
MDW0460HGS8			0.1811	4.60	105.00	55.00	50.00	5.00	
MDW0470HGS8			0.1850	4.70	105.00	55.00	50.00	5.00	
MDW01875HGS8	○	3/16	0.1875	4.76	4.1339	2.1654	1.9685	0.1875	
MDW0480HGS8			0.1890	4.80	105.00	55.00	50.00	5.00	
MDW0490HGS8			0.1929	4.90	105.00	55.00	50.00	5.00	
MDW0500HGS8	○		0.1969	5.00	105.00	55.00	50.00	5.00	M6x1
MDW0510HGS8			0.2008	5.10	118.00	60.50	56.00	6.00	
MDW02010HGS8	○	#7	0.2010	5.11	4.6457	2.3819	2.2047	0.2344	1/4-20
MDW02031HGS8	○	13/64	0.2031	5.16	4.6457	2.3819	2.2047	0.2344	
MDW0520HGS8			0.2047	5.20	118.00	60.50	56.00	6.00	
MDW0530HGS8			0.2087	5.30	118.00	60.50	56.00	6.00	
MDW0540HGS8			0.2126	5.40	118.00	60.50	56.00	6.00	
MDW02130HGS8	○	#3	0.2130	5.41	4.6457	2.3819	2.2047	0.2344	
MDW0550HGS8	★		0.2165	5.50	118.00	60.50	56.00	6.00	
MDW02188HGS8	○	7/32	0.2188	5.56	4.6457	2.5984	2.0472	0.2344	1/4-28
MDW0560HGS8			0.2205	5.60	118.00	66.00	52.00	6.00	

○ = HGS8 style drills arriving 3rd Quarter 2010 ★ = Worldwide Warehouse item available in 10 business days
 Some drills can achieve greater depths. Always check for sufficient flute length. Note: Special diameters available upon request.

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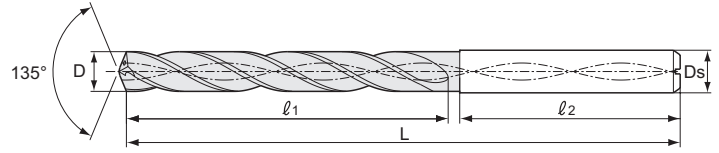
MDW-HGS8 8XD drill for excellent chip management and long tool life (Internal coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length l_1 (in/mm)	Shank Length l_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW02210HGS8	○	#2	0.2210	5.61	4.6457	2.5984	2.0472	0.2344	
MDW0570HGS8			0.2244	5.70	118.00	66.00	52.00	6.0	
MDW0580HGS8			0.2283	5.80	118.00	66.00	52.00	6.0	
MDW0590HGS8			0.2323	5.90	118.00	66.00	52.00	6.0	
MDW02344HGS8	○	15/64	0.2344	5.95	4.6457	2.5984	2.0472	0.2344	
MDW0600HGS8	○		0.2362	6.00	118.00	66.00	52.00	6.00	M7x1
MDW0610HGS8			0.2402	6.10	130.00	71.50	53.00	7.00	
MDW0620HGS8			0.2441	6.20	130.00	71.50	53.00	7.00	
MDW0630HGS8			0.2480	6.30	130.00	71.50	53.00	7.00	
MDW02500HGS8	○	1/4	0.2500	6.35	5.1181	2.8150	2.0866	0.2812	
MDW0640HGS8			0.2520	6.40	130.00	71.50	53.00	7.00	
MDW0650HGS8	★		0.2559	6.50	130.00	71.50	53.00	7.00	
MDW02570HGS8	○	#F	0.2570	6.53	5.1181	3.0315	2.0866	0.2812	5/16-18
MDW0653HGS8			0.2571	6.53	130.00	77.00	53.00	7.00	
MDW0660HGS8			0.2598	6.60	130.00	77.00	53.00	7.00	
MDW0670HGS8			0.2638	6.70	130.00	77.00	53.00	7.00	
MDW02656HGS8	○	17/64	0.2656	6.75	5.1181	3.0315	2.0866	0.2812	
MDW02660HGS8	○	#H	0.2660	6.76	5.1181	3.0315	2.0866	0.2812	
MDW0680HGS8	○		0.2677	6.80	130.00	77.00	53.00	7.00	
MDW0690HGS8			0.2717	6.90	130.00	77.00	53.00	7.00	
MDW02720HGS8	○	#I	0.2720	6.91	5.1181	3.0315	2.0866	0.2812	5/16-24
MDW0700HGS8	○		0.2756	7.00	130.00	77.00	53.00	7.00	
MDW02770HGS8		#J	0.2770	7.04	5.1181	3.0315	2.0866	0.2812	
MDW0710HGS8			0.2795	7.10	142.00	82.50	54.00	8.00	
MDW02812HGS8	○	9/32	0.2812	7.14	5.1181	3.0315	2.0866	0.2812	
MDW0720HGS8			0.2835	7.20	142.00	82.50	54.00	8.00	
MDW0730HGS8			0.2874	7.30	142.00	82.50	54.00	8.00	
MDW0740HGS8			0.2913	7.40	142.00	82.50	54.00	8.00	
MDW0750HGS8	★		0.2953	7.50	142.00	82.50	54.00	8.00	
MDW02969HGS8	○	19/64	0.2969	7.54	5.5906	3.4646	2.1260	0.3125	
MDW0760HGS8			0.2992	7.60	142.00	88.00	54.00	8.00	
MDW0770HGS8			0.3031	7.70	142.00	88.00	54.00	8.00	
MDW0780HGS8			0.3071	7.80	142.00	88.00	54.00	8.00	M9x1.25
MDW0790HGS8			0.3110	7.90	142.00	88.00	54.00	8.00	
MDW03125HGS8	○	5/16	0.3125	7.94	5.5906	3.4646	2.1260	0.3125	3/8-16
MDW0800HGS8	○		0.3150	8.00	142.00	88.00	54.00	8.00	
MDW0810HGS8			0.3189	8.10	154.00	93.50	55.00	9.00	
MDW0820HGS8			0.3228	8.20	154.00	93.50	55.00	9.00	
MDW03230HGS8		#P	0.3230	8.20	6.0630	3.6811	2.1654	0.3594	
MDW0830HGS8			0.3268	8.30	154.00	93.50	55.00	9.00	
MDW03281HGS8		21/64	0.3281	8.33	6.0630	3.6811	2.1654	0.3594	
MDW0840HGS8			0.3307	8.40	154.00	93.50	55.00	9.00	
MDW03320HGS8		#Q	0.3320	8.43	6.0630	3.6811	2.1654	0.3594	
MDW0850HGS8	○		0.3346	8.50	154.00	93.50	55.00	9.00	M10x1.5
MDW0860HGS8			0.3386	8.60	154.00	99.00	55.00	9.00	
MDW0870HGS8			0.3425	8.70	154.00	99.00	55.00	9.00	
MDW03438HGS8	○	11/32	0.3438	8.73	6.0630	3.8976	2.1654	0.3594	

○ = HGS8 style drills arriving 3rd Quarter 2010 ★ = Worldwide Warehouse item available in 10 business days

Some drills can achieve greater depths. Always check for sufficient flute length. Note: Special diameters available upon request.

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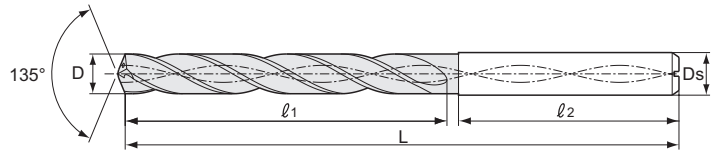
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MDW-HGS8 8XD drill for excellent chip management and long tool life (Internal coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length l_1 (in/mm)	Shank Length l_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW0880HGS8			0.3465	8.80	154.00	99.00	55.00	9.00	
MDW0890HGS8			0.3504	8.90	154.00	99.00	55.00	9.00	
MDW0900HGS8	○		0.3543	9.00	154.00	99.00	55.00	9.00	
MDW0910HGS8			0.3583	9.10	166.00	104.50	56.00	10.00	
MDW03594HGS8		23/64	0.3594	9.13	6.0630	3.8976	2.1654	0.3594	
MDW0920HGS8			0.3622	9.20	166.00	104.50	56.00	10.00	
MDW0930HGS8			0.3661	9.30	166.00	104.50	56.00	10.00	
MDW03680HGS8		#U	0.3680	9.35	6.5354	4.1142	2.2047	0.3906	7/16-14
MDW0940HGS8			0.3701	9.40	166.00	104.50	56.00	10.00	
MDW0950HGS8	★		0.3740	9.50	166.00	104.50	56.00	10.00	
MDW03750HGS8	○	3/8	0.3750	9.53	6.5354	4.3307	2.2047	0.3906	
MDW0960HGS8			0.3780	9.60	166.00	110.00	56.00	10.00	
MDW0970HGS8			0.3819	9.70	166.00	110.00	56.00	10.00	
MDW0980HGS8			0.3858	9.80	166.00	110.00	56.00	10.00	
MDW0990HGS8			0.3898	9.90	166.00	110.00	56.00	10.00	
MDW03906HGS8	○	25/64	0.3906	9.92	6.5354	4.3307	2.2047	0.3906	
MDW1000HGS8	○		0.3937	10.00	166.00	110.00	56.00	10.00	
MDW1010HGS8			0.3976	10.10	182.00	115.50	61.00	11.00	
MDW1020HGS8			0.4016	10.20	182.00	115.50	61.00	11.00	M12x1.75
MDW1030HGS8	○		0.4055	10.30	182.00	115.50	61.00	11.00	
MDW04062HGS8	○	13/32	0.4062	10.32	7.1654	4.5472	2.4016	0.4375	
MDW1040HGS8			0.4094	10.40	182.00	115.50	61.00	11.00	
MDW1050HGS8	○		0.4134	10.50	182.00	115.50	61.00	11.00	
MDW1060HGS8			0.4173	10.60	182.00	121.00	61.00	11.00	
MDW1070HGS8			0.4213	10.70	182.00	121.00	61.00	11.00	
MDW04219HGS8	○	27/64	0.4219	10.72	7.1654	4.7638	2.4016	0.4375	1/2-13
MDW1080HGS8			0.4252	10.80	182.00	121.00	61.00	11.00	
MDW1090HGS8			0.4291	10.90	182.00	121.00	61.00	11.00	
MDW1100HGS8	○		0.4331	11.00	182.00	121.00	61.00	11.00	
MDW1110HGS8			0.4370	11.10	194.00	126.50	62.00	12.00	
MDW04375HGS8	○	7/16	0.4375	11.11	7.1654	4.7638	2.4016	0.4375	
MDW1120HGS8			0.4409	11.20	194.00	126.50	62.00	12.00	
MDW1130HGS8			0.4449	11.30	194.00	126.50	62.00	12.00	
MDW1140HGS8			0.4488	11.40	194.00	126.50	62.00	12.00	
MDW1150HGS8	★		0.4528	11.50	194.00	126.50	62.00	12.00	
MDW04531HGS8		29/64	0.4531	11.51	7.6378	5.1969	2.4409	0.4688	1/2-20
MDW1160HGS8			0.4567	11.60	194.00	132.00	62.00	12.00	
MDW1170HGS8			0.4606	11.70	194.00	132.00	62.00	12.00	
MDW1180HGS8			0.4646	11.80	194.00	132.00	62.00	12.00	
MDW1190HGS8			0.4685	11.90	194.00	132.00	62.00	12.00	
MDW04688HGS8	○	15/32	0.4688	11.91	7.6378	5.1969	2.4409	0.4688	
MDW1200HGS8	○		0.4724	12.00	194.00	132.00	62.00	12.00	M14x2
MDW1210HGS8			0.4764	12.10	206.00	137.50	63.00	13.00	
MDW1220HGS8			0.4803	12.20	206.00	137.50	63.00	13.00	
MDW1230HGS8			0.4843	12.30	206.00	137.50	63.00	13.00	9/16-12
MDW04844HGS8		31/64	0.4844	12.30	8.1102	5.4134	2.4803	0.5156	
MDW1240HGS8			0.4882	12.40	206.00	137.50	63.00	13.00	

○ = HGS8 style drills arriving 3rd Quarter 2010 ★ = Worldwide Warehouse item available in 10 business days
 Some drills can achieve greater depths. Always check for sufficient flute length. Note: Special diameters available upon request.

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MDW-HGS8 8XD drill for excellent chip management and long tool life (Internal coolant)

Catalog Number (inch/metric)	Stock	Fractional Wire & Letters	Diameter D (in)	Diameter D (mm)	Overall Length L (in/mm)	Flute Length l_1 (in/mm)	Shank Length l_2 (in/mm)	Shank Diameter D_s (in/mm)	Tap Size
MDW1250HGS8	★		0.4921	12.50	206.00	137.50	63.00	13.00	
MDW1260HGS8			0.4961	12.60	206.00	143.00	63.00	13.00	
MDW1270HGS8		1/2	0.5000	12.70	206.00	143.00	63.00	13.00	
MDW05000HGS8	○	1/2	0.5000	12.70	8.1102	5.6299	2.4803	0.5156	
MDW1280HGS8			0.5039	12.80	206.00	143.00	63.00	13.00	
MDW1283HGS8			0.5051	12.83	206.00	143.00	63.00	13.00	
MDW1290HGS8			0.5079	12.90	206.00	143.00	63.00	13.00	
MDW1300HGS8	★		0.5118	13.00	206.00	143.00	63.00	13.00	
MDW05156HGS8		33/64	0.5156	13.10	8.1102	5.6299	2.4803	0.5156	9/19-18
MDW1310HGS8			0.5157	13.10	218.00	148.50	64.00	14.00	
MDW1320HGS8			0.5197	13.20	218.00	148.50	64.00	14.00	
MDW1330HGS8			0.5236	13.30	218.00	148.50	64.00	14.00	
MDW1340HGS8			0.5276	13.40	218.00	148.50	64.00	14.00	
MDW05312HGS8		17/32	0.5312	13.49	8.5827	5.8465	2.5197	0.5469	5/8-11
MDW1350HGS8	★		0.5315	13.50	218.00	148.50	64.00	14.00	
MDW1360HGS8			0.5354	13.60	218.00	154.00	64.00	14.00	
MDW1370HGS8			0.5394	13.70	218.00	154.00	64.00	14.00	
MDW1380HGS8			0.5433	13.80	218.00	154.00	64.00	14.00	
MDW05469HGS8		35/64	0.5469	13.89	8.5827	6.0630	2.5197	0.5469	M16x2
MDW1390HGS8			0.5472	13.90	218.00	154.00	64.00	14.00	
MDW1400HGS8	★		0.5512	14.00	218.00	154.00	64.00	14.00	
MDW1410HGS8			0.5551	14.10	230.00	159.50	65.00	15.00	
MDW1420HGS8			0.5591	14.20	230.00	159.50	65.00	15.00	
MDW05625HGS8		9/16	0.5625	14.29	9.0551	6.2795	2.5591	0.5937	
MDW1430HGS8			0.5630	14.30	230.00	159.50	65.00	15.00	
MDW1440HGS8			0.5669	14.40	230.00	159.50	65.00	15.00	
MDW1450HGS8	★		0.5709	14.50	230.00	159.50	65.00	15.00	
MDW1460HGS8			0.5748	14.60	230.00	165.00	65.00	15.00	
MDW05781HGS8		37/64	0.5781	14.68	9.0551	6.4961	2.5591	0.5937	5/8-18
MDW1470HGS8			0.5787	14.70	230.00	165.00	65.00	15.00	
MDW1480HGS8			0.5827	14.80	230.00	165.00	65.00	15.00	
MDW1490HGS8			0.5866	14.90	230.00	165.00	65.00	15.00	
MDW1500HGS8	★		0.5906	15.00	230.00	165.00	65.00	15.00	
MDW05937HGS8		19/32	0.5937	15.08	9.0551	6.4961	2.5591	0.5937	
MDW1510HGS8			0.5945	15.10	242.00	170.50	66.00	16.00	
MDW1520HGS8			0.5984	15.20	242.00	170.50	66.00	16.00	
MDW1530HGS8			0.6024	15.30	242.00	170.50	66.00	16.00	
MDW1540HGS8			0.6063	15.40	242.00	170.50	66.00	16.00	
MDW06094HGS8		39/64	0.6094	15.48	9.5276	6.7126	2.5984	0.6250	11/16-12
MDW1550HGS8	★		0.6102	15.50	242.00	170.50	66.00	16.00	M18x2.5
MDW1560HGS8			0.6142	15.60	242.00	176.00	66.00	16.00	
MDW1570HGS8			0.6181	15.70	242.00	176.00	66.00	16.00	
MDW1580HGS8			0.6220	15.80	242.00	176.00	66.00	16.00	
MDW06250HGS8		5/8	0.6250	15.88	9.5276	6.9291	2.5984	0.6250	11/16-16
MDW1590HGS8			0.6260	15.90	242.00	176.00	66.00	16.00	
MDW1600HGS8	★		0.6299	16.00	242.00	176.00	66.00	16.00	

○ = HGS8 style drills arriving 3rd Quarter 2010 ★ = Worldwide Warehouse item available in 10 business days

Some drills can achieve greater depths. Always check for sufficient flute length. Note: Special diameters available upon request.

■ RECOMMENDED SPEEDS & FEEDS (INCH)

GS2 & GS4 (external coolant) Speed: v=SFM Feed: f=IPR

Drill Dia. (inch)		Steels <Hb250	Steels >Hb250	Nodular Cast Iron	Die Steel	Stainless Steels*	Exotic Alloys	Titanium Alloy	Aluminum	Gray Cast Iron
.110 ~ .197	v	100 ~ 220	100 ~ 220	100 ~ 160	50 ~ 120	40 ~ 100	40 ~ 100	40 ~ 100	120 ~ 600	100 ~ 260
	f	.006 ~ .010	.004 ~ .010	.006 ~ .010	.002 ~ .006	.002 ~ .006	.002 ~ .006	.002 ~ .006	.008 ~ .016	.006 ~ .012
.197 ~ .315	v	140 ~ 240	120 ~ 220	140 ~ 260	50 ~ 160	50 ~ 120	50 ~ 120	50 ~ 120	120 ~ 600	120 ~ 290
	f	.006 ~ .012	.006 ~ .010	.008 ~ .012	.004 ~ .008	.003 ~ .008	.003 ~ .008	.003 ~ .008	.008 ~ .016	.006 ~ .014
.315 ~ .394	v	140 ~ 240	120 ~ 220	140 ~ 260	70 ~ 180	50 ~ 140	50 ~ 140	50 ~ 140	240 ~ 720	170 ~ 340
	f	.008 ~ .012	.006 ~ .012	.008 ~ .014	.004 ~ .010	.003 ~ .008	.003 ~ .008	.003 ~ .008	.008 ~ .016	.008 ~ .016
.394 ~ .472	v	180 ~ 280	140 ~ 250	180 ~ 290	70 ~ 180	70 ~ 180	70 ~ 180	70 ~ 180	300 ~ 720	190 ~ 340
	f	.008 ~ .012	.006 ~ .012	.008 ~ .014	.004 ~ .010	.004 ~ .008	.004 ~ .008	.008 ~ .018	.008 ~ .018	.010 ~ .018
.472 ~ .551	v	180 ~ 310	140 ~ 280	180 ~ 310	100 ~ 190	70 ~ 180	70 ~ 180	70 ~ 180	300 ~ 720	220 ~ 360
	f	.010 ~ .014	.006 ~ .012	.008 ~ .014	.004 ~ .010	.004 ~ .010	.004 ~ .010	.004 ~ .010	.008 ~ .028	.010 ~ .024
.551 ~ .787	v	190 ~ 340	170 ~ 280	220 ~ 360	100 ~ 220	70 ~ 180	70 ~ 180	70 ~ 180	300 ~ 720	220 ~ 380
	f	.010 ~ .018	.008 ~ .014	.008 ~ .018	.004 ~ .012	.004 ~ .010	.004 ~ .010	.004 ~ .010	.008 ~ .028	.010 ~ .024

HGS3, HGS5, & HGS8 (internal coolant)

Drill Dia. (inch)		Steels <Hb200	Steels Hb200-300	Alloy Steels >Hb300	Prehard Steels HRC45	Die Steels (Annealed)	Stainless Steels*	Ductile Cast Iron	Gray Cast Iron	Titanium Alloy Ti-6Al-4V	Inconel, Monel, etc.
<.196	v	250 ~ 400	165 ~ 330	135 ~ 265	65 ~ 165	100 ~ 185	100 ~ 195	130 ~ 330	265 ~ 395	65 ~ 130	35 ~ 75
	f	.006 ~ .010	.006 ~ .010	.004 ~ .008	.003 ~ .004	.003 ~ .006	.004 ~ .008	.006 ~ .010	.006 ~ .012	.003 ~ .004	.002 ~ .003
.197 ~ .394	v	360 ~ 480	230 ~ 460	135 ~ 265	100 ~ 195	160 ~ 240	165 ~ 280	265 ~ 470	330 ~ 470	80 ~ 130	35 ~ 85
	f	.008 ~ .014	.008 ~ .014	.004 ~ .010	.004 ~ .006	.004 ~ .008	.004 ~ .010	.008 ~ .014	.008 ~ .014	.003 ~ .005	.003 ~ .004
.395 ~ .630	v	430 ~ 550	265 ~ 495	135 ~ 330	100 ~ 195	160 ~ 240	165 ~ 310	280 ~ 400	400 ~ 550	80 ~ 130	35 ~ 100
	f	.010 ~ .014	.010 ~ .014	.006 ~ .012	.005 ~ .008	.005 ~ .009	.006 ~ .012	.010 ~ .014	.010 ~ .016	.004 ~ .006	.003 ~ .006

*For difficult-to-machine stainless steels, (316, 302, 304, 17-4ph, etc.) adjust speeds & feeds accordingly

■ RECOMMENDED SPEEDS & FEEDS (METRIC)

GS2 & GS4 (external coolant) Speed: v=m/min Feed: f=mm/rev

Drill Dia. (mm)		Steels <Hb250	Steels >Hb250	Nodular Cast Iron	Die Steel	Stainless Steel	Exotic Alloys	Titanium Alloy	Aluminum	Gray Cast Iron
2.0 ~ 5.0	v	29 ~ 66	29 ~ 59	29 ~ 48	14 ~ 36	11 ~ 29	11 ~ 29	11 ~ 29	36 ~ 184	29 ~ 80
	f	.15 ~ .25	.10 ~ .25	.15 ~ .25	.05 ~ .15	.05 ~ .15	.05 ~ .15	.05 ~ .15	.20 ~ .41	.15 ~ .30
5.0 ~ 8.0	v	44 ~ 73	36 ~ 66	44 ~ 80	14 ~ 48	14 ~ 36	14 ~ 36	14 ~ 36	36 ~ 184	36 ~ 88
	f	.15 ~ .30	.15 ~ .25	.20 ~ .30	.10 ~ .20	.08 ~ .20	.08 ~ .20	.08 ~ .20	.20 ~ .41	.15 ~ .36
8.0 ~ 10.0	v	44 ~ 73	36 ~ 66	44 ~ 80	22 ~ 55	14 ~ 44	14 ~ 44	14 ~ 44	73 ~ 220	52 ~ 102
	f	.20 ~ .30	.15 ~ .30	.20 ~ .36	.10 ~ .25	.08 ~ .20	.08 ~ .20	.08 ~ .20	.20 ~ .41	.20 ~ .41
10.0 ~ 12.0	v	55 ~ 84	44 ~ 77	55 ~ 88	22 ~ 55	22 ~ 55	22 ~ 55	22 ~ 55	91 ~ 220	59 ~ 102
	f	.20 ~ .30	.15 ~ .30	.20 ~ .36	.10 ~ .25	.10 ~ .20	.10 ~ .20	.10 ~ .20	.20 ~ .46	.25 ~ .46
12.0 ~ 14.0	v	55 ~ 95	44 ~ 84	55 ~ 95	29 ~ 59	22 ~ 55	22 ~ 55	22 ~ 55	91 ~ 240	66 ~ 109
	f	.25 ~ .36	.15 ~ .30	.20 ~ .36	.10 ~ .25	.10 ~ .25	.10 ~ .25	.10 ~ .25	.20 ~ .71	.25 ~ .61
14.0 ~ 20.0	v	55 ~ 95	44 ~ 84	55 ~ 95	29 ~ 59	22 ~ 55	22 ~ 55	22 ~ 55	91 ~ 240	66 ~ 109
	f	.25 ~ .36	.15 ~ .30	.20 ~ .36	.10 ~ .25	.10 ~ .25	.10 ~ .25	.10 ~ .25	.20 ~ .71	.25 ~ .61

HGS3, HGS5, & HGS8 (internal coolant)

Drill Dia. (mm)		Steels <Hb200	Steels Hb200-300	Alloy Steels >Hb300	Prehard Steels HRC45	Die Steels (Annealed)	Stainless Steels*	Ductile Cast Iron	Gray Cast Iron	Titanium Alloy Ti-6Al-4V	Inconel, Monel, etc.
<4.9	v	76 ~ 122	50 ~ 100	41 ~ 81	20 ~ 50	31 ~ 56	31 ~ 60	39 ~ 100	81 ~ 120	20 ~ 40	11 ~ 23
	f	.15 ~ .25	.15 ~ .25	.10 ~ .20	.08 ~ .10	.08 ~ .15	.10 ~ .20	.15 ~ .25	.15 ~ .30	.08 ~ .10	.05 ~ .08
5.0 ~ 10.0	v	110 ~ 146	70 ~ 40	41 ~ 81	31 ~ 60	49 ~ 73	50 ~ 85	81 ~ 122	100 ~ 143	24 ~ 40	11 ~ 26
	f	.20 ~ .35	.20 ~ .35	.10 ~ .25	.10 ~ .15	.10 ~ .20	.10 ~ .25	.20 ~ .25	.20 ~ .35	.08 ~ .13	.08 ~ .10
10.1 ~ 16.0	v	131 ~ 168	81 ~ 151	41 ~ 100	31 ~ 60	49 ~ 73	50 ~ 95	85 ~ 122	122 ~ 168	24 ~ 40	11 ~ 30
	f	.25 ~ .35	.25 ~ .35	.15 ~ .30	.13 ~ .20	.13 ~ .23	.15 ~ .30	.25 ~ .36	.25 ~ .41	.10 ~ .15	.07 ~ .15

*For difficult-to-machine stainless steels, (316, 302, 304, 17-4ph, etc.) adjust speeds & feeds accordingly



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