

超硬コーティングドリル
Coated Carbide Drills

マルチドリル

ネクシオ

NeXEO MDE型

Multi Drill NeXEO MDE type

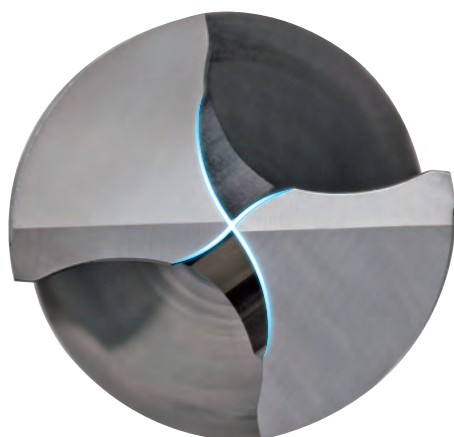
汎用性を追求したドリルの新機軸

- Next for Everyone -

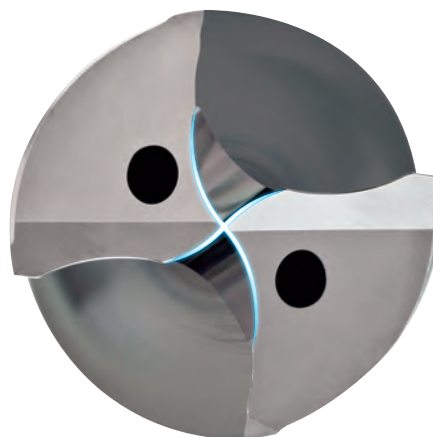


高炭素鋼、金型鋼から、ステンレス鋼まで、幅広い加工に対応
切れ味良好!! 小型マシニングセンタ、小型旋盤でも安定加工

RXシンニング+円弧刃型



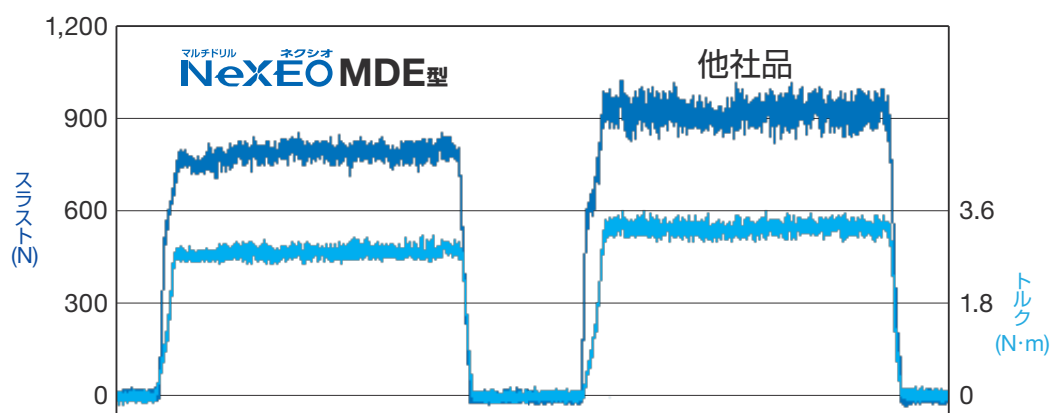
外部給油式



内部給油式

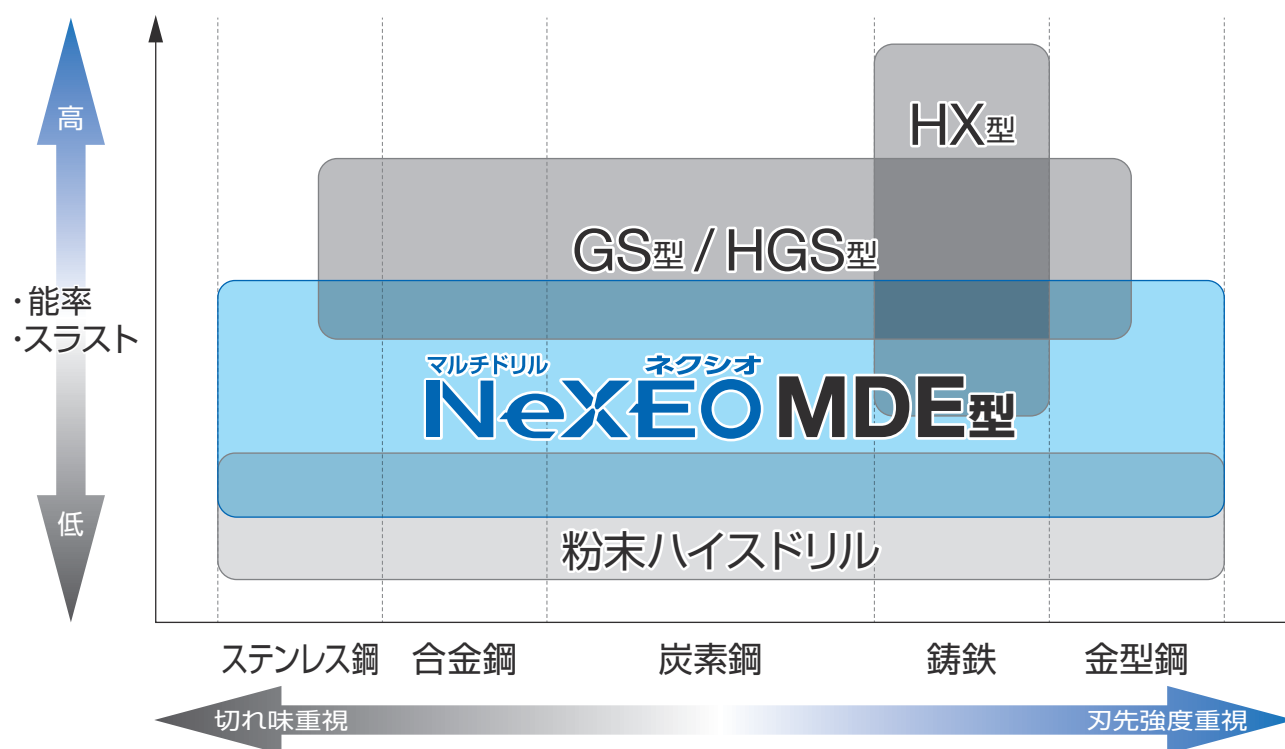
低抵抗で、切りくずを分断

- RXシンニングでスラストを低減、
小型マシニングセンタ、小型旋盤にも最適



刃径: $\phi 8\text{mm} \times 5\text{D}$, 被削材: S50C, 切削条件: $v_c=80\text{m/min}$, $f=0.15\text{mm/rev}$, $H=38\text{mm}$ (貫通) 内部給油 (水溶性)

に対応する汎用ドリル



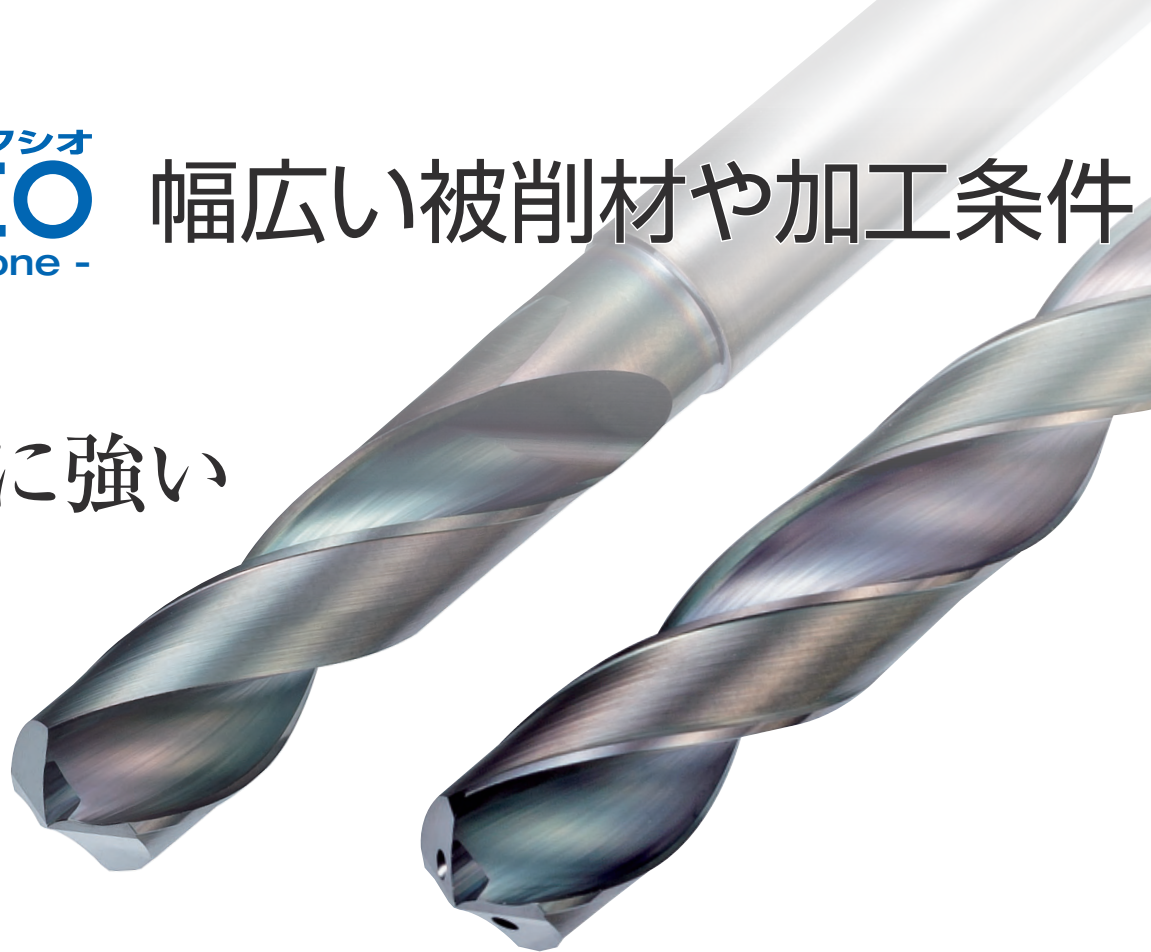
●新円弧刃型で良好な切りくず処理



刃径: $\phi 9\text{mm}$, 被削材: S50C, 切削条件: $v_c=30\text{m/min}$, $f=0.09\text{mm/rev}$ 内部給油 (水溶性)

幅広い被削材や加工条件

肩欠けに強い



New

汎用性を追求した新材種

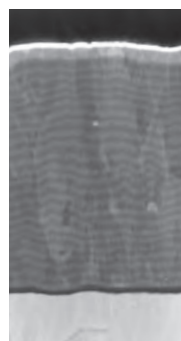
ACT100

●微粒系超硬母材

耐摩耗性と耐折損性を両立!

●NXコーティング

Absotech® 技術を応用した高品位・高硬度・
高強度膜で、優れた耐摩耗性、耐熱性を実現!



TiAlCrSi系超多層
コーティング

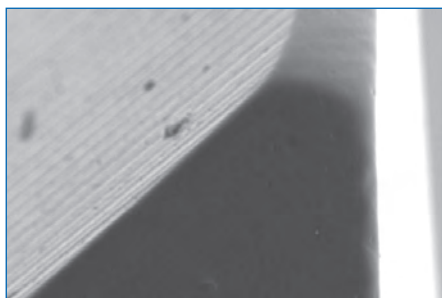
硬さHV : 46GPa

酸化温度:1,100℃

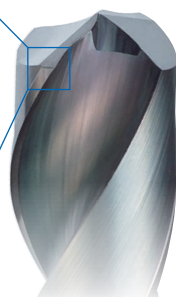
高密着層

●高品位エッジが肩部の安定寿命を実現

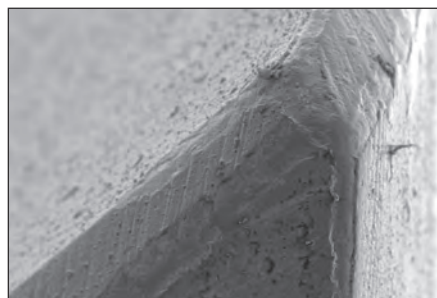
マルチドリル
NexEO MDE型



チッピングの無い高品位な刃先



他社品



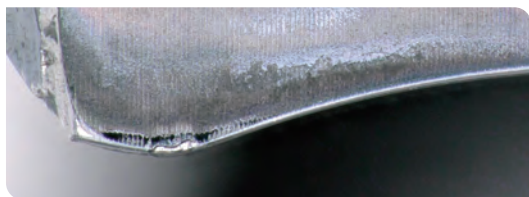
エッジのコーティングがチッピング

で、安定長寿命を実現 !!

高炭素鋼加工

でも 肩が強い!

マルチドリル ネグシオ
NeXEO MDE型



他社品A



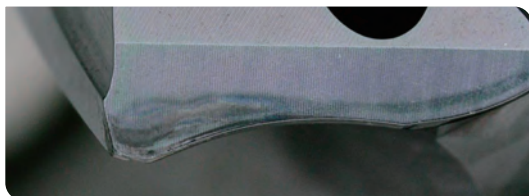
肩部欠損

被削材: S50C, 切削条件: $v_c=80\text{m/min}$, $f=0.15\text{mm/rev}$ 内部給油 (水溶性)

合金鋼加工

でも 肩が強い!

マルチドリル ネグシオ
NeXEO MDE型



他社品B



肩部溶着欠損

被削材: SCM415, 切削条件: $v_c=110\text{m/min}$, $f=0.2\text{mm/rev}$ 内部給油 (水溶性)

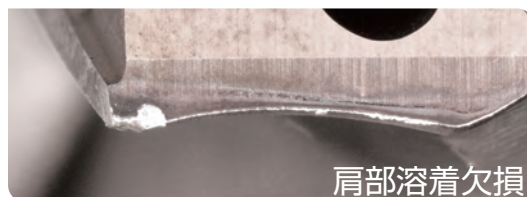
ステンレス鋼加工

でも 肩が強い!

マルチドリル ネグシオ
NeXEO MDE型



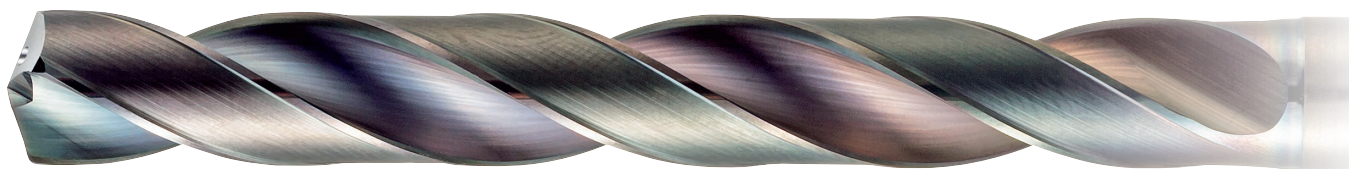
他社品C



肩部溶着欠損

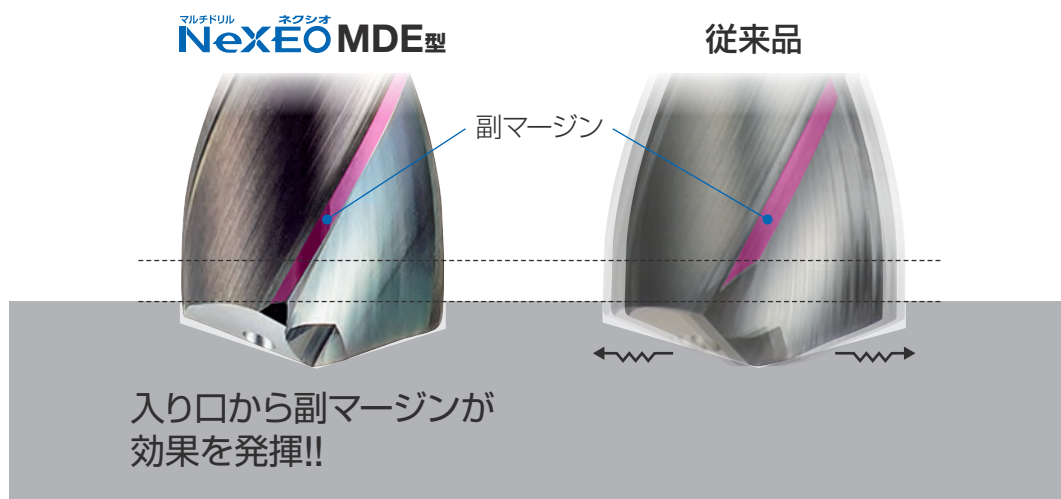
被削材: SUS304, 切削条件: $v_c=60\text{m/min}$, $f=0.1\text{mm/rev}$ 内部給油 (水溶性)

良好な穴精度と穴品位を

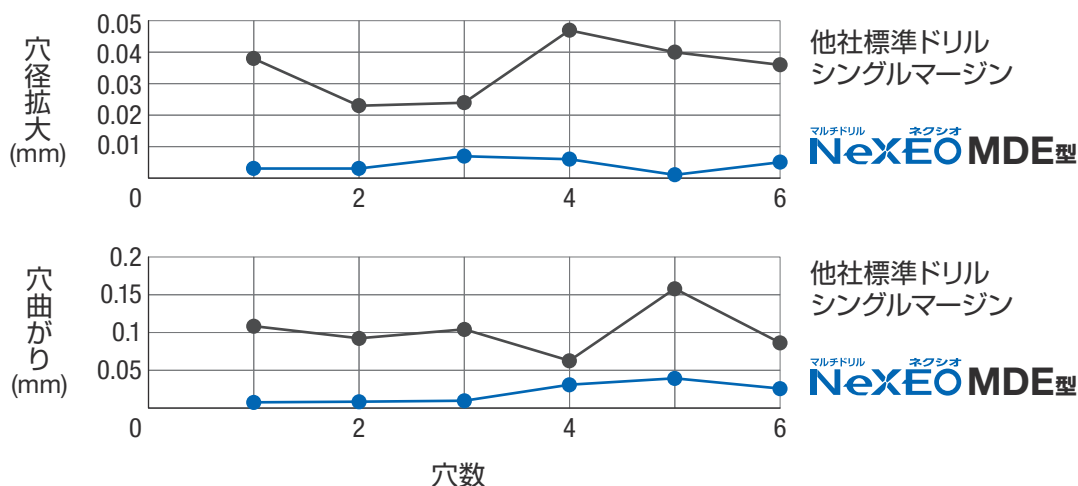


内部給油式：ダブルマージン

●特殊ダブルマージンで穴精度良好（内部給油式）

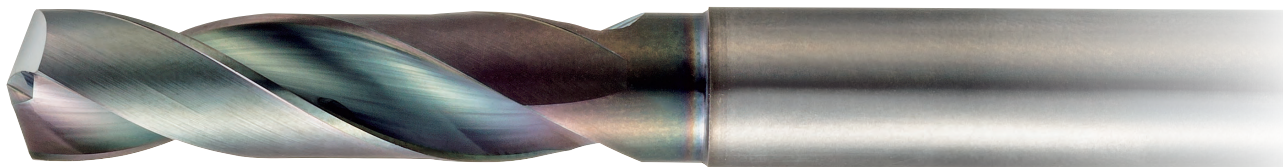


●穴精度比較（金型鋼加工）



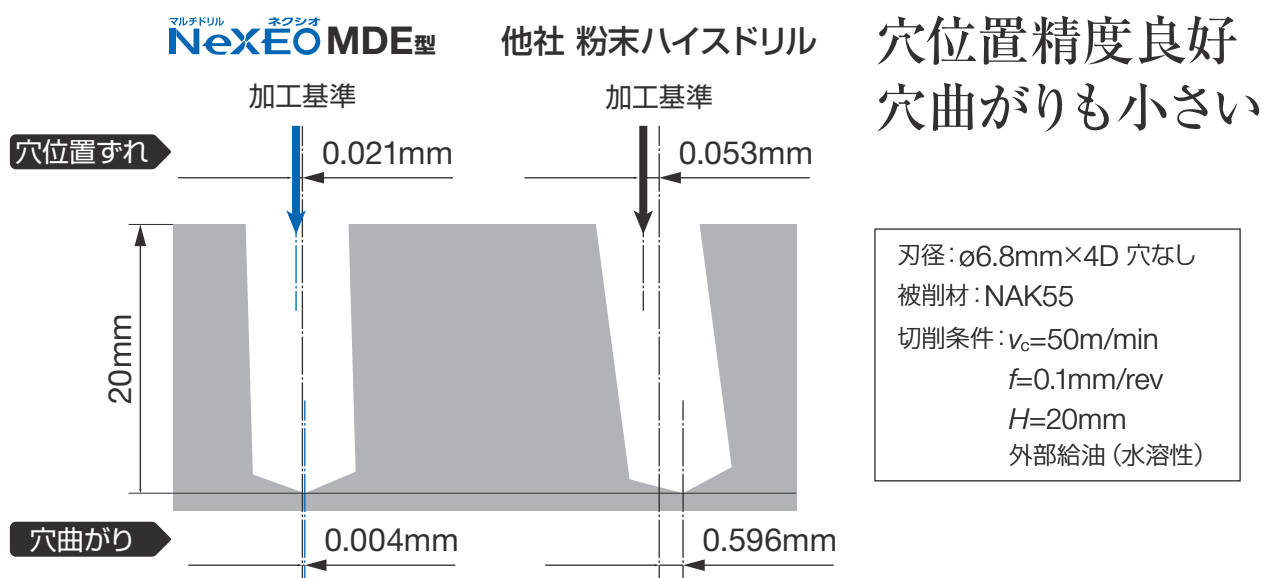
ドリル径：φ8mm×5D 穴付き，被削材：DH31S(49HRC)，切削条件： $v_c=17\text{m/min}$ ， $f=0.07\text{mm/rev}$ 内部給油（水溶性）

実現!!

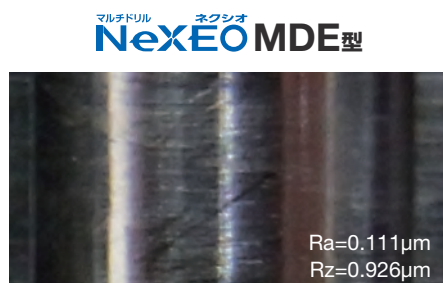


外部給油式：シングルマージン

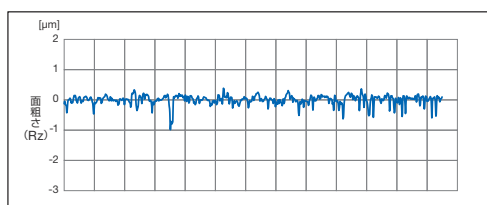
●粉末ハイスドリルと比較、穴精度良好（金型鋼加工）



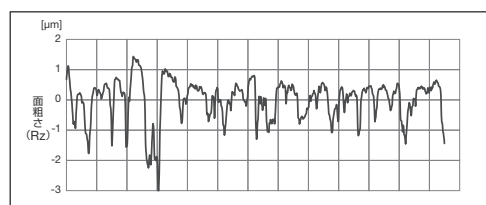
●穴壁面比較



光沢有り、良好

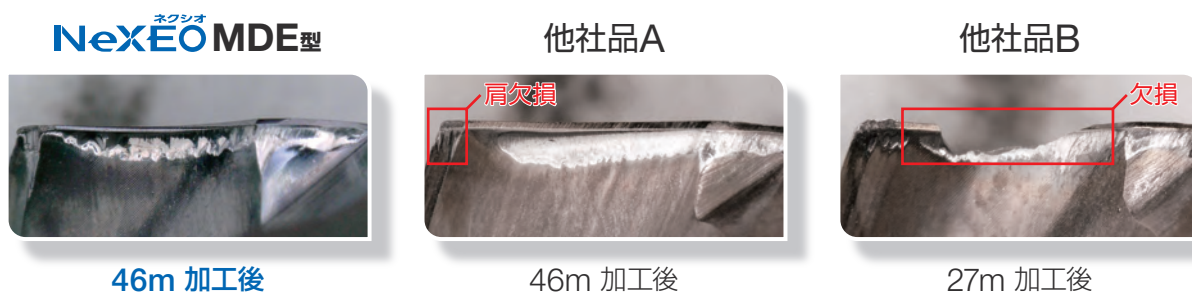
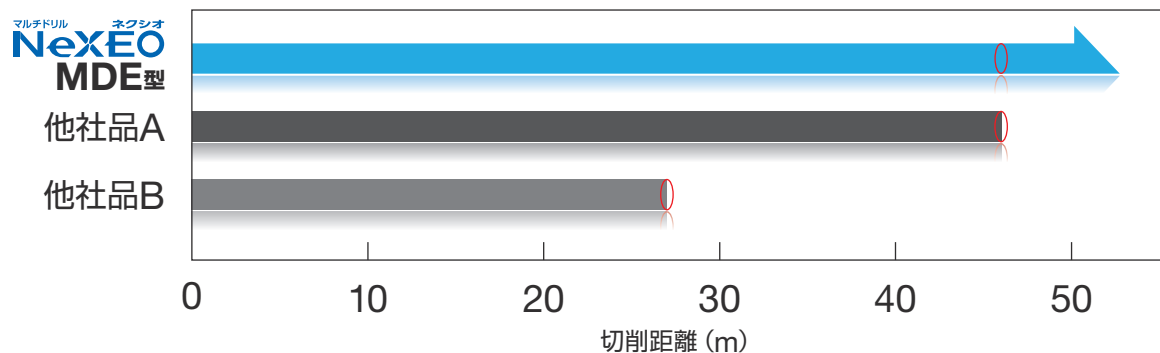


むしれにより白濁



●高炭素鋼使用実例

新材種ACT100で高い耐摩耗性と耐肩欠け性を実現



被削材：S50C, 設備：BT30 立形M/C
 使用工具：MDE 0800S08H05 (ø8mm×5D) 穴付き
 切削条件： $v_c=80\text{m/min}$, $f=0.15\text{mm/rev}$, $H=38\text{mm}$ (貫通) 内部給油 (水溶性)

●低炭素鋼使用実例

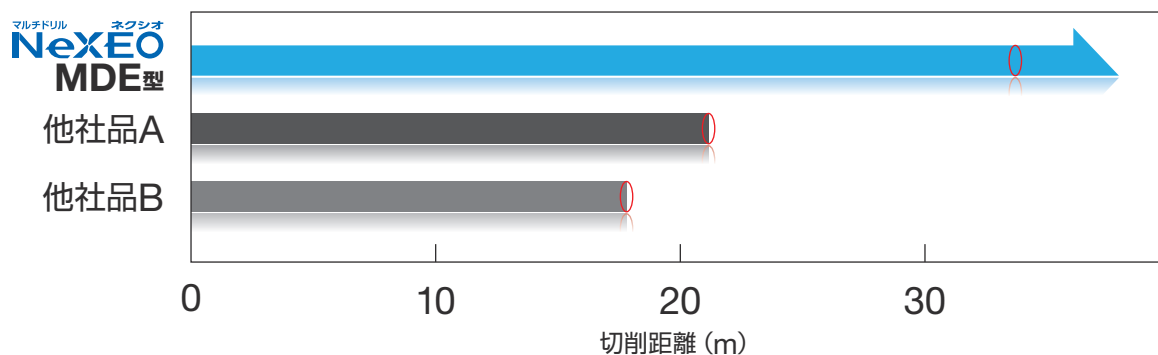
低炭素鋼で良好な切りくず処理



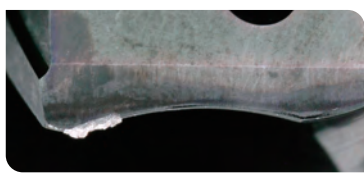
被削材：SM材 (工作機械フレーム部品), 設備：門形大型M/C
 使用工具：MDE 1150S12H05 (ø11.5mm×5D) 穴付き
 切削条件： $v_c=100\text{m/min}$, $f=0.25\text{mm/rev}$ 内部給油 (水溶性), 切削距離：約20m/30分

●高硬度合金鋼使用実例

新材種ACT100と新刃型で、凝着欠損にも強い



マルチドリル ネグシオ
NexEO MDE型



他社品A



他社品B



被削材：SCM440H (30HRC) , 設備：BT30 立形M/C
 使用工具：MDE 0800S08H05 (ø8mm×5D) 穴付き
 切削条件： $v_c=80\text{m/min}$, $f=0.15\text{mm/rev}$, $H=40\text{mm}$ (貫通) 内部給油 (水溶性)

●ステンレス鋼使用実例

旋盤によるステンレス鋼を安定加工

マルチドリル ネグシオ
NexEO MDE型



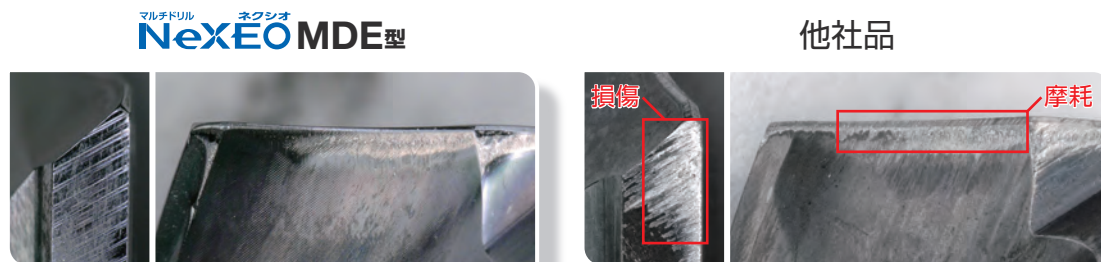
従来品



被削材：SUS310, 設備：NC旋盤 (被削材回転)
 使用工具：MDE 0350S04H05 (ø3.5mm×5D) 穴付き
 切削条件： $v_c=40\text{m/min}$, $f=0.05\text{mm/rev}$, $H=14\text{mm}$ 内部給油 (不水溶性) , 加工数：5,000個

●ダクタイル鋳鉄使用実例

新コーティングにより、マージン損傷・すくい面摩耗を低減



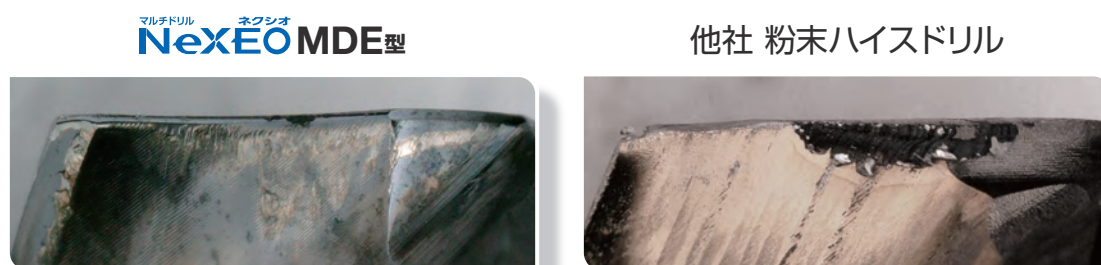
被削材：FCD450, 設備：HSK63 M/C

使用工具：MDE 079S08H05 (ø7.9mm×5D) 穴付き

切削条件： $v_c=70\text{m/min}$, $f=0.1\text{mm/rev}$, $H=40\text{mm}$ (貫通), $L=64\text{m}$, 内部給油 (水溶性)

●粉末ハイスドリルに対する切り替え実例

粉末ハイスドリルに対して、約10倍の長寿命



被削材：S15C (自動車部品), 設備：BT30 小型M/C

使用工具：MDE 0680S07E04 (ø6.8mm×4D)

切削条件： $v_c=60\text{m/min}$, $f=0.15\text{mm/rev}$

外部給油 (不水溶性), 加工数：12,000穴

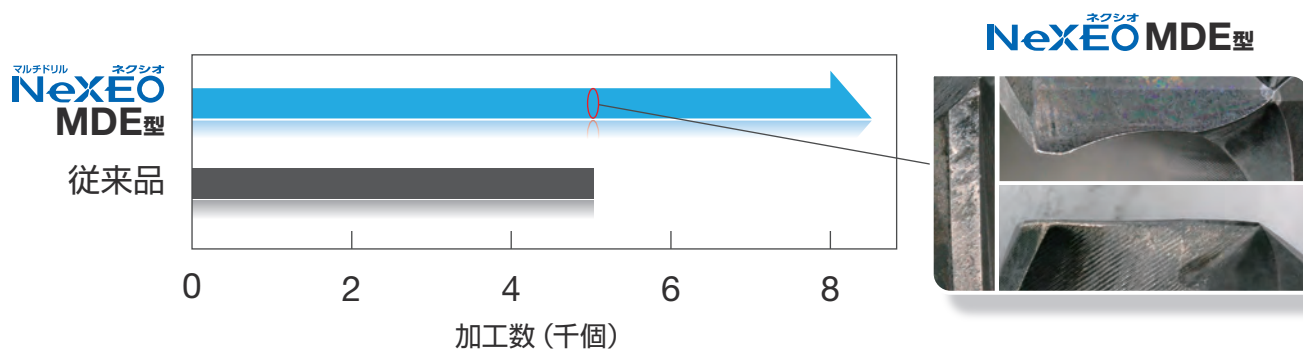
他社 粉末ハイスドリル (ø6.8mm×4D)

$v_c=40\text{m/min}$, $f=0.15\text{mm/rev}$

外部給油 (不水溶性), 加工数：1,200穴

●小型旋盤でのステンレス鋼使用実例

低抵抗で、切りくず処理良好、安定長寿命を実現



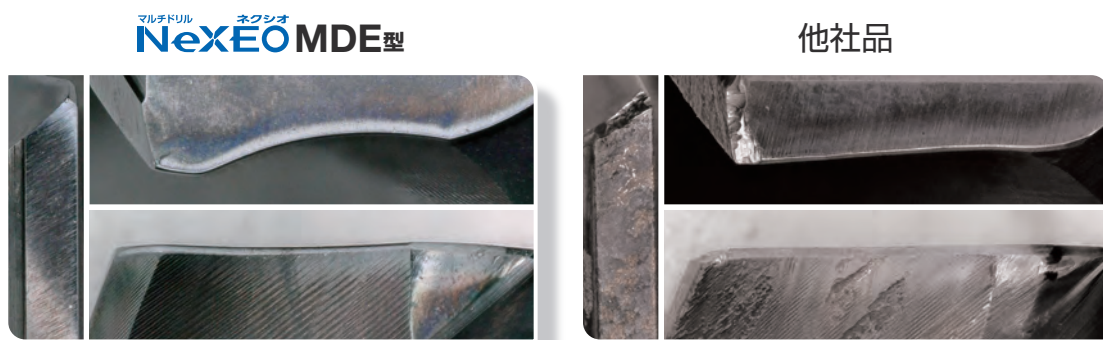
被削材：SUS316L (95～100HRB) プラグ部品, 設備：CNC自動旋盤 (被削材回転)

使用工具：MDE 0680S07E2 (ø6.8mm×2D)

切削条件： $v_c=50\text{m/min}$, $f=0.09\text{mm/rev}$ 外部給油 (不水溶性)

●小型マシニングセンタでの高炭素鋼使用実例

高炭素鋼の低送り加工でも安定長寿命



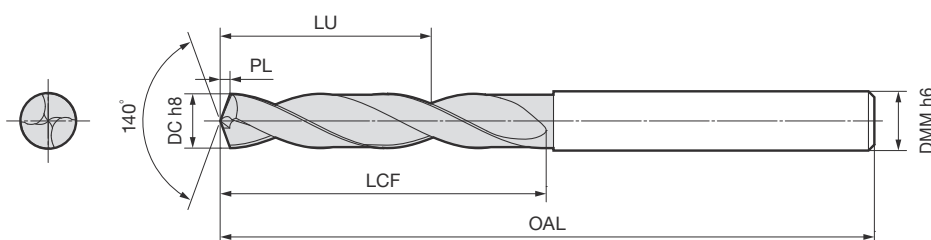
被削材：S48C, 設備：BT30 小型M/C

使用工具：MDE 0830S07E4 (ø8.3mm×4D)

切削条件： $v_c=30\text{m/min}$, $f=0.08\text{mm/rev}$ 外部給油 (水溶性), 加工数：150個

●MDE-E型 (外部給油式)

炭素鋼合金鋼 ~0.28% 0.29%~	調質鋼	高硬度鋼 ~45HRC 48HRC~	ステン レス鋼	Ti合金	耐熱鋼	鋳鉄	タタイル 鋳鉄	アルミ 合金	銅合金	複合材 CFRP	ASSOTECH NX コート	2D	4D
○	◎	◎	○	○	○	○	○	○	○	○			



●本体 刃径 ø3.0 ~ 4.9mm

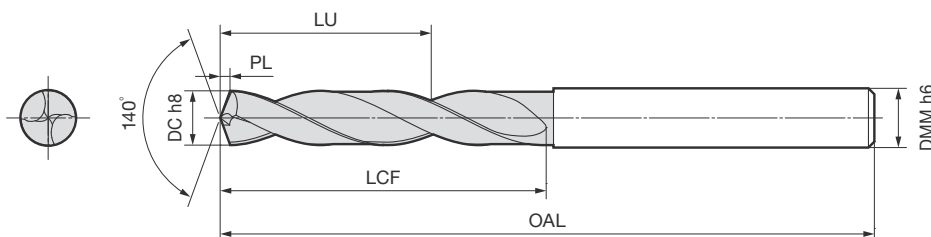
刃径 DC (mm)	穴 深さ (mm)	在庫	型番	寸法 (mm)					標準価格 (円)
				有効長 LU	フルート長 LCF	全長 OAL	先端 PL	シャンク径 DMM	
3.0	2	●	MDE 0300S03E02	9.0	13.5	45.5	0.5	3.0	4,240
	4	●	0300S03E04	15.0	19.5	49.5	0.5	3.0	5,020
3.1	2	●	MDE 0310S04E02	15.0	19.6	54.6	0.6	4.0	4,570
	4	●	0310S04E04	20.0	24.6	60.6	0.6	4.0	5,390
3.2	2	●	MDE 0320S04E02	14.8	19.6	54.6	0.6	4.0	4,570
	4	●	0320S04E04	19.8	24.6	60.6	0.6	4.0	5,390
3.3	2	●	MDE 0330S04E02	14.7	19.6	54.6	0.6	4.0	4,570
	4	●	0330S04E04	19.7	24.6	60.6	0.6	4.0	5,390
3.4	2	●	MDE 0340S04E02	14.5	19.6	54.6	0.6	4.0	4,570
	4	●	0340S04E04	19.5	24.6	60.6	0.6	4.0	5,390
3.5	2	●	MDE 0350S04E02	14.4	19.6	54.6	0.6	4.0	4,570
	4	●	0350S04E04	19.4	24.6	60.6	0.6	4.0	5,390
3.6	2	●	MDE 0360S04E02	16.3	21.7	54.7	0.7	4.0	4,760
	4	●	0360S04E04	22.3	27.7	60.7	0.7	4.0	5,670
3.7	2	●	MDE 0370S04E02	16.2	21.7	54.7	0.7	4.0	4,760
	4	●	0370S04E04	22.2	27.7	60.7	0.7	4.0	5,670
3.8	2	●	MDE 0380S04E02	16.0	21.7	54.7	0.7	4.0	4,760
	4	●	0380S04E04	22.0	27.7	60.7	0.7	4.0	5,670
3.9	2	●	MDE 0390S04E02	15.9	21.7	54.7	0.7	4.0	4,760
	4	●	0390S04E04	21.9	27.7	60.7	0.7	4.0	5,670
4.0	2	●	MDE 0400S04E02	15.7	21.7	54.7	0.7	4.0	4,760
	4	●	0400S04E04	21.7	27.7	60.7	0.7	4.0	5,670
4.1	2	●	MDE 0410S05E02	17.6	23.7	61.7	0.7	5.0	5,150
	4	●	0410S05E04	25.6	31.7	76.7	0.7	5.0	6,090
4.2	2	●	MDE 0420S05E02	17.5	23.8	61.8	0.8	5.0	5,150
	4	●	0420S05E04	25.5	31.8	76.8	0.8	5.0	6,090
4.3	2	●	MDE 0430S05E02	17.4	23.8	61.8	0.8	5.0	5,150
	4	●	0430S05E04	25.4	31.8	76.8	0.8	5.0	6,090
4.4	2	●	MDE 0440S05E02	17.2	23.8	61.8	0.8	5.0	5,150
	4	●	0440S05E04	25.2	31.8	76.8	0.8	5.0	6,090
4.5	2	●	MDE 0450S05E02	17.1	23.8	61.8	0.8	5.0	5,150
	4	●	0450S05E04	25.1	31.8	76.8	0.8	5.0	6,090
4.6	2	●	MDE 0460S05E02	18.9	25.8	61.8	0.8	5.0	5,500
	4	●	0460S05E04	31.9	38.8	76.8	0.8	5.0	6,470
4.7	2	●	MDE 0470S05E02	18.9	25.9	61.9	0.9	5.0	5,500
	4	●	0470S05E04	31.9	38.9	76.9	0.9	5.0	6,470
4.8	2	●	MDE 0480S05E02	18.7	25.9	61.9	0.9	5.0	5,500
	4	●	0480S05E04	31.7	38.9	76.9	0.9	5.0	6,470
4.9	2	●	MDE 0490S05E02	18.6	25.9	61.9	0.9	5.0	5,500
	4	●	0490S05E04	31.6	38.9	76.9	0.9	5.0	6,470

●本体 刃径 ø5.0 ~ 6.9mm

刃径 DC (mm)	穴 深さ (mm)	在庫	型番	寸法 (mm)					標準価格 (円)
				有効長 LU	フルート長 LCF	全長 OAL	先端 PL	シャンク径 DMM	
5.0	2	●	MDE 0500S05E02	18.4	25.9	61.9	0.9	5.0	5,500
	4	●	0500S05E04	31.4	38.9	76.9	0.9	5.0	6,470
5.1	2	●	MDE 0510S06E02	18.3	25.9	65.9	0.9	6.0	5,830
	4	●	0510S06E04	32.3	39.9	81.9	0.9	6.0	6,850
5.2	2	●	MDE 0520S06E02	18.1	25.9	65.9	0.9	6.0	5,830
	4	●	0520S06E04	32.1	39.9	81.9	0.9	6.0	6,850
5.3	2	●	MDE 0530S06E02	18.1	26.0	66.0	1.0	6.0	5,830
	4	●	0530S06E04	32.1	40.0	82.0	1.0	6.0	6,850
5.4	2	●	MDE 0540S06E02	17.9	26.0	66.0	1.0	6.0	5,830
	4	●	0540S06E04	31.9	40.0	82.0	1.0	6.0	6,850
5.5	2	●	MDE 0550S06E02	17.8	26.0	66.0	1.0	6.0	5,830
	4	●	0550S06E04	31.8	40.0	82.0	1.0	6.0	6,850
5.6	2	●	MDE 0560S06E02	19.6	28.0	66.0	1.0	6.0	6,090
	4	●	0560S06E04	33.6	42.0	82.0	1.0	6.0	7,210
5.7	2	●	MDE 0570S06E02	19.5	28.0	66.0	1.0	6.0	6,090
	4	●	0570S06E04	33.5	42.0	82.0	1.0	6.0	7,210
5.8	2	●	MDE 0580S06E02	19.4	28.1	66.1	1.1	6.0	6,090
	4	●	0580S06E04	33.4	42.1	82.1	1.1	6.0	7,210
5.9	2	●	MDE 0590S06E02	19.3	28.1	66.1	1.1	6.0	6,090
	4	●	0590S06E04	33.3	42.1	82.1	1.1	6.0	7,210
6.0	2	●	MDE 0600S06E02	19.1	28.1	66.1	1.1	6.0	6,090
	4	●	0600S06E04	33.1	42.1	82.1	1.1	6.0	7,210
6.1	2	●	MDE 0610S07E02	23.0	32.1	74.1	1.1	7.0	6,090
	4	●	0610S07E04	34.0	43.1	84.1	1.1	7.0	7,210
6.2	2	●	MDE 0620S07E02	22.8	32.1	74.1	1.1	7.0	6,090
	4	●	0620S07E04	33.8	43.1	84.1	1.1	7.0	7,210
6.3	2	●	MDE 0630S07E02	22.7	32.1	74.1	1.1	7.0	6,090
	4	●	0630S07E04	33.7	43.1	84.1	1.1	7.0	7,210
6.4	2	●	MDE 0640S07E02	22.6	32.2	74.2	1.2	7.0	6,090
	4	●	0640S07E04	33.6	43.2	84.2	1.2	7.0	7,210
6.5	2	●	MDE 0650S07E02	22.5	32.2	74.2	1.2	7.0	6,090
	4	●	0650S07E04	33.5	43.2	84.2	1.2	7.0	7,210
6.6	2	●	MDE 0660S07E02	24.3	34.2	74.2	1.2	7.0	6,470
	4	●	0660S07E04	34.3	44.2	84.2	1.2	7.0	7,630
6.7	2	●	MDE 0670S07E02	24.2	34.2	74.2	1.2	7.0	6,470
	4	●	0670S07E04	34.2	44.2	84.2	1.2	7.0	7,630
6.8	2	●	MDE 0680S07E02	24.0	34.2	74.2	1.2	7.0	6,470
	4	●	0680S07E04	34.0	44.2	84.2	1.2	7.0	7,630
6.9	2	●	MDE 0690S07E02	24.0	34.3	74.3	1.3	7.0	6,470
	4	●	0690S07E04	34.0	44.3	84.3	1.3	7.0	7,630

●MDE-E型 (外部給油式)

炭素鋼・合金鋼 ~0.28%0.29%~	調質鋼	高硬度鋼 ~45HRC46HRC~	ステン レス鋼	Ti合金	耐熱鋼	鋳鉄	タタイル 鋳鉄	アルミ 合金	銅合金	複合材 CFRP	ASSOTECH NX コート	2D	4D
○	◎	◎	○	○	○	○	○	○	○	○			



●本体 刃径 ø7.0 ~ 8.9mm

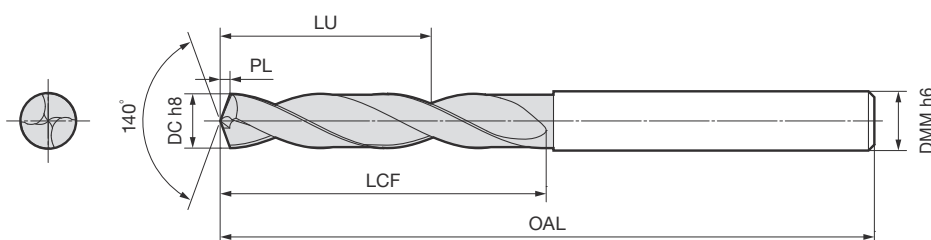
刃径 DC (mm)	穴 深さ (mm)	在庫	型番	寸法 (mm)					標準価格 (円)
				有効長 LU	フルート長 LCF	全長 OAL	先端 PL	シャンク径 DMM	
7.0	2	●	MDE 0700S07E02	23.8	34.3	74.3	1.3	7.0	6,470
	4	●	0700S07E04	33.8	44.3	84.3	1.3	7.0	7,630
7.1	2	●	MDE 0710S08E02	23.7	34.3	79.3	1.3	8.0	6,850
	4	●	0710S08E04	35.7	46.3	91.3	1.3	8.0	8,120
7.2	2	●	MDE 0720S08E02	23.5	34.3	79.3	1.3	8.0	6,850
	4	●	0720S08E04	35.5	46.3	91.3	1.3	8.0	8,120
7.3	2	●	MDE 0730S08E02	23.4	34.3	79.3	1.3	8.0	6,850
	4	●	0730S08E04	35.4	46.3	91.3	1.3	8.0	8,120
7.4	2	●	MDE 0740S08E02	23.2	34.3	79.3	1.3	8.0	6,850
	4	●	0740S08E04	35.2	46.3	91.3	1.3	8.0	8,120
7.5	2	●	MDE 0750S08E02	23.2	34.4	79.4	1.4	8.0	6,850
	4	●	0750S08E04	35.2	46.4	91.4	1.4	8.0	8,120
7.6	2	●	MDE 0760S08E02	26.0	37.4	79.4	1.4	8.0	7,210
	4	●	0760S08E04	38.0	49.4	91.4	1.4	8.0	8,540
7.7	2	●	MDE 0770S08E02	25.9	37.4	79.4	1.4	8.0	7,210
	4	●	0770S08E04	37.9	49.4	91.4	1.4	8.0	8,540
7.8	2	●	MDE 0780S08E02	25.7	37.4	79.4	1.4	8.0	7,210
	4	●	0780S08E04	37.7	49.4	91.4	1.4	8.0	8,540
7.9	2	●	MDE 0790S08E02	25.6	37.4	79.4	1.4	8.0	7,210
	4	●	0790S08E04	37.6	49.4	91.4	1.4	8.0	8,540
8.0	2	●	MDE 0800S08E02	25.5	37.5	79.5	1.5	8.0	7,210
	4	●	0800S08E04	37.5	49.5	91.5	1.5	8.0	8,540
8.1	2	●	MDE 0810S09E02	25.4	37.5	83.5	1.5	9.0	7,630
	4	●	0810S09E04	42.4	54.5	99.5	1.5	9.0	9,030
8.2	2	●	MDE 0820S09E02	25.2	37.5	83.5	1.5	9.0	7,630
	4	●	0820S09E04	42.2	54.5	99.5	1.5	9.0	9,030
8.3	2	●	MDE 0830S09E02	25.1	37.5	83.5	1.5	9.0	7,630
	4	●	0830S09E04	42.1	54.5	99.5	1.5	9.0	9,030
8.4	2	●	MDE 0840S09E02	24.9	37.5	83.5	1.5	9.0	7,630
	4	●	0840S09E04	41.9	54.5	99.5	1.5	9.0	9,030
8.5	2	●	MDE 0850S09E02	24.8	37.5	83.5	1.5	9.0	7,630
	4	●	0850S09E04	41.8	54.5	99.5	1.5	9.0	9,030
8.6	2	●	MDE 0860S09E02	26.7	39.6	83.6	1.6	9.0	7,980
	4	●	0860S09E04	43.7	56.6	99.6	1.6	9.0	9,380
8.7	2	●	MDE 0870S09E02	26.6	39.6	83.6	1.6	9.0	7,980
	4	●	0870S09E04	43.6	56.6	99.6	1.6	9.0	9,380
8.8	2	●	MDE 0880S09E02	26.4	39.6	83.6	1.6	9.0	7,980
	4	●	0880S09E04	43.4	56.6	99.6	1.6	9.0	9,380
8.9	2	●	MDE 0890S09E02	26.3	39.6	83.6	1.6	9.0	7,980
	4	●	0890S09E04	43.3	56.6	99.6	1.6	9.0	9,380

●本体 刃径 ø9.0 ~ 10.9mm

刃径 DC (mm)	穴 深さ (mm)	在庫	型番	寸法 (mm)					標準価格 (円)
				有効長 LU	フルート長 LCF	全長 OAL	先端 PL	シャンク径 DMM	
9.0	2	●	MDE 0900S09E02	26.1	39.6	83.6	1.6	9.0	7,980
	4	●	0900S09E04	43.1	56.6	99.6	1.6	9.0	9,380
9.1	2	●	MDE 0910S10E02	26.1	39.7	88.7	1.7	10.0	8,400
	4	●	0910S10E04	46.1	59.7	106.7	1.7	10.0	9,870
9.2	2	●	MDE 0920S10E02	25.9	39.7	88.7	1.7	10.0	8,400
	4	●	0920S10E04	45.9	59.7	106.7	1.7	10.0	9,870
9.3	2	●	MDE 0930S10E02	25.8	39.7	88.7	1.7	10.0	8,400
	4	●	0930S10E04	45.8	59.7	106.7	1.7	10.0	9,870
9.4	2	●	MDE 0940S10E02	25.6	39.7	88.7	1.7	10.0	8,400
	4	●	0940S10E04	45.6	59.7	106.7	1.7	10.0	9,870
9.5	2	●	MDE 0950S10E02	25.5	39.7	88.7	1.7	10.0	8,400
	4	●	0950S10E04	45.5	59.7	106.7	1.7	10.0	9,870
9.6	2	●	MDE 0960S10E02	28.3	42.7	88.7	1.7	10.0	8,750
	4	●	0960S10E04	47.3	61.7	106.7	1.7	10.0	10,300
9.7	2	●	MDE 0970S10E02	28.3	42.8	88.8	1.8	10.0	8,750
	4	●	0970S10E04	47.3	61.8	106.8	1.8	10.0	10,300
9.8	2	●	MDE 0980S10E02	28.1	42.8	88.8	1.8	10.0	8,750
	4	●	0980S10E04	47.1	61.8	106.8	1.8	10.0	10,300
9.9	2	●	MDE 0990S10E02	28.0	42.8	88.8	1.8	10.0	8,750
	4	●	0990S10E04	47.0	61.8	106.8	1.8	10.0	10,300
10.0	2	●	MDE 1000S10E02	27.8	42.8	88.8	1.8	10.0	8,750
	4	●	1000S10E04	46.8	61.8	106.8	1.8	10.0	10,300
10.1	2	●	MDE 1010S11E02	27.7	42.8	94.8	1.8	11.0	9,170
	4	●	1010S11E04	52.7	67.8	115.8	1.8	11.0	10,800
10.2	2	●	MDE 1020S11E02	27.6	42.9	94.9	1.9	11.0	9,170
	4	●	1020S11E04	52.6	67.9	115.9	1.9	11.0	10,800
10.3	2	●	MDE 1030S11E02	27.5	42.9	94.9	1.9	11.0	9,170
	4	●	1030S11E04	52.5	67.9	115.9	1.9	11.0	10,800
10.4	2	●	MDE 1040S11E02	27.3	42.9	94.9	1.9	11.0	9,170
	4	●	1040S11E04	52.3	67.9	115.9	1.9	11.0	10,800
10.5	2	●	MDE 1050S11E02	27.2	42.9	94.9	1.9	11.0	9,170
	4	●	1050S11E04	52.2	67.9	115.9	1.9	11.0	10,800
10.6	2	●	MDE 1060S11E02	31.0	46.9	94.9	1.9	11.0	9,520
	4	●	1060S11E04	54.0	69.9	115.9	1.9	11.0	11,200
10.7	2	●	MDE 1070S11E02	30.9	46.9	94.9	1.9	11.0	9,520
	4	●	1070S11E04	53.9	69.9	115.9	1.9	11.0	11,200
10.8	2	●	MDE 1080S11E02	30.8	47.0	95.0	2.0	11.0	9,520
	4	●	1080S11E04	53.8	70.0	116.0	2.0	11.0	11,200
10.9	2	●	MDE 1090S11E02	30.7	47.0	95.0	2.0	11.0	9,520
	4	●	1090S11E04	53.7	70.0	116.0	2.0	11.0	11,200

●MDE-E型 (外部給油式)

炭素鋼合金鋼 ~0.28% 0.29%~	調質鋼	高硬度鋼 ~45HRC 46HRC~	ステン レス鋼	Ti合金	耐熱鋼	鋳鉄	タタイル 鋳鉄	アルミ 合金	銅合金	複合材 CFRP	ASSOTECH NX コート	2D	4D
○	◎	◎	○	○	○	○	○	○	○	○			



●本体 刃径φ11.0～12.9mm

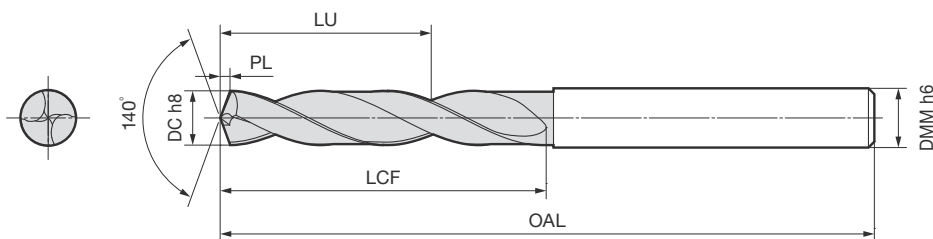
刃径 DC (mm)	穴 深さ (mm)	在庫	型番	寸法 (mm)					標準価格 (円)
				有効長 LU	フルート長 LCF	全長 OAL	先端 PL	シャンク径 DMM	
11.0	2	●	MDE 1100S11E02	30.5	47.0	95.0	2.0	11.0	9,520
	4	●	1100S11E04	53.5	70.0	116.0	2.0	11.0	11,200
11.1	2	●	MDE 1110S12E02	30.4	47.0	102.0	2.0	12.0	9,940
	4	●	1110S12E04	56.4	73.0	123.0	2.0	12.0	11,600
11.2	2	●	MDE 1120S12E02	30.2	47.0	102.0	2.0	12.0	9,940
	4	●	1120S12E04	56.2	73.0	123.0	2.0	12.0	11,600
11.3	2	●	MDE 1130S12E02	30.2	47.1	102.1	2.1	12.0	9,940
	4	●	1130S12E04	56.2	73.1	123.1	2.1	12.0	11,600
11.4	2	●	MDE 1140S12E02	30.0	47.1	102.1	2.1	12.0	9,940
	4	●	1140S12E04	56.0	73.1	123.1	2.1	12.0	11,600
11.5	2	●	MDE 1150S12E02	29.9	47.1	102.1	2.1	12.0	9,940
	4	●	1150S12E04	55.9	73.1	123.1	2.1	12.0	11,600
11.6	2	●	MDE 1160S12E02	31.7	49.1	102.1	2.1	12.0	10,300
	4	●	1160S12E04	57.7	75.1	123.1	2.1	12.0	12,100
11.7	2	●	MDE 1170S12E02	31.6	49.1	102.1	2.1	12.0	10,300
	4	●	1170S12E04	57.6	75.1	123.1	2.1	12.0	12,100
11.8	2	●	MDE 1180S12E02	31.4	49.1	102.1	2.1	12.0	10,300
	4	●	1180S12E04	57.4	75.1	123.1	2.1	12.0	12,100
11.9	2	●	MDE 1190S12E02	31.4	49.2	102.2	2.2	12.0	10,300
	4	●	1190S12E04	57.4	75.2	123.2	2.2	12.0	12,100
12.0	2	●	MDE 1200S12E02	31.2	49.2	102.2	2.2	12.0	10,300
	4	●	1200S12E04	57.2	75.2	123.2	2.2	12.0	12,100
12.1	2	●	MDE 1210S13E02	31.1	49.2	102.2	2.2	13.0	10,700
	4	●	1210S13E04	60.1	78.2	139.2	2.2	13.0	12,400
12.2	2	●	MDE 1220S13E02	30.9	49.2	102.2	2.2	13.0	10,700
	4	●	1220S13E04	59.9	78.2	139.2	2.2	13.0	12,400
12.3	2	●	MDE 1230S13E02	30.8	49.2	102.2	2.2	13.0	10,700
	4	●	1230S13E04	59.8	78.2	139.2	2.2	13.0	12,400
12.4	2	●	MDE 1240S13E02	30.7	49.3	102.3	2.3	13.0	10,700
	4	●	1240S13E04	59.7	78.3	139.3	2.3	13.0	12,400
12.5	2	●	MDE 1250S13E02	30.6	49.3	102.3	2.3	13.0	10,700
	4	●	1250S13E04	59.6	78.3	139.3	2.3	13.0	12,400
12.6	2	●	MDE 1260S13E02	32.4	51.3	102.3	2.3	13.0	11,000
	4	●	1260S13E04	61.4	80.3	139.3	2.3	13.0	12,900
12.7	2	●	MDE 1270S13E02	32.3	51.3	102.3	2.3	13.0	11,000
	4	●	1270S13E04	61.3	80.3	139.3	2.3	13.0	12,900
12.8	2	●	MDE 1280S13E02	32.1	51.3	102.3	2.3	13.0	11,000
	4	●	1280S13E04	61.1	80.3	139.3	2.3	13.0	12,900
12.9	2	●	MDE 1290S13E02	32.0	51.3	102.3	2.3	13.0	11,000
	4	●	1290S13E04	61.0	80.3	139.3	2.3	13.0	12,900

●本体 刃径φ13.0～14.9mm

刃径 DC (mm)	穴 深さ (mm)	在庫	型番	寸法 (mm)					標準価格 (円)
				有効長 LU	フルート長 LCF	全長 OAL	先端 PL	シャンク径 DMM	
13.0	2	●	MDE 1300S13E02	31.9	51.4	102.4	2.4	13.0	11,000
	4	●	1300S13E04	60.9	80.4	139.4	2.4	13.0	12,900
13.1	2	●	MDE 1310S14E02	32.8	52.4	107.4	2.4	14.0	11,500
	4	●	1310S14E04	66.8	86.4	149.4	2.4	14.0	13,300
13.2	2	●	MDE 1320S14E02	32.6	52.4	107.4	2.4	14.0	11,500
	4	●	1320S14E04	66.6	86.4	149.4	2.4	14.0	13,300
13.3	2	●	MDE 1330S14E02	32.5	52.4	107.4	2.4	14.0	11,500
	4	●	1330S14E04	66.5	86.4	149.4	2.4	14.0	13,300
13.4	2	●	MDE 1340S14E02	32.3	52.4	107.4	2.4	14.0	11,500
	4	●	1340S14E04	66.3	86.4	149.4	2.4	14.0	13,300
13.5	2	●	MDE 1350S14E02	32.3	52.5	107.5	2.5	14.0	11,500
	4	●	1350S14E04	66.3	86.5	149.5	2.5	14.0	13,300
13.6	2	●	MDE 1360S14E02	34.1	54.5	107.5	2.5	14.0	11,800
	4	●	1360S14E04	68.1	88.5	149.5	2.5	14.0	13,800
13.7	2	●	MDE 1370S14E02	34.0	54.5	107.5	2.5	14.0	11,800
	4	●	1370S14E04	68.0	88.5	149.5	2.5	14.0	13,800
13.8	2	●	MDE 1380S14E02	33.8	54.5	107.5	2.5	14.0	11,800
	4	●	1380S14E04	67.8	88.5	149.5	2.5	14.0	13,800
13.9	2	●	MDE 1390S14E02	33.7	54.5	107.5	2.5	14.0	11,800
	4	●	1390S14E04	67.7	88.5	149.5	2.5	14.0	13,800
14.0	2	●	MDE 1400S14E02	33.5	54.5	107.5	2.5	14.0	11,800
	4	●	1400S14E04	67.5	88.5	149.5	2.5	14.0	13,800
14.1	2	●	MDE 1410S15E02	33.5	54.6	110.6	2.6	15.0	14,800
	4	●	1410S15E04	70.5	91.6	155.6	2.6	15.0	17,200
14.2	2	●	MDE 1420S15E02	33.3	54.6	110.6	2.6	15.0	14,800
	4	●	1420S15E04	70.3	91.6	155.6	2.6	15.0	17,200
14.3	2	●	MDE 1430S15E02	33.2	54.6	110.6	2.6	15.0	14,800
	4	●	1430S15E04	70.2	91.6	155.6	2.6	15.0	17,200
14.4	2	●	MDE 1440S15E02	33.0	54.6	110.6	2.6	15.0	14,800
	4	●	1440S15E04	70.0	91.6	155.6	2.6	15.0	17,200
14.5	2	●	MDE 1450S15E02	32.9	54.6	110.6	2.6	15.0	14,800
	4	●	1450S15E04	69.9	91.6	155.6	2.6	15.0	17,200
14.6	2	●	MDE 1460S15E02	33.8	55.7	110.7	2.7	15.0	15,300
	4	●	1460S15E04	71.8	93.7	155.7	2.7	15.0	17,700
14.7	2	●	MDE 1470S15E02	33.7	55.7	110.7	2.7	15.0	15,300
	4	●	1470S15E04	71.7	93.7	155.7	2.7	15.0	17,700
14.8	2	●	MDE 1480S15E02	33.5	55.7	110.7	2.7	15.0	15,300
	4	●	1480S15E04	71.5	93.7	155.7	2.7	15.0	17,700
14.9	2	●	MDE 1490S15E02	33.4	55.7	110.7	2.7	15.0	15,300
	4	●	1490S15E04	71.4	93.7	155.7	2.7	15.0	17,700

●MDE-E型 (外部給油式)

炭素鋼・合金鋼 ~0.28%0.29%~	調質鋼	高硬度鋼 ~45HRC46HRC~	ステン レス鋼	Ti合金	耐熱鋼	鋳鉄	タタイル 鋳鉄	アルミ 合金	銅合金	複合材 CFRP	ASSOTECH NX コート	2D	4D
○	◎	◎	○	○	○	○	○	○	○	○			

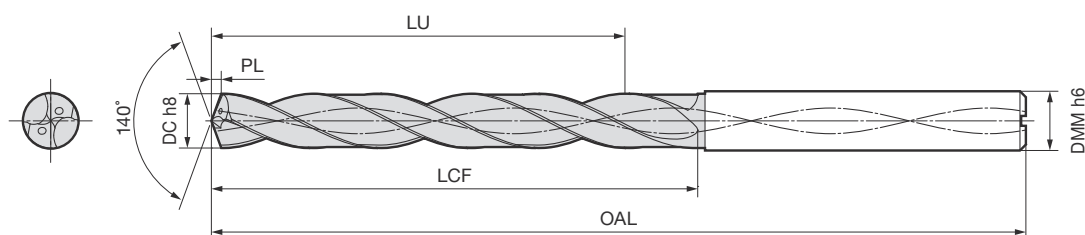


●本体 刃径φ15.0～20.0mm

刃径 DC (mm)	穴 深さ (mm)	在庫	型番	寸法 (mm)					標準価格 (円)
				有効長 LU	フルート長 LCF	全長 OAL	先端 PL	シャンク径 DMM	
15.0	2	●	MDE 1500S15E02	33.2	55.7	110.7	2.7	15.0	15,300
	4	●	1500S15E04	71.2	93.7	155.7	2.7	15.0	17,700
15.1	2	●	MDE 1510S16E02	33.1	55.7	114.7	2.7	16.0	15,800
	4	●	1510S16E04	74.1	96.7	162.7	2.7	16.0	18,300
15.2	2	●	MDE 1520S16E02	33.0	55.8	114.8	2.8	16.0	15,800
	4	●	1520S16E04	74.0	96.8	162.8	2.8	16.0	18,300
15.3	2	●	MDE 1530S16E02	32.9	55.8	114.8	2.8	16.0	15,800
	4	●	1530S16E04	73.9	96.8	162.8	2.8	16.0	18,300
15.4	2	●	MDE 1540S16E02	32.7	55.8	114.8	2.8	16.0	15,800
	4	●	1540S16E04	73.7	96.8	162.8	2.8	16.0	18,300
15.5	2	●	MDE 1550S16E02	32.6	55.8	114.8	2.8	16.0	15,800
	4	●	1550S16E04	73.6	96.8	162.8	2.8	16.0	18,300
15.6	2	●	MDE 1560S16E02	34.4	57.8	114.8	2.8	16.0	16,200
	4	●	1560S16E04	75.4	98.8	162.8	2.8	16.0	18,800
15.7	2	●	MDE 1570S16E02	34.4	57.9	114.9	2.9	16.0	16,200
	4	●	1570S16E04	75.4	98.9	162.9	2.9	16.0	18,800
15.8	2	●	MDE 1580S16E02	34.2	57.9	114.9	2.9	16.0	16,200
	4	●	1580S16E04	75.2	98.9	162.9	2.9	16.0	18,800
15.9	2	●	MDE 1590S16E02	34.1	57.9	114.9	2.9	16.0	16,200
	4	●	1590S16E04	75.1	98.9	162.9	2.9	16.0	18,800
16.0	2	●	MDE 1600S16E02	33.9	57.9	114.9	2.9	16.0	16,200
	4	●	1600S16E04	74.9	98.9	162.9	2.9	16.0	18,800
16.5	2	●	MDE 1650S17E02	34.3	59.0	119.0	3.0	17.0	17,600
	4	●	1650S17E04	76.3	101.0	170.0	3.0	17.0	21,300
16.8	4	●	MDE 1680S17E04	75.9	101.1	170.1	3.1	17.0	23,000
17.0	2	●	MDE 1700S17E02	34.6	60.1	119.1	3.1	17.0	19,000
	4	●	1700S17E04	75.7	101.2	170.2	3.2	17.0	23,000
17.5	2	●	MDE 1750S18E02	35.0	61.2	123.2	3.2	18.0	20,500
	4	●	1750S18E04	77.0	103.2	170.2	3.2	18.0	25,000
18.0	2	●	MDE 1800S18E02	35.3	62.3	123.3	3.3	18.0	22,100
	4	●	1800S18E04	78.3	105.3	170.3	3.3	18.0	27,100
18.5	2	●	MDE 1850S19E02	34.7	62.4	126.4	3.4	19.0	23,400
	4	●	1850S19E04	79.7	107.4	182.4	3.4	19.0	29,500
19.0	2	●	MDE 1900S19E02	35.0	63.5	126.5	3.5	19.0	25,000
	4	●	1900S19E04	80.9	109.4	182.4	3.4	19.0	30,600
19.5	2	●	MDE 1950S20E02	35.3	64.5	130.5	3.5	20.0	26,500
	4	●	1950S20E04	84.3	113.5	182.5	3.5	20.0	31,400
19.7	4	●	MDE 1970S20E04	88.1	117.6	182.6	3.6	20.0	32,300
20.0	2	●	MDE 2000S20E02	35.6	65.6	130.6	3.6	20.0	28,000
	4	●	2000S20E04	87.6	117.6	182.6	3.6	20.0	32,300

●MDE-H型 (内部給油式)

炭素鋼合金鋼 ~0.28% 0.23%~	調質鋼	高硬度鋼 ~45-HRC 48-HRC~	ステン レス鋼	Ti合金	耐熱鋼	鋳鉄	ダクタイル 鋳鉄	アルミ 合金	銅合金	複合材 CFRP	ABSOTECH NX コート	油穴付き	3D	5D	8D
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎					



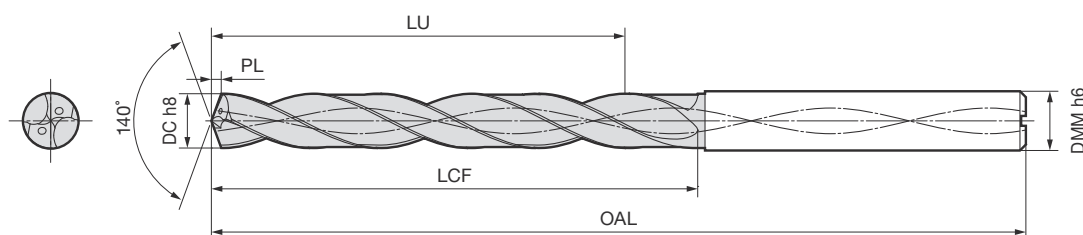
●本体 刃径 ø3.0 ~ 4.2mm

刃径 DC (mm)	穴深さ (mm)	在庫	型番	寸法 (mm)					標準価格 (円)
				有効長 LU	フルート長 LCF	全長 OAL	先端 PL	シャンク径 DMM	
3.0	3	●	MDE 0300S03H03	14.0	18.5	68.5	0.5	3.0	7,800
	5	●	0300S03H05	24.0	28.5	78.5	0.5	3.0	10,800
	8	●	0300S03H08	29.0	33.5	81.5	0.5	3.0	12,800
3.1	3	●	MDE 0310S04H03	16.0	20.6	72.6	0.6	4.0	8,480
	5	●	0310S04H05	28.0	32.6	86.6	0.6	4.0	11,000
	8	●	0310S04H08	34.5	39.1	92.6	0.6	4.0	13,100
3.2	3	●	MDE 0320S04H03	15.8	20.6	72.6	0.6	4.0	8,480
	5	●	0320S04H05	27.8	32.6	86.6	0.6	4.0	11,000
	8	●	0320S04H08	34.3	39.1	92.6	0.6	4.0	13,100
3.3	3	●	MDE 0330S04H03	15.7	20.6	72.6	0.6	4.0	8,480
	5	●	0330S04H05	27.7	32.6	86.6	0.6	4.0	11,000
	8	●	0330S04H08	34.2	39.1	92.6	0.6	4.0	13,100
3.4	3	●	MDE 0340S04H03	15.5	20.6	72.6	0.6	4.0	8,480
	5	●	0340S04H05	27.5	32.6	86.6	0.6	4.0	11,000
	8	●	0340S04H08	34.0	39.1	92.6	0.6	4.0	13,100
3.5	3	●	MDE 0350S04H03	15.4	20.6	72.6	0.6	4.0	8,480
	5	●	0350S04H05	27.4	32.6	86.6	0.6	4.0	11,000
	8	●	0350S04H08	33.9	39.1	92.6	0.6	4.0	13,100
3.6	3	●	MDE 0360S04H03	17.8	23.2	72.7	0.7	4.0	8,640
	5	●	0360S04H05	31.3	36.7	86.7	0.7	4.0	11,100
	8	●	0360S04H08	39.3	44.7	92.7	0.7	4.0	13,100
3.7	3	●	MDE 0370S04H03	17.7	23.2	72.7	0.7	4.0	8,640
	5	●	0370S04H05	31.2	36.7	86.7	0.7	4.0	11,100
	8	●	0370S04H08	39.2	44.7	92.7	0.7	4.0	13,100
3.8	3	●	MDE 0380S04H03	17.5	23.2	72.7	0.7	4.0	8,640
	5	●	0380S04H05	31.0	36.7	86.7	0.7	4.0	11,100
	8	●	0380S04H08	39.0	44.7	92.7	0.7	4.0	13,100
3.9	3	●	MDE 0390S04H03	17.4	23.2	72.7	0.7	4.0	8,640
	5	●	0390S04H05	30.9	36.7	86.7	0.7	4.0	11,100
	8	●	0390S04H08	38.9	44.7	92.7	0.7	4.0	13,100
4.0	3	●	MDE 0400S04H03	17.2	23.2	72.7	0.7	4.0	8,640
	5	●	0400S04H05	30.7	36.7	86.7	0.7	4.0	11,100
	8	●	0400S04H08	38.7	44.7	92.7	0.7	4.0	13,100
4.1	3	●	MDE 0410S05H03	19.6	25.7	80.7	0.7	5.0	9,440
	5	●	0410S05H05	34.6	40.7	98.7	0.7	5.0	11,500
	8	●	0410S05H08	44.1	50.2	105.7	0.7	5.0	13,600
4.2	3	●	MDE 0420S05H03	19.5	25.8	80.8	0.8	5.0	9,440
	5	●	0420S05H05	34.5	40.8	98.8	0.8	5.0	11,500
	8	●	0420S05H08	44.0	50.3	105.8	0.8	5.0	13,600

●本体 刃径 ø4.3 ~ 5.5mm

刃径 DC (mm)	穴深さ (mm)	在庫	型番	寸法 (mm)					標準価格 (円)
				有効長 LU	フルート長 LCF	全長 OAL	先端 PL	シャンク径 DMM	
4.3	3	●	MDE 0430S05H03	19.4	25.8	80.8	0.8	5.0	9,440
	5	●	0430S05H05	34.4	40.8	98.8	0.8	5.0	11,500
	8	●	0430S05H08	43.9	50.3	105.8	0.8	5.0	13,600
4.4	3	●	MDE 0440S05H03	19.2	25.8	80.8	0.8	5.0	9,440
	5	●	0440S05H05	34.2	40.8	98.8	0.8	5.0	11,500
	8	●	0440S05H08	43.7	50.3	105.8	0.8	5.0	13,600
4.5	3	●	MDE 0450S05H03	19.1	25.8	80.8	0.8	5.0	9,440
	5	●	0450S05H05	34.1	40.8	98.8	0.8	5.0	11,500
	8	●	0450S05H08	43.6	50.3	105.8	0.8	5.0	13,600
4.6	3	●	MDE 0460S05H03	21.4	28.3	80.8	0.8	5.0	10,100
	5	●	0460S05H05	37.9	44.8	98.8	0.8	5.0	11,700
	8	●	0460S05H08	48.9	55.8	105.8	0.8	5.0	13,800
4.7	3	●	MDE 0470S05H03	21.4	28.4	80.9	0.9	5.0	10,100
	5	●	0470S05H05	37.9	44.9	98.9	0.9	5.0	11,700
	8	●	0470S05H08	48.9	55.9	105.9	0.9	5.0	13,800
4.8	3	●	MDE 0480S05H03	21.2	28.4	80.9	0.9	5.0	10,100
	5	●	0480S05H05	37.7	44.9	98.9	0.9	5.0	11,700
	8	●	0480S05H08	48.7	55.9	105.9	0.9	5.0	13,800
4.9	3	●	MDE 0490S05H03	21.1	28.4	80.9	0.9	5.0	10,100
	5	●	0490S05H05	37.6	44.9	98.9	0.9	5.0	11,700
	8	●	0490S05H08	48.6	55.9	105.9	0.9	5.0	13,800
5.0	3	●	MDE 0500S05H03	20.9	28.4	80.9	0.9	5.0	10,100
	5	●	0500S05H05	37.4	44.9	98.9	0.9	5.0	11,700
	8	●	0500S05H08	48.4	55.9	105.9	0.9	5.0	13,800
5.1	3	●	MDE 0510S06H03	20.8	28.4	82.9	0.9	6.0	10,800
	5	●	0510S06H05	37.3	44.9	100.9	0.9	6.0	12,300
	8	●	0510S06H08	53.8	61.4	118.9	0.9	6.0	14,400
5.2	3	●	MDE 0520S06H03	20.6	28.4	82.9	0.9	6.0	10,800
	5	●	0520S06H05	37.1	44.9	100.9	0.9	6.0	12,300
	8	●	0520S06H08	53.6	61.4	118.9	0.9	6.0	14,400
5.3	3	●	MDE 0530S06H03	20.6	28.5	83.0	1.0	6.0	10,800
	5	●	0530S06H05	37.1	45.0	101.0	1.0	6.0	12,300
	8	●	0530S06H08	53.6	61.5	119.0	1.0	6.0	14,400
5.4	3	●	MDE 0540S06H03	20.4	28.5	83.0	1.0	6.0	10,800
	5	●	0540S06H05	36.9	45.0	101.0	1.0	6.0	12,300
	8	●	0540S06H08	53.4	61.5	119.0	1.0	6.0	14,400
5.5	3	●	MDE 0550S06H03	20.3	28.5	83.0	1.0	6.0	10,800
	5	●	0550S06H05	36.8	45.0	101.0	1.0	6.0	12,300
	8	●	0550S06H08	53.3	61.5	119.0	1.0	6.0	14,400

●MDE-H型 (内部給油式)



●本体 刃径 ø5.6 ~ 6.8mm

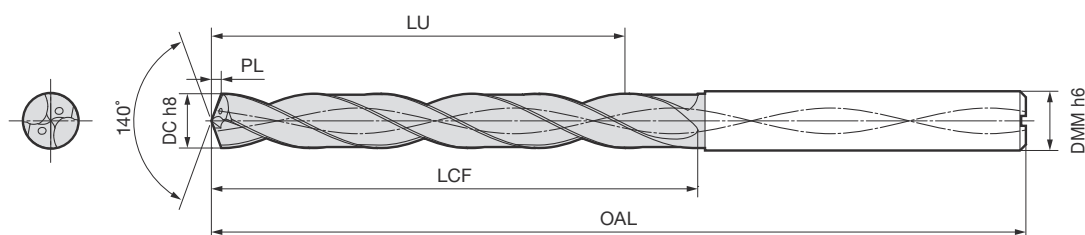
刃径 DC (mm)	穴深さ LD	在庫	型番	寸法 (mm)					標準価格 (円)
				有効長 LU	フルート長 LCF	全長 OAL	先端 PL	シャンク径 DMM	
5.6	3	●	MDE 0560S06H03	22.6	31.0	83.0	1.0	6.0	10,900
	5	●	0560S06H05	40.6	49.0	101.0	1.0	6.0	12,600
	8	●	0560S06H08	58.6	67.0	119.0	1.0	6.0	14,800
5.7	3	●	MDE 0570S06H03	22.5	31.0	83.0	1.0	6.0	10,900
	5	●	0570S06H05	40.5	49.0	101.0	1.0	6.0	12,600
	8	●	0570S06H08	58.5	67.0	119.0	1.0	6.0	14,800
5.8	3	●	MDE 0580S06H03	22.4	31.1	83.1	1.1	6.0	10,900
	5	●	0580S06H05	40.4	49.1	101.1	1.1	6.0	12,600
	8	●	0580S06H08	58.4	67.1	119.1	1.1	6.0	14,800
5.9	3	●	MDE 0590S06H03	22.3	31.1	83.1	1.1	6.0	10,900
	5	●	0590S06H05	40.3	49.1	101.1	1.1	6.0	12,600
	8	●	0590S06H08	58.3	67.1	119.1	1.1	6.0	14,800
6.0	3	●	MDE 0600S06H03	22.1	31.1	83.1	1.1	6.0	10,900
	5	●	0600S06H05	40.1	49.1	101.1	1.1	6.0	12,600
	8	●	0600S06H08	58.1	67.1	119.1	1.1	6.0	14,800
6.1	3	●	MDE 0610S07H03	24.5	33.6	89.1	1.1	7.0	11,700
	5	●	0610S07H05	44.0	53.1	110.1	1.1	7.0	13,300
	8	●	0610S07H08	63.5	72.6	131.1	1.1	7.0	15,600
6.2	3	●	MDE 0620S07H03	24.3	33.6	89.1	1.1	7.0	11,700
	5	●	0620S07H05	43.8	53.1	110.1	1.1	7.0	13,300
	8	●	0620S07H08	63.3	72.6	131.1	1.1	7.0	15,600
6.3	3	●	MDE 0630S07H03	24.2	33.6	89.1	1.1	7.0	11,700
	5	●	0630S07H05	43.7	53.1	110.1	1.1	7.0	13,300
	8	●	0630S07H08	63.2	72.6	131.1	1.1	7.0	15,600
6.4	3	●	MDE 0640S07H03	24.1	33.7	89.2	1.2	7.0	11,700
	5	●	0640S07H05	43.6	53.2	110.2	1.2	7.0	13,300
	8	●	0640S07H08	63.1	72.7	131.2	1.2	7.0	15,600
6.5	3	●	MDE 0650S07H03	24.0	33.7	89.2	1.2	7.0	11,700
	5	●	0650S07H05	43.5	53.2	110.2	1.2	7.0	13,300
	8	●	0650S07H08	63.0	72.7	131.2	1.2	7.0	15,600
6.6	3	●	MDE 0660S07H03	26.3	36.2	89.2	1.2	7.0	11,900
	5	●	0660S07H05	47.3	57.2	110.2	1.2	7.0	13,600
	8	●	0660S07H08	68.3	78.2	131.2	1.2	7.0	15,800
6.7	3	●	MDE 0670S07H03	26.2	36.2	89.2	1.2	7.0	11,900
	5	●	0670S07H05	47.2	57.2	110.2	1.2	7.0	13,600
	8	●	0670S07H08	68.2	78.2	131.2	1.2	7.0	15,800
6.8	3	●	MDE 0680S07H03	26.0	36.2	89.2	1.2	7.0	11,900
	5	●	0680S07H05	47.0	57.2	110.2	1.2	7.0	13,600
	8	●	0680S07H08	68.0	78.2	131.2	1.2	7.0	15,800

●本体 刃径 ø6.9 ~ 8.1mm

刃径 DC (mm)	穴深さ LD	在庫	型番	寸法 (mm)					標準価格 (円)
				有効長 LU	フルート長 LCF	全長 OAL	先端 PL	シャンク径 DMM	
6.9	3	●	MDE 0690S07H03	26.0	36.3	89.3	1.3	7.0	11,900
	5	●	0690S07H05	47.0	57.3	110.3	1.3	7.0	13,600
	8	●	0690S07H08	68.0	78.3	131.3	1.3	7.0	15,800
7.0	3	●	MDE 0700S07H03	25.8	36.3	89.3	1.3	7.0	11,900
	5	●	0700S07H05	46.8	57.3	110.3	1.3	7.0	13,600
	8	●	0700S07H08	67.8	78.3	131.3	1.3	7.0	15,800
7.1	3	●	MDE 0710S08H03	28.2	38.8	95.3	1.3	8.0	12,900
	5	●	0710S08H05	50.7	61.3	119.3	1.3	8.0	14,700
	8	●	0710S08H08	73.2	83.8	143.3	1.3	8.0	16,900
7.2	3	●	MDE 0720S08H03	28.0	38.8	95.3	1.3	8.0	12,900
	5	●	0720S08H05	50.5	61.3	119.3	1.3	8.0	14,700
	8	●	0720S08H08	73.0	83.8	143.3	1.3	8.0	16,900
7.3	3	●	MDE 0730S08H03	27.9	38.8	95.3	1.3	8.0	12,900
	5	●	0730S08H05	50.4	61.3	119.3	1.3	8.0	14,700
	8	●	0730S08H08	72.9	83.8	143.3	1.3	8.0	16,900
7.4	3	●	MDE 0740S08H03	27.7	38.8	95.3	1.3	8.0	12,900
	5	●	0740S08H05	50.2	61.3	119.3	1.3	8.0	14,700
	8	●	0740S08H08	72.7	83.8	143.3	1.3	8.0	16,900
7.5	3	●	MDE 0750S08H03	27.7	38.9	95.4	1.4	8.0	12,900
	5	●	0750S08H05	50.2	61.4	119.4	1.4	8.0	14,700
	8	●	0750S08H08	72.7	83.9	143.4	1.4	8.0	16,900
7.6	3	●	MDE 0760S08H03	30.0	41.4	95.4	1.4	8.0	13,200
	5	●	0760S08H05	54.0	65.4	119.4	1.4	8.0	15,100
	8	●	0760S08H08	78.0	89.4	143.4	1.4	8.0	17,200
7.7	3	●	MDE 0770S08H03	29.9	41.4	95.4	1.4	8.0	13,200
	5	●	0770S08H05	53.9	65.4	119.4	1.4	8.0	15,100
	8	●	0770S08H08	77.9	89.4	143.4	1.4	8.0	17,200
7.8	3	●	MDE 0780S08H03	29.7	41.4	95.4	1.4	8.0	13,200
	5	●	0780S08H05	53.7	65.4	119.4	1.4	8.0	15,100
	8	●	0780S08H08	77.7	89.4	143.4	1.4	8.0	17,200
7.9	3	●	MDE 0790S08H03	29.6	41.4	95.4	1.4	8.0	13,200
	5	●	0790S08H05	53.6	65.4	119.4	1.4	8.0	15,100
	8	●	0790S08H08	77.6	89.4	143.4	1.4	8.0	17,200
8.0	3	●	MDE 0800S08H03	29.5	41.5	95.5	1.5	8.0	13,200
	5	●	0800S08H05	53.5	65.5	119.5	1.5	8.0	15,100
	8	●	0800S08H08	77.5	89.5	143.5	1.5	8.0	17,200
8.1	3	●	MDE 0810S09H03	31.9	44.0	101.5	1.5	9.0	14,200
	5	●	0810S09H05	57.4	69.5	128.5	1.5	9.0	16,200
	8	●	0810S09H08	82.9	95.0	155.5	1.5	9.0	18,000

●MDE-H型 (内部給油式)

炭素鋼合金鋼 ~0.28% 0.23%~	調質鋼	高硬度鋼 ~45-HRC~48-HRC~	ステン レス鋼	Ti合金	耐熱鋼	鋳鉄	ダクタイル 鋳鉄	アルミ 合金	銅合金	複合材 CFRP	ABSOTECH NX コート	油穴付き	3D	5D	8D
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎					



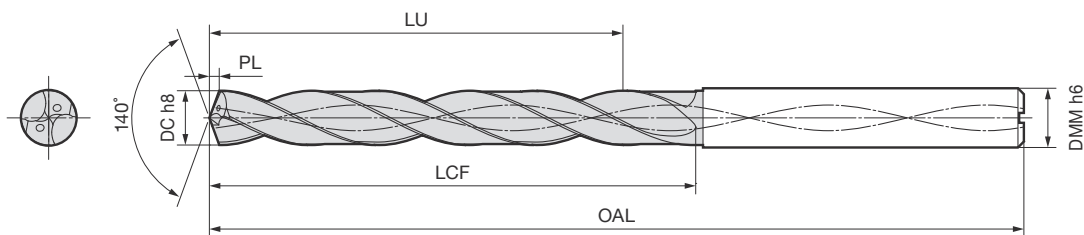
●本体 刃径 ø8.2 ~ 9.4mm

刃径 DC (mm)	穴 深さ (mm)	在庫	型番	寸法 (mm)					標準価格 (円)
				有効長 LU	フルート長 LCF	全長 OAL	先端 PL	シャンク径 DMM	
8.2	3	●	MDE 0820S09H03	31.7	44.0	101.5	1.5	9.0	14,200
	5	●	0820S09H05	57.2	69.5	128.5	1.5	9.0	16,200
	8	●	0820S09H08	82.7	95.0	155.5	1.5	9.0	18,000
8.3	3	●	MDE 0830S09H03	31.6	44.0	101.5	1.5	9.0	14,200
	5	●	0830S09H05	57.1	69.5	128.5	1.5	9.0	16,200
	8	●	0830S09H08	82.6	95.0	155.5	1.5	9.0	18,000
8.4	3	●	MDE 0840S09H03	31.4	44.0	101.5	1.5	9.0	14,200
	5	●	0840S09H05	56.9	69.5	128.5	1.5	9.0	16,200
	8	●	0840S09H08	82.4	95.0	155.5	1.5	9.0	18,000
8.5	3	●	MDE 0850S09H03	31.3	44.0	101.5	1.5	9.0	14,200
	5	●	0850S09H05	56.8	69.5	128.5	1.5	9.0	16,200
	8	●	0850S09H08	82.3	95.0	155.5	1.5	9.0	18,000
8.6	3	●	MDE 0860S09H03	33.7	46.6	101.6	1.6	9.0	14,400
	5	●	0860S09H05	60.7	73.6	128.6	1.6	9.0	16,500
	8	●	0860S09H08	87.7	100.6	155.6	1.6	9.0	18,200
8.7	3	●	MDE 0870S09H03	33.6	46.6	101.6	1.6	9.0	14,400
	5	●	0870S09H05	60.6	73.6	128.6	1.6	9.0	16,500
	8	●	0870S09H08	87.6	100.6	155.6	1.6	9.0	18,200
8.8	3	●	MDE 0880S09H03	33.4	46.6	101.6	1.6	9.0	14,400
	5	●	0880S09H05	60.4	73.6	128.6	1.6	9.0	16,500
	8	●	0880S09H08	87.4	100.6	155.6	1.6	9.0	18,200
8.9	3	●	MDE 0890S09H03	33.3	46.6	101.6	1.6	9.0	14,400
	5	●	0890S09H05	60.3	73.6	128.6	1.6	9.0	16,500
	8	●	0890S09H08	87.3	100.6	155.6	1.6	9.0	18,200
9.0	3	●	MDE 0900S09H03	33.1	46.6	101.6	1.6	9.0	14,400
	5	●	0900S09H05	60.1	73.6	128.6	1.6	9.0	16,500
	8	●	0900S09H08	87.1	100.6	155.6	1.6	9.0	18,200
9.1	3	●	MDE 0910S10H03	35.6	49.2	107.7	1.7	10.0	15,400
	5	●	0910S10H05	64.1	77.7	137.7	1.7	10.0	17,600
	8	●	0910S10H08	92.6	106.2	167.7	1.7	10.0	20,700
9.2	3	●	MDE 0920S10H03	35.4	49.2	107.7	1.7	10.0	15,400
	5	●	0920S10H05	63.9	77.7	137.7	1.7	10.0	17,600
	8	●	0920S10H08	92.4	106.2	167.7	1.7	10.0	20,700
9.3	3	●	MDE 0930S10H03	35.3	49.2	107.7	1.7	10.0	15,400
	5	●	0930S10H05	63.8	77.7	137.7	1.7	10.0	17,600
	8	●	0930S10H08	92.3	106.2	167.7	1.7	10.0	20,700
9.4	3	●	MDE 0940S10H03	35.1	49.2	107.7	1.7	10.0	15,400
	5	●	0940S10H05	63.6	77.7	137.7	1.7	10.0	17,600
	8	●	0940S10H08	92.1	106.2	167.7	1.7	10.0	20,700

●本体 刃径 ø9.5 ~ 10.7mm

刃径 DC (mm)	穴 深さ (mm)	在庫	型番	寸法 (mm)					標準価格 (円)
				有効長 LU	フルート長 LCF	全長 OAL	先端 PL	シャンク径 DMM	
9.5	3	●	MDE 0950S10H03	35.0	49.2	107.7	1.7	10.0	15,400
	5	●	0950S10H05	63.5	77.7	137.7	1.7	10.0	17,600
	8	●	0950S10H08	92.0	106.2	167.7	1.7	10.0	20,700
9.6	3	●	MDE 0960S10H03	37.3	51.7	107.7	1.7	10.0	15,700
	5	●	0960S10H05	67.3	81.7	137.7	1.7	10.0	17,900
	8	●	0960S10H08	97.3	111.7	167.7	1.7	10.0	21,200
9.7	3	●	0970S10H03	37.3	51.8	107.8	1.8	10.0	15,700
	5	●	0970S10H05	67.3	81.8	137.8	1.8	10.0	17,900
	8	●	0970S10H08	97.3	111.8	167.8	1.8	10.0	21,200
9.8	3	●	0980S10H03	37.1	51.8	107.8	1.8	10.0	15,700
	5	●	0980S10H05	67.1	81.8	137.8	1.8	10.0	17,900
	8	●	0980S10H08	97.1	111.8	167.8	1.8	10.0	21,200
9.9	3	●	MDE 0990S10H03	37.0	51.8	107.8	1.8	10.0	15,700
	5	●	0990S10H05	67.0	81.8	137.8	1.8	10.0	17,900
	8	●	0990S10H08	97.0	111.8	167.8	1.8	10.0	21,200
10.0	3	●	MDE 1000S10H03	36.8	51.8	107.8	1.8	10.0	15,700
	5	●	1000S10H05	66.8	81.8	137.8	1.8	10.0	17,900
	8	●	1000S10H08	96.8	111.8	167.8	1.8	10.0	21,200
10.1	3	●	MDE 1010S11H03	39.2	54.3	117.8	1.8	11.0	16,700
	5	●	1010S11H05	70.7	85.8	150.8	1.8	11.0	19,000
	8	●	1010S11H08	102.2	117.3	183.8	1.8	11.0	23,400
10.2	3	●	MDE 1020S11H03	39.1	54.4	117.9	1.9	11.0	16,700
	5	●	1020S11H05	70.6	85.9	150.9	1.9	11.0	19,000
	8	●	1020S11H08	102.1	117.4	183.9	1.9	11.0	23,400
10.3	3	●	MDE 1030S11H03	39.0	54.4	117.9	1.9	11.0	16,700
	5	●	1030S11H05	70.5	85.9	150.9	1.9	11.0	19,000
	8	●	1030S11H08	102.0	117.4	183.9	1.9	11.0	23,400
10.4	3	●	MDE 1040S11H03	38.8	54.4	117.9	1.9	11.0	16,700
	5	●	1040S11H05	70.3	85.9	150.9	1.9	11.0	19,000
	8	●	1040S11H08	101.8	117.4	183.9	1.9	11.0	23,400
10.5	3	●	MDE 1050S11H03	38.7	54.4	117.9	1.9	11.0	16,700
	5	●	1050S11H05	70.2	85.9	150.9	1.9	11.0	19,000
	8	●	1050S11H08	101.7	117.4	183.9	1.9	11.0	23,400
10.6	3	●	MDE 1060S11H03	41.0	56.9	117.9	1.9	11.0	17,100
	5	●	1060S11H05	74.0	89.9	150.9	1.9	11.0	19,500
	8	●	1060S11H08	107.0	122.9	183.9	1.9	11.0	23,900
10.7	3	●	MDE 1070S11H03	40.9	56.9	117.9	1.9	11.0	17,100
	5	●	1070S11H05	73.9	89.9	150.9	1.9	11.0	19,500
	8	●	1070S11H08	106.9	122.9	183.9	1.9	11.0	23,900

●MDE-H型 (内部給油式)



●本体 刃径φ10.8～12.0mm

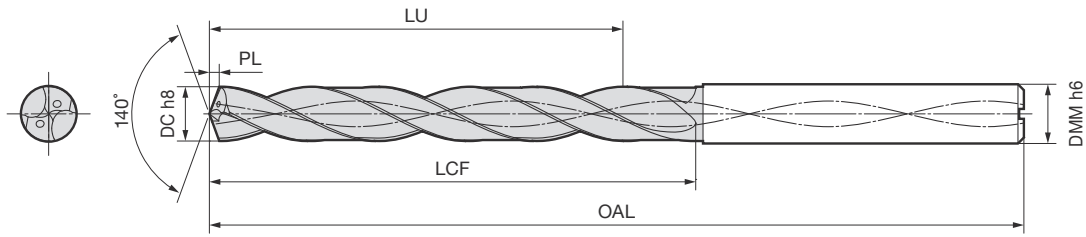
刃径 DC (mm)	穴深さ L0	在庫	型番	寸法 (mm)					標準価格 (円)
				有効長 LU	フルート長 LCF	全長 OAL	先端 PL	シャンク径 DMM	
10.8	3	●	MDE 1080S11H03	40.8	57.0	118.0	2.0	11.0	17,100
	5	●	1080S11H05	73.8	90.0	151.0	2.0	11.0	19,500
	8	●	1080S11H08	106.8	123.0	184.0	2.0	11.0	23,900
10.9	3	●	MDE 1090S11H03	40.7	57.0	118.0	2.0	11.0	17,100
	5	●	1090S11H05	73.7	90.0	151.0	2.0	11.0	19,500
	8	●	1090S11H08	106.7	123.0	184.0	2.0	11.0	23,900
11.0	3	●	MDE 1100S11H03	40.5	57.0	118.0	2.0	11.0	17,100
	5	●	1100S11H05	73.5	90.0	151.0	2.0	11.0	19,500
	8	●	1100S11H08	106.5	123.0	184.0	2.0	11.0	23,900
11.1	3	●	MDE 1110S12H03	42.9	59.5	124.0	2.0	12.0	18,000
	5	●	1110S12H05	77.4	94.0	160.0	2.0	12.0	20,700
	8	●	1110S12H08	111.9	128.5	196.0	2.0	12.0	26,400
11.2	3	●	MDE 1120S12H03	42.7	59.5	124.0	2.0	12.0	18,000
	5	●	1120S12H05	77.2	94.0	160.0	2.0	12.0	20,700
	8	●	1120S12H08	111.7	128.5	196.0	2.0	12.0	26,400
11.3	3	●	MDE 1130S12H03	42.7	59.6	124.1	2.1	12.0	18,000
	5	●	1130S12H05	77.2	94.1	160.1	2.1	12.0	20,700
	8	●	1130S12H08	111.7	128.6	196.1	2.1	12.0	26,400
11.4	3	●	MDE 1140S12H03	42.5	59.6	124.1	2.1	12.0	18,000
	5	●	1140S12H05	77.0	94.1	160.1	2.1	12.0	20,700
	8	●	1140S12H08	111.5	128.6	196.1	2.1	12.0	26,400
11.5	3	●	MDE 1150S12H03	42.4	59.6	124.1	2.1	12.0	18,000
	5	●	1150S12H05	76.9	94.1	160.1	2.1	12.0	20,700
	8	●	1150S12H08	111.4	128.6	196.1	2.1	12.0	26,400
11.6	3	●	MDE 1160S12H03	44.7	62.1	124.1	2.1	12.0	18,500
	5	●	1160S12H05	80.7	98.1	160.1	2.1	12.0	21,100
	8	●	1160S12H08	116.7	134.1	196.1	2.1	12.0	26,900
11.7	3	●	MDE 1170S12H03	44.6	62.1	124.1	2.1	12.0	18,500
	5	●	1170S12H05	80.6	98.1	160.1	2.1	12.0	21,100
	8	●	1170S12H08	116.6	134.1	196.1	2.1	12.0	26,900
11.8	3	●	MDE 1180S12H03	44.4	62.1	124.1	2.1	12.0	18,500
	5	●	1180S12H05	80.4	98.1	160.1	2.1	12.0	21,100
	8	●	1180S12H08	116.4	134.1	196.1	2.1	12.0	26,900
11.9	3	●	MDE 1190S12H03	44.4	62.2	124.2	2.2	12.0	18,500
	5	●	1190S12H05	80.4	98.2	160.2	2.2	12.0	21,100
	8	●	1190S12H08	116.4	134.2	196.2	2.2	12.0	26,900
12.0	3	●	MDE 1200S12H03	44.2	62.2	124.2	2.2	12.0	18,500
	5	●	1200S12H05	57.2	75.2	160.2	2.2	12.0	21,100
	8	●	1200S12H08	116.2	134.2	196.2	2.2	12.0	26,900

●本体 刃径φ12.1～13.3mm

刃径 DC (mm)	穴深さ L0	在庫	型番	寸法 (mm)					標準価格 (円)
				有効長 LU	フルート長 LCF	全長 OAL	先端 PL	シャンク径 DMM	
12.1	3	●	MDE 1210S13H03	46.6	64.7	130.2	2.2	13.0	19,500
	5	●	1210S13H05	84.1	102.2	169.2	2.2	13.0	22,200
	8	●	1210S13H08	121.6	139.7	208.2	2.2	13.0	29,900
12.2	3	●	MDE 1220S13H03	46.4	64.7	130.2	2.2	13.0	19,500
	5	●	1220S13H05	83.9	102.2	169.2	2.2	13.0	22,200
	8	●	1220S13H08	121.4	139.7	208.2	2.2	13.0	29,900
12.3	3	●	MDE 1230S13H03	46.3	64.7	130.2	2.2	13.0	19,500
	5	●	1230S13H05	83.8	102.2	169.2	2.2	13.0	22,200
	8	●	1230S13H08	121.3	139.7	208.2	2.2	13.0	29,900
12.4	3	●	MDE 1240S13H03	46.2	64.8	130.3	2.3	13.0	19,500
	5	●	1240S13H05	83.7	102.3	169.3	2.3	13.0	22,200
	8	●	1240S13H08	121.2	139.8	208.3	2.3	13.0	29,900
12.5	3	●	MDE 1250S13H03	46.1	64.8	130.3	2.3	13.0	19,500
	5	●	1250S13H05	83.6	102.3	169.3	2.3	13.0	22,200
	8	●	1250S13H08	121.1	139.8	208.3	2.3	13.0	29,900
12.6	3	●	MDE 1260S13H03	48.4	67.3	130.3	2.3	13.0	19,800
	5	●	1260S13H05	87.4	106.3	169.3	2.3	13.0	22,600
	8	●	1260S13H08	126.4	145.3	208.3	2.3	13.0	30,300
12.7	3	●	MDE 1270S13H03	48.3	67.3	130.3	2.3	13.0	19,800
	5	●	1270S13H05	87.3	106.3	169.3	2.3	13.0	22,600
	8	●	1270S13H08	126.3	145.3	208.3	2.3	13.0	30,300
12.8	3	●	MDE 1280S13H03	48.1	67.3	130.3	2.3	13.0	19,800
	5	●	1280S13H05	87.1	106.3	169.3	2.3	13.0	22,600
	8	●	1280S13H08	126.1	145.3	208.3	2.3	13.0	30,300
12.9	3	●	MDE 1290S13H03	48.0	67.3	130.3	2.3	13.0	19,800
	5	●	1290S13H05	87.0	106.3	169.3	2.3	13.0	22,600
	8	●	1290S13H08	126.0	145.3	208.3	2.3	13.0	30,300
13.0	3	●	MDE 1300S13H03	47.9	67.4	130.4	2.4	13.0	19,800
	5	●	1300S13H05	86.9	106.4	169.4	2.4	13.0	22,600
	8	●	1300S13H08	125.9	145.4	208.4	2.4	13.0	30,300
13.1	3	●	MDE 1310S14H03	50.3	69.9	136.4	2.4	14.0	20,800
	5	●	1310S14H05	90.8	110.4	178.4	2.4	14.0	23,800
	8	●	1310S14H08	131.3	150.9	220.4	2.4	14.0	33,900
13.2	3	●	MDE 1320S14H03	50.1	69.9	136.4	2.4	14.0	20,800
	5	●	1320S14H05	90.6	110.4	178.4	2.4	14.0	23,800
	8	●	1320S14H08	131.1	150.9	220.4	2.4	14.0	33,900
13.3	3	●	MDE 1330S14H03	50.0	69.9	136.4	2.4	14.0	20,800
	5	●	1330S14H05	90.5	110.4	178.4	2.4	14.0	23,800
	8	●	1330S14H08	131.0	150.9	220.4	2.4	14.0	33,900

●MDE-H型 (内部給油式)

炭素鋼合金鋼 ~0.28% 0.23%	調質鋼	高硬度鋼 45-HRC 48-HRC	ステン レス鋼	Ti合金	耐熱鋼	鋳鉄	ダクタイル 鋳鉄	アルミ 合金	銅合金	複合材 CFRP	ABS-TECH NX コート	油穴付き	3D	5D	8D
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎					



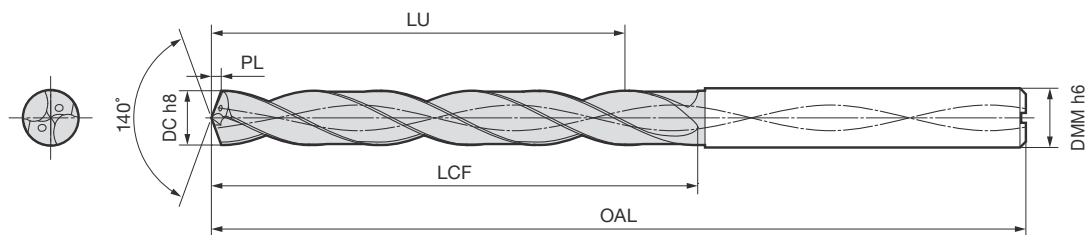
●本体 刃径φ13.4～14.6mm

刃径 DC (mm)	穴 深さ (mm)	在庫	型番	寸法 (mm)					標準価格 (円)
				有効長 LU	フルート長 LCF	全長 OAL	先端 PL	シャンク径 DMM	
13.4	3	●	MDE 1340S14H03	49.8	69.9	136.4	2.4	14.0	20,800
	5	●	1340S14H05	90.3	110.4	178.4	2.4	14.0	23,800
	8	●	1340S14H08	130.8	150.9	220.4	2.4	14.0	33,900
13.5	3	●	MDE 1350S14H03	49.8	70.0	136.5	2.5	14.0	20,800
	5	●	1350S14H05	90.3	110.5	178.5	2.5	14.0	23,800
	8	●	1350S14H08	130.8	151.0	220.5	2.5	14.0	33,900
13.6	3	●	MDE 1360S14H03	52.1	72.5	136.5	2.5	14.0	21,200
	5	●	1360S14H05	94.1	114.5	178.5	2.5	14.0	24,200
	8	●	1360S14H08	136.1	156.5	220.5	2.5	14.0	34,400
13.7	3	●	MDE 1370S14H03	52.0	72.5	136.5	2.5	14.0	21,200
	5	●	1370S14H05	94.0	114.5	178.5	2.5	14.0	24,200
	8	●	1370S14H08	136.0	156.5	220.5	2.5	14.0	34,400
13.8	3	●	MDE 1380S14H03	51.8	72.5	136.5	2.5	14.0	21,200
	5	●	1380S14H05	93.8	114.5	178.5	2.5	14.0	24,200
	8	●	1380S14H08	135.8	156.5	220.5	2.5	14.0	34,400
13.9	3	●	MDE 1390S14H03	51.7	72.5	136.5	2.5	14.0	21,200
	5	●	1390S14H05	93.7	114.5	178.5	2.5	14.0	24,200
	8	●	1390S14H08	135.7	156.5	220.5	2.5	14.0	34,400
14.0	3	●	MDE 1400S14H03	51.5	72.5	136.5	2.5	14.0	21,200
	5	●	1400S14H05	93.5	114.5	178.5	2.5	14.0	24,200
	8	●	1400S14H08	135.5	156.5	220.5	2.5	14.0	34,400
14.1	3	●	MDE 1410S15H03	54.0	75.1	142.6	2.6	15.0	23,400
	5	●	1410S15H05	97.5	118.6	187.6	2.6	15.0	26,800
	8	●	1410S15H08	141.0	162.1	232.6	2.6	15.0	40,700
14.2	3	●	MDE 1420S15H03	53.8	75.1	142.6	2.6	15.0	23,400
	5	●	1420S15H05	97.3	118.6	187.6	2.6	15.0	26,800
	8	●	1420S15H08	140.8	162.1	232.6	2.6	15.0	40,700
14.3	3	●	MDE 1430S15H03	53.7	75.1	142.6	2.6	15.0	23,400
	5	●	1430S15H05	97.2	118.6	187.6	2.6	15.0	26,800
	8	●	1430S15H08	140.7	162.1	232.6	2.6	15.0	40,700
14.4	3	●	MDE 1440S15H03	53.5	75.1	142.6	2.6	15.0	23,400
	5	●	1440S15H05	97.0	118.6	187.6	2.6	15.0	26,800
	8	●	1440S15H08	140.5	162.1	232.6	2.6	15.0	40,700
14.5	3	●	MDE 1450S15H03	53.4	75.1	142.6	2.6	15.0	23,400
	5	●	1450S15H05	96.9	118.6	187.6	2.6	15.0	26,800
	8	●	1450S15H08	140.4	162.1	232.6	2.6	15.0	40,700
14.6	3	●	MDE 1460S15H03	55.8	77.7	142.7	2.7	15.0	23,900
	5	●	1460S15H05	100.8	122.7	187.7	2.7	15.0	27,200
	8	●	1460S15H08	145.8	167.7	232.7	2.7	15.0	41,300

●本体 刃径φ14.7～15.9mm

刃径 DC (mm)	穴 深さ (mm)	在庫	型番	寸法 (mm)					標準価格 (円)
				有効長 LU	フルート長 LCF	全長 OAL	先端 PL	シャンク径 DMM	
14.7	3	●	MDE 1470S15H03	55.7	77.7	142.7	2.7	15.0	23,900
	5	●	1470S15H05	100.7	122.7	187.7	2.7	15.0	27,200
	8	●	1470S15H08	145.7	167.7	232.7	2.7	15.0	41,300
14.8	3	●	MDE 1480S15H03	55.5	77.7	142.7	2.7	15.0	23,900
	5	●	1480S15H05	100.5	122.7	187.7	2.7	15.0	27,200
	8	●	1480S15H08	145.5	167.7	232.7	2.7	15.0	41,300
14.9	3	●	MDE 1490S15H03	55.4	77.7	142.7	2.7	15.0	23,900
	5	●	1490S15H05	100.4	122.7	187.7	2.7	15.0	27,200
	8	●	1490S15H08	145.4	167.7	232.7	2.7	15.0	41,300
15.0	3	●	MDE 1500S15H03	55.2	77.7	142.7	2.7	15.0	23,900
	5	●	1500S15H05	100.2	122.7	187.7	2.7	15.0	27,200
	8	●	1500S15H08	145.2	167.7	232.7	2.7	15.0	41,300
15.1	3	●	MDE 1510S16H03	57.6	80.2	148.7	2.7	16.0	24,900
	5	●	1510S16H05	104.1	126.7	196.7	2.7	16.0	28,500
	8	●	1510S16H08	150.6	173.2	244.7	2.7	16.0	46,100
15.2	3	●	MDE 1520S16H03	57.5	80.3	148.8	2.8	16.0	24,900
	5	●	1520S16H05	104.0	126.8	196.8	2.8	16.0	28,500
	8	●	1520S16H08	150.5	173.3	244.8	2.8	16.0	46,100
15.3	3	●	MDE 1530S16H03	57.4	80.3	148.8	2.8	16.0	24,900
	5	●	1530S16H05	103.9	126.8	196.8	2.8	16.0	28,500
	8	●	1530S16H08	150.4	173.3	244.8	2.8	16.0	46,100
15.4	3	●	MDE 1540S16H03	57.2	80.3	148.8	2.8	16.0	24,900
	5	●	1540S16H05	103.7	126.8	196.8	2.8	16.0	28,500
	8	●	1540S16H08	150.2	173.3	244.8	2.8	16.0	46,100
15.5	3	●	MDE 1550S16H03	57.1	80.3	148.8	2.8	16.0	24,900
	5	●	1550S16H05	103.6	126.8	196.8	2.8	16.0	28,500
	8	●	1550S16H08	150.1	173.3	244.8	2.8	16.0	46,100
15.6	3	●	MDE 1560S16H03	59.4	82.8	148.8	2.8	16.0	25,300
	5	●	1560S16H05	107.4	130.8	196.8	2.8	16.0	28,900
	8	●	1560S16H08	155.4	178.8	244.8	2.8	16.0	46,500
15.7	3	●	MDE 1570S16H03	59.4	82.9	148.9	2.9	16.0	25,300
	5	●	1570S16H05	107.4	130.9	196.9	2.9	16.0	28,900
	8	●	1570S16H08	155.4	178.9	244.9	2.9	16.0	46,500
15.8	3	●	MDE 1580S16H03	59.2	82.9	148.9	2.9	16.0	25,300
	5	●	1580S16H05	107.2	130.9	196.9	2.9	16.0	28,900
	8	●	1580S16H08	155.2	178.9	244.9	2.9	16.0	46,500
15.9	3	●	MDE 1590S16H03	59.1	82.9	148.9	2.9	16.0	25,300
	5	●	1590S16H05	107.1	130.9	196.9	2.9	16.0	28,900
	8	●	1590S16H08	155.1	178.9	244.9	2.9	16.0	46,500

●MDE-H型 (内部給油式)



●本体 刃径φ16.0～20.0mm

刃径 DC (mm)	穴深さ (mm)	在庫	型番	寸法 (mm)					標準価格 (円)
				有効長 LU	フルート長 LCF	全長 OAL	先端 PL	シャンク径 DMM	
16.0	3	●	MDE 1600S16H03	58.9	82.9	148.9	2.9	16.0	25,300
	5	●	1600S16H05	106.9	130.9	196.9	2.9	16.0	28,900
	8	●	1600S16H08	154.9	178.9	244.9	2.9	16.0	46,500
16.5	3	●	MDE 1650S17H03	60.8	85.5	155.0	3.0	17.0	27,700
	5	●	1650S17H05	114.3	139.0	206.0	3.0	17.0	34,600
17.0	3	●	MDE 1700S17H03	62.6	88.1	155.1	3.1	17.0	28,000
	5	●	1700S17H05	113.6	139.1	206.1	3.1	17.0	35,000
17.5	3	●	MDE 1750S18H03	64.5	90.7	161.2	3.2	18.0	32,600
	5	●	1750S18H05	123.0	149.2	217.3	3.2	18.0	40,600
18.0	3	●	MDE 1800S18H03	66.3	93.3	161.3	3.3	18.0	33,000
	5	●	1800S18H05	122.3	149.3	217.3	3.3	18.0	41,000
18.5	3	●	MDE 1850S19H03	68.2	95.9	167.4	3.4	19.0	37,700
	5	●	1850S19H05	127.7	155.4	224.4	3.4	19.0	46,600
19.0	3	●	MDE 1900S19H03	70.0	98.5	167.5	3.5	19.0	38,000
	5	●	1900S19H05	127.0	155.5	224.5	3.5	19.0	47,000
19.5	3	●	MDE 1950S20H03	71.8	101.0	173.5	3.5	20.0	42,600
	5	●	1950S20H05	134.3	163.5	233.5	3.5	20.0	52,600
20.0	3	●	MDE 2000S20H03	73.6	103.6	173.6	3.6	20.0	43,000
	5	●	2000S20H05	133.6	163.6	233.6	3.6	20.0	53,000

●推奨切削条件 (MDE-E型 外部給油式 2D/4D)

被削材	軟鋼・低炭素鋼 SS400・S15C ~160HB		炭素鋼 S35C・S50C ~230HB		合金鋼 SCM・SCr 20~30HRC		合金鋼 SCM・SCr 30~38HRC	
切削速度	60~100m/min		60~120m/min		50~100m/min		40~80m/min	
刃径DC (mm)	回転速度 (min ⁻¹)	送り量 (mm/rev)	回転速度 (min ⁻¹)	送り量 (mm/rev)	回転速度 (min ⁻¹)	送り量 (mm/rev)	回転速度 (min ⁻¹)	送り量 (mm/rev)
3	8,500	0.05~0.12	8,500	0.05~0.12	7,500	0.05~0.12	6,400	0.05~0.12
4	6,400	0.07~0.17	6,400	0.07~0.17	5,600	0.07~0.17	4,800	0.07~0.17
5	5,100	0.08~0.20	5,100	0.08~0.20	4,500	0.08~0.20	3,900	0.08~0.20
6	4,300	0.10~0.20	4,300	0.10~0.20	3,800	0.10~0.20	3,200	0.10~0.20
7	3,700	0.12~0.23	3,700	0.12~0.23	3,200	0.12~0.23	2,800	0.12~0.23
8	3,200	0.15~0.25	3,200	0.15~0.25	2,800	0.15~0.25	2,400	0.15~0.25
9	2,900	0.17~0.25	2,900	0.17~0.25	2,500	0.17~0.25	2,200	0.17~0.25
10	2,600	0.18~0.28	2,600	0.18~0.28	2,300	0.18~0.28	2,000	0.18~0.28
11	2,400	0.20~0.30	2,400	0.20~0.30	2,100	0.20~0.30	1,800	0.20~0.30
12	2,200	0.20~0.30	2,200	0.20~0.30	1,900	0.20~0.30	1,600	0.20~0.30
14	1,900	0.20~0.30	1,900	0.20~0.30	1,600	0.20~0.30	1,400	0.20~0.30
16	1,600	0.20~0.30	1,600	0.20~0.30	1,400	0.20~0.30	1,200	0.20~0.30
18	1,500	0.20~0.30	1,500	0.20~0.30	1,300	0.20~0.30	1,100	0.20~0.30
20	1,300	0.20~0.30	1,300	0.20~0.30	1,200	0.20~0.30	1,000	0.20~0.30

*高能率加工にはGS型をお奨めいたします。

被削材	鋳鉄 FC250~280HB		ダクタイル鋳鉄 FCD450・FCD600 ~270HB		ステンレス鋼(不水溶性加工) SUS304・SUS410 ~200HB		特殊鋼・プリハードン鋼 SKS2・SKD61(非調質) 30~38HRc	
切削速度	60~100m/min		50~100m/min		20~50m/min		30~60m/min	
刃径DC (mm)	回転速度 (min ⁻¹)	送り量 (mm/rev)	回転速度 (min ⁻¹)	送り量 (mm/rev)	回転速度 (min ⁻¹)	送り量 (mm/rev)	回転速度 (min ⁻¹)	送り量 (mm/rev)
3	8,500	0.06~0.15	7,500	0.05~0.12	4,300	0.05~0.10	5,400	0.05~0.12
4	6,400	0.08~0.18	5,600	0.07~0.17	3,200	0.05~0.10	4,000	0.07~0.17
5	5,100	0.10~0.20	4,500	0.08~0.20	2,600	0.06~0.15	3,200	0.08~0.20
6	4,300	0.12~0.23	3,800	0.10~0.20	2,200	0.06~0.15	2,700	0.10~0.20
7	3,700	0.12~0.23	3,200	0.12~0.23	1,900	0.06~0.18	2,300	0.10~0.20
8	3,200	0.18~0.25	2,800	0.15~0.25	1,600	0.06~0.20	2,000	0.12~0.25
9	2,900	0.17~0.25	2,500	0.17~0.25	1,500	0.08~0.20	1,800	0.12~0.25
10	2,600	0.18~0.28	2,300	0.18~0.28	1,300	0.08~0.20	1,600	0.12~0.25
11	2,400	0.20~0.30	2,100	0.20~0.30	1,200	0.08~0.20	1,500	0.15~0.30
12	2,200	0.20~0.30	1,900	0.20~0.30	1,100	0.10~0.25	1,400	0.15~0.30
14	1,900	0.20~0.30	1,600	0.20~0.30	1,000	0.10~0.25	1,200	0.15~0.30
16	1,600	0.20~0.30	1,400	0.20~0.30	800	0.10~0.25	1,000	0.15~0.30
18	1,500	0.20~0.30	1,300	0.20~0.30	800	0.10~0.25	900	0.15~0.30
20	1,300	0.20~0.30	1,200	0.20~0.30	700	0.10~0.25	800	0.15~0.30

*高能率加工にはGS型をお奨めいたします。

1. 上記推奨切削条件表は、水溶性切削油剤使用時を示すものです。(ステンレス鋼加工は除く)
2. 水溶性切削油は切刃先端部に十分に供給してください。
3. 不水溶性切削油を使用される場合は、切削速度を20~30%下げて十分な給油量を確保してください。
4. 保持具へのドリルセット時は、切刃先端外周部の振れを0.02mm以下にしてください。
5. 保持具内へのフルート入り込みは避けてください。
6. 加工物の食い付き部が異形状(傾き・断続等)の場合、食い付き時送り量を半分程度に下げてください。
*それでも加工安定性が確保出来ない場合は、フラットマルチドリルMDF型にてフラット面の前加工を推奨します。
7. 貫通時断続加工になる場合は貫通前より送り量を半分程度に下げてください。

●推奨切削条件 (MDE-H型 内部給油式 3D/5D/8D)

被削材	軟鋼・低炭素鋼 SS400-S15C ~160HB		炭素鋼 S35C-S50C ~230HB		合金鋼 SCM-SCr 20~30HRC		合金鋼 SCM-SCr 30~38HRC	
切削速度	70~110m/min		60~120m/min		60~120m/min		40~80m/min	
刃径DC (mm)	回転速度 (min ⁻¹)	送り量 (mm/rev)	回転速度 (min ⁻¹)	送り量 (mm/rev)	回転速度 (min ⁻¹)	送り量 (mm/rev)	回転速度 (min ⁻¹)	送り量 (mm/rev)
3	9,600	0.05~0.12	8,500	0.05~0.12	7,500	0.05~0.12	6,400	0.05~0.12
4	7,200	0.07~0.17	6,400	0.07~0.17	5,600	0.07~0.17	4,800	0.07~0.17
5	5,800	0.08~0.20	5,100	0.08~0.20	4,500	0.08~0.20	3,900	0.08~0.20
6	4,800	0.10~0.20	4,300	0.10~0.20	3,800	0.10~0.20	3,200	0.10~0.20
7	4,100	0.12~0.23	3,700	0.12~0.23	3,200	0.12~0.23	2,800	0.12~0.23
8	3,600	0.12~0.25	3,200	0.12~0.25	2,800	0.12~0.25	2,400	0.12~0.25
9	3,200	0.14~0.25	2,900	0.14~0.25	2,500	0.14~0.25	2,200	0.14~0.25
10	2,900	0.16~0.28	2,600	0.16~0.28	2,300	0.16~0.28	2,000	0.16~0.28
11	2,700	0.18~0.30	2,400	0.18~0.30	2,100	0.18~0.30	1,800	0.18~0.30
12	2,400	0.20~0.30	2,200	0.20~0.30	1,900	0.20~0.30	1,600	0.20~0.30
14	2,100	0.20~0.30	1,900	0.20~0.30	1,600	0.20~0.30	1,400	0.20~0.30
16	1,800	0.20~0.30	1,600	0.20~0.30	1,400	0.20~0.30	1,200	0.20~0.30
18	1,600	0.20~0.30	1,500	0.20~0.30	1,300	0.20~0.30	1,100	0.20~0.30
20	1,500	0.20~0.30	1,300	0.20~0.30	1,200	0.20~0.30	1,000	0.20~0.30

*高効率加工にはHGS型をお奨めいたします。

被削材	鋳鉄 FC250~280HB		ダクタイル鋳鉄 FCD450-FCD600 ~270HB		ステンレス鋼 SUS304-SUS410 ~200HB		特殊鋼・プリハードン鋼 SKS2-SKD61 (非調質) 30~38HRc	
切削速度	60~100m/min		50~100m/min		40~80m/min		30~60m/min	
刃径DC (mm)	回転速度 (min ⁻¹)	送り量 (mm/rev)	回転速度 (min ⁻¹)	送り量 (mm/rev)	回転速度 (min ⁻¹)	送り量 (mm/rev)	回転速度 (min ⁻¹)	送り量 (mm/rev)
3	8,500	0.06~0.15	7,500	0.05~0.12	6,400	0.05~0.12	4,800	0.05~0.10
4	6,400	0.08~0.18	5,600	0.07~0.17	4,800	0.07~0.17	3,600	0.06~0.13
5	5,100	0.10~0.20	4,500	0.08~0.20	3,900	0.08~0.20	2,900	0.07~0.15
6	4,300	0.12~0.23	3,800	0.10~0.20	3,200	0.10~0.20	2,400	0.08~0.18
7	3,700	0.12~0.23	3,200	0.12~0.23	2,800	0.10~0.23	2,100	0.10~0.20
8	3,200	0.18~0.25	2,800	0.12~0.25	2,400	0.10~0.20	1,800	0.12~0.22
9	2,900	0.17~0.25	2,500	0.14~0.25	2,200	0.12~0.23	1,600	0.14~0.22
10	2,600	0.18~0.28	2,300	0.16~0.28	2,000	0.12~0.23	1,500	0.16~0.25
11	2,400	0.20~0.30	2,100	0.18~0.30	1,800	0.15~0.25	1,400	0.18~0.28
12	2,200	0.20~0.30	1,900	0.20~0.30	1,600	0.15~0.25	1,200	0.18~0.28
14	1,900	0.20~0.30	1,600	0.20~0.30	1,400	0.15~0.25	1,100	0.18~0.30
16	1,600	0.20~0.30	1,400	0.20~0.30	1,200	0.15~0.25	900	0.18~0.30
18	1,500	0.20~0.30	1,300	0.20~0.30	1,100	0.15~0.25	800	0.18~0.30
20	1,300	0.20~0.30	1,200	0.20~0.30	1,000	0.15~0.25	720	0.18~0.30

*高効率加工【鋳鉄・ダクタイル鋳鉄】にはHX(HY)型を、【ステンレス鋼・特殊鋼・プリハードン鋼】にはHGS型をお奨めいたします。

1. 上記推奨切削条件表は、水溶性切削油剤使用時を示すものです。
2. MQL給油でもご使用いただけます。但し外部ミキシング型MQL装置ではシャンク径(DMM)がφ16mm以上の場合、MQLが生成されない場合がありますのでご注意ください。
3. 保持具へのドリルセット時は、切刃先端外周部の振れを0.02mm以下にしてください。
4. 保持具内へのフルート入り込みは避けてください。
5. 加工物の食い付き部が異形状(傾き・断続等)の場合、食い付き時送り量を半分程度に下げてください。
*それでも加工安定性が確保出来ない場合は、フラットマルチドリルMDF型にてフラット面の前加工を推奨します。
6. 貫通時断続加工になる場合は貫通前より送り量を半分程度に下げてください。



◆安全にお使いいただくために◆



- 高温の切りくずが飛散したり長く伸びた切りくずが排出されることがありますので、安全カバーや保護メガネ等の保護具を使用し、防災・防火に十分ご注意ください。
- Very hot or lengthy chips may be discharged while the machine is in operation. Therefore, machine guards, safety goggles or other protective covers must be used. Fire safety precautions must also be considered.
- 鋭い切れ刃を持っているため取扱いにご注意ください。
- 使用方法を誤ったり、使用条件が不適切な場合、工具破損、飛散を招きますので推奨条件の範囲内でご使用ください。
- Please handle with care as this product has sharp edges.
- Improper cutting conditions or mis-handling of the tool may result in breakages or projectiles. Therefore, please use the tool within its recommended conditions.
- 不水溶性の切削液をご使用になる場合は、自動消火装置を設置するなどの対策を講じて頂き、火災にくれぐれもご注意ください。
- When using non-water soluble cutting oil, precautions against fire must be taken and please ensure that a fire extinguisher is placed near the machine.

住友電気工業株式会社

SUMITOMO ELECTRIC INDUSTRIES, LTD.

ハードメタル事業部 Global Marketing Department	〒664-0016 兵庫県伊丹市昆陽北1-1-1 1-1-1, Koyakita, Itami, Hyogo 664-0016, Japan	TEL (072)772-4531 TEL +81-(72)-772-4535	FAX (072)772-4595 FAX +81-(72)-771-0088
東京営業グループ	〒107-8468 東京都港区元赤坂1-3-13	TEL (03)6406-2635	FAX (03)6406-4006
名古屋営業グループ	〒451-6036 名古屋市西区牛島町6-1	TEL (052)589-3873	FAX (052)589-3874
大阪営業グループ	*〒471-0835 愛知県豊田市曙町2-80 〒541-0041 大阪市中央区北浜4-7-28	TEL (0565)26-4370 TEL (06)6221-3600	FAX (0565)26-4366 FAX (06)6221-3015
流通販売部	東京市販グループ TEL (03)6406-2636 名古屋市販グループ TEL (052)589-3873 大阪市販グループ TEL (06)6221-3700	営業所 苫小牧 ☎(0144)35-3322 仙台 ☎(022)292-0128 北関東 ☎(0285)24-3627 熊谷 ☎(048)525-8215 横浜 ☎(045)851-1788 富士 ☎(0545)53-1152 浜松 ☎(053)451-4395 北陸 ☎(076)264-3822 岡山 ☎(086)221-3052 広島 ☎(082)250-1022 九州 ☎(092)481-8131	

住友電工ツールネット株式会社 製造元 住友電工ハードメタル株式会社

東京営業部 TEL(03)6406-2814 FAX(03)6406-4037
中部営業部 TEL(052)589-3840 FAX(052)589-3841
大阪営業部 TEL(06)6221-3900 FAX(06)6221-3015

>> 切削工具の最新情報を発信中 <<

<http://www.sumitool.com>

フリーダイヤル 110番
0120-159110
※新着商品サービス 9:00~12:00, 13:00~17:00 (土・日・祝日を除く)

※営業所移転につき、2017年6月より所在地・電話番号・FAXが変更になりました。

(2017.6) I SN