

AT1-FC

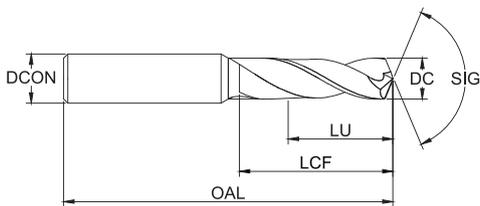
- ▶ MSTM's AT1 drills are designed for maximum value and good performance when drilling a wide variety of materials, ranging from soft, non-ferrous materials to semi-hardened steels.
- ▶ Twister GP drills are an excellent choice for all general-purpose hole-making applications.
- ▶ Next-generation HiPIMS technology FerroCon coating results in maximum tool surface hardness and smoothness resulting in increased tool life and maximum productivity.
- ▶ Recommended for drilling cast iron, unalloyed and alloyed steels, up to 45 HRC.



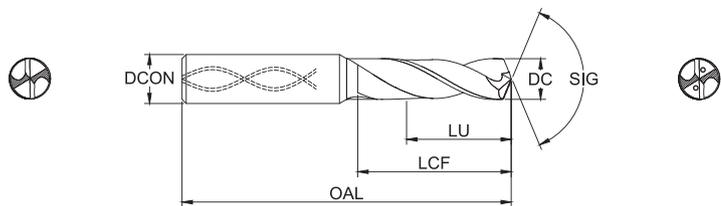
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|---|---|---|---|---|---|
| P | M | K | N | S | H |
| ● | | ● | ● | | |

● Recommended ○ Good

External Coolant



Internal Coolant



Stub (External Coolant)



units in mm

| CODE | DC | DCON | LU | LCF | OAL |
|---------------------|-----|------|----|-----|-----|
| MS-AT1-SB-0-0300-FC | 3.0 | 3 | 12 | 16 | 46 |
| MS-AT1-SB-0-0310-FC | 3.1 | 4 | 14 | 18 | 49 |
| MS-AT1-SB-0-0320-FC | 3.2 | 4 | 14 | 18 | 49 |
| MS-AT1-SB-0-0330-FC | 3.3 | 4 | 14 | 18 | 49 |
| MS-AT1-SB-0-0340-FC | 3.4 | 4 | 15 | 20 | 52 |
| MS-AT1-SB-0-0350-FC | 3.5 | 4 | 15 | 20 | 52 |
| MS-AT1-SB-0-0360-FC | 3.6 | 4 | 15 | 20 | 52 |
| MS-AT1-SB-0-0370-FC | 3.7 | 4 | 15 | 20 | 52 |
| MS-AT1-SB-0-0380-FC | 3.8 | 4 | 17 | 22 | 55 |
| MS-AT1-SB-0-0390-FC | 3.9 | 4 | 17 | 22 | 55 |
| MS-AT1-SB-0-0400-FC | 4.0 | 4 | 17 | 22 | 55 |
| MS-AT1-SB-0-0410-FC | 4.1 | 5 | 17 | 22 | 55 |
| MS-AT1-SB-0-0420-FC | 4.2 | 5 | 17 | 22 | 55 |
| MS-AT1-SB-0-0430-FC | 4.3 | 5 | 18 | 24 | 58 |
| MS-AT1-SB-0-0440-FC | 4.4 | 5 | 18 | 24 | 58 |
| MS-AT1-SB-0-0450-FC | 4.5 | 5 | 18 | 24 | 58 |
| MS-AT1-SB-0-0460-FC | 4.6 | 5 | 18 | 24 | 58 |
| MS-AT1-SB-0-0470-FC | 4.7 | 5 | 18 | 24 | 58 |
| MS-AT1-SB-0-0480-FC | 4.8 | 5 | 20 | 26 | 62 |
| MS-AT1-SB-0-0490-FC | 4.9 | 5 | 20 | 26 | 62 |
| MS-AT1-SB-0-0500-FC | 5.0 | 5 | 20 | 26 | 62 |
| MS-AT1-SB-0-0510-FC | 5.1 | 6 | 20 | 26 | 62 |
| MS-AT1-SB-0-0520-FC | 5.2 | 6 | 20 | 26 | 62 |
| MS-AT1-SB-0-0530-FC | 5.3 | 6 | 20 | 26 | 62 |
| MS-AT1-SB-0-0540-FC | 5.4 | 6 | 21 | 28 | 66 |
| MS-AT1-SB-0-0550-FC | 5.5 | 6 | 21 | 28 | 66 |
| MS-AT1-SB-0-0560-FC | 5.6 | 6 | 21 | 28 | 66 |
| MS-AT1-SB-0-0570-FC | 5.7 | 6 | 21 | 28 | 66 |
| MS-AT1-SB-0-0580-FC | 5.8 | 6 | 21 | 28 | 66 |
| MS-AT1-SB-0-0590-FC | 5.9 | 6 | 21 | 28 | 66 |
| MS-AT1-SB-0-0600-FC | 6.0 | 6 | 21 | 28 | 66 |

Stub (External Coolant)



units in mm

| CODE | DC | DCON | LU | LCF | OAL |
|---------------------|-----|------|----|-----|-----|
| MS-AT1-SB-0-0610-FC | 6.1 | 8 | 23 | 31 | 70 |
| MS-AT1-SB-0-0620-FC | 6.2 | 8 | 23 | 31 | 70 |
| MS-AT1-SB-0-0630-FC | 6.3 | 8 | 23 | 31 | 70 |
| MS-AT1-SB-0-0640-FC | 6.4 | 8 | 23 | 31 | 70 |
| MS-AT1-SB-0-0650-FC | 6.5 | 8 | 23 | 31 | 70 |
| MS-AT1-SB-0-0660-FC | 6.6 | 8 | 23 | 31 | 70 |
| MS-AT1-SB-0-0670-FC | 6.7 | 8 | 23 | 31 | 70 |
| MS-AT1-SB-0-0680-FC | 6.8 | 8 | 25 | 34 | 74 |
| MS-AT1-SB-0-0690-FC | 6.9 | 8 | 25 | 34 | 74 |
| MS-AT1-SB-0-0700-FC | 7.0 | 8 | 25 | 34 | 74 |
| MS-AT1-SB-0-0710-FC | 7.1 | 8 | 25 | 34 | 74 |
| MS-AT1-SB-0-0720-FC | 7.2 | 8 | 25 | 34 | 74 |
| MS-AT1-SB-0-0730-FC | 7.3 | 8 | 25 | 34 | 74 |
| MS-AT1-SB-0-0740-FC | 7.4 | 8 | 25 | 34 | 74 |
| MS-AT1-SB-0-0750-FC | 7.5 | 8 | 25 | 34 | 74 |
| MS-AT1-SB-0-0760-FC | 7.6 | 8 | 27 | 37 | 79 |
| MS-AT1-SB-0-0770-FC | 7.7 | 8 | 27 | 37 | 79 |
| MS-AT1-SB-0-0780-FC | 7.8 | 8 | 27 | 37 | 79 |
| MS-AT1-SB-0-0790-FC | 7.9 | 8 | 27 | 37 | 79 |
| MS-AT1-SB-0-0800-FC | 8.0 | 8 | 27 | 37 | 79 |
| MS-AT1-SB-0-0810-FC | 8.1 | 10 | 27 | 37 | 79 |
| MS-AT1-SB-0-0820-FC | 8.2 | 10 | 27 | 37 | 79 |
| MS-AT1-SB-0-0830-FC | 8.3 | 10 | 27 | 37 | 79 |
| MS-AT1-SB-0-0840-FC | 8.4 | 10 | 27 | 37 | 79 |
| MS-AT1-SB-0-0850-FC | 8.5 | 10 | 27 | 37 | 79 |
| MS-AT1-SB-0-0860-FC | 8.6 | 10 | 29 | 40 | 84 |
| MS-AT1-SB-0-0870-FC | 8.7 | 10 | 29 | 40 | 84 |
| MS-AT1-SB-0-0880-FC | 8.8 | 10 | 29 | 40 | 84 |
| MS-AT1-SB-0-0890-FC | 8.9 | 10 | 29 | 40 | 84 |
| MS-AT1-SB-0-0900-FC | 9.0 | 10 | 29 | 40 | 84 |
| MS-AT1-SB-0-0910-FC | 9.1 | 10 | 29 | 40 | 84 |

Stub (External Coolant)



units in mm

| CODE | DC | DCON | LU | LCF | OAL |
|---------------------|------|------|----|-----|-----|
| MS-AT1-SB-0-0920-FC | 9.2 | 10 | 29 | 40 | 84 |
| MS-AT1-SB-0-0930-FC | 9.3 | 10 | 29 | 40 | 84 |
| MS-AT1-SB-0-0940-FC | 9.4 | 10 | 29 | 40 | 84 |
| MS-AT1-SB-0-0950-FC | 9.5 | 10 | 29 | 40 | 84 |
| MS-AT1-SB-0-0960-FC | 9.6 | 10 | 31 | 43 | 89 |
| MS-AT1-SB-0-0970-FC | 9.7 | 10 | 31 | 43 | 89 |
| MS-AT1-SB-0-0980-FC | 9.8 | 10 | 31 | 43 | 89 |
| MS-AT1-SB-0-0990-FC | 9.9 | 10 | 31 | 43 | 89 |
| MS-AT1-SB-0-1000-FC | 10 | 10 | 31 | 43 | 89 |
| MS-AT1-SB-0-1010-FC | 10.1 | 12 | 31 | 43 | 89 |
| MS-AT1-SB-0-1020-FC | 10.2 | 12 | 31 | 43 | 89 |
| MS-AT1-SB-0-1030-FC | 10.3 | 12 | 31 | 43 | 89 |
| MS-AT1-SB-0-1040-FC | 10.4 | 12 | 31 | 43 | 89 |
| MS-AT1-SB-0-1050-FC | 10.5 | 12 | 31 | 43 | 89 |
| MS-AT1-SB-0-1060-FC | 10.6 | 12 | 31 | 43 | 89 |
| MS-AT1-SB-0-1070-FC | 10.7 | 12 | 33 | 47 | 95 |
| MS-AT1-SB-0-1080-FC | 10.8 | 12 | 33 | 47 | 95 |
| MS-AT1-SB-0-1090-FC | 10.9 | 12 | 33 | 47 | 95 |
| MS-AT1-SB-0-1100-FC | 11 | 12 | 33 | 47 | 95 |
| MS-AT1-SB-0-1110-FC | 11.1 | 12 | 33 | 47 | 95 |
| MS-AT1-SB-0-1120-FC | 11.2 | 12 | 33 | 47 | 95 |
| MS-AT1-SB-0-1130-FC | 11.3 | 12 | 33 | 47 | 95 |
| MS-AT1-SB-0-1140-FC | 11.4 | 12 | 33 | 47 | 95 |
| MS-AT1-SB-0-1150-FC | 11.5 | 12 | 33 | 47 | 95 |
| MS-AT1-SB-0-1160-FC | 11.6 | 12 | 33 | 47 | 95 |
| MS-AT1-SB-0-1170-FC | 11.7 | 12 | 33 | 47 | 95 |
| MS-AT1-SB-0-1180-FC | 11.8 | 12 | 33 | 47 | 95 |
| MS-AT1-SB-0-1190-FC | 11.9 | 12 | 35 | 51 | 102 |
| MS-AT1-SB-0-1200-FC | 12 | 12 | 35 | 51 | 102 |
| MS-AT1-SB-0-1210-FC | 12.1 | 14 | 35 | 51 | 102 |
| MS-AT1-SB-0-1220-FC | 12.2 | 14 | 35 | 51 | 102 |

Stub (External Coolant)



units in mm

| CODE | DC | DCON | LU | LCF | OAL |
|---------------------|------|------|----|-----|-----|
| MS-AT1-SB-0-1230-FC | 12.3 | 14 | 35 | 51 | 102 |
| MS-AT1-SB-0-1240-FC | 12.4 | 14 | 35 | 51 | 102 |
| MS-AT1-SB-0-1250-FC | 12.5 | 14 | 35 | 51 | 102 |
| MS-AT1-SB-0-1260-FC | 12.6 | 14 | 35 | 51 | 102 |
| MS-AT1-SB-0-1270-FC | 12.7 | 14 | 35 | 51 | 102 |
| MS-AT1-SB-0-1280-FC | 12.8 | 14 | 35 | 51 | 102 |
| MS-AT1-SB-0-1290-FC | 12.9 | 14 | 35 | 51 | 102 |
| MS-AT1-SB-0-1300-FC | 13 | 14 | 35 | 51 | 102 |
| MS-AT1-SB-0-1310-FC | 13.1 | 14 | 35 | 51 | 102 |
| MS-AT1-SB-0-1320-FC | 13.2 | 14 | 35 | 51 | 102 |
| MS-AT1-SB-0-1330-FC | 13.3 | 14 | 37 | 54 | 107 |
| MS-AT1-SB-0-1340-FC | 13.4 | 14 | 37 | 54 | 107 |
| MS-AT1-SB-0-1350-FC | 13.5 | 14 | 37 | 54 | 107 |
| MS-AT1-SB-0-1360-FC | 13.6 | 14 | 37 | 54 | 107 |
| MS-AT1-SB-0-1370-FC | 13.7 | 14 | 37 | 54 | 107 |
| MS-AT1-SB-0-1380-FC | 13.8 | 14 | 37 | 54 | 107 |
| MS-AT1-SB-0-1390-FC | 13.9 | 14 | 37 | 54 | 107 |
| MS-AT1-SB-0-1400-FC | 14 | 14 | 37 | 54 | 107 |
| MS-AT1-SB-0-1410-FC | 14.1 | 16 | 38 | 56 | 111 |
| MS-AT1-SB-0-1420-FC | 14.2 | 16 | 38 | 56 | 111 |
| MS-AT1-SB-0-1430-FC | 14.3 | 16 | 38 | 56 | 111 |
| MS-AT1-SB-0-1440-FC | 14.4 | 16 | 38 | 56 | 111 |
| MS-AT1-SB-0-1450-FC | 14.5 | 16 | 38 | 56 | 111 |
| MS-AT1-SB-0-1460-FC | 14.6 | 16 | 38 | 56 | 111 |
| MS-AT1-SB-0-1470-FC | 14.7 | 16 | 38 | 56 | 111 |
| MS-AT1-SB-0-1480-FC | 14.8 | 16 | 38 | 56 | 111 |
| MS-AT1-SB-0-1490-FC | 14.9 | 16 | 38 | 56 | 111 |
| MS-AT1-SB-0-1500-FC | 15 | 16 | 38 | 56 | 111 |
| MS-AT1-SB-0-1510-FC | 15.1 | 16 | 38 | 58 | 115 |
| MS-AT1-SB-0-1520-FC | 15.2 | 16 | 38 | 58 | 115 |
| MS-AT1-SB-0-1530-FC | 15.3 | 16 | 38 | 58 | 115 |

Stub (External Coolant)



units in mm

| CODE | DC | DCON | LU | LCF | OAL |
|---------------------|------|------|----|-----|-----|
| MS-AT1-SB-0-1540-FC | 15.4 | 16 | 38 | 58 | 115 |
| MS-AT1-SB-0-1550-FC | 15.5 | 16 | 38 | 58 | 115 |
| MS-AT1-SB-0-1560-FC | 15.6 | 16 | 38 | 58 | 115 |
| MS-AT1-SB-0-1570-FC | 15.7 | 16 | 38 | 58 | 115 |
| MS-AT1-SB-0-1580-FC | 15.8 | 16 | 38 | 58 | 115 |
| MS-AT1-SB-0-1590-FC | 15.9 | 16 | 38 | 58 | 115 |
| MS-AT1-SB-0-1600-FC | 16 | 16 | 38 | 58 | 115 |
| MS-AT1-SB-0-1610-FC | 16.1 | 18 | 39 | 60 | 119 |
| MS-AT1-SB-0-1620-FC | 16.2 | 18 | 39 | 60 | 119 |
| MS-AT1-SB-0-1630-FC | 16.3 | 18 | 39 | 60 | 119 |
| MS-AT1-SB-0-1640-FC | 16.4 | 18 | 39 | 60 | 119 |
| MS-AT1-SB-0-1650-FC | 16.5 | 18 | 39 | 60 | 119 |
| MS-AT1-SB-0-1660-FC | 16.6 | 18 | 39 | 60 | 119 |
| MS-AT1-SB-0-1670-FC | 16.7 | 18 | 39 | 60 | 119 |
| MS-AT1-SB-0-1680-FC | 16.8 | 18 | 39 | 60 | 119 |
| MS-AT1-SB-0-1690-FC | 16.9 | 18 | 39 | 60 | 119 |
| MS-AT1-SB-0-1700-FC | 17 | 18 | 39 | 60 | 119 |
| MS-AT1-SB-0-1710-FC | 17.1 | 18 | 40 | 62 | 123 |
| MS-AT1-SB-0-1720-FC | 17.2 | 18 | 40 | 62 | 123 |
| MS-AT1-SB-0-1730-FC | 17.3 | 18 | 40 | 62 | 123 |
| MS-AT1-SB-0-1740-FC | 17.4 | 18 | 40 | 62 | 123 |
| MS-AT1-SB-0-1750-FC | 17.5 | 18 | 40 | 62 | 123 |
| MS-AT1-SB-0-1760-FC | 17.6 | 18 | 40 | 62 | 123 |
| MS-AT1-SB-0-1770-FC | 17.7 | 18 | 40 | 62 | 123 |
| MS-AT1-SB-0-1780-FC | 17.8 | 18 | 40 | 62 | 123 |
| MS-AT1-SB-0-1790-FC | 17.9 | 18 | 40 | 62 | 123 |
| MS-AT1-SB-0-1800-FC | 18 | 18 | 40 | 62 | 123 |
| MS-AT1-SB-0-1810-FC | 18.1 | 20 | 41 | 64 | 127 |
| MS-AT1-SB-0-1820-FC | 18.2 | 20 | 41 | 64 | 127 |
| MS-AT1-SB-0-1830-FC | 18.3 | 20 | 41 | 64 | 127 |
| MS-AT1-SB-0-1840-FC | 18.4 | 20 | 41 | 64 | 127 |

Stub (External Coolant)



units in mm

| CODE | DC | DCON | LU | LCF | OAL |
|---------------------|------|------|----|-----|-----|
| MS-AT1-SB-0-1850-FC | 18.5 | 20 | 41 | 64 | 127 |
| MS-AT1-SB-0-1860-FC | 18.6 | 20 | 41 | 64 | 127 |
| MS-AT1-SB-0-1870-FC | 18.7 | 20 | 41 | 64 | 127 |
| MS-AT1-SB-0-1880-FC | 18.8 | 20 | 41 | 64 | 127 |
| MS-AT1-SB-0-1890-FC | 18.9 | 20 | 41 | 64 | 127 |
| MS-AT1-SB-0-1900-FC | 19 | 20 | 41 | 64 | 127 |
| MS-AT1-SB-0-1910-FC | 19.1 | 20 | 42 | 66 | 131 |
| MS-AT1-SB-0-1920-FC | 19.2 | 20 | 42 | 66 | 131 |
| MS-AT1-SB-0-1930-FC | 19.3 | 20 | 42 | 66 | 131 |
| MS-AT1-SB-0-1940-FC | 19.4 | 20 | 42 | 66 | 131 |
| MS-AT1-SB-0-1950-FC | 19.5 | 20 | 42 | 66 | 131 |
| MS-AT1-SB-0-1960-FC | 19.6 | 20 | 42 | 66 | 131 |
| MS-AT1-SB-0-1970-FC | 19.7 | 20 | 42 | 66 | 131 |
| MS-AT1-SB-0-1980-FC | 19.8 | 20 | 42 | 66 | 131 |
| MS-AT1-SB-0-1990-FC | 19.9 | 20 | 42 | 66 | 131 |
| MS-AT1-SB-0-2000-FC | 20 | 20 | 42 | 66 | 131 |