OCT type

“ Octoblader ”

" Octoblader "

Face Milling | Pocket Milling | Shoulder Milling | Helical Interpolation

OCT Type

ECONOMY CUTTER WITH 8 CORNERS

Features and Benefits

Economy cutter with 8 corners.

- 8 corners can be used when cutting depth is 4mm or less.
- 8 indexes per insert means:
  2 times more indexes than a square insert.
  4 times more indexes than a rectangle/parallelogram insert.
  An incredibly economical insert!

Increased insert rigidity.

- We've improved insert rigidity by increasing insert thickness by 15%, or to 5.5mm. Compare this to a standard thickness of just 4.76mm.
- Also, with an obtuse corner angle of 135 degrees and a corner radius of 1.2mm (competitors' are generally 0.8mm), the insert corner strength is increased making it difficult to become damaged even under severe cutting conditions.

A strong tool body for a wide array of applications.

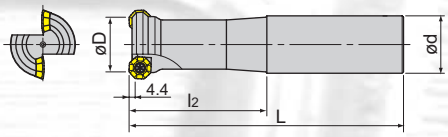
- A wide clearance between the cutting edge makes this tool ideal for 3D cutting.
- In addition, a much wider chip pocket allows for more efficient chip ejection given any cutting condition, without sacrificing cutter rigidity.

Easy, quick, and accurate indexing.

- A quick loosening of the screw is all that is needed to index (no need to pull the screw out)! It is, by far, a very simple, quick, and reliable method of indexing.

OCT (End-mill Type)

Fig.5/4

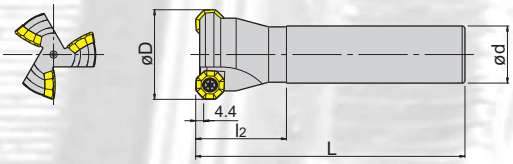


Body

Cat. No.	Stock	No. of inserts	Dimensions (mm)				Fig.
			D	l_2	L	d	
OCT-02040-100-S42	●	2	**40**	100	200	42	1

● Stock in Japan

Fig.2



Body (Profiling End-mill)

Cat. No.	Stock	No. of inserts	Dimensions (mm)				Fig.
			øD	l_2	L	ød	
OCT-03050PF-050-S32	●	3	**50**	50	150	32	2
OCT-03063PF-050-S32	●	3	**63**	50	150	32	2

● Stock in Japan

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OCT (Face Mill Type)

Fig.3

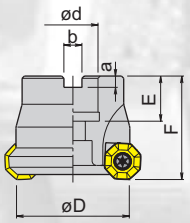


Fig.4

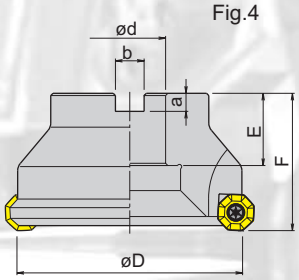
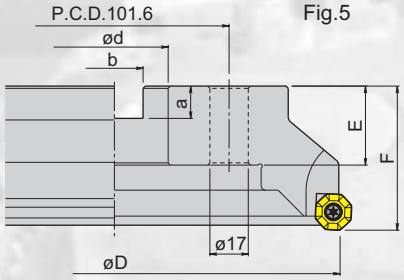


Fig.5



Body

Cat. No.	Stock	No. of inserts	Dimensions (mm)						Fig.
			øD	F	ød	a	b	E	
OCT-04050-22R	●	4	**50**	45	22	6.3	10.4	20	3
OCT-05063-22R	●	5	**63**	50	22	6.3	10.4	20	3
OCT-05080-27R	●	5	**80**	55	27	7	12.4	22	3
OCT-06100-32R	●	6	**100**	55	32	8	14.4	32	4
OCT-08125-40R	●	8	**125**	55	40	9	16.4	35	4
OCT-10160-40R	●	10	**160**	55	40	9	16.4	35	4
OCT-12200-60R	●	12	**200**	63	60	14	25.7	35	5

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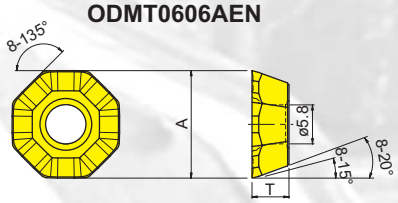
OCT Type

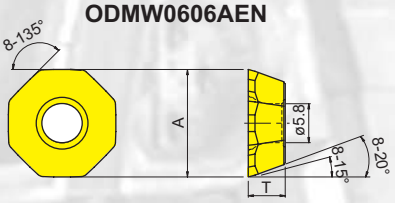
Inserts

ODMT0606AEN



NEW

ODMW0606AEN

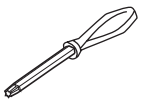


Cat. No.	Coated		Dimensions (mm)	
	JC8015	JC5040	A	T
ODMT0606AEN	●	●	16	5.5
NEW ODMW0606AEN	●		16	5.5

Caution! This insert fit only original Dijet Body.

● New product on request

Parts

Clamp screw / Torque	Wrench
	
ESW-510 / (5.5 N-m)	A-25SD

Recommended cutting conditions for "OCTOBLADER"

Work materials	Insert grade	Hardness (HB)	Cutting speed (m/min)	feed (mm/insert)
Low carbon steel, Mild steel	JC5040	180 - 280	180 - 250	0.15 - 0.45
Medium carbon steel, High carbon steel	JC5040	180 - 280	150 - 200	0.15 - 0.45
Alloy steel, Tool steel	JC5040	180 - 280	120 - 170	0.15 - 0.35
Stainless steel	JC8015	- 270	80 - 150	0.10 - 0.30
Gray cast iron	JC8015	200 - 250	150 - 250	0.25 - 0.45
Nodular cast iron	JC8015	180 - 250	150 - 250	0.25 - 0.45

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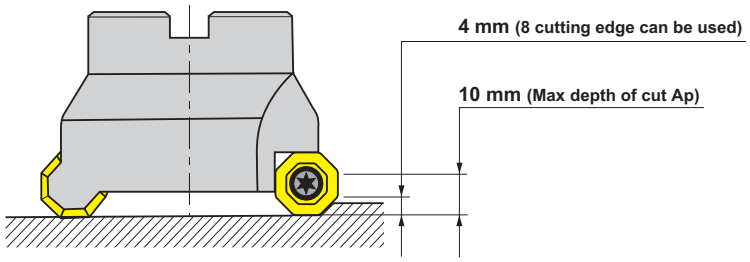
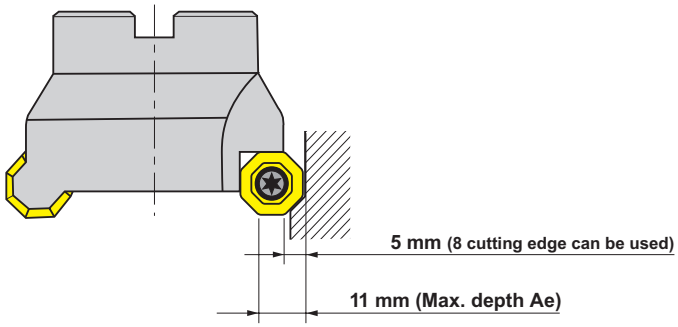
Cutting applications for OCT.

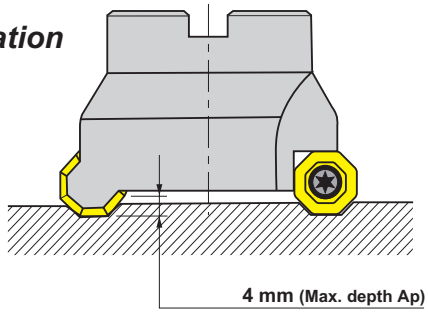
Face Milling



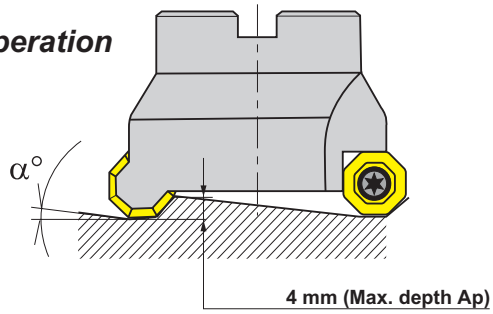
Vertical Cutting



Plunging Operation



Ramping Operation



Body Ø	α°
OCT-04050R	≦8.4°
OCT-05063R	≦5.8°
OCT-05080R	≦4.1°
OCT-06100R	≦3.0°
OCT-08125R	≦2.2°
OCT-10160R	≦1.5°
OCT-12200R	≦1.0°

" Octoblader "

■ *Cutting data for "Octoblader"*

1. High efficient machining by 4 x D tool. (Q=211cm³/min)

Roughing
Overhang length: 250mm (L=4 x D)

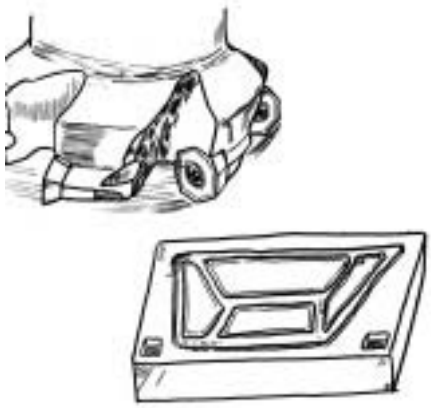
Result

Competitor could cut only 1mm Ap due to chatter Octoblader could cut 2 mm. without chatter.
Smooth cut Q=211cm³/min.

Work	**Part name**	Injection mold
	Material	S50C
	Hardness	–
Tool	**Tool No.**	OCT- 4063PF-22R
	Insert No.	ODMT0606AEN, JC5040
Cutting conditions	**Cutting speed**	158 m/min (800 min^{-1})
	Feed speed	2,112 mm/min
	Ap	2 mm
	Ae	50 mm
	Coolant	Dry cut
	Machine	Horizontal MC

2. Cost reduction (Reduced the cost to 1/8)

Roughing operation



Result

Competitor could not index 8 corners due to chipping and tool life was 10h. Octoblader could use 8 corners and got 40h tool life. Reduced the cost to 1/8.

Work	**Part name**	Stamping die for hood
	Material	FC250
	Hardness	260 HB
Tool	**Tool No.**	OCT-10160R
	Insert No.	ODMT0606AEN, JC5040
Cutting conditions	**Cutting speed**	116 m/min (220 min^{-1})
	Feed speed	700 mm/min
	Ap	4 mm
	Ae	MAX. 160 mm
	Coolant	Dry cut
	Machine	Vertical MC/22kW