PRODUCT NEWS

PN-E-008

SERIES EXPANSION

DIJET

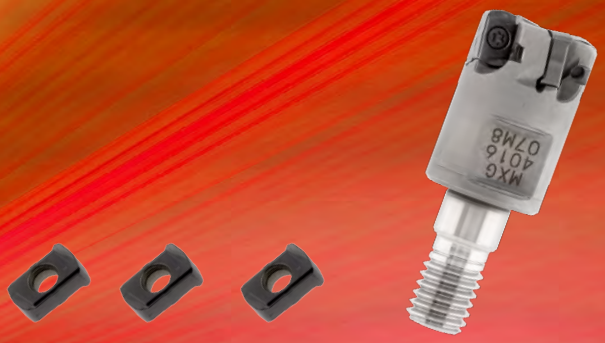
High-Feed Milling Cutter with Double-Sided Inserts

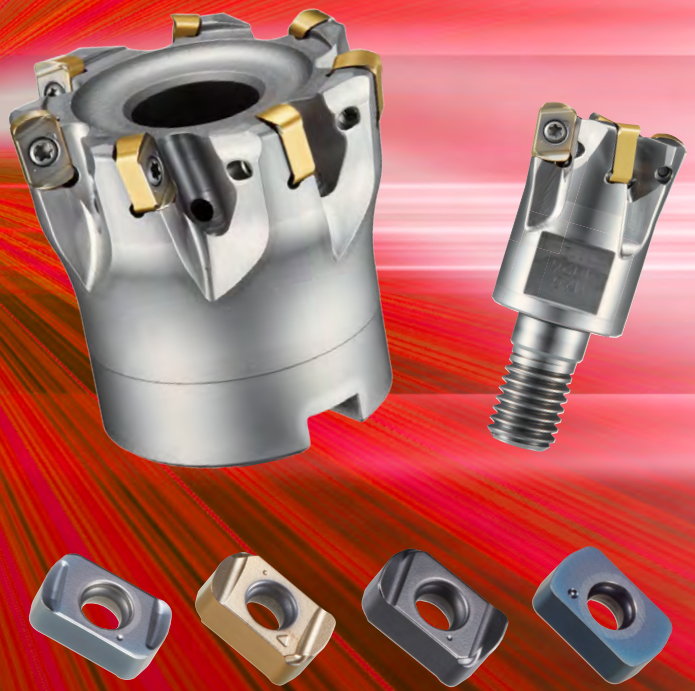
QM MAX GII

GMX07/MXG07

Modular type : Ø10–Ø16

Shank type : Ø10–Ø14





GMX10/MXG10

Bore type : Ø40–Ø66

Modular type : Ø16–Ø42

Shank type : Ø16–Ø32

DIJET GmbH

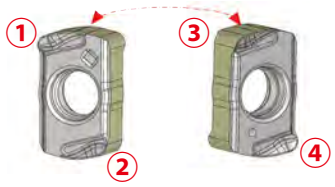
www.dijet.de

High-Feed Milling Cutter
Multi-Blade Design with Double-Sided Compact Inserts for High Productivity

Feature 1

Lineup from Ø10, featuring economical double-sided inserts with four cutting edges.

1. Economical Double-Sided Inserts



2. Lineup from Ø10 — Insert size 07

- ✓ Tool diameter **Ø10**–Ø16 mm
- ✓ Max. depth of cut: **0.5 mm**
- ✓ **Modular type**: Ø10–Ø16 mm
  Shank type: Ø10–Ø14 mm

Feature 2

High-Rigidity Design for Stable, Reliable Machining.

1. Increased insert rigidity

Insert thickness increased by 14%

NEW **MXG07**
ENMU07...

MPM
EOMT06...

2. M2 Fine-Pitch Screw

Fine-pitch
M2 screw

NEW **MXG07**

Coarse-pitch
M1.8 screw

MPM
(Conventional model)

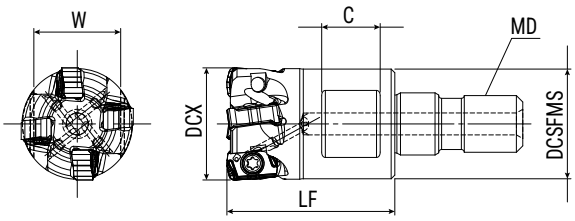
3. High-Rigidity Body Design

NEW **MXG07**

MPM

Body rigidity improved by 44%

MXG07 TYPE Modular Type



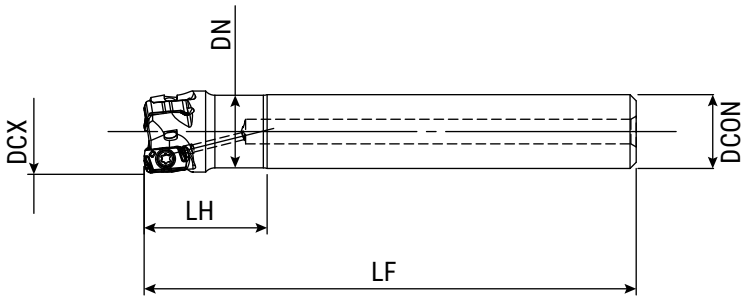
Cat.No.	Stock	No. of inserts	Dimensions (mm)						Insert
			DCX	LF	DCSFMS	MD	C	W	
MXG-2010-07-M6	●	2	10	18	9.5	M6	6.5	8	ENMU07T207ZER-PM
MXG-3012-07-M6	●	3	12	20	11.2	M6	6.5	8	
MXG-3013-07-M6	●	3	13	20	11.2	M6	6.5	8	
MXG-4016-07-M8	●	4	16	23	15	M8	8	12	

Note) All cutter bodies are supplied without Inserts, Wrench and MOLY.

● : Stocked Items

Screw	Torque(N.m)	Wrench
TSW-2044H	0.5	A-06

GMX07 TYPE Shank Type



Type	Cat.No.	Stock	No. of inserts	Dimensions (mm)					Insert
				DCX	LH	LF	DN	DCON	
Standard	GMX2010-07-20-S10+A	●	2	10	20	80	9.2	10	ENMU07T207ZER-PM
	GMX3012-07-20-S12+A	●	3	12	20	80	11.2	12	
	GMX3014-07-20-S12+A	●	3	14	20	80	11.8	12	
Long shank	GMX2011-07-20-S10-LS+A	●	2	11	20	120	9.6	10	
	GMX3013-07-20-S12-LS+A	●	3	13	20	120	11.6	12	
	GMX3014-07-20-S12-LS+A	●	3	14	20	120	11.8	12	

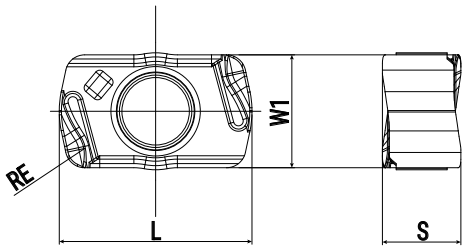
Note) All cutter bodies are supplied without Inserts, Wrench and MOLY.

● : Stocked Items

Screw	Torque(N.m)	Wrench
TSW-2044H	0.5	A-06

GMX07/MXG07 TYPE

Insert



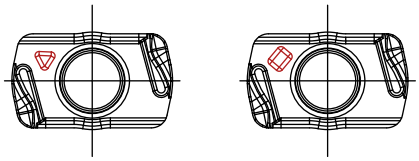
Cat.No.	Tolerance	PVD Coating		Dimensions (mm)			
		JC8050	JC8118	RE	L	W1	S
ENMU07T207ZER-PM	M	●	●	0.7	7	4.25	2.85

Note) 10 inserts per case.

●：Stocked Items

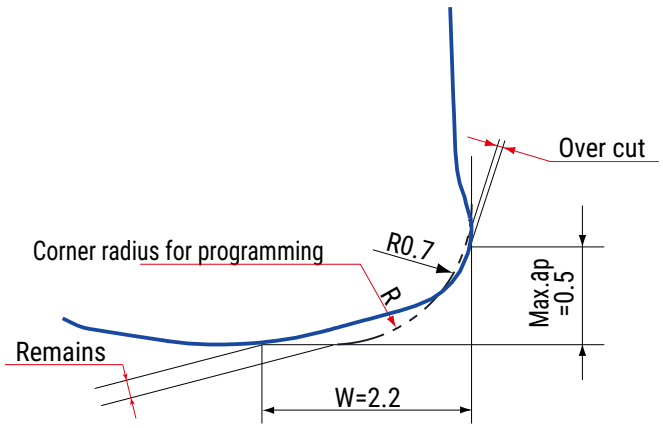
GRADE MARKING

ENMU07T207ZER-PM



JC8118　　JC8050

■ Definition of corner shape for programming

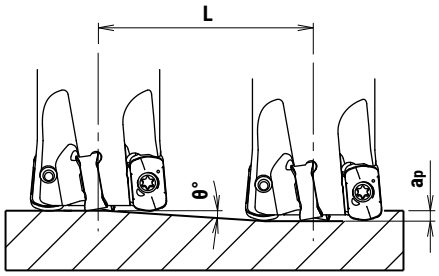


(mm)

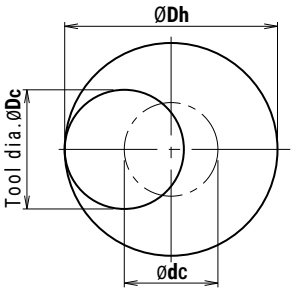
Corner radius for programming	Remains	Over cut
1.0 (Std.)	0.21	0
1.5	0.10	0.15
2.0	0.01	0.85

■ Recommended Data for Profile Milling

Ramping



Helical interpolation



● Calculation of tool pass dia.

$$\underset{\text{Tool pass dia.}}{\text{Ødc}} = \underset{\text{Bore dia.}}{\text{ØDh}} - \underset{\text{Tool dia.}}{\text{ØDc}}$$

● Depth of cut per one circuit should not exceed max. depth of cut ap

● Down cutting is recommended, tool pass rotation should be counterclockwise

● In case of ramping and helical interpolation, apply 70% or less feed (Vf) from standard cutting condition table

● Drilling is not recommended.

ENMU07T207ZER-PM

Tool dia. (mm)	Effective Cutting dia. (mm)	Max. depth of cut **APMX** (mm)	Ramping		Helical interpolation		
			Max.ramping angle **RMPX** θ°	Total cutting length at **APMX** : **L**(mm)	Through hole **Min**.bore dia. **Dh** (mm)	Blind hole,flat bottom **Min**.bore dia. **Dh** (mm)	Through hole **Max**.bore dia. **Dh** (mm)
10	5.5	0.5	1.1	26.0	15	16	19
12	7.5	0.5	1.2	23.9	19	20	23
13	8.4	0.5	1.1	26.0	21	22	25
16	11.4	0.5	0.9	31.8	27	28	31

■ Recommended Cutting Conditions | GMX07/MXG07 type

Material	Insert	Grade	*Vc* (m/min)	*fz* (mm/t)	*ap* (mm)	*ae* (mm)
Carbon Steel below 250HB	ENMU07...–PM	JC8050	165	1.0	0.3	0.7 Dc
Tool & Die Steel below 255HB	ENMU07...–PM	JC8050	150	1.0	0.3	0.7 Dc
Mold Steel 30–36HRC	ENMU07...–PM	JC8050	150	1.0	0.3	0.7 Dc
Mold Steel 38–43HRC	ENMU07...–PM	JC8118	120	0.9	0.3	0.7 Dc
Hardened Die Steel 42–52HRC	ENMU07...–PM	JC8118	90	0.6	0.25	0.7 Dc
Grey Cast Iron	ENMU07...–PM	JC8118	200	1.0	0.3	0.7 Dc
Nodular Cast Iron	ENMU07...–PM	JC8118	200	1.0	0.3	0.7 Dc
Stainless Steel	ENMU07...–PM	JC8050	165	1.0	0.3	0.7 Dc

Note:

1. These parameters represent stable machining at lengths 3×D.
   Please adjust cutting conditions according to machine rigidity or work rigidity.
2. In case of chatter ocurring, recommended to reduce ap or rpm and keep feed per tooth.
3. ap should be reduced when using on low rigidity machine.
4. Use air blow.