

HEPTA MILL HEP Type

HEPTA MILL- High Feed Mill with 7 Cutting-Edge



- Max. Depth of cut 5mm at fz=1mm/tooth is possible.
- Insert with thickness 6.35mm is durable for heavy roughing.
- Heptagonal insert with unique geometry for lower cutting force.
- Double clamping system
- Multi functional cutter for ramping , pocket milling , plunging.



Fig 1

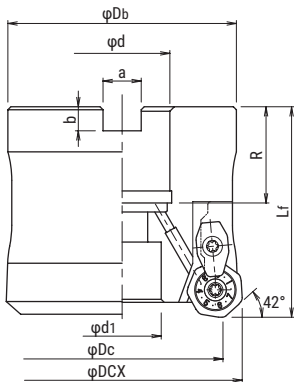


Fig 2

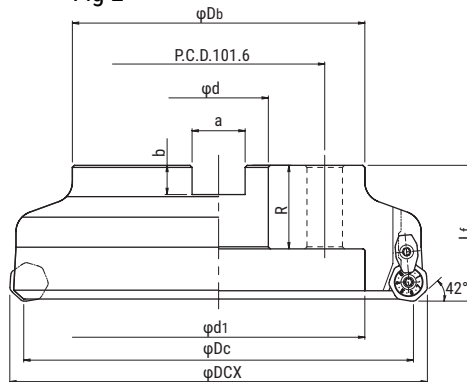
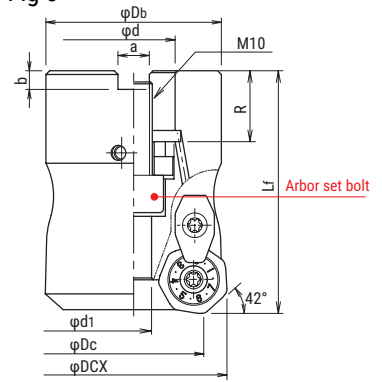


Fig 3

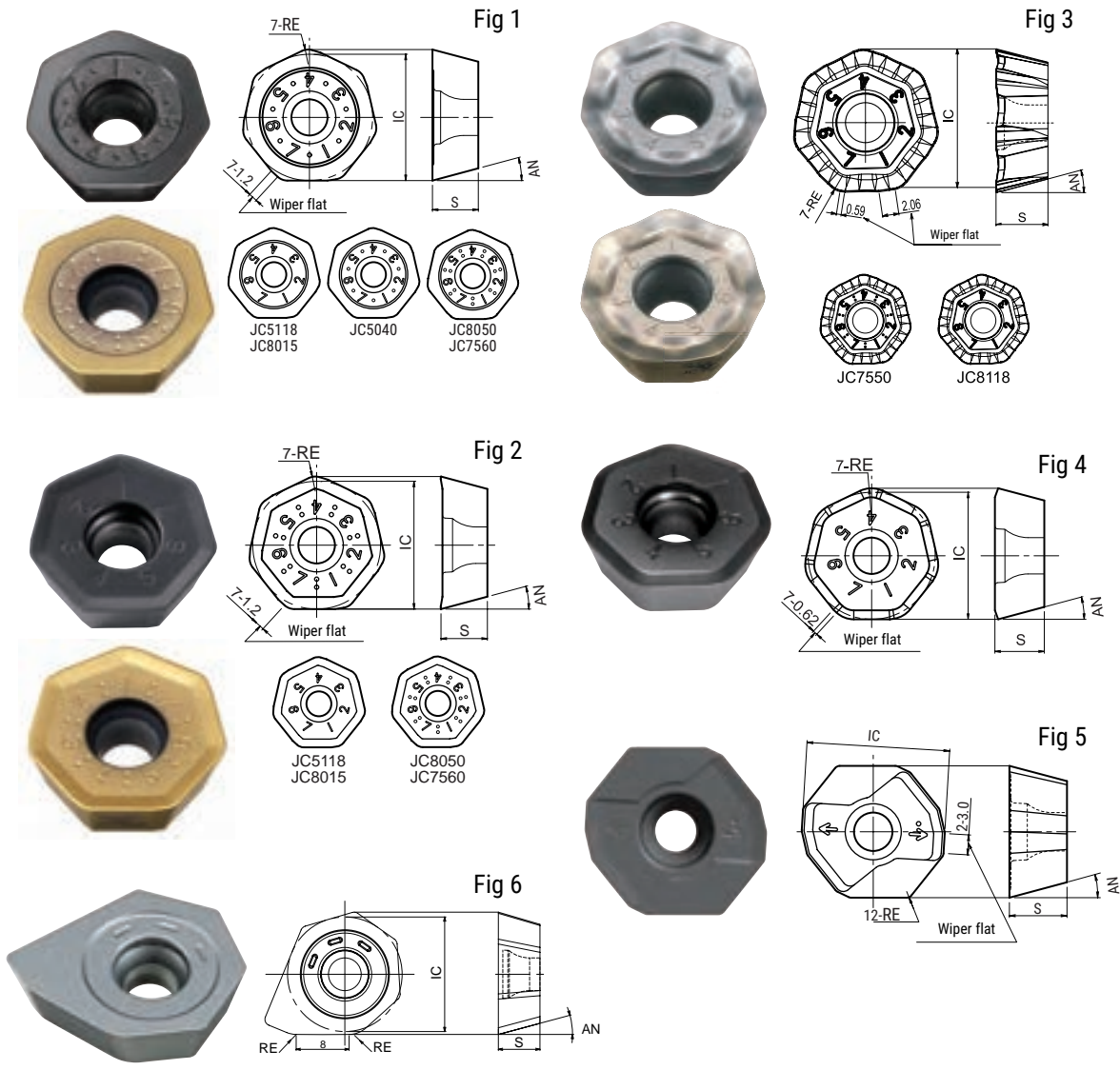


| Cat.No. | Stock | No. of inserts | Dimensions (mm) | | | | | | | | | | Arbor set bolt | Parts | | Weight (kg) | Inserts | Fig. |
|-----------------|-------|----------------|-----------------|------|-----|-----|-----|------|------|------|-------------|--------------|----------------|--------|--------------|-------------|---------|------|
| | | | φDc | φDCX | Lf | φDb | φd | φd1 | a | b | ℓ | Screw | | Wrench | | | | |
| HEP-3050R-08-22 | ● | 3 | 36.7 | 50 | 65 | 47 | 22 | 9.6 | 10.4 | 6.3 | 19 | M10X1.5X25* | DSW-4512H | A-20 | 0.9 | XD**080... | 3 | |
| HEP-4063R-08-22 | ● | 4 | 49.5 | 63 | 50 | 60 | | 17 | | | | 20 | | | M10 | | | 1.1 |
| HEP-4063R-08-27 | ● | 5 | 66.6 | 80 | 55 | 76 | 27 | 20 | 12.4 | 7 | 22 | M12X1.75X30* | | | 1.1 | | | |
| HEP-5080R-08-27 | ● | 6 | 86.6 | 100 | 70 | 96 | | 32 | 26 | 14.4 | 8 | 32 | | | M12X1.75X40* | | 1.9 | |
| HEP-6100R-08-32 | ● | 7 | 111.6 | 125 | | 100 | 40 | 32 | 16.4 | 9 | 35 | M16X2X45* | | | 3.6 | | | |
| HEP-7125R-08-40 | ● | 8 | 146.6 | 160 | 140 | 60 | 140 | 25.4 | 14.3 | 40 | M20X2.5X45* | 5.5 | | | | | | |
| HEP-8160R-08-40 | ● | 9 | 186.6 | 200 | 140 | 60 | 140 | 25.4 | 14.3 | 40 | M20X2.5X45* | 8.4 | | | | | | |
| HEP-9200R-08-60 | ● | 9 | 186.6 | 200 | 65 | 140 | 140 | 25.4 | 14.3 | 40 | M16 | 10.2 | | | 2 | | | |

| Screw | Torque(N.m) |
|-----------|-------------|
| DSW-4512H | 6 |

HEPTA MILL **HEP Type**

■ **Insert**



| Cat.No. | Tolerance | PVD Coating | | | | | | Dimensions(mm) | | | | Fig. | |
|------------------|-----------|-------------|--------|--------|--------|--------|--------|----------------|-----|--------|------|------|----|
| | | JC5040 | JC7550 | JC7560 | JC8011 | JC8015 | JC8050 | JC8118 | RE | IC | S | | AN |
| XDMW080620ZTR | M | ● | | ● | | ● | ● | ● | 2 | 17.5 | 6.35 | 15° | 1 |
| XDMW080635ZTR-S | | | | | | ● | | | 3.5 | | | | 4 |
| XDMT080620ZER | | | | ● | | ● | ● | ● | 2 | | | | 2 |
| XDMT080620ZER-ML | | ● | | | | | ● | | | 17.341 | 6.5 | | 3 |
| XDMT080708ZER | | | | | | ○ | | | 0.8 | 18.6 | 7.5 | | 5 |
| XDHW080610ZER-W | | H | | | | ● | | | 4 | 17.5 | 6.35 | | 6 |

HEPTA MILL**HEP Type**

■ Recommended cutting conditions

GENERAL CUTTING

| Material | Insert | Grade | Tool dia.(mm) | | | | | | | | | |
|--|--|--------------------------------|----------------|---------------|---------------|-----------------------------|-------------------|----------------|---------------|---------------|-----------------------------|-------------------|
| | | | 50 | | | | | 63 | | | | |
| | | | 3N | | | | | 4N | | | | |
| | | | ℓ (mm) | a_p (mm) | a_e (mm) | n (min ⁻¹) | V_f (mm/min) | ℓ (mm) | a_p (mm) | a_e (mm) | n (min ⁻¹) | V_f (mm/min) |
| Carbon steel (S50C, S55C) below 250HB | XDMT080620ZER (XDMW080620ZTR) [XDMW080620ZTR] | JC7560 (JC5040) [JC7560] | 100 | 4 | ~35 | 900 | 2,200 | 100 | 4 | ~42 | 700 | 2,300 |
| | | | 150 | 3.5 | ~35 | 800 | 1,700 | 150 | 3.5 | ~42 | 650 | 1,800 |
| | | | 200 | 3 | ~35 | 700 | 1,300 | 200 | 3 | ~42 | 600 | 1,500 |
| Tool & die steel (SKD61, SKD11) below 255HB | XDMT080620ZER (XDMW080620ZTR) [XDMW080620ZTR] | JC7560 (JC5040) [JC7560] | 100 | 3 | ~35 | 900 | 1,900 | 100 | 3 | ~42 | 700 | 2,000 |
| | | | 150 | 2.5 | ~35 | 800 | 1,400 | 150 | 2.5 | ~42 | 650 | 1,600 |
| | | | 200 | 2.5 | ~35 | 700 | 1,050 | 200 | 2.5 | ~42 | 600 | 1,200 |
| Mold steel (HPM7, PX5, P20) 30-36 HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC7560) [JC5040] | 100 | 3 | ~35 | 900 | 1,900 | 100 | 3 | ~42 | 700 | 2,000 |
| | | | 150 | 2.5 | ~35 | 800 | 1,400 | 150 | 2.5 | ~42 | 650 | 1,600 |
| | | | 200 | 2.5 | ~35 | 700 | 1,050 | 200 | 2.5 | ~42 | 600 | 1,200 |
| Mold steel (NAK80, HPM1, P21) 38-43HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC8015) [JC8118] | 100 | 3 | ~35 | 650 | 1,400 | 100 | 3 | ~42 | 500 | 1,400 |
| | | | 150 | 2.5 | ~35 | 600 | 1,100 | 150 | 2.5 | ~42 | 450 | 1,100 |
| | | | 200 | 2.5 | ~35 | 500 | 750 | 200 | 2.5 | ~42 | 400 | 700 |
| Hardened die steel (SKD61, DAC, DHA) 42-52HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC8015) [JC8118] | 100 | 2 | ~25 | 450 | 550 | 100 | 2 | ~30 | 450 | 700 |
| | | | 150 | 1.5 | ~25 | 400 | 450 | 150 | 1.5 | ~30 | 400 | 600 |
| | | | 200 | 1.5 | ~25 | 350 | 320 | 200 | 1.5 | ~30 | 300 | 350 |
| Grey cast iron (FC250) 160-260HB | XDMW080620ZTR (XDMW080620ZTR) [XDMW080620ZTR-S] | JC8015 (JC8118) [JC8015] | 100 | 5 | ~35 | 900 | 2,700 | 100 | 5 | ~42 | 700 | 2,800 |
| | | | 150 | 4 | ~35 | 800 | 2,400 | 150 | 4 | ~42 | 600 | 2,400 |
| | | | 200 | 3.5 | ~35 | 700 | 1,800 | 200 | 3.5 | ~42 | 550 | 2,000 |
| Nodular cast iron (FCD700) 170-300HB | XDMW080620ZTR (XDMW080620ZTR) [XDMW080620ZTR-S] | JC8015 (JC8118) [JC8015] | 100 | 4 | ~35 | 750 | 1,800 | 100 | 4 | ~42 | 600 | 2,000 |
| | | | 150 | 3 | ~35 | 680 | 1,350 | 150 | 3 | ~42 | 550 | 1,450 |
| | | | 200 | 2.5 | ~35 | 600 | 1,000 | 200 | 2.5 | ~42 | 500 | 1,150 |
| Austenitic stainless steel (SUS304, 316, 317) 17Cr | XDMT080620ZER (XDMT080620ZER) [XDMT080620ZER-ML] | JC8050 (JC7560) [JC7550] | 100 | 4 | ~35 | 800 | 1,200 | 100 | 4 | ~42 | 650 | 1,200 |
| | | | 150 | 3.5 | ~35 | 700 | 1,000 | 150 | 3.5 | ~42 | 600 | 1,000 |
| | | | 200 | 3 | ~35 | 600 | 700 | 200 | 3 | ~42 | 500 | 800 |
| Titanium alloy (Ti-6Al-4V) 35-43HRC | XDMT080620ZER-ML (XDMT080620ZER) [XDMT080620ZER] | JC7550 (JC5040) [JC8118] | 100 | 3 | ~30 | 380 | 250 | 100 | 3 | ~38 | 300 | 250 |
| | | | 150 | 2.5 | ~30 | 320 | 150 | 150 | 2.5 | ~38 | 250 | 150 |
| | | | 200 | 2.5 | ~30 | 250 | 120 | 200 | 2.5 | ~38 | 200 | 120 |
| Heat resistant alloy (INCO718) 35-43HRC | XDMT080620ZER-ML (XDMT080620ZER) [XDMT080620ZER] | JC8118 (JC8118) [JC8015] | 100 | 2 | ~25 | 200 | 120 | 100 | 2 | ~30 | 150 | 120 |
| | | | 150 | 1.5 | ~25 | 160 | 80 | 150 | 1.5 | ~30 | 120 | 80 |
| | | | 200 | 1.5 | ~25 | 120 | 60 | 200 | 1.5 | ~30 | 100 | 60 |

Note

1. Please adjust cutting conditions according to machine rigidity or work rigidity.
2. In case of chatter occurring, recommended to reduce a_p or V_f .
3. Use air blow.
4. XDMW080635ZTR-S(JC8015) is recommended to cut cast steel with crusty and nonuniform suarface.

HEPTA MILL**HEP Type**

■ Recommended cutting conditions

GENERAL CUTTING

| Material | Insert | Grade | Tool dia.(mm) | | | | | | | | | |
|--|--|--------------------------------|----------------|---------------|---------------|-----------------------------|-------------------|----------------|---------------|---------------|-----------------------------|-------------------|
| | | | 80 | | | | | 100 | | | | |
| | | | 5N | | | | | 6N | | | | |
| | | | ℓ (mm) | a_p (mm) | a_e (mm) | n (min ⁻¹) | V_f (mm/min) | ℓ (mm) | a_p (mm) | a_e (mm) | n (min ⁻¹) | V_f (mm/min) |
| Carbon steel (S50C, S55C) below 250HB | XDMT080620ZER (XDMW080620ZTR) [XDMW080620ZTR] | JC7560 (JC5040) [JC7560] | 100 | 4 | ~55 | 550 | 2,200 | 100 | 4 | ~70 | 450 | 2,200 |
| | | | 150 | 4 | ~55 | 500 | 1,800 | 150 | 4 | ~70 | 400 | 1,700 |
| | | | 200 | 3.5 | ~55 | 450 | 1,400 | 200 | 3.5 | ~70 | 350 | 1,300 |
| Tool & die steel (SKD61, SKD11) below 255HB | XDMT080620ZER (XDMW080620ZTR) [XDMW080620ZTR] | JC7560 (JC5040) [JC7560] | 100 | 3 | ~55 | 550 | 2,000 | 100 | 3 | ~70 | 450 | 1,900 |
| | | | 150 | 3 | ~55 | 500 | 1,500 | 150 | 3 | ~70 | 400 | 1,500 |
| | | | 200 | 2.5 | ~55 | 450 | 1,100 | 200 | 2.5 | ~70 | 350 | 1,100 |
| Mold steel (HPM7, PX5, P20) 30-36 HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC7560) [JC5040] | 100 | 3 | ~55 | 550 | 2,000 | 100 | 3 | ~70 | 450 | 1,900 |
| | | | 150 | 3 | ~55 | 500 | 1,500 | 150 | 3 | ~70 | 400 | 1,500 |
| | | | 200 | 2.5 | ~55 | 450 | 1,100 | 200 | 2.5 | ~70 | 350 | 1,100 |
| Mold steel (NAK80, HPM1, P21) 38-43HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC8015) [JC8118] | 100 | 3 | ~55 | 400 | 1,300 | 100 | 3 | ~70 | 350 | 1,500 |
| | | | 150 | 3 | ~55 | 350 | 1,050 | 150 | 3 | ~70 | 300 | 1,200 |
| | | | 200 | 2.5 | ~55 | 300 | 800 | 200 | 2.5 | ~70 | 250 | 800 |
| Hardened die steel (SKD61, DAC, DHA) 42-52HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC8015) [JC8118] | 100 | 2 | ~40 | 350 | 700 | 100 | 2 | ~50 | 250 | 600 |
| | | | 150 | 2 | ~40 | 300 | 600 | 150 | 2 | ~50 | 200 | 500 |
| | | | 200 | 1.5 | ~40 | 250 | 400 | 200 | 1.5 | ~50 | 160 | 400 |
| Grey cast iron (FC250) 160-260HB | XDMW080620ZTR (XDMW080620ZTR) [XDMW080620ZTR-S] | JC8015 (JC8118) [JC8015] | 100 | 5 | ~55 | 550 | 2,750 | 100 | 5 | ~70 | 450 | 2,700 |
| | | | 150 | 5 | ~55 | 500 | 2,400 | 150 | 5 | ~70 | 400 | 2,400 |
| | | | 200 | 4 | ~55 | 450 | 1,800 | 200 | 4 | ~70 | 350 | 2,000 |
| Nodular cast iron (FCD700) 170-300HB | XDMW080620ZTR (XDMW080620ZTR) [XDMW080620ZTR-S] | JC8015 (JC8118) [JC8015] | 100 | 4 | ~55 | 450 | 1,750 | 100 | 4 | ~70 | 380 | 1,800 |
| | | | 150 | 4 | ~55 | 400 | 1,350 | 150 | 4 | ~70 | 350 | 1,350 |
| | | | 200 | 3 | ~55 | 380 | 1,000 | 200 | 3 | ~70 | 300 | 1,150 |
| Austenitic stainless steel (SUS304, 316, 317) 17Cr | XDMT080620ZER (XDMT080620ZER) [XDMT080620ZER-ML] | JC8050 (JC7560) [JC7550] | 100 | 4 | ~55 | 500 | 1,200 | 100 | 4 | ~70 | 400 | 1,100 |
| | | | 150 | 4 | ~55 | 450 | 900 | 150 | 4 | ~70 | 350 | 1,000 |
| | | | 200 | 3.5 | ~55 | 400 | 800 | 200 | 3.5 | ~70 | 300 | 700 |
| Titanium alloy (Ti-6Al-4V) 35-43HRC | XDMT080620ZER-ML (XDMT080620ZER) [XDMT080620ZER] | JC7550 (JC5040) [JC8118] | 100 | 3 | ~50 | 240 | 240 | 100 | 3 | ~60 | 200 | 240 |
| | | | 150 | 3 | ~50 | 200 | 150 | 150 | 3 | ~60 | 160 | 150 |
| | | | 200 | 2.5 | ~50 | 160 | 120 | 200 | 2.5 | ~60 | 130 | 120 |
| Heat resistant alloy (INCO718) 35-43HRC | XDMT080620ZER-ML (XDMT080620ZER) [XDMT080620ZER] | JC8118 (JC8118) [JC8015] | 100 | 2 | ~40 | 120 | 120 | 100 | 2 | ~50 | 100 | 120 |
| | | | 150 | 2 | ~40 | 100 | 75 | 150 | 2 | ~50 | 80 | 70 |
| | | | 200 | 1.5 | ~40 | 80 | 60 | 200 | 1.5 | ~50 | 70 | 60 |

Note

1. Please adjust cutting conditions according to machine rigidity or work rigidity.
2. In case of chatter occurring, recommended to reduce a_p or V_f .
3. Use air blow.
4. XDMW080635ZTR-S(JC8015) is recommended to cut cast steel with crusty and nonuniform suarface.

HEPTA MILL

HEP Type

Recommended cutting conditions

GENERAL CUTTING

| Material | Insert | Grade | Tool dia.(mm) | | | | | | | | | |
|--|--|--------------------------------|---------------|------------|------------|---------------------------|----------------|-----------|------------|------------|---------------------------|----------------|
| | | | 125 | | | | | 160 | | | | |
| | | | 7N | | | | | 8N | | | | |
| | | | ℓ (mm) | ap (mm) | ae (mm) | n (min ⁻¹) | Vf (mm/min) | ℓ (mm) | ap (mm) | ae (mm) | n (min ⁻¹) | Vf (mm/min) |
| Carbon steel (S50C, S55C) below 250HB | XDMT080620ZER (XDMW080620ZTR) [XDMW080620ZTR] | JC7560 (JC5040) [JC7560] | 100 | 4 | ~90 | 350 | 2,000 | 100 | 4 | ~120 | 300 | 1,900 |
| | | | 150 | 4 | ~90 | 320 | 1,600 | 150 | 4 | ~120 | 260 | 1,500 |
| | | | 200 | 4 | ~90 | 300 | 1,300 | 200 | 4 | ~120 | 220 | 1,100 |
| Tool & die steel (SKD61, SKD11) below 255HB | XDMT080620ZER (XDMW080620ZTR) [XDMW080620ZTR] | JC7560 (JC5040) [JC7560] | 100 | 3 | ~90 | 350 | 1,700 | 100 | 3 | ~120 | 300 | 1,700 |
| | | | 150 | 3 | ~90 | 320 | 1,350 | 150 | 3 | ~120 | 260 | 1,250 |
| | | | 200 | 3 | ~90 | 300 | 1,050 | 200 | 3 | ~120 | 220 | 900 |
| Mold steel (HPM7, PX5, P20) 30-36 HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC7560) [JC5040] | 100 | 3 | ~90 | 350 | 1,700 | 100 | 3 | ~120 | 300 | 1,700 |
| | | | 150 | 3 | ~90 | 320 | 1,350 | 150 | 3 | ~120 | 260 | 1,250 |
| | | | 200 | 3 | ~90 | 300 | 1,050 | 200 | 3 | ~120 | 220 | 900 |
| Mold steel (NAK80, HPM1, P21) 38-43HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC8015) [JC8118] | 100 | 3 | ~90 | 300 | 1,500 | 100 | 3 | ~120 | 250 | 1,400 |
| | | | 150 | 3 | ~90 | 250 | 1,100 | 150 | 3 | ~120 | 200 | 1,000 |
| | | | 200 | 3 | ~90 | 200 | 750 | 200 | 3 | ~120 | 150 | 600 |
| Hardened die steel (SKD61, DAC, DHA) 42-52HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC8015) [JC8118] | 100 | 2 | ~60 | 200 | 550 | 100 | 2 | ~80 | 170 | 550 |
| | | | 150 | 2 | ~60 | 150 | 400 | 150 | 2 | ~80 | 150 | 500 |
| | | | 200 | 2 | ~60 | 125 | 260 | 200 | 2 | ~80 | 120 | 300 |
| Grey cast iron (FC250) 160-260HB | XDMW080620ZTR (XDMW080620ZTR) [XDMW080620ZTR-S] | JC8015 (JC8118) [JC8015] | 100 | 5 | ~90 | 350 | 2,450 | 100 | 5 | ~120 | 300 | 2,250 |
| | | | 150 | 5 | ~90 | 320 | 2,200 | 150 | 5 | ~120 | 260 | 2,100 |
| | | | 200 | 5 | ~90 | 280 | 1,800 | 200 | 5 | ~120 | 220 | 1,700 |
| Nodular cast iron (FCD700) 170-300HB | XDMW080620ZTR (XDMW080620ZTR) [XDMW080620ZTR-S] | JC8015 (JC8118) [JC8015] | 100 | 4 | ~90 | 300 | 1,700 | 100 | 4 | ~120 | 250 | 1,500 |
| | | | 150 | 4 | ~90 | 270 | 1,250 | 150 | 4 | ~120 | 220 | 1,200 |
| | | | 200 | 3 | ~90 | 250 | 1,000 | 200 | 4 | ~120 | 180 | 950 |
| Austenitic stainless steel (SUS304, 316, 317) 17Cr | XDMT080620ZER (XDMT080620ZER) [XDMT080620ZER-ML] | JC8050 (JC7560) [JC7550] | 100 | 4 | ~90 | 300 | 1,000 | 100 | 4 | ~120 | 240 | 900 |
| | | | 150 | 4 | ~90 | 250 | 800 | 150 | 4 | ~120 | 200 | 750 |
| | | | 200 | 3 | ~90 | 220 | 650 | 200 | 3 | ~120 | 180 | 600 |
| Titanium alloy (Ti-6Al-4V) 35-43HRC | XDMT080620ZER-ML (XDMT080620ZER) [XDMT080620ZER] | JC7550 (JC5040) [JC8118] | 100 | 3 | ~75 | 160 | 220 | 100 | 3 | ~100 | 120 | 200 |
| | | | 150 | 3 | ~75 | 130 | 140 | 150 | 3 | ~100 | 100 | 120 |
| | | | 200 | 3 | ~75 | 100 | 100 | 200 | 3 | ~100 | 80 | 100 |
| Heat resistant alloy (INCO718) 35-43HRC | XDMT080620ZER-ML (XDMT080620ZER) [XDMT080620ZER] | JC8118 (JC8118) [JC8015] | 100 | 2 | ~60 | 80 | 120 | 100 | 2 | ~80 | 60 | 100 |
| | | | 150 | 2 | ~60 | 65 | 70 | 150 | 2 | ~80 | 50 | 60 |
| | | | 200 | 2 | ~60 | 50 | 50 | 200 | 2 | ~80 | 40 | 50 |

Note

1. Please adjust cutting conditions according to machine rigidity or work rigidity.
2. In case of chatter occurring, recommended to reduce ap or Vf.
3. Use air blow.
4. XDMW080635ZTR-S(JC8015) is recommended to cut cast steel with crusty and nonuniform surface.

HEPTA MILL**HEP Type**

■ Recommended cutting conditions

GENERAL CUTTING

| Material | Insert | Grade | Tool dia.(mm) | | | | | | | | | |
|--|--|--------------------------------|-----------------------------|-------------------|------|-----|-------|--|--|--|--|--|
| | | | 200 | | | | | | | | | |
| | | | 9N | | | | | | | | | |
| ℓ (mm) | a_p (mm) | a_e (mm) | n (min ⁻¹) | V_f (mm/min) | | | | | | | | |
| Carbon steel (S50C, S55C) below 250HB | XDMT080620ZER (XDMW080620ZTR) [XDMW080620ZTR] | JC7560 (JC5040) [JC7560] | 100 | 4 | ~150 | 220 | 1,600 | | | | | |
| | | | 150 | 4 | ~150 | 200 | 1,300 | | | | | |
| | | | 200 | 4 | ~150 | 180 | 1,000 | | | | | |
| Tool & die steel (SKD61, SKD11) below 255HB | XDMT080620ZER (XDMW080620ZTR) [XDMW080620ZTR] | JC7560 (JC5040) [JC7560] | 100 | 3 | ~150 | 220 | 1,400 | | | | | |
| | | | 150 | 3 | ~150 | 200 | 1,100 | | | | | |
| | | | 200 | 3 | ~150 | 180 | 800 | | | | | |
| Mold steel (HPM7, PX5, P20) 30-36 HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC7560) [JC5040] | 100 | 3 | ~150 | 220 | 1,400 | | | | | |
| | | | 150 | 3 | ~150 | 200 | 1,100 | | | | | |
| | | | 200 | 3 | ~150 | 180 | 800 | | | | | |
| Mold steel (NAK80, HPM1, P21) 38-43HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC8015) [JC8118] | 100 | 3 | ~150 | 200 | 1,100 | | | | | |
| | | | 150 | 3 | ~150 | 170 | 1,000 | | | | | |
| | | | 200 | 3 | ~150 | 130 | 600 | | | | | |
| Hardened die steel (SKD61, DAC, DHA) 42-52HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC8015) [JC8118] | 100 | 2 | ~100 | 140 | 500 | | | | | |
| | | | 150 | 2 | ~100 | 120 | 450 | | | | | |
| | | | 200 | 2 | ~100 | 100 | 280 | | | | | |
| Grey cast iron (FC250) 160-260HB | XDMW080620ZTR (XDMW080620ZTR) [XDMW080620ZTR-S] | JC8015 (JC8118) [JC8015] | 100 | 5 | ~150 | 220 | 2,000 | | | | | |
| | | | 150 | 5 | ~150 | 200 | 1,800 | | | | | |
| | | | 200 | 5 | ~150 | 180 | 1,400 | | | | | |
| Nodular cast iron (FCD700) 170-300HB | XDMW080620ZTR (XDMW080620ZTR) [XDMW080620ZTR-S] | JC8015 (JC8118) [JC8015] | 100 | 4 | ~150 | 180 | 1,350 | | | | | |
| | | | 150 | 4 | ~150 | 170 | 1,000 | | | | | |
| | | | 200 | 3 | ~150 | 150 | 800 | | | | | |
| Austenitic stainless steel (SUS304, 316, 317) 17Cr | XDMT080620ZER (XDMT080620ZER) [XDMT080620ZER-ML] | JC8050 (JC7560) [JC7550] | 100 | 4 | ~150 | 200 | 800 | | | | | |
| | | | 150 | 4 | ~150 | 160 | 650 | | | | | |
| | | | 200 | 3 | ~150 | 140 | 550 | | | | | |
| Titanium alloy (Ti-6Al-4V) 35-43HRC | XDMT080620ZER-ML (XDMT080620ZER) [XDMT080620ZER] | JC7550 (JC5040) [JC8118] | 100 | 3 | ~120 | 100 | 180 | | | | | |
| | | | 150 | 3 | ~120 | 80 | 110 | | | | | |
| | | | 200 | 3 | ~120 | 60 | 80 | | | | | |
| Heat resistant alloy (INCO718) 35-43HRC | XDMT080620ZER-ML (XDMT080620ZER) [XDMT080620ZER] | JC8118 (JC8118) [JC8015] | 100 | 2 | ~100 | 50 | 90 | | | | | |
| | | | 150 | 2 | ~100 | 40 | 60 | | | | | |
| | | | 200 | 2 | ~100 | 30 | 40 | | | | | |

Note

1. Please adjust cutting conditions according to machine rigidity or work rigidity.
2. In case of chatter occurring, recommended to reduce a_p or V_f .
3. Use air blow.
4. XDMW080635ZTR-S(JC8015) is recommended to cut cast steel with crusty and nonuniform surface.

HEPTA MILL**HEP Type**

■ Recommended cutting conditions

UNSTABLE CUTTING

| Material | Insert | Grade | Tool dia.(mm) | | | | | | | | | |
|--|--|--------------------------------|----------------|---------------|---------------|-----------------------------|-------------------|----------------|---------------|---------------|-----------------------------|-------------------|
| | | | 50 | | | | | 63 | | | | |
| | | | 3N | | | | | 4N | | | | |
| | | | ℓ (mm) | a_p (mm) | a_e (mm) | n (min ⁻¹) | V_f (mm/min) | ℓ (mm) | a_p (mm) | a_e (mm) | n (min ⁻¹) | V_f (mm/min) |
| Carbon steel (S50C, S55C) below 250HB | XDMT080620ZER (XDMW080620ZTR) [XDMW080620ZTR] | JC7560 (JC5040) [JC7560] | 100 | 4 | ~35 | 750 | 1,800 | 100 | 4 | ~42 | 600 | 1,950 |
| | | | 150 | 3.5 | ~35 | 680 | 1,450 | 150 | 3.5 | ~42 | 550 | 1,500 |
| | | | 200 | 3 | ~35 | 600 | 1,100 | 200 | 3 | ~42 | 500 | 1,300 |
| Tool & die steel (SKD61, SKD11) below 255HB | XDMT080620ZER (XDMW080620ZTR) [XDMW080620ZTR] | JC7560 (JC5040) [JC7560] | 100 | 3 | ~35 | 750 | 1,600 | 100 | 3 | ~42 | 600 | 1,700 |
| | | | 150 | 2.5 | ~35 | 680 | 1,200 | 150 | 2.5 | ~42 | 550 | 1,350 |
| | | | 200 | 2.5 | ~35 | 600 | 900 | 200 | 2.5 | ~42 | 500 | 1,000 |
| Mold steel (HPM7, PX5, P20) 30-36 HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC7560) [JC5040] | 100 | 3 | ~35 | 750 | 1,600 | 100 | 3 | ~42 | 600 | 1,700 |
| | | | 150 | 2.5 | ~35 | 680 | 1,200 | 150 | 2.5 | ~42 | 550 | 1,350 |
| | | | 200 | 2.5 | ~35 | 600 | 900 | 200 | 2.5 | ~42 | 500 | 1,000 |
| Mold steel (NAK80, HPM1, P21) 38-43HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC8015) [JC8118] | 100 | 3 | ~35 | 550 | 1,100 | 100 | 3 | ~42 | 450 | 1,250 |
| | | | 150 | 2.5 | ~35 | 500 | 900 | 150 | 2.5 | ~42 | 400 | 1,000 |
| | | | 200 | 2.5 | ~35 | 400 | 600 | 200 | 2.5 | ~42 | 350 | 700 |
| Hardened die steel (SKD61, DAC, DHA) 42-52HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC8015) [JC8118] | 100 | 2 | ~25 | 450 | 450 | 100 | 2 | ~30 | 450 | 550 |
| | | | 150 | 1.5 | ~25 | 400 | 350 | 150 | 1.5 | ~30 | 400 | 500 |
| | | | 200 | 1.5 | ~25 | 350 | 250 | 200 | 1.5 | ~30 | 300 | 300 |
| Grey cast iron (FC250) 160-260HB | XDMW080620ZTR (XDMW080620ZTR) [XDMW080620ZTR-S] | JC8015 (JC8118) [JC8015] | 100 | 5 | ~35 | 750 | 2,250 | 100 | 5 | ~42 | 600 | 2,400 |
| | | | 150 | 4 | ~35 | 680 | 2,000 | 150 | 4 | ~42 | 550 | 2,200 |
| | | | 200 | 3.5 | ~35 | 600 | 1,500 | 200 | 3.5 | ~42 | 500 | 1,700 |
| Nodular cast iron (FCD700) 170-300HB | XDMW080620ZTR (XDMW080620ZTR) [XDMW080620ZTR-S] | JC8015 (JC8118) [JC8015] | 100 | 4 | ~35 | 650 | 1,400 | 100 | 4 | ~42 | 550 | 1,500 |
| | | | 150 | 3 | ~35 | 600 | 1,100 | 150 | 3 | ~42 | 500 | 1,200 |
| | | | 200 | 2.5 | ~35 | 500 | 750 | 200 | 2.5 | ~42 | 400 | 800 |
| Austenitic stainless steel (SUS304, 316, 317) 17Cr | XDMT080620ZER (XDMT080620ZER) [XDMT080620ZER-ML] | JC8050 (JC7560) [JC7550] | 100 | 4 | ~35 | 650 | 1,000 | 100 | 4 | ~42 | 500 | 1,000 |
| | | | 150 | 3.5 | ~35 | 550 | 800 | 150 | 3.5 | ~42 | 450 | 800 |
| | | | 200 | 3 | ~35 | 500 | 550 | 200 | 3 | ~42 | 400 | 650 |
| Titanium alloy (Ti-6Al-4V) 35-43HRC | XDMT080620ZER-ML (XDMT080620ZER) [XDMT080620ZER] | JC7550 (JC5040) [JC8118] | 100 | 3 | ~30 | 300 | 200 | 100 | 3 | ~38 | 240 | 200 |
| | | | 150 | 2.5 | ~30 | 250 | 120 | 150 | 2.5 | ~38 | 200 | 120 |
| | | | 200 | 2.5 | ~30 | 200 | 100 | 200 | 2.5 | ~38 | 160 | 100 |
| Heat resistant alloy (INCO718) 35-43HRC | XDMT080620ZER-ML (XDMT080620ZER) [XDMT080620ZER] | JC8118 (JC8118) [JC8015] | 100 | 2 | ~25 | 160 | 100 | 100 | 2 | ~30 | 120 | 100 |
| | | | 150 | 1.5 | ~25 | 130 | 65 | 150 | 1.5 | ~30 | 100 | 65 |
| | | | 200 | 1.5 | ~25 | 100 | 50 | 200 | 1.5 | ~30 | 80 | 50 |

Note

1. Please adjust cutting conditions according to machine rigidity or work rigidity.
2. In case of chatter occurring, recommended to reduce a_p or V_f .
3. Use air blow.
4. XDMW080635ZTR-S(JC8015) is recommended to cut cast steel with crusty and nonuniform suarface.

HEPTA MILL**HEP Type**

■ Recommended cutting conditions

UNSTABLE CUTTING

| Material | Insert | Grade | Tool dia.(mm) | | | | | | | | | |
|--|--|--------------------------------|----------------|---------------|---------------|-----------------------------|-------------------|----------------|---------------|---------------|-----------------------------|-------------------|
| | | | 80 | | | | | 100 | | | | |
| | | | 5N | | | | | 6N | | | | |
| | | | ℓ (mm) | a_p (mm) | a_e (mm) | n (min ⁻¹) | V_f (mm/min) | ℓ (mm) | a_p (mm) | a_e (mm) | n (min ⁻¹) | V_f (mm/min) |
| Carbon steel (S50C, S55C) below 250HB | XDMT080620ZER (XDMW080620ZTR) [XDMW080620ZTR] | JC7560 (JC5040) [JC7560] | 100 | 4 | ~55 | 450 | 1,800 | 100 | 4 | ~70 | 380 | 1,800 |
| | | | 150 | 4 | ~55 | 400 | 1,500 | 150 | 4 | ~70 | 350 | 1,400 |
| | | | 200 | 3.5 | ~55 | 380 | 1,200 | 200 | 3.5 | ~70 | 300 | 1,100 |
| Tool & die steel (SKD61, SKD11) below 255HB | XDMT080620ZER (XDMW080620ZTR) [XDMW080620ZTR] | JC7560 (JC5040) [JC7560] | 100 | 3 | ~55 | 450 | 1,700 | 100 | 3 | ~70 | 380 | 1,600 |
| | | | 150 | 3 | ~55 | 400 | 1,250 | 150 | 3 | ~70 | 350 | 1,250 |
| | | | 200 | 2.5 | ~55 | 380 | 900 | 200 | 2.5 | ~70 | 300 | 900 |
| Mold steel (HPM7, PX5, P20) 30-36 HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC7560) [JC5040] | 100 | 3 | ~55 | 450 | 1,700 | 100 | 3 | ~70 | 380 | 1,600 |
| | | | 150 | 3 | ~55 | 400 | 1,250 | 150 | 3 | ~70 | 350 | 1,250 |
| | | | 200 | 2.5 | ~55 | 380 | 900 | 200 | 2.5 | ~70 | 300 | 900 |
| Mold steel (NAK80, HPM1, P21) 38-43HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC8015) [JC8118] | 100 | 3 | ~55 | 350 | 1,150 | 100 | 3 | ~70 | 300 | 1,200 |
| | | | 150 | 3 | ~55 | 300 | 900 | 150 | 3 | ~70 | 250 | 900 |
| | | | 200 | 2.5 | ~55 | 250 | 700 | 200 | 2.5 | ~70 | 200 | 550 |
| Hardened die steel (SKD61, DAC, DHA) 42-52HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC8015) [JC8118] | 100 | 2 | ~40 | 350 | 550 | 100 | 2 | ~50 | 250 | 500 |
| | | | 150 | 2 | ~40 | 300 | 500 | 150 | 2 | ~50 | 200 | 400 |
| | | | 200 | 1.5 | ~40 | 250 | 320 | 200 | 1.5 | ~50 | 160 | 320 |
| Grey cast iron (FC250) 160-260HB | XDMW080620ZTR (XDMW080620ZTR) [XDMW080620ZTR-S] | JC8015 (JC8118) [JC8015] | 100 | 5 | ~55 | 450 | 2,250 | 100 | 5 | ~70 | 380 | 2,250 |
| | | | 150 | 5 | ~55 | 400 | 1,900 | 150 | 5 | ~70 | 350 | 2,000 |
| | | | 200 | 4 | ~55 | 380 | 1,500 | 200 | 4 | ~70 | 300 | 1,700 |
| Nodular cast iron (FCD700) 170-300HB | XDMW080620ZTR (XDMW080620ZTR) [XDMW080620ZTR-S] | JC8015 (JC8118) [JC8015] | 100 | 4 | ~55 | 400 | 1,350 | 100 | 4 | ~70 | 330 | 1,200 |
| | | | 150 | 4 | ~55 | 350 | 1,100 | 150 | 4 | ~70 | 300 | 900 |
| | | | 200 | 3 | ~55 | 300 | 800 | 200 | 3 | ~70 | 250 | 750 |
| Austenitic stainless steel (SUS304, 316, 317) 17Cr | XDMT080620ZER (XDMT080620ZER) [XDMT080620ZER-ML] | JC8050 (JC7560) [JC7550] | 100 | 4 | ~55 | 400 | 1,000 | 100 | 4 | ~70 | 300 | 900 |
| | | | 150 | 4 | ~55 | 350 | 700 | 150 | 4 | ~70 | 300 | 800 |
| | | | 200 | 3.5 | ~55 | 300 | 650 | 200 | 3.5 | ~70 | 250 | 600 |
| Titanium alloy (Ti-6Al-4V) 35-43HRC | XDMT080620ZER-ML (XDMT080620ZER) [XDMT080620ZER] | JC7550 (JC5040) [JC8118] | 100 | 3 | ~50 | 200 | 200 | 100 | 3 | ~60 | 160 | 200 |
| | | | 150 | 3 | ~50 | 160 | 120 | 150 | 3 | ~60 | 130 | 120 |
| | | | 200 | 2.5 | ~50 | 130 | 100 | 200 | 2.5 | ~60 | 100 | 100 |
| Heat resistant alloy (INCO718) 35-43HRC | XDMT080620ZER-ML (XDMT080620ZER) [XDMT080620ZER] | JC8118 (JC8118) [JC8015] | 100 | 2 | ~40 | 100 | 100 | 100 | 2 | ~50 | 80 | 100 |
| | | | 150 | 2 | ~40 | 80 | 60 | 150 | 2 | ~50 | 65 | 60 |
| | | | 200 | 1.5 | ~40 | 65 | 50 | 200 | 1.5 | ~50 | 60 | 50 |

Note

1. Please adjust cutting conditions according to machine rigidity or work rigidity.
2. In case of chatter occurring, recommended to reduce a_p or V_f .
3. Use air blow.
4. XDMW080635ZTR-S(JC8015) is recommended to cut cast steel with crusty and nonuniform surface.

HEPTA MILL**HEP Type**

■ Recommended cutting conditions

UNSTABLE CUTTING

| Material | Insert | Grade | Tool dia.(mm) | | | | | | | | | |
|--|--|--------------------------------|----------------|---------------|---------------|-----------------------------|-------------------|----------------|---------------|---------------|-----------------------------|-------------------|
| | | | 125 | | | | | 160 | | | | |
| | | | 7N | | | | | 8N | | | | |
| | | | ℓ (mm) | a_p (mm) | a_e (mm) | n (min ⁻¹) | V_f (mm/min) | ℓ (mm) | a_p (mm) | a_e (mm) | n (min ⁻¹) | V_f (mm/min) |
| Carbon steel (S50C, S55C) below 250HB | XDMT080620ZER (XDMW080620ZTR) [XDMW080620ZTR] | JC7560 (JC5040) [JC7560] | 100 | 4 | ~90 | 300 | 1,700 | 100 | 4 | ~120 | 250 | 1,600 |
| | | | 150 | 4 | ~90 | 270 | 1,400 | 150 | 4 | ~120 | 220 | 1,200 |
| | | | 200 | 4 | ~90 | 250 | 1,100 | 200 | 4 | ~120 | 180 | 900 |
| Tool & die steel (SKD61, SKD11) below 255HB | XDMT080620ZER (XDMW080620ZTR) [XDMW080620ZTR] | JC7560 (JC5040) [JC7560] | 100 | 3 | ~90 | 300 | 1,400 | 100 | 3 | ~120 | 250 | 1,400 |
| | | | 150 | 3 | ~90 | 270 | 1,100 | 150 | 3 | ~120 | 220 | 1,000 |
| | | | 200 | 3 | ~90 | 250 | 900 | 200 | 3 | ~120 | 180 | 750 |
| Mold steel (HPM7, PX5, P20) 30-36 HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC7560) [JC5040] | 100 | 3 | ~90 | 300 | 1,400 | 100 | 3 | ~120 | 250 | 1,400 |
| | | | 150 | 3 | ~90 | 270 | 1,100 | 150 | 3 | ~120 | 220 | 1,000 |
| | | | 200 | 3 | ~90 | 250 | 900 | 200 | 3 | ~120 | 180 | 750 |
| Mold steel (NAK80, HPM1, P21) 38-43HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC8015) [JC8118] | 100 | 3 | ~90 | 250 | 1,150 | 100 | 3 | ~120 | 200 | 1,100 |
| | | | 150 | 3 | ~90 | 200 | 800 | 150 | 3 | ~120 | 150 | 800 |
| | | | 200 | 3 | ~90 | 150 | 550 | 200 | 3 | ~120 | 120 | 550 |
| Hardened die steel (SKD61, DAC, DHA) 42-52HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC8015) [JC8118] | 100 | 2 | ~60 | 200 | 450 | 100 | 2 | ~80 | 170 | 450 |
| | | | 150 | 2 | ~60 | 150 | 320 | 150 | 2 | ~80 | 150 | 400 |
| | | | 200 | 2 | ~60 | 125 | 200 | 200 | 2 | ~80 | 120 | 250 |
| Grey cast iron (FC250) 160-260HB | XDMW080620ZTR (XDMW080620ZTR) [XDMW080620ZTR-S] | JC8015 (JC8118) [JC8015] | 100 | 5 | ~90 | 300 | 2,100 | 100 | 5 | ~120 | 250 | 2,000 |
| | | | 150 | 5 | ~90 | 270 | 1,850 | 150 | 5 | ~120 | 220 | 1,750 |
| | | | 200 | 5 | ~90 | 250 | 1,500 | 200 | 5 | ~120 | 180 | 1,450 |
| Nodular cast iron (FCD700) 170-300HB | XDMW080620ZTR (XDMW080620ZTR) [XDMW080620ZTR-S] | JC8015 (JC8118) [JC8015] | 100 | 4 | ~90 | 250 | 1,100 | 100 | 4 | ~120 | 200 | 1,000 |
| | | | 150 | 4 | ~90 | 230 | 850 | 150 | 4 | ~120 | 170 | 800 |
| | | | 200 | 3 | ~90 | 200 | 700 | 200 | 4 | ~120 | 150 | 600 |
| Austenitic stainless steel (SUS304, 316, 317) 17Cr | XDMT080620ZER (XDMT080620ZER) [XDMT080620ZER-ML] | JC8050 (JC7560) [JC7550] | 100 | 4 | ~90 | 250 | 800 | 100 | 4 | ~120 | 200 | 700 |
| | | | 150 | 4 | ~90 | 200 | 650 | 150 | 4 | ~120 | 160 | 600 |
| | | | 200 | 3 | ~90 | 180 | 500 | 200 | 3 | ~120 | 150 | 500 |
| Titanium alloy (Ti-6Al-4V) 35-43HRC | XDMT080620ZER-ML (XDMT080620ZER) [XDMT080620ZER] | JC7550 (JC5040) [JC8118] | 100 | 3 | ~75 | 130 | 180 | 100 | 3 | ~100 | 100 | 160 |
| | | | 150 | 3 | ~75 | 100 | 110 | 150 | 3 | ~100 | 80 | 100 |
| | | | 200 | 3 | ~75 | 80 | 80 | 200 | 3 | ~100 | 65 | 80 |
| Heat resistant alloy (INCO718) 35-43HRC | XDMT080620ZER-ML (XDMT080620ZER) [XDMT080620ZER] | JC8118 (JC8118) [JC8015] | 100 | 2 | ~60 | 65 | 100 | 100 | 2 | ~80 | 50 | 80 |
| | | | 150 | 2 | ~60 | 50 | 60 | 150 | 2 | ~80 | 40 | 50 |
| | | | 200 | 2 | ~60 | 40 | 40 | 200 | 2 | ~80 | 30 | 40 |

Note

1. Please adjust cutting conditions according to machine rigidity or work rigidity.
2. In case of chatter occurring, recommended to reduce a_p or V_f .
3. Use air blow.
4. XDMW080635ZTR-S(JC8015) is recommended to cut cast steel with crusty and nonuniform suarface.

HEPTA MILL**HEP Type**

■ Recommended cutting conditions

UNSTABLE CUTTING

| Material | Insert | Grade | Tool dia.(mm) | | | | | | | | | |
|--|--|--------------------------------|-----------------------------|-------------------|------|-----|-------|--|--|--|--|--|
| | | | 200 | | | | | | | | | |
| | | | 9N | | | | | | | | | |
| ℓ (mm) | a_p (mm) | a_e (mm) | n (min ⁻¹) | V_f (mm/min) | | | | | | | | |
| Carbon steel (S50C, S55C) below 250HB | XDMT080620ZER (XDMW080620ZTR) [XDMW080620ZTR] | JC7560 (JC5040) [JC7560] | 100 | 4 | ~150 | 180 | 1,300 | | | | | |
| | | | 150 | 4 | ~150 | 170 | 1,100 | | | | | |
| | | | 200 | 4 | ~150 | 150 | 850 | | | | | |
| Tool & die steel (SKD61, SKD11) below 255HB | XDMT080620ZER (XDMW080620ZTR) [XDMW080620ZTR] | JC7560 (JC5040) [JC7560] | 100 | 3 | ~150 | 180 | 1,200 | | | | | |
| | | | 150 | 3 | ~150 | 170 | 900 | | | | | |
| | | | 200 | 3 | ~150 | 150 | 700 | | | | | |
| Mold steel (HPM7, PX5, P20) 30-36 HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC7560) [JC5040] | 100 | 3 | ~150 | 180 | 1,200 | | | | | |
| | | | 150 | 3 | ~150 | 170 | 900 | | | | | |
| | | | 200 | 3 | ~150 | 150 | 700 | | | | | |
| Mold steel (NAK80, HPM1, P21) 38-43HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC8015) [JC8118] | 100 | 3 | ~150 | 170 | 1,000 | | | | | |
| | | | 150 | 3 | ~150 | 150 | 800 | | | | | |
| | | | 200 | 3 | ~150 | 100 | 500 | | | | | |
| Hardened die steel (SKD61, DAC, DHA) 42-52HRC | XDMT080620ZER (XDMT080620ZER) [XDMW080620ZTR] | JC8118 (JC8015) [JC8118] | 100 | 2 | ~100 | 140 | 400 | | | | | |
| | | | 150 | 2 | ~100 | 120 | 350 | | | | | |
| | | | 200 | 2 | ~100 | 100 | 220 | | | | | |
| Grey cast iron (FC250) 160-260HB | XDMW080620ZTR (XDMW080620ZTR) [XDMW080620ZTR-S] | JC8015 (JC8118) [JC8015] | 100 | 5 | ~150 | 180 | 1,600 | | | | | |
| | | | 150 | 5 | ~150 | 170 | 1,500 | | | | | |
| | | | 200 | 5 | ~150 | 150 | 1,200 | | | | | |
| Nodular cast iron (FCD700) 170-300HB | XDMW080620ZTR (XDMW080620ZTR) [XDMW080620ZTR-S] | JC8015 (JC8118) [JC8015] | 100 | 4 | ~150 | 160 | 900 | | | | | |
| | | | 150 | 4 | ~150 | 140 | 700 | | | | | |
| | | | 200 | 3 | ~150 | 120 | 500 | | | | | |
| Austenitic stainless steel (SUS304, 316, 317) 17Cr | XDMT080620ZER (XDMT080620ZER) [XDMT080620ZER-ML] | JC8050 (JC7560) [JC7550] | 100 | 4 | ~150 | 160 | 650 | | | | | |
| | | | 150 | 4 | ~150 | 130 | 500 | | | | | |
| | | | 200 | 3 | ~150 | 110 | 450 | | | | | |
| Titanium alloy (Ti-6Al-4V) 35-43HRC | XDMT080620ZER-ML (XDMT080620ZER) [XDMT080620ZER] | JC7550 (JC5040) [JC8118] | 100 | 3 | ~120 | 80 | 150 | | | | | |
| | | | 150 | 3 | ~120 | 65 | 90 | | | | | |
| | | | 200 | 3 | ~120 | 50 | 65 | | | | | |
| Heat resistant alloy (INCO718) 35-43HRC | XDMT080620ZER-ML (XDMT080620ZER) [XDMT080620ZER] | JC8118 (JC8118) [JC8015] | 100 | 2 | ~100 | 40 | 70 | | | | | |
| | | | 150 | 2 | ~100 | 30 | 50 | | | | | |
| | | | 200 | 2 | ~100 | 25 | 30 | | | | | |

Note

1. Please adjust cutting conditions according to machine rigidity or work rigidity.
2. In case of chatter occurring, recommended to reduce a_p or V_f .
3. Use air blow.
4. XDMW080635ZTR-S(JC8015) is recommended to cut cast steel with crusty and nonuniform surface.