

High-Precision Shoulder Milling Cutter
for General Purpose

SEC-WAVEMILL **WEZ** Series
Rev. 2

Ultra-Refined "Universal" Cutter





■ Features

● Supports Various Machining Operations

Applicable to various machining applications, the cutter lineup includes diameters of $\phi 14$ to $\phi 160$ mm, enabling large ramping.

● Excellent Machining Quality

With a combination of optimised cutting edge shape and high-precision molding technology, superb wall surface accuracy and surface finish quality are achieved.

● Excellent Sharpness with Low Resistance

Reduces machining noise and suppresses burrs.

Lineup includes ground inserts with a focus on sharpness.

● General-purpose Grade Applicable to Any Work Material

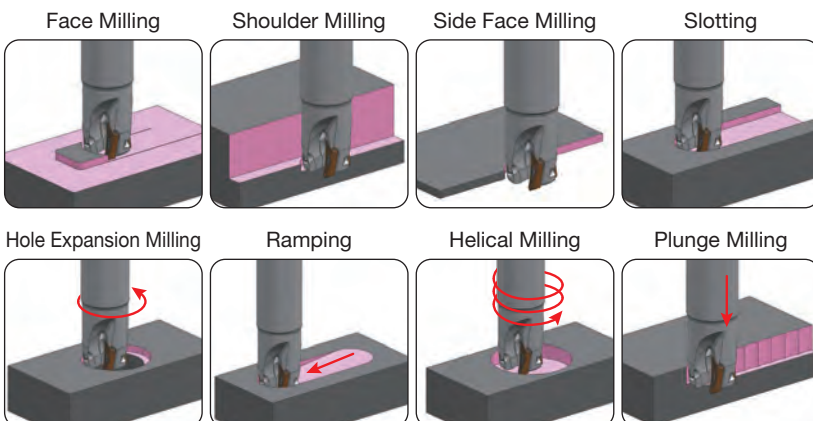
Introducing the new grade ACU2500, supporting machining in a wide range of fields and applicable to steel, stainless steel, and cast iron.

■ Series (Body)

Number in ● is the number of teeth Inch Inch Bore * mark: Different-diameter shanks in stock

Type	Cat. No.	Diameter Range (mm)																	
		$\phi 14$	$\phi 16$	$\phi 18$	$\phi 20$	$\phi 22$	$\phi 25$	$\phi 28$	$\phi 30$	$\phi 32$	$\phi 35$	$\phi 40$	$\phi 50$	$\phi 63$	$\phi 80$	$\phi 100$	$\phi 125$	$\phi 160$	
Shell Type	WEZ 11000RS											● 4 ● 6	● 5 ● 7	● 6 ● 8	● 7 ● 10	● 9 ● 12			
	WEZ 11000R Inch														● 7 ● 10	● 9 ● 12			
	WEZ 17000RS											● 3 ● 4	● 3 ● 5	● 4 ● 6	● 4 ● 7	● 5 ● 8	● 6 ● 11	● 9 ● 12	● 8 ● 10
	WEZ 17000R Inch														● 4 ● 7	● 5 ● 8	● 6 ● 11	● 9 ● 12	● 8 ● 10
Shank Type	WEZ 11000E	● 1	● 2*	● 2	● 2* ● 3*	● 3	● 2* ● 4*	● 3*	● 4	● 4	● 2 ● 4	● 3 ● 5*	● 5	● 2 ● 6	● 4 ● 7	● 8	● 10		
	WEZ 11000EL	● 1	● 2*	● 2	● 2*	● 2	● 2* ● 3	● 2	● 2	● 2* ● 3	● 3	● 2	● 3						
	WEZ 17000E						● 2*	● 2	● 3	● 2 ● 3*	● 3	● 3 ● 4	● 3* ● 5*	● 4* ● 6*	● 7				
	WEZ 17000EL						● 2	● 2	● 2	● 2* ● 3	● 2	● 2 ● 3	● 3 ● 4	● 3* ● 5*	● 4* ● 6*				

■ Supports Ramping/Helical Milling/Plunge Milling Applicable to various applications!



■ Optimised Body Design

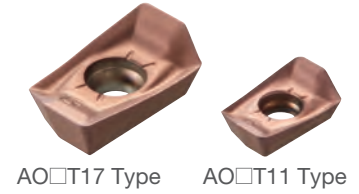
● Wide Guide Face for Stable Insert Clamping



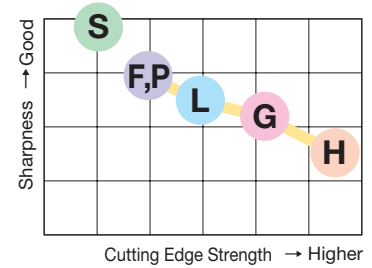
Chipbreaker Lineup

Work Materials	P M K S H					N
Chipbreaker	L Type	G Type	H Type	F Type	P Type	S Type
Cutting Edge Figure	11 Type	Not Available				
	17 Type					
Applications	Light Cut Low-rigidity Machining	Main Chipbreaker General to Interrupted Machining	Heavy Cut Heavy Interrupted Machining Hardened Steel	Light Cut Medium Finishing Low-burr Design	Light Cut High-precision Machining High Wall Surface Squareness	For Non-Ferrous Metals

Insert Size Comparison



Chipbreaker Selection Guide



Series (Insert)

●: Standard stock ○: Planned stock

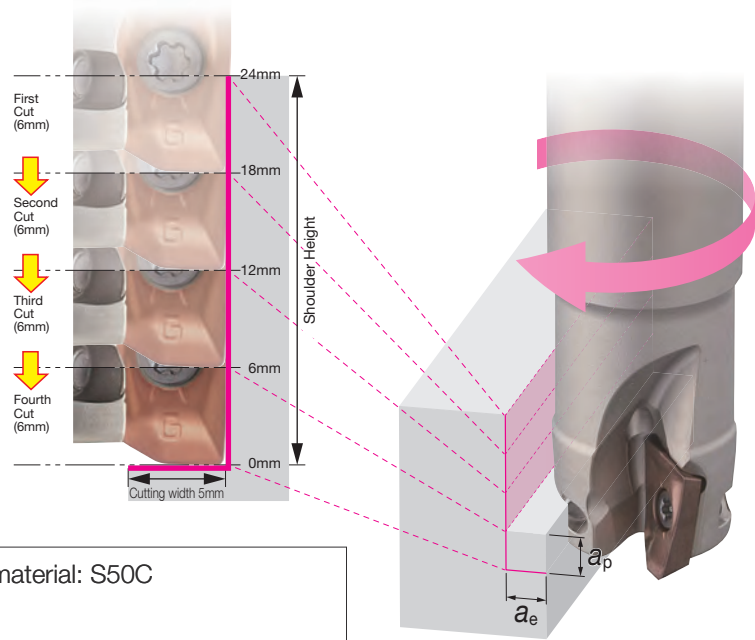
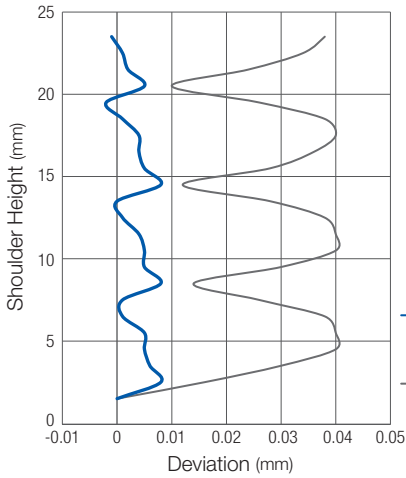
Cat. No.	Nose Radius (mm)											
	R0.2	R0.4	R0.8	R1.2	R1.6	R2.0	R2.4	R3.0	R3.2	R4.0	R5.0	R6.4
AOMT11T3○○PEER-G	○	●	●	○	○	○	○	○	○			
AOMT11T3○○PEER-H		●	●	○	○							
AOET11T3○○PEER-F	○	●	●	○								
AOET11T3○○PEER-P16	○	●	●	○								
AOET11T3○○PEER-P20	○	●	●	○								
AOET11T3○○PEER-P25	○	●	●	○								
AOET11T3○○PEFR-S	○	●	●	○								
AOMT1705○○PEER-L	○	●	●	○	○							
AOMT1705○○PEER-G	○	●	●	○	○	○	○	○	○	○	○	○
AOMT1705○○PEER-H		●	●	○	○							
AOET1705○○PEER-F	○	●	●	○	○							
AOET1705○○PEER-P25	○	●	●	○								
AOET1705○○PEER-P32	○	●	●	○								
AOET1705○○PEFR-S	○	●	●	○								

P Type Chipbreaker Selection Guide

Cat. No.	Diameter (mm)										
	ø14	ø16	ø18	ø20	ø22	ø25	ø28	ø30	ø32	ø35	ø40 or more
AOET11T3○○PEER-P○○	-P16		-P20		Not Available	-P25		Not Available			
AOET1705○○PEER-P○○	Not Available					-P25		-P32		Not Available	

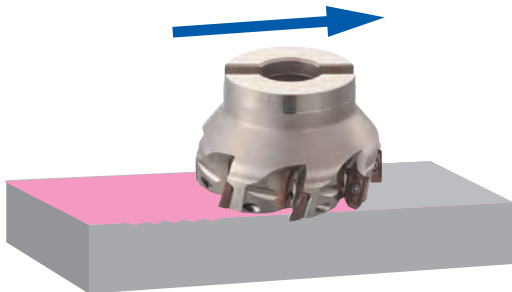
■ Improved Milling Quality

- Excellent squareness



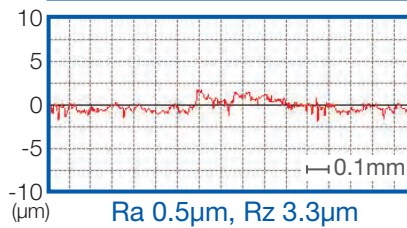
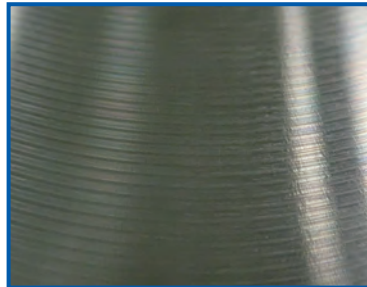
Machine: Vertical Machining Centre BT40, Work material: S50C
 Tool: WEZ 11020E03 (ø20, 3 flutes)
 Insert: AOMT 11T308PEER-G (ACU2500)
 Cutting conditions: $v_c = 150\text{m/min}$, $f_z = 0.15\text{mm/t}$, $a_p = 6\text{mm} \times 4 \text{ passes}$, $a_e = 5\text{mm}$ Dry

- Excellent Surface Quality

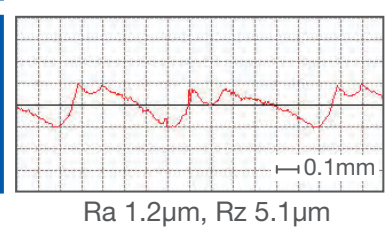
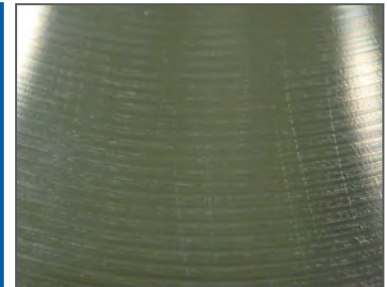


Machine: Vertical Machining Centre BT50,
 Work material: SCM440
 Tool: WEZ 17100RS08 (ø100, 8 flutes)
 Insert: AOMT 170508PEER-G (ACU2500)
 Cutting conditions: $v_c = 250\text{m/min}$, $f_z = 0.15\text{mm/t}$,
 $a_p = 2\text{mm}$, $a_e = 85\text{mm}$ Dry

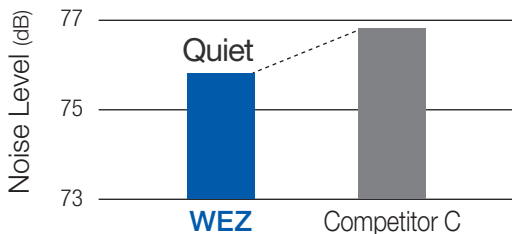
WEZ Series



Competitor B

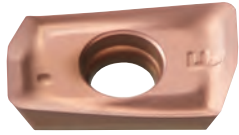
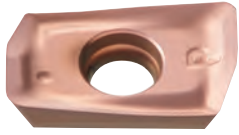



- Lower cutting force helps reduce machining noise



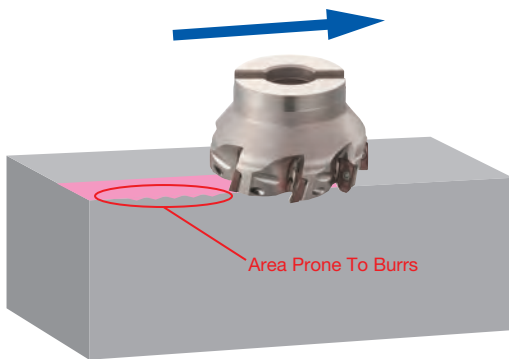
Machine: Vertical Machining Centre BT40, Work material: S50C
 Tool: WEZ 11020E03 (ø20, 3 flutes)
 Insert: AOMT 11T308PEER-G (ACU2500)
 Cutting conditions: $v_c = 150\text{m/min}$, $f_z = 0.15\text{mm/t}$, $a_p = 8\text{mm}$,
 $a_e = 5\text{mm}$ Dry

■ Lineup of Chipbreakers for Ground Inserts

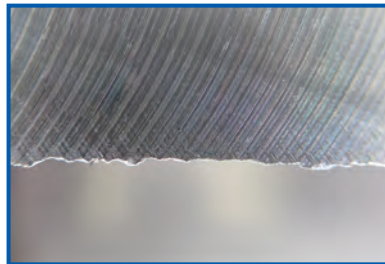
F Type	P Type	S Type
		
<ul style="list-style-type: none"> • Sharpness from ground finish enables burr control • Excellent squareness with all diameters 	<ul style="list-style-type: none"> • Premium item with cutting edge shape optimised for each diameter while maintaining the F Type chipbreaker's sharpness • Enables wall surface squareness equal to solid endmills through a blade shape optimised for each tool diameter 	<ul style="list-style-type: none"> • Suppresses adhesion with rake face lapping • DLC Coat inserts available for further improved adhesion resistance

■ Cutting edge specialized for sharpness

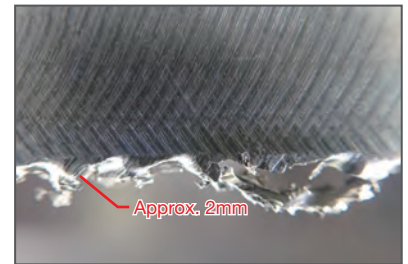
- Burr Control with Great Sharpness



WEZ Series

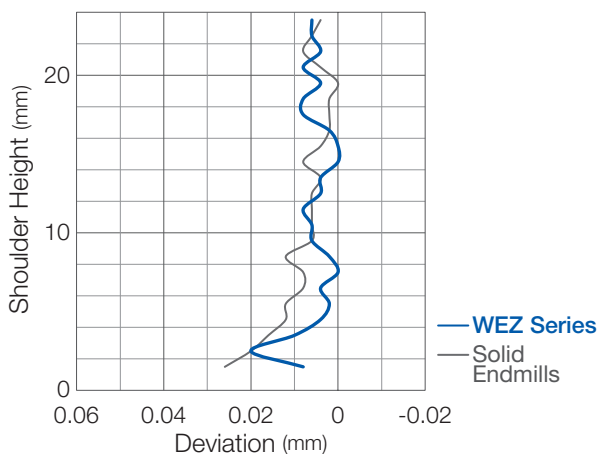


Competitor D



Machine: Vertical Machining Centre BT50, Work material: SUS304
 Tool: WEZ 11050RS07 (ø50, 7 flutes)
 Insert: AOET 11T308PEER-F (ACU2500)
 Cutting conditions: $v_c = 120\text{m/min}$, $f_z = 0.12\text{mm/t}$, $a_p = 1\text{mm}$, $a_e = 30\text{mm}$ Dry

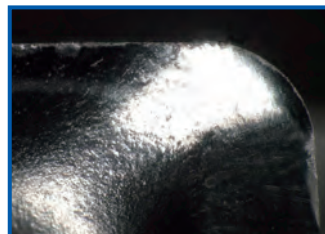
■ Realizes wall surface squareness equivalent to solid endmills



Machine: Vertical Machining Centre BT50,
 Work material: S50C
 Tool: WEZ 11020E03 (ø20, 3 flutes)
 Insert: AOET 11T308PEER-P20 (ACU2500)
 Cutting conditions: $v_c = 150\text{m/min}$, $f_z = 0.1\text{mm/t}$,
 $a_p = 8\text{mm} \times 3 \text{ passes}$, $a_e = 1\text{mm}$ Dry

■ Sharp edge chipbreaker for non-ferrous metals, with excellent adhesion resistance

WEZ Series



No Adhesion

Competitor E



Adhesion

Machine: Vertical Machining Centre BT30,
 Work material: ADC12
 Tool: WEZ 11020E03 (ø20, 3 flutes)
 Insert: AOET 11T308PEFR-S (H20)
 Cutting conditions: $v_c = 350\text{m/min}$, $f_z = 0.1\text{mm/t}$, $a_p = 3\text{mm}$,
 $a_e = 10\text{mm}$ Dry

Insert Grades Selection Guide

The WEZ Series can be combined with multiple new grade inserts. In particular, the newly developed general-purpose **ACU2500** grade suitable for various work materials has now been released. Enhanced lineup of coatings in addition to carbide and cermet for milling steel, stainless steel, cast iron, and aluminum alloy.

Work Materials		Finishing to Light Cut	Medium Cut	Rough to Heavy Cut
P Steel	Coated Carbide	ACP2000	ACU2500	ACP3000
	Cermet	T2500A		
M Stainless Steel	Coated Carbide	ACU2500	ACM200	ACM300

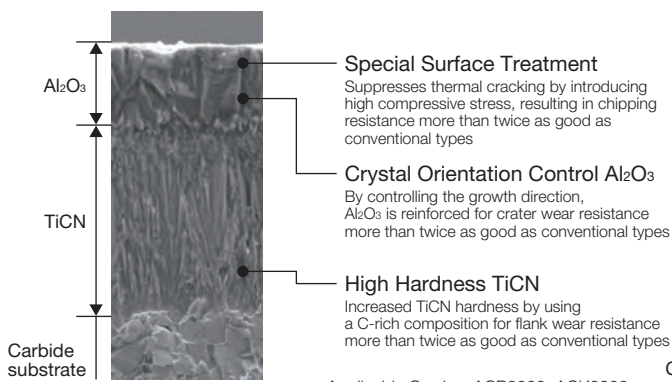
Work Materials		Finishing to Light Cut	Medium Cut	Rough to Heavy Cut
K Cast Iron	Coated Carbide	ACK2000	ACK3000	ACU2500
	Coated Carbide		DL2000	
N Non-Ferrous Metal	Coated Carbide			
	Carbide		H20	

The letters "C" and "P" at the end of each grade indicate the coating type. ▽: CVD ▲: PVD

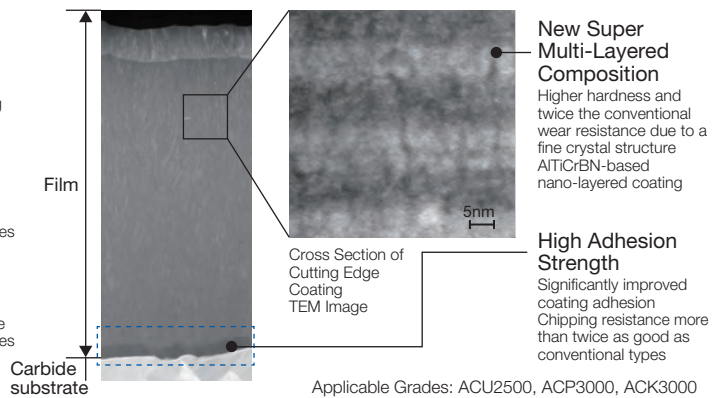
Coating Features

New Absotech™ (absolute technology) coating technology that realises absolute stability

ABSOTECH CVD



ABSOTECH PVD



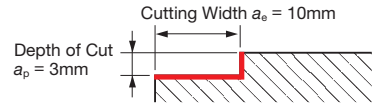
Work Materials	Grades	Coating Thickness (μm)	Features
P Steel, M Stainless Steel, K Cast Iron	ACU2500	3	General-purpose grade applicable to steel, stainless steel, and cast iron. Adopts a carbide substrate with excellent fracture resistance and wear resistance, plus a new coating with excellent wear resistance and chipping resistance, realising stable long tool life with various work material grades.
P Steel	ACP2000	10	Stable long tool life with high-speed machining is realised by adopting a new coating and a tough carbide substrate with excellent thermal crack resistance.
	ACP3000	3	Adopts a very tough carbide substrate, plus a new coating with excellent wear resistance and chipping resistance, realising stable long tool life for wet machining of steel in particular.
	T2500A	—	Thanks to the excellent thermal crack resistance conferred by high thermal conductivity and the improved toughness due to the finer and more uniform structure, this cermet grade achieves high levels of fracture resistance and wear resistance.
M Stainless Steel	ACM200	6	Realises superb stability in machining of high-hardness stainless steel, due to a high-strength carbide substrate and highly wear-resistant coating.
	ACM300	3	Realises superb stability in machining of stainless steel, due to a high-strength carbide substrate and highly chipping-resistant coating.
K Cast Iron	ACK2000	10	Stable long tool life with high-speed machining of cast iron is realised by adopting a new coating with excellent thermal resistance and a tough carbide substrate.
	ACK3000	3	Adopts a carbide substrate with excellent wear resistance, plus a new coating with excellent wear resistance and chipping resistance, realising stable long tool life in dry machining of cast iron.
N Non-Ferrous Metal	DL2000	0.5	DLC coating grade for non-ferrous metal machining with a low coefficient of friction and excellent adhesion resistance.
	H20	—	Uncoated grade for non-ferrous metal machining with excellent wear resistance and fracture resistance.

Recommended Cutting Conditions

WEZ11 Type

Tool: WEZ11020E03, Insert: AO□T11T3 Type

Cutting Conditions: Depth of Cut $a_p = 3\text{mm}$, Cutting Width $a_e = 10\text{mm}$, Dry



ISO Classification	Work Materials	Work Material Hardness (HB)	Chipbreaker	Grades													
				ACU2500	ACP2000	ACP3000	T2500A	ACK2000	ACK3000	ACM200	ACM300	DL2000					
				Feed Rate per Tooth f_z (mm/t) Min. - Optimum - Max.													
				0.08-0.15-0.20	0.08-0.15-0.20	0.08-0.15-0.20	0.08-0.12-0.18	0.08-0.15-0.20	0.08-0.15-0.20	0.08-0.15-0.20	0.05-0.10-0.15						
				Cutting Speed v_c (m/min) Min. - Optimum - Max.													
P	Steel, Carbon Steel S15C	125	G	270-320-370	300-350-400	250-300-350	230-280-330										
	S45C	190	G	170-220-270	200-250-300	150-200-250	130-180-230										
	S45C Hardened	250	G	140-180-220	160-200-245	120-160-200	105-145-185										
	S75C	270	G	110-145-175	130-165-195	100-130-165	85-115-150										
	S75C Hardened	300	G	70- 90-110	80-100-120	60- 80-100	50- 70- 90										
	Low-Alloy Steel SCM, SNCM	180	G	160-205-255	190-235-280	140-190-235	120-170-215										
	SCM, SNCM Hardened	275	G	95-120-150	110-135-165	80-110-140	70-100-125										
	SCM, SNCM Hardened	300	G	85-110-130	100-125-150	75-100-125	65- 90-115										
	SCM, SNCM Hardened	350	G	60- 80-100	70- 90-110	50- 70- 90	45- 65- 85										
	High-Alloy Steel SKD, SKT, SKH	200	G	140-180-220	160-200-245	120-160-205											
SKD, SKT, SKH Hardened	325	G	55- 70- 85	60- 80-100	50- 65- 80												
M	Stainless Steel SUS430 and Others (Martensitic/Ferritic)	200	G	110-140-170						140-170-190	90-110-140						
	SUS403 and Others (Martensitic/Hardened)	240	G	100-125-150						125-150-170	80-100-125						
	SUS304, SUS316 (Austenitic)	180	G	120-150-180						150-180-200	100-120-150						
K	Cast Iron		G	150-200-250				250-300-350	170-220-270								
	Ductile Cast Iron		G	90-120-150				150-180-210	100-130-160								
S	Exotic Alloy Heat-Resistant Alloy		G	30- 40- 55						35- 45- 60	25- 35- 50						
	Ti Alloy		G	60- 80-100						70- 90-110	50- 70- 90						
N	Aluminum Alloy Si $\leq 12.6\%$		S												500-750-1000		
	Si $> 12.6\%$		S												170-200- 250		
	Copper Alloy		S												300-330- 350		

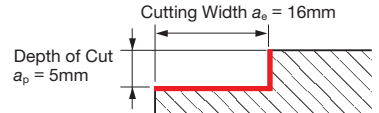
- The recommended cutting conditions may not be practical depending on the operating conditions (e.g. machine, work material shape, clamping system).
- For Slotting, adjust the feed rate to around 70% of the above values.

Note The cutting conditions above are a guide. Actual conditions will need to be adjusted according to machine rigidity, work material rigidity, depth of cut and other factors.

WEZ17 Type

Tool: WEZ17032E03, Insert: AO□T1705 Type

Cutting Conditions: Depth of Cut $a_p = 5\text{mm}$, Cutting Width $a_e = 16\text{mm}$, Dry



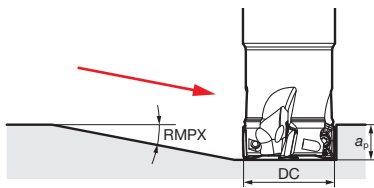
ISO Classification	Work Materials	Work Material Hardness (HB)	Chipbreaker	Grades												
				ACU2500	ACP2000	ACP3000	T2500A	ACK2000	ACK3000	ACM200	ACM300	DL2000				
				Feed Rate per Tooth f_z (mm/t) Min. - Optimum - Max.												
				0.10-0.20-0.28	0.10-0.20-0.28	0.10-0.20-0.28	0.10-0.15-0.22	0.10-0.20-0.28	0.10-0.20-0.28	0.10-0.20-0.28	0.05-0.10-0.15					
				Cutting Speed v_c (m/min) Min. - Optimum - Max.												
P	Steel, Carbon Steel S15C	125	G	285-335-390	315-360-420	265-315-370	240-295-345									
	S45C	190	G	180-230-285	210-265-315	160-210-265	135-190-240									
	S45C Hardened	250	G	145-190-230	170-210-255	130-170-215	110-155-195									
	S75C	270	G	115-150-185	135-170-205	100-135-170	90-125-155									
	S75C Hardened	300	G	70- 90-115	85-105-125	65- 85-105	55- 75- 95									
	Low-Alloy Steel SCM, SNCM	180	G	170-220-265	200-245-295	150-200-250	130-180-225									
	SCM, SNCM Hardened	275	G	100-130-155	115-145-175	85-115-145	75-105-135									
	SCM, SNCM Hardened	300	G	90-115-140	105-130-155	75-105-130	65- 90-120									
	SCM, SNCM Hardened	350	G	65- 85-100	75- 95-115	55- 75- 95	50- 70- 85									
	High-Alloy Steel SKD, SKT, SKH	200	G	145-185-230	170-215-255	130-170-215										
SKD, SKT, SKH Hardened	325	G	55- 75- 90	65- 85-100	50- 65- 85											
M	Stainless Steel SUS430 and Others (Martensitic/Ferritic)	200	G	115-145-175						145-175-195	100-115-145					
	SUS403 and Others (Martensitic/Hardened)	240	G	105-130-155						130-155-175	85-105-130					
	SUS304, SUS316 (Austenitic)	180	G	125-155-190						160-190-210	105-125-160					
K	Cast Iron		G	160-210-265				265-315-370	180-230-285							
	Ductile Cast Iron		G	95-125-160				160-190-220	105-140-170							
S	Exotic Alloy Heat-Resistant Alloy		G	30- 40- 60						35- 45- 60	25- 35- 50					
	Ti Alloy		G	60- 85-105						75- 95-115	50- 75- 95					
N	Aluminum Alloy Si $\leq 12.6\%$		S												500-750-1000	
	Si $> 12.6\%$		S												170-200- 250	
	Copper Alloy		S												300-330- 350	

- The recommended cutting conditions may not be practical depending on the operating conditions (e.g. machine, work material shape, clamping system).
- For Slotting, adjust the feed rate to around 70% of the above values.

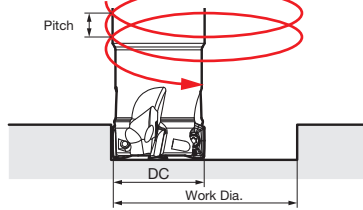
Note The cutting conditions above are a guide. Actual conditions will need to be adjusted according to machine rigidity, work material rigidity, depth of cut and other factors.

■ Ramping/Helical Milling Upper Limits

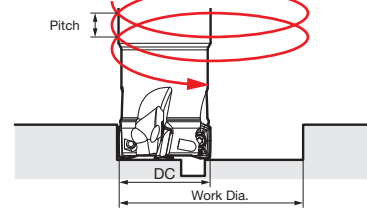
Ramping



Flat bottom machining



Machining with prepared hole



WEZ11 Type

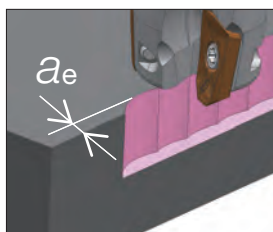
Tool Dia. DC	Max. Ramping Angle RMPX (°)	Flat bottom machining				Machining with prepared hole	
		Max. Machining Dia. (mm)	Maximum Pitch (mm/rev)	Min. Machining Dia. (mm)	Maximum Pitch (mm/rev)	Min. Machining Dia. (mm)	Maximum Pitch (mm/rev)
14	13.2	25.3	8.4	23.1	5.9	19.0	1.9
16	10.5	29.3	7.6	27.0	5.6	21.7	1.5
18	8.1	33.3	6.7	30.9	5.0	25.2	1.4
20	6.5	37.3	6.0	34.9	4.6	29.1	1.3
22	5.3	41.3	5.4	38.8	4.3	32.9	1.3
25	4.1	47.3	4.8	44.8	3.9	38.9	1.3
28	3.4	53.3	4.4	50.7	3.6	44.9	1.3
30	3.0	57.3	4.2	54.7	3.5	48.8	1.3
32	2.7	61.3	4.0	58.7	3.3	52.8	1.2
35	2.3	67.3	3.8	64.6	3.1	58.8	1.2
40	1.8	77.3	3.4	74.6	2.9	68.8	1.2
50	1.2	97.3	3.0	94.6	2.6	88.8	1.1
63	0.8	123.3	2.8	120.5	2.5	114.7	1.1

WEZ17 Type

Tool Dia. DC	Max. Ramping Angle RMPX (°)	Flat bottom machining				Machining with prepared hole	
		Max. Machining Dia. (mm)	Maximum Pitch (mm/rev)	Min. Machining Dia. (mm)	Maximum Pitch (mm/rev)	Min. Machining Dia. (mm)	Maximum Pitch (mm/rev)
25	10.8	47.3	13.0	41.0	8.3	33.1	1.8
28	8.1	53.3	11.1	46.9	7.5	39.0	1.8
30	7.0	57.3	10.2	50.9	7.0	43.0	1.8
32	6.1	61.3	9.5	54.9	6.7	47.0	1.7
35	5.1	67.3	8.7	60.8	6.2	53.0	1.7
40	4.0	77.3	7.7	70.8	5.7	63.0	1.7
50	2.5	97.3	6.5	90.7	5.0	83.0	1.6
63	1.8	123.3	5.6	116.7	4.5	109.0	1.6

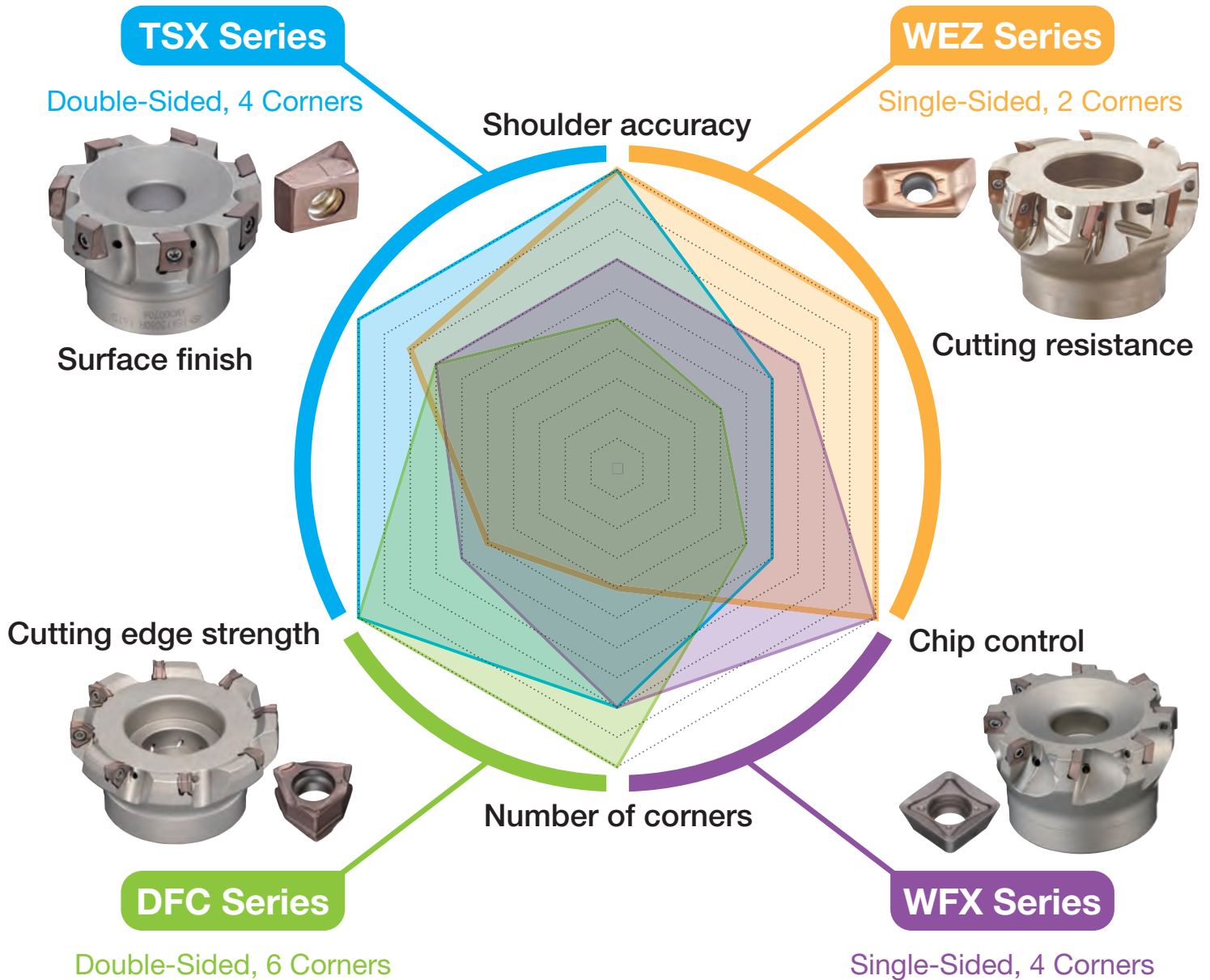
*The table above shows values with nose radius 0.8mm.

■ Plunge Milling Upper Limits



	Max. a_e (mm)
WEZ11 Type	3
WEZ17 Type	5

■ Shoulder Milling Tool Selection Guide



★★★: Top recommendation

	Surface finish	Shoulder accuracy	Cutting resistance	Chip control	Number of corners	Cutting edge strength
WEZ Series	★★★	★★★	★★★	★★★	★	★★★
TSX Series	★★★	★★★	★★	★★★	★★	★★★
DFC Series	★★★	★	★	★★★	★★★	★★★
WFX Series	★★★	★★	★★	★★★	★★	★★

*For the details of each product, see the TSX Series (brochure No. 523), DFC Series (brochure No. 513), and WFX Series (brochure No. 491).

Rake Angle	Radial	-7° to -11°
	Axial	14° to 15°



Fig 1

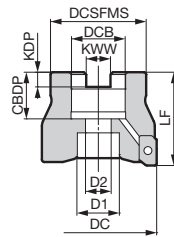


Fig 2

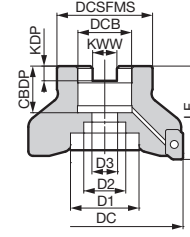
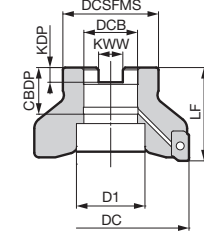


Fig 3



Body (Shell Type)

Dimensions (mm)

Cat. No.	Stock	Dia.	Boss	Height	Bore Dia.	Keyway Width	Keyway Depth	Mounting Depth	Bolt	Bolt	Bolt	Number of Teeth	Weight (kg)	Fig
		DC	DCSFMS	LF	DCB	KWW	KDP	CBDP	D1	D2	D3			
WEZ 11040RS04	●	40	33	40	16	8.4	5.6	18	14	9	—	4	0.21	1
WEZ 11040RS06	●	40	33	40	16	8.4	5.6	18	14	9	—	6	0.20	1
WEZ 11050RS05	●	50	41	40	22	10.4	6.3	20	18	11	—	5	0.32	1
WEZ 11050RS07	●	50	41	40	22	10.4	6.3	20	18	11	—	7	0.31	1
WEZ 11063RS06	●	63	50	40	22	10.4	6.3	20	18	11	—	6	0.58	1
WEZ 11063RS08	●	63	50	40	22	10.4	6.3	20	18	11	—	8	0.57	1
WEZ 11080RS07	●	*80	55	50	27	12.4	7	22	20	14	—	7	1.08	1
WEZ 11080RS10	●	*80	55	50	27	12.4	7	22	20	14	—	10	1.07	1
WEZ 11100RS09	●	100	70	50	32	14.4	8	32	46	—	—	9	1.57	3
WEZ 11100RS12	●	100	70	50	32	14.4	8	32	46	—	—	12	1.56	3
WEZ 11080R07	●	*80	55	50	25.4	9.5	6	25	20	14	—	7	1.09	1
WEZ 11080R10	●	*80	55	50	25.4	9.5	6	25	20	14	—	10	1.08	1
WEZ 11100R09	●	*100	70	63	31.75	12.7	8	32	46	27	18	9	2.12	2
WEZ 11100R12	●	*100	70	63	31.75	12.7	8	32	46	27	18	12	2.10	2



Check the collet mounting size (DCB) when selecting the cutter. Inserts are sold separately.

For securing the ø80mm and ø100mm cutters to the arbors marked with *, use a JIS B1176 hexagonal socket bolt (ø80: M12 x 30 to 35mm, ø100: M16 x 40 to 45mm).

Identification Code

WEZ 11 050 R S 07

Cutter Series Insert Size Cutter Dia. Feed Direction Metric Bore Number of Teeth

Parts

Applicable Cutter	Flat Screw		Integrated Wrench	Anti-seizure Cream
WEZ11040RS04	BFTX0306IP	1.5	TRDR08IP	SUMI-P
WEZ11040RS06				
WEZ11050RS05				
WEZ11050RS07				
WEZ11063RS06				
WEZ11063RS08				
WEZ11080R(S)07				
WEZ11080R(S)10				
WEZ11100R(S)09				
WEZ11100R(S)12				

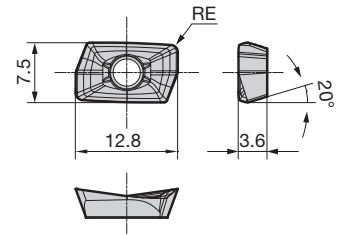
Recommended Tightening Torque (N·m)

● mark: Standard stocked item

Insert

P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metal **S** Exotic Alloy **H** Hardened Steel

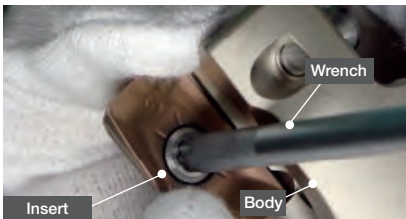
Process	Grade		Coated Carbide					Carbide	DLC	Cermet	Dimensions (mm)
	High-speed/Light	General-purpose	P	K	M	S	N	N	P		
	General-purpose	Roughing	P	K	M	S	N	N			
Cat. No.	ACU2500	ACP2000	ACP3000	ACK2000	ACK3000	ACM200	ACM300	H20	DL2000	T2500A	Nose Radius RE
AOMT11T302PEER-G	○	○	○	○	○	○	○	—	—	○	0.2
AOMT11T304PEER-G	●	○	○	○	○	○	○	—	—	○	0.4
AOMT11T308PEER-G	●	○	○	○	○	○	○	—	—	○	0.8
AOMT11T312PEER-G	○	○	○	○	○	○	○	—	—	○	1.2
AOMT11T316PEER-G	○	○	○	○	○	○	○	—	—	○	1.6
AOMT11T320PEER-G	○	○	○	○	○	○	○	—	—	○	2.0
AOMT11T324PEER-G	○	○	○	○	○	○	○	—	—	○	2.4
AOMT11T330PEER-G	○	○	○	○	○	○	○	—	—	○	3.0
AOMT11T332PEER-G	○	○	○	○	○	○	○	—	—	○	3.2
AOMT11T304PEER-H	●	○	○	○	○	○	○	—	—	—	0.4
AOMT11T308PEER-H	●	○	○	○	○	○	○	—	—	—	0.8
AOMT11T312PEER-H	○	○	○	○	○	○	○	—	—	—	1.2
AOMT11T316PEER-H	○	○	○	○	○	○	○	—	—	—	1.6
AOET11T302PEER-F	○	—	—	—	—	—	—	—	—	—	0.2
AOET11T304PEER-F	●	—	—	—	—	—	—	—	—	—	0.4
AOET11T308PEER-F	●	—	—	—	—	—	—	—	—	—	0.8
AOET11T312PEER-F	○	—	—	—	—	—	—	—	—	—	1.2
AOET11T302PEER-P16	○	—	—	—	—	—	—	—	—	—	0.2
AOET11T304PEER-P16	●	—	—	—	—	—	—	—	—	—	0.4
AOET11T308PEER-P16	●	—	—	—	—	—	—	—	—	—	0.8
AOET11T312PEER-P16	○	—	—	—	—	—	—	—	—	—	1.2
AOET11T302PEER-P20	○	—	—	—	—	—	—	—	—	—	0.2
AOET11T304PEER-P20	●	—	—	—	—	—	—	—	—	—	0.4
AOET11T308PEER-P20	●	—	—	—	—	—	—	—	—	—	0.8
AOET11T312PEER-P20	○	—	—	—	—	—	—	—	—	—	1.2
AOET11T302PEER-P25	○	—	—	—	—	—	—	—	—	—	0.2
AOET11T304PEER-P25	●	—	—	—	—	—	—	—	—	—	0.4
AOET11T308PEER-P25	●	—	—	—	—	—	—	—	—	—	0.8
AOET11T312PEER-P25	○	—	—	—	—	—	—	—	—	—	1.2
AOET11T302PEFR-S	—	—	—	—	—	—	—	○	○	—	0.2
AOET11T304PEFR-S	—	—	—	—	—	—	—	●	●	—	0.4
AOET11T308PEFR-S	—	—	—	—	—	—	—	●	●	—	0.8
AOET11T312PEFR-S	—	—	—	—	—	—	—	○	○	—	1.2



-L: Low Cutting Force, -G: General-purpose, -H: Strong Edge, -F: Medium Finishing, -P16/-P20/-P25: High-precision Machining, -S: Non-ferrous metals.
 * -P16 is applicable to cutter diameters $\phi 14$ and $\phi 16$. -P20 is applicable to cutter diameters $\phi 18$ and $\phi 20$. -P25 is applicable to cutter diameters $\phi 25$ and $\phi 28$.

Precautions for Mounting Inserts

- (1) Clean the mounting seat surface and contact parts.
- (2) While pressing the insert solidly against the seat surface, tighten the screws with the included wrench.
- (3) Apply Anti-seizure Cream to the screws and tighten at the recommended torque.
- (4) After tightening, check that there are no gaps on the seat surface.



*** When mounting inserts with nose radius of 3.0 or above, modification of the body is required.**



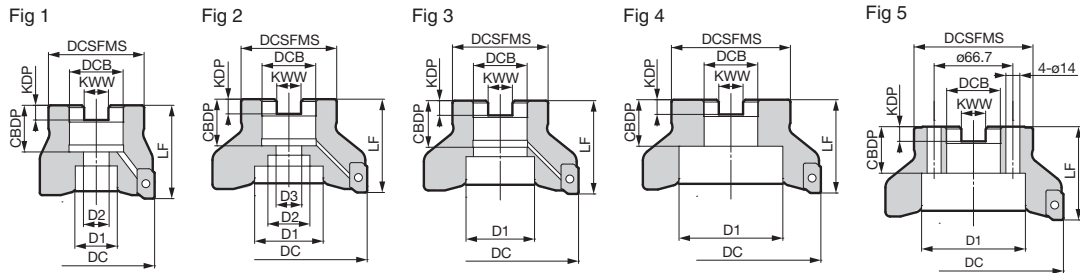
Modify this edge.

Reworking guidelines
 Nose radius = 3.0: C1 (AOMT11T330PEER)
 Nose radius = 3.2: C1 (AOMT11T332PEER)

Standard: R1.

Rake Angle	Radial	-4° to -9°	15mm	90°
	Axial	10° to 15°		

P M K N S



Body (Shell Type)

Dimensions (mm)

Cat. No.	Stock	Dia.	Boss	Height	Bore Dia.	Keyway Width	Keyway Depth	Mounting Depth	Bolt	Bolt	Bolt	Number of Teeth	Weight (kg)	Fig	
		DC	DCSFMS	LF	DCB	KWW	KDP	CBDP	D1	D2	D3				
Metric	WEZ 17040RS03	●	40	33	40	16	8.4	5.6	18	14	9	—	3	0.19	1
	WEZ 17040RS04	●	40	33	40	16	8.4	5.6	18	14	9	—	4	0.16	1
	WEZ 17050RS03	●	50	41	40	22	10.4	6.3	20	18	11	—	3	0.30	1
	WEZ 17050RS05	●	50	41	40	22	10.4	6.3	20	18	11	—	5	0.26	1
	WEZ 17063RS04	●	63	50	40	22	10.4	6.3	20	18	11	—	4	0.54	1
	WEZ 17063RS06	●	63	50	40	22	10.4	6.3	20	18	11	—	6	0.51	1
	WEZ 17080RS04	●	*80	55	50	27	12.4	7	22	20	14	—	4	1.10	1
	WEZ 17080RS07	●	*80	55	50	27	12.4	7	22	20	14	—	7	1.05	1
	WEZ 17100RS05	●	100	70	50	32	14.4	8	32	46	—	—	5	1.58	3
	WEZ 17100RS08	●	100	70	50	32	14.4	8	32	46	—	—	8	1.57	3
	WEZ 17125RS06	●	125	80	63	40	16.4	9	29	52	29	—	6	3.04	1
	WEZ 17125RS09	●	125	80	63	40	16.4	9	29	52	29	—	9	3.07	1
	WEZ 17125RS11	●	125	80	63	40	16.4	9	29	52	29	—	11	3.02	1
	WEZ 17160RS08	●	160	130	63	40	16.4	9	29	90	—	—	8	5.24	5
WEZ 17160RS10	●	160	130	63	40	16.4	9	29	90	—	—	10	5.31	5	
WEZ 17160RS12	●	160	130	63	40	16.4	9	29	90	—	—	12	5.26	5	
Inch	WEZ 17080R04	●	*80	55	50	25.4	9.5	6	25	20	14	—	4	1.10	1
	WEZ 17080R07	●	*80	55	50	25.4	9.5	6	25	20	14	—	7	1.06	1
	WEZ 17100R05	●	*100	70	63	31.75	12.7	8	32	46	27	18	5	2.08	2
	WEZ 17100R08	●	*100	70	63	31.75	12.7	8	32	46	27	18	8	2.07	2
	WEZ 17125R06	●	125	80	63	38.1	15.9	10	35.5	55	30	—	6	3.09	1
	WEZ 17125R09	●	125	80	63	38.1	15.9	10	35.5	55	30	—	9	3.11	1
	WEZ 17125R11	●	125	80	63	38.1	15.9	10	35.5	55	30	—	11	3.06	1
	WEZ 17160R08	●	160	100	63	50.8	19.1	11	38	72	—	—	8	5.04	4
	WEZ 17160R10	●	160	100	63	50.8	19.1	11	38	72	—	—	10	5.09	4
	WEZ 17160R12	●	160	100	63	50.8	19.1	11	38	72	—	—	12	5.04	4

Check the collet mounting size (DCB) when selecting the cutter. Inserts are sold separately.



For securing the ø80mm and ø100mm cutters to the arbors marked with *, use a JIS B1176 hexagonal socket bolt (ø80: M12 x 30 to 35mm, ø100: M16 x 40 to 45mm).

Identification Code

WEZ 17 100 R S 05

Cutter Series Insert Size Cutter Dia. Feed Direction Metric Bore Number of Teeth

Parts

Applicable Cutter	Flat Screw		Integrated Wrench	Detachable Wrench Handle Grip	Detachable Wrench Bit	Anti-seizure Cream
WEZ17040RS03	BFTX0409IP	3.0	—	HPS1015	TRB15IP	SUMI-P
WEZ17040RS04						
WEZ17050RS03						
WEZ17050RS05						
WEZ17063RS04						
WEZ17063RS06						
WEZ17080R(S)04						
WEZ17080R(S)07						
WEZ17100R(S)05						
WEZ17100R(S)08						
WEZ17125R(S)06						
WEZ17125R(S)09						
WEZ17125R(S)11						
WEZ17160R(S)08						
WEZ17160R(S)10			TRDR15IP	—	—	
WEZ17160R(S)12						

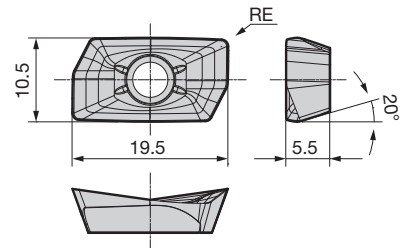
Recommended Tightening Torque (N·m)

● mark: Standard stocked item

Insert

P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metal **S** Exotic Alloy **H** Hardened Steel

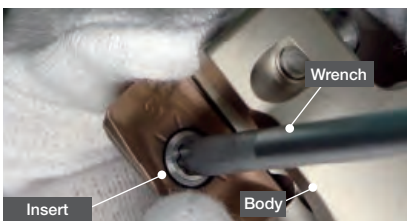
Process	Grade		Coated Carbide					Carbide	DLC	Cermet	Dimensions (mm)
	High-speed/Light	General-purpose	P	K	M	S	N	N	P		
	General-purpose	Roughing	P	K	M	S	N	N			
Cat. No.	ACU2500	ACP2000	ACP3000	ACK2000	ACK3000	ACM200	ACM300	H20	DL2000	T2500A	Nose Radius RE
AOMT 170502PEER-L	○	—	○	—	○	○	○	—	—	○	0.2
AOMT 170504PEER-L	●	—	○	—	○	○	○	—	—	○	0.4
AOMT 170508PEER-L	●	—	○	—	○	○	○	—	—	○	0.8
AOMT 170512PEER-L	○	—	○	—	○	○	○	—	—	○	1.2
AOMT 170516PEER-L	○	—	○	—	○	○	○	—	—	○	1.6
AOMT 170502PEER-G	○	○	○	○	○	○	○	—	—	○	0.2
AOMT 170504PEER-G	●	○	○	○	○	○	○	—	—	○	0.4
AOMT 170508PEER-G	●	○	○	○	○	○	○	—	—	○	0.8
AOMT 170512PEER-G	○	○	○	○	○	○	○	—	—	○	1.2
AOMT 170516PEER-G	○	○	○	○	○	○	○	—	—	○	1.6
AOMT 170520PEER-G	○	○	○	○	○	○	○	—	—	○	2.0
AOMT 170524PEER-G	○	○	○	○	○	○	○	—	—	○	2.4
AOMT 170530PEER-G	○	○	○	○	○	○	○	—	—	○	3.0
AOMT 170532PEER-G	○	○	○	○	○	○	○	—	—	○	3.2
AOMT 170540PEER-G	○	○	○	○	○	○	○	—	—	○	4.0
AOMT 170550PEER-G	○	○	○	○	○	○	○	—	—	○	5.0
AOMT 170564PEER-G	○	○	○	○	○	○	○	—	—	○	6.4
AOMT 170504PEER-H	●	○	○	○	○	○	○	—	—	—	0.4
AOMT 170508PEER-H	●	○	○	○	○	○	○	—	—	—	0.8
AOMT 170512PEER-H	○	○	○	○	○	○	○	—	—	—	1.2
AOMT 170516PEER-H	○	○	○	○	○	○	○	—	—	—	1.6
AOET 170502PEER-F	○	—	—	—	—	—	—	—	—	—	0.2
AOET 170504PEER-F	●	—	—	—	—	—	—	—	—	—	0.4
AOET 170508PEER-F	●	—	—	—	—	—	—	—	—	—	0.8
AOET 170512PEER-F	○	—	—	—	—	—	—	—	—	—	1.2
AOET 170502PEER-P25	○	—	—	—	—	—	—	—	—	—	0.2
AOET 170504PEER-P25	●	—	—	—	—	—	—	—	—	—	0.4
AOET 170508PEER-P25	●	—	—	—	—	—	—	—	—	—	0.8
AOET 170512PEER-P25	○	—	—	—	—	—	—	—	—	—	1.2
AOET 170502PEER-P32	○	—	—	—	—	—	—	—	—	—	0.2
AOET 170504PEER-P32	●	—	—	—	—	—	—	—	—	—	0.4
AOET 170508PEER-P32	●	—	—	—	—	—	—	—	—	—	0.8
AOET 170512PEER-P32	○	—	—	—	—	—	—	—	—	—	1.2
AOET 170502PEFR-S	—	—	—	—	—	—	○	○	—	—	0.2
AOET 170504PEFR-S	—	—	—	—	—	—	●	●	—	—	0.4
AOET 170508PEFR-S	—	—	—	—	—	—	●	●	—	—	0.8
AOET 170512PEFR-S	—	—	—	—	—	—	○	○	—	—	1.2



-L: Low Cutting Force, -G: General-purpose, -H: Strong Edge, -F: Medium Finishing, -P25/-P32: High-precision Machining, -S: Non-ferrous metals.
 *-P25 is applicable to cutter diameters ø25 and ø28. -P32 is applicable to cutter diameters ø30, ø32 and ø35.

Precautions for Mounting Inserts

- (1) Clean the mounting seat surface and contact parts.
- (2) While pressing the insert solidly against the seat surface, tighten the screws with the included wrench.
- (3) Apply Anti-seizure Cream to the screws and tighten at the recommended torque.
- (4) After tightening, check that there are no gaps on the seat surface.



* When mounting inserts with nose radius of 3.0 or above, modification of the body is required.



Modify this edge.

- Reworking guidelines
- Nose radius = 3.0: C1 (AOMT170530PEER)
 - Nose radius = 3.2: C1 (AOMT170532PEER)
 - Nose radius = 4.0: C2 (AOMT170540PEER)
 - Nose radius = 5.0: C5 (AOMT170550PEER)
 - Nose radius = 6.4: C5 (AOMT170564PEER)

Standard: R1.

Rake Angle	Radial	-7° to -18°
	Axial	6° to 15°

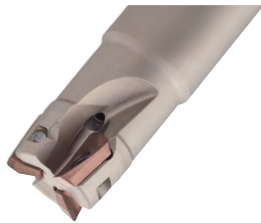


Fig 1

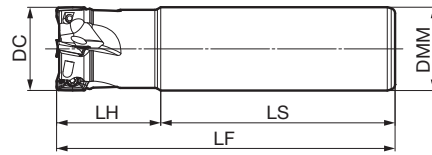
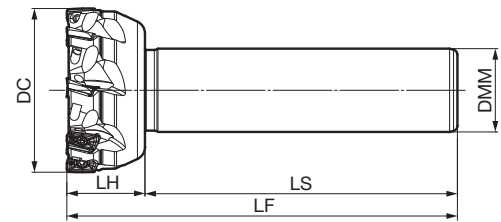


Fig 2



Body (Shank Type)

Dimensions (mm)

Cat. No.	Stock	Dia.		Shank		Head		Shank		Overall Length	Number of Teeth	Weight (kg)	Fig
		DC	DMM	DMM	LH	LS	LF						
WEZ 11014E01	●	14	16	25	55	80	1	0.10	1				
WEZ 11016E02	●	16	16	25	75	100	2	0.13	1				
WEZ 11016E02-12	●	16	12	25	75	100	2	0.07	2				
WEZ 11018E02	●	18	16	25	75	100	2	0.13	2				
WEZ 11020E02	●	20	20	30	80	110	2	0.23	1				
WEZ 11020E02-16	●	20	16	30	80	110	2	0.15	2				
WEZ 11020E03	●	20	20	30	80	110	3	0.22	1				
WEZ 11020E03-16	●	20	16	30	80	110	3	0.14	2				
WEZ 11022E03	●	22	20	30	80	110	3	0.23	1				
WEZ 11025E02	●	25	25	35	85	120	2	0.40	1				
WEZ 11025E03	●	25	25	35	85	120	3	0.40	1				
WEZ 11025E03-20	●	25	20	35	85	120	3	0.26	2				
WEZ 11025E04	●	25	25	35	85	120	4	0.39	2				
WEZ 11025E04-20	●	25	20	35	85	120	4	0.26	2				
WEZ 11028E04	●	28	25	35	85	120	4	0.41	1				
WEZ 11030E04	●	30	25	40	90	130	4	0.46	1				
WEZ 11032E02	●	32	32	40	90	130	2	0.74	1				
WEZ 11032E03	●	32	32	40	90	130	3	0.73	1				
WEZ 11032E04	●	32	32	40	90	130	4	0.73	2				
WEZ 11032E05	●	32	32	40	90	130	5	0.72	2				
WEZ 11032E05-25	●	32	25	40	90	130	5	0.46	2				
WEZ 11035E05	●	35	32	40	90	130	5	0.75	2				
WEZ 11040E02	●	40	32	30	120	150	2	0.96	2				
WEZ 11040E04	●	40	32	30	120	150	4	0.94	2				
WEZ 11040E06	●	40	32	30	120	150	6	0.93	2				
WEZ 11050E05	●	50	32	30	120	150	5	1.04	2				
WEZ 11050E07	●	50	32	30	120	150	7	1.04	2				
WEZ 11063E08	●	63	32	30	120	150	8	1.24	2				
WEZ 11080E10	●	80	32	30	120	150	10	1.52	2				

Inserts are sold separately.

Parts

Applicable Cutter	Flat Screw		Integrated Wrench	Anti-seizure Cream
WEZ11014E01 WEZ11016E02(-12) WEZ11018E02 WEZ11020E02(-16) WEZ11020E03(-16) WEZ11022E03 WEZ11025E02 WEZ11025E03(-20) WEZ11025E04(-20) WEZ11028E04 WEZ11030E04 WEZ11032E02 WEZ11032E03 WEZ11032E04 WEZ11032E05(-25) WEZ11035E05 WEZ11040E02 WEZ11040E04 WEZ11040E06 WEZ11050E05 WEZ11050E07 WEZ11063E08 WEZ11080E10	BFTX0305IP	1.5	TRDR08IP	SUMI-P
	BFTX0306IP			

Recommended Tightening Torque (N·m)

● mark: Standard stocked item

Identification Code

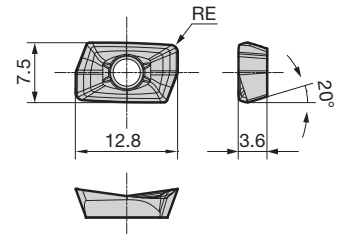
WEZ 11 025 E 03 -20

Cutter Series Insert Size Cutter Dia. With Shank Number of Teeth Shank Dia.

Insert

P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metal **S** Exotic Alloy **H** Hardened Steel

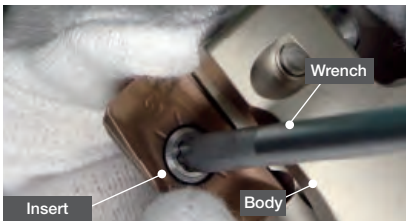
Process	Grade		Coated Carbide					Carbide	DLC	Cermet	Dimensions (mm)
	High-speed/Light	General-purpose	P	K	M	S	N	N	P		
	General-purpose	Roughing	P	K	M	S	N	N			
Cat. No.	ACU2500	ACP2000	ACP3000	ACK2000	ACK3000	ACM200	ACM300	H20	DL2000	T2500A	Nose Radius RE
AOMT11T302PEER-G	○	○	○	○	○	○	○	—	—	○	0.2
AOMT11T304PEER-G	●	○	○	○	○	○	○	—	—	○	0.4
AOMT11T308PEER-G	●	○	○	○	○	○	○	—	—	○	0.8
AOMT11T312PEER-G	○	○	○	○	○	○	○	—	—	○	1.2
AOMT11T316PEER-G	○	○	○	○	○	○	○	—	—	○	1.6
AOMT11T320PEER-G	○	○	○	○	○	○	○	—	—	○	2.0
AOMT11T324PEER-G	○	○	○	○	○	○	○	—	—	○	2.4
AOMT11T330PEER-G	○	○	○	○	○	○	○	—	—	○	3.0
AOMT11T332PEER-G	○	○	○	○	○	○	○	—	—	○	3.2
AOMT11T304PEER-H	●	○	○	○	○	○	○	—	—	—	0.4
AOMT11T308PEER-H	●	○	○	○	○	○	○	—	—	—	0.8
AOMT11T312PEER-H	○	○	○	○	○	○	○	—	—	—	1.2
AOMT11T316PEER-H	○	○	○	○	○	○	○	—	—	—	1.6
AOET11T302PEER-F	○	—	—	—	—	—	—	—	—	—	0.2
AOET11T304PEER-F	●	—	—	—	—	—	—	—	—	—	0.4
AOET11T308PEER-F	●	—	—	—	—	—	—	—	—	—	0.8
AOET11T312PEER-F	○	—	—	—	—	—	—	—	—	—	1.2
AOET11T302PEER-P16	○	—	—	—	—	—	—	—	—	—	0.2
AOET11T304PEER-P16	●	—	—	—	—	—	—	—	—	—	0.4
AOET11T308PEER-P16	●	—	—	—	—	—	—	—	—	—	0.8
AOET11T312PEER-P16	○	—	—	—	—	—	—	—	—	—	1.2
AOET11T302PEER-P20	○	—	—	—	—	—	—	—	—	—	0.2
AOET11T304PEER-P20	●	—	—	—	—	—	—	—	—	—	0.4
AOET11T308PEER-P20	●	—	—	—	—	—	—	—	—	—	0.8
AOET11T312PEER-P20	○	—	—	—	—	—	—	—	—	—	1.2
AOET11T302PEER-P25	○	—	—	—	—	—	—	—	—	—	0.2
AOET11T304PEER-P25	●	—	—	—	—	—	—	—	—	—	0.4
AOET11T308PEER-P25	●	—	—	—	—	—	—	—	—	—	0.8
AOET11T312PEER-P25	○	—	—	—	—	—	—	—	—	—	1.2
AOET11T302PEFR-S	—	—	—	—	—	—	—	○	○	—	0.2
AOET11T304PEFR-S	—	—	—	—	—	—	—	●	●	—	0.4
AOET11T308PEFR-S	—	—	—	—	—	—	—	●	●	—	0.8
AOET11T312PEFR-S	—	—	—	—	—	—	—	○	○	—	1.2



-L: Low Cutting Force, -G: General-purpose, -H: Strong Edge, -F: Medium Finishing, -P16/-P20/-P25: High-precision Machining, -S: Non-ferrous metals.
 * -P16 is applicable to cutter diameters ø14 and ø16. -P20 is applicable to cutter diameters ø18 and ø20. -P25 is applicable to cutter diameters ø25 and ø28.

Precautions for Mounting Inserts

- Clean the mounting seat surface and contact parts.
- While pressing the insert solidly against the seat surface, tighten the screws with the included wrench.
- Apply Anti-seizure Cream to the screws and tighten at the recommended torque.
- After tightening, check that there are no gaps on the seat surface.



*** When mounting inserts with nose radius of 3.0 or above, modification of the body is required.**



Modify this edge.

Reworking guidelines
 Nose radius = 3.0: C1 (AOMT11T330PEER)
 Nose radius = 3.2: C1 (AOMT11T332PEER)

Standard: R1.

Rake Angle	Radial	-7° to -18°
	Axial	6° to 15°



Fig 1

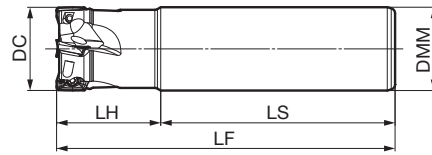
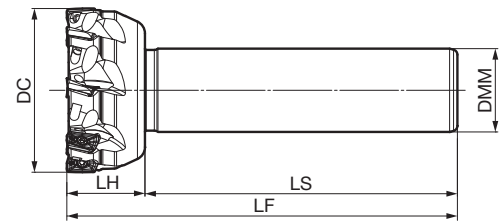


Fig 2



Body (Long Type)

Dimensions (mm)

Cat. No.	Stock	Dia.	Shank	Head	Shank	Overall Length	Number of Teeth	Weight (kg)	Fig
		DC	DMM	LH	LS	LF			
WEZ 11014EL01	●	14	16	25	95	120	1	0.16	1
WEZ 11016EL02	●	16	16	25	120	145	2	0.19	1
WEZ 11016EL02-14	●	16	14	25	120	145	2	0.15	2
WEZ 11018EL02	●	18	16	25	120	145	2	0.20	2
WEZ 11020EL02	●	20	20	40	110	150	2	0.31	1
WEZ 11020EL02-18	●	20	18	25	125	150	2	0.26	2
WEZ 11022EL02	●	22	20	30	120	150	2	0.32	2
WEZ 11025EL02	●	25	25	50	120	170	2	0.57	1
WEZ 11025EL02-22	●	25	22	30	140	170	2	0.46	2
WEZ 11025EL03	●	25	25	50	120	170	3	0.57	1
WEZ 11028EL02	●	28	25	30	140	170	2	0.60	2
WEZ 11030EL02	●	30	25	30	140	170	2	0.62	2
WEZ 11032EL02	●	32	32	60	110	170	2	0.97	1
WEZ 11032EL02-30	●	32	30	30	140	170	2	0.88	2
WEZ 11032EL03	●	32	32	60	110	170	3	0.96	1
WEZ 11035EL02	●	35	32	30	140	170	2	1.02	2
WEZ 11035EL03	●	35	32	30	140	170	3	1.00	2
WEZ 11040EL02	●	40	32	30	140	170	2	1.08	2
WEZ 11050EL03	●	50	32	30	140	170	3	1.19	2

Inserts are sold separately.

Identification Code

WEZ 11 025 E L 02 -22

Cutter Series Insert Size Cutter Dia. With Shank Long Type Number of Teeth Shank Dia.

Parts

Applicable Cutter	Flat Screw		Integrated Wrench	Anti-seizure Cream
WEZ11014EL01	BFTX0305IP	1.5	TRDR08IP	SUMI-P
WEZ11016EL02(-14)				
WEZ11018EL02	BFTX0306IP	1.5	TRDR08IP	SUMI-P
WEZ11020EL02(-18)				
WEZ11022EL02				
WEZ11025EL02(-22)				
WEZ11025EL03				
WEZ11028EL02				
WEZ11030EL02				
WEZ11032EL02(-30)				
WEZ11032EL03				
WEZ11035EL02				
WEZ11035EL03				
WEZ11040EL02				
WEZ11050EL03				

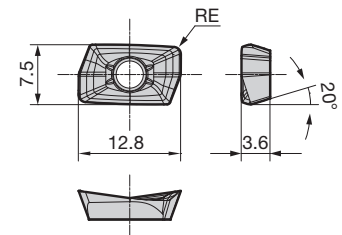
Recommended Tightening Torque (N-m)

● mark: Standard stocked item

Insert

P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metal **S** Exotic Alloy **H** Hardened Steel

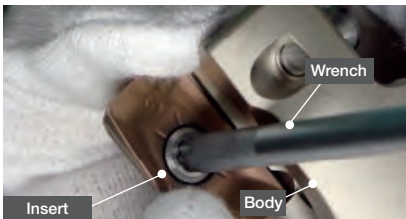
Process	Grade		Coated Carbide					Carbide	DLC	Cermet	Dimensions (mm)
	High-speed/Light	General-purpose	P	K	M	S	N	N	P		
	High-speed/Light	General-purpose	P	K	M	S	N	N	P		
	Roughing										
Cat. No.	ACU2500	ACP2000	ACP3000	ACK2000	ACK3000	ACM200	ACM300	H20	DL2000	T2500A	Nose Radius RE
AOMT11T302PEER-G	○	○	○	○	○	○	○	—	—	○	0.2
AOMT11T304PEER-G	●	○	○	○	○	○	○	—	—	○	0.4
AOMT11T308PEER-G	●	○	○	○	○	○	○	—	—	○	0.8
AOMT11T312PEER-G	○	○	○	○	○	○	○	—	—	○	1.2
AOMT11T316PEER-G	○	○	○	○	○	○	○	—	—	○	1.6
AOMT11T320PEER-G	○	○	○	○	○	○	○	—	—	○	2.0
AOMT11T324PEER-G	○	○	○	○	○	○	○	—	—	○	2.4
AOMT11T330PEER-G	○	○	○	○	○	○	○	—	—	○	3.0
AOMT11T332PEER-G	○	○	○	○	○	○	○	—	—	○	3.2
AOMT11T304PEER-H	●	○	○	○	○	○	○	—	—	—	0.4
AOMT11T308PEER-H	●	○	○	○	○	○	○	—	—	—	0.8
AOMT11T312PEER-H	○	○	○	○	○	○	○	—	—	—	1.2
AOMT11T316PEER-H	○	○	○	○	○	○	○	—	—	—	1.6
AOET11T302PEER-F	○	—	—	—	—	—	—	—	—	—	0.2
AOET11T304PEER-F	●	—	—	—	—	—	—	—	—	—	0.4
AOET11T308PEER-F	●	—	—	—	—	—	—	—	—	—	0.8
AOET11T312PEER-F	○	—	—	—	—	—	—	—	—	—	1.2
AOET11T302PEER-P16	○	—	—	—	—	—	—	—	—	—	0.2
AOET11T304PEER-P16	●	—	—	—	—	—	—	—	—	—	0.4
AOET11T308PEER-P16	●	—	—	—	—	—	—	—	—	—	0.8
AOET11T312PEER-P16	○	—	—	—	—	—	—	—	—	—	1.2
AOET11T302PEER-P20	○	—	—	—	—	—	—	—	—	—	0.2
AOET11T304PEER-P20	●	—	—	—	—	—	—	—	—	—	0.4
AOET11T308PEER-P20	●	—	—	—	—	—	—	—	—	—	0.8
AOET11T312PEER-P20	○	—	—	—	—	—	—	—	—	—	1.2
AOET11T302PEER-P25	○	—	—	—	—	—	—	—	—	—	0.2
AOET11T304PEER-P25	●	—	—	—	—	—	—	—	—	—	0.4
AOET11T308PEER-P25	●	—	—	—	—	—	—	—	—	—	0.8
AOET11T312PEER-P25	○	—	—	—	—	—	—	—	—	—	1.2
AOET11T302PEFR-S	—	—	—	—	—	—	—	○	○	—	0.2
AOET11T304PEFR-S	—	—	—	—	—	—	—	●	●	—	0.4
AOET11T308PEFR-S	—	—	—	—	—	—	—	●	●	—	0.8
AOET11T312PEFR-S	—	—	—	—	—	—	—	○	○	—	1.2



-L: Low Cutting Force, -G: General-purpose, -H: Strong Edge, -F: Medium Finishing, -P16/-P20/-P25: High-precision Machining, -S: Non-ferrous metals.
 * -P16 is applicable to cutter diameters $\phi 14$ and $\phi 16$. -P20 is applicable to cutter diameters $\phi 18$ and $\phi 20$. -P25 is applicable to cutter diameters $\phi 25$ and $\phi 28$.

Precautions for Mounting Inserts

- (1) Clean the mounting seat surface and contact parts.
- (2) While pressing the insert solidly against the seat surface, tighten the screws with the included wrench.
- (3) Apply Anti-seizure Cream to the screws and tighten at the recommended torque.
- (4) After tightening, check that there are no gaps on the seat surface.



* When mounting inserts with nose radius of 3.0 or above, modification of the body is required.



Modify this edge.

Reworking guidelines
 Nose radius = 3.0: C1 (AOMT11T330PEER)
 Nose radius = 3.2: C1 (AOMT11T332PEER)

Standard: R1.

Rake Angle	Radial	-6° to -12°	15mm	90°
	Axial	6° to 15°		

P M K N S



Fig 1

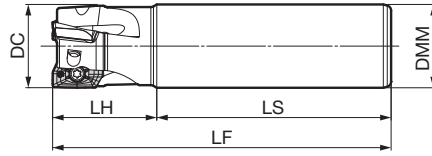
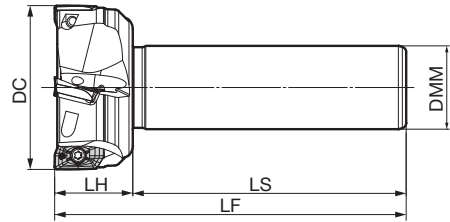


Fig 2



Body (Shank Type)

Dimensions (mm)

Cat. No.	Stock	Dia.		Shank		Head		Shank		Overall Length	Number of Teeth	Weight (kg)	Fig
		DC	DMM	DMM	LH	LS	LF						
WEZ 17025E02	●	25	25	25	35	85	120	2	0.38	1			
WEZ 17025E02-20	●	25	20	20	35	85	120	2	0.25	2			
WEZ 17028E02	●	28	25	25	35	85	120	2	0.40	2			
WEZ 17030E03	●	30	25	25	40	90	130	3	0.43	2			
WEZ 17032E02	●	32	32	32	40	90	130	2	0.71	1			
WEZ 17032E03	●	32	32	32	40	90	130	3	0.69	1			
WEZ 17032E03-25	●	32	25	25	40	90	130	3	0.44	2			
WEZ 17035E03	●	35	32	32	40	90	130	3	0.72	2			
WEZ 17040E03	●	40	32	32	30	105	135	3	0.81	2			
WEZ 17040E04	●	40	32	32	30	105	135	4	0.79	2			
WEZ 17050E03	●	50	32	32	30	105	135	3	0.93	2			
WEZ 17050E03-42	●	50	42	42	30	105	135	3	1.41	2			
WEZ 17050E05	●	50	32	32	30	105	135	5	0.89	2			
WEZ 17050E05-42	●	50	42	42	30	105	135	5	1.37	2			
WEZ 17063E04	●	63	32	32	30	105	135	4	1.10	2			
WEZ 17063E04-42	●	63	42	42	30	105	135	4	1.58	2			
WEZ 17063E06	●	63	32	32	30	105	135	6	1.08	2			
WEZ 17063E06-42	●	63	42	42	30	105	135	6	1.56	2			
WEZ 17080E07	●	80	32	32	30	105	135	7	1.39	2			

Inserts are sold separately.

Identification Code

WEZ 17 025 E 02 -20

Cutter Series Insert Size Cutter Dia. With Shank Number of Teeth Shank Dia.

Parts

Applicable Cutter	Flat Screw		Integrated Wrench	Anti-seizure Cream
WEZ17025E02(-20)	BFTX0407IP			
WEZ17028E02				
WEZ17030E03	BFTX0409IP	3.0	TRDR15IP	SUMI-P
WEZ17032E02				
WEZ17032E03(-25)				
WEZ17035E03				
WEZ17040E03				
WEZ17040E04				
WEZ17050E03(-42)				
WEZ17050E05(-42)				
WEZ17063E04(-42)				
WEZ17063E06(-42)				
WEZ17080E07				

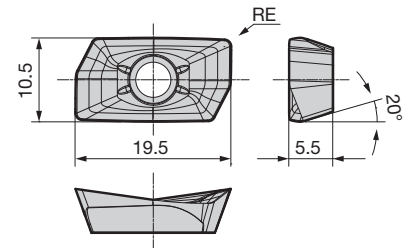
Recommended Tightening Torque (N·m)

● mark: Standard stocked item

Insert

P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metal **S** Exotic Alloy **H** Hardened Steel

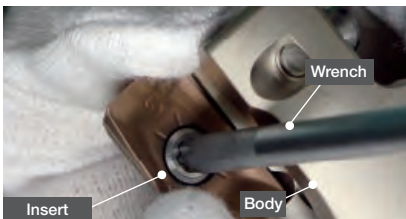
Process	Grade		Coated Carbide					Carbide	DLC	Cermet	Dimensions (mm)
	High-speed/Light	General-purpose	P	K	M	S	N	N	P		
	General-purpose	Roughing	P	K	M	S	N	N			
Cat. No.	ACU2500	ACP2000	ACP3000	ACK2000	ACK3000	ACM200	ACM300	H20	DL2000	T2500A	Nose Radius RE
AOMT 170502PEER-L	○	—	○	—	○	○	○	—	—	○	0.2
AOMT 170504PEER-L	●	—	○	—	○	○	○	—	—	○	0.4
AOMT 170508PEER-L	●	—	○	—	○	○	○	—	—	○	0.8
AOMT 170512PEER-L	○	—	○	—	○	○	○	—	—	○	1.2
AOMT 170516PEER-L	○	—	○	—	○	○	○	—	—	○	1.6
AOMT 170502PEER-G	○	○	○	○	○	○	○	—	—	○	0.2
AOMT 170504PEER-G	●	○	○	○	○	○	○	—	—	○	0.4
AOMT 170508PEER-G	●	○	○	○	○	○	○	—	—	○	0.8
AOMT 170512PEER-G	○	○	○	○	○	○	○	—	—	○	1.2
AOMT 170516PEER-G	○	○	○	○	○	○	○	—	—	○	1.6
AOMT 170520PEER-G	○	○	○	○	○	○	○	—	—	○	2.0
AOMT 170524PEER-G	○	○	○	○	○	○	○	—	—	○	2.4
AOMT 170530PEER-G	○	○	○	○	○	○	○	—	—	○	3.0
AOMT 170532PEER-G	○	○	○	○	○	○	○	—	—	○	3.2
AOMT 170540PEER-G	○	○	○	○	○	○	○	—	—	○	4.0
AOMT 170550PEER-G	○	○	○	○	○	○	○	—	—	○	5.0
AOMT 170564PEER-G	○	○	○	○	○	○	○	—	—	○	6.4
AOMT 170504PEER-H	●	○	○	○	○	○	○	—	—	—	0.4
AOMT 170508PEER-H	●	○	○	○	○	○	○	—	—	—	0.8
AOMT 170512PEER-H	○	○	○	○	○	○	○	—	—	—	1.2
AOMT 170516PEER-H	○	○	○	○	○	○	○	—	—	—	1.6
AOET 170502PEER-F	○	—	—	—	—	—	—	—	—	—	0.2
AOET 170504PEER-F	●	—	—	—	—	—	—	—	—	—	0.4
AOET 170508PEER-F	●	—	—	—	—	—	—	—	—	—	0.8
AOET 170512PEER-F	○	—	—	—	—	—	—	—	—	—	1.2
AOET 170502PEER-P25	○	—	—	—	—	—	—	—	—	—	0.2
AOET 170504PEER-P25	●	—	—	—	—	—	—	—	—	—	0.4
AOET 170508PEER-P25	●	—	—	—	—	—	—	—	—	—	0.8
AOET 170512PEER-P25	○	—	—	—	—	—	—	—	—	—	1.2
AOET 170502PEER-P32	○	—	—	—	—	—	—	—	—	—	0.2
AOET 170504PEER-P32	●	—	—	—	—	—	—	—	—	—	0.4
AOET 170508PEER-P32	●	—	—	—	—	—	—	—	—	—	0.8
AOET 170512PEER-P32	○	—	—	—	—	—	—	—	—	—	1.2
AOET 170502PEFR-S	—	—	—	—	—	—	○	○	—	—	0.2
AOET 170504PEFR-S	—	—	—	—	—	—	●	●	—	—	0.4
AOET 170508PEFR-S	—	—	—	—	—	—	●	●	—	—	0.8
AOET 170512PEFR-S	—	—	—	—	—	—	○	○	—	—	1.2



-L: Low Cutting Force, -G: General-purpose, -H: Strong Edge, -F: Medium Finishing, -P25/-P32: High-precision Machining, -S: Non-ferrous metals.
 *-P25 is applicable to cutter diameters ø25 and ø28. -P32 is applicable to cutter diameters ø30, ø32 and ø35.

Precautions for Mounting Inserts

- (1) Clean the mounting seat surface and contact parts.
- (2) While pressing the insert solidly against the seat surface, tighten the screws with the included wrench.
- (3) Apply Anti-seizure Cream to the screws and tighten at the recommended torque.
- (4) After tightening, check that there are no gaps on the seat surface.



* When mounting inserts with nose radius of 3.0 or above, modification of the body is required.



Modify this edge.

- Reworking guidelines
- Nose radius = 3.0: C1 (AOMT170530PEER)
 - Nose radius = 3.2: C1 (AOMT170532PEER)
 - Nose radius = 4.0: C2 (AOMT170540PEER)
 - Nose radius = 5.0: C5 (AOMT170550PEER)
 - Nose radius = 6.4: C5 (AOMT170564PEER)

Standard: R1.

Rake Angle	Radial	-6° to -12°
	Axial	6° to 15°



Fig 1

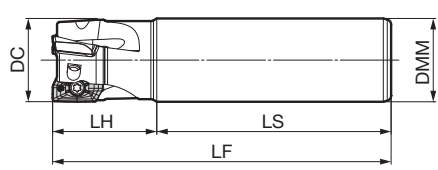
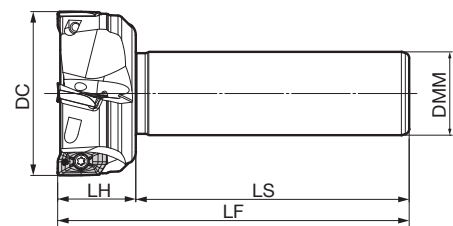


Fig 2



Body (Long Type)

Dimensions (mm)

Cat. No.	Stock	Dia.	Shank	Head	Shank	Overall Length	Number of Teeth	Weight (kg)	Fig
		DC	DMM	LH	LS	LF			
WEZ 17025EL02	●	25	25	50	120	170	2	0.55	1
WEZ 17028EL02	●	28	25	50	120	170	2	0.57	2
WEZ 17030EL02	●	30	25	50	120	170	2	0.59	2
WEZ 17032EL02	●	32	32	60	110	170	2	0.94	1
WEZ 17032EL02-30	●	32	30	50	120	170	2	0.85	2
WEZ 17032EL03	●	32	32	60	110	170	3	0.92	1
WEZ 17035EL02	●	35	32	50	120	170	2	0.98	2
WEZ 17040EL02	●	40	32	50	120	170	2	1.09	2
WEZ 17040EL03	●	40	32	50	120	170	3	1.08	2
WEZ 17040EL04	●	40	32	50	120	170	4	1.05	2
WEZ 17050EL03	●	50	32	50	120	170	3	1.29	2
WEZ 17050EL03-42	●	50	42	50	120	170	3	1.83	2
WEZ 17050EL05	●	50	32	50	120	170	5	1.25	2
WEZ 17050EL05-42	●	50	42	50	120	170	5	1.79	2
WEZ 17063EL04	●	63	32	50	120	170	4	1.61	2
WEZ 17063EL04-42	●	63	42	50	120	170	4	2.16	2
WEZ 17063EL06	●	63	32	50	120	170	6	1.58	2
WEZ 17063EL06-42	●	63	42	50	120	170	6	2.13	2

Inserts are sold separately.

Identification Code

WEZ 17 032 E L 02 -30

Cutter Series Insert Size Cutter Dia. With Shank Long Type Number of Teeth Shank Dia.

Parts

Applicable Cutter	Flat Screw		Integrated Wrench	Anti-seizure Cream
WEZ17025EL02	BFTX0407IP	3.0	TRDR15IP	SUMI-P
WEZ17028EL02				
WEZ17030EL02	BFTX0409IP	3.0	TRDR15IP	SUMI-P
WEZ17032EL02(-30)				
WEZ17032EL03				
WEZ17035EL02				
WEZ17040EL02				
WEZ17040EL03				
WEZ17040EL04				
WEZ17050EL03(-42)				
WEZ17050EL05(-42)				
WEZ17063EL04(-42)				
WEZ17063EL06(-42)				

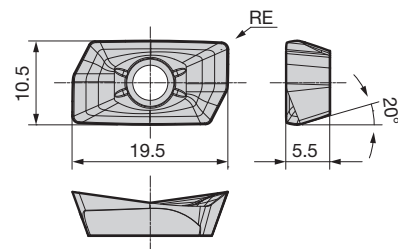
Recommended Tightening Torque (N·m)

● mark: Standard stocked item

Insert

P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metal **S** Exotic Alloy **H** Hardened Steel

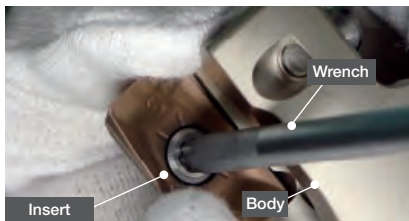
Process	Grade		Coated Carbide		Carbide	DLC	Cermet	Dimensions (mm)			
	High-speed/Light	General-purpose	P	K	M	N	P				
	General-purpose	Roughing	P	K	M	N	P				
Cat. No.	ACU2500	ACP2000	ACP3000	ACK2000	ACK3000	ACM200	ACM300	H20	DL2000	T2500A	Nose Radius RE
AOMT 170502PEER-L	○	—	○	—	○	○	○	—	—	○	0.2
AOMT 170504PEER-L	●	—	○	—	○	○	○	—	—	○	0.4
AOMT 170508PEER-L	●	—	○	—	○	○	○	—	—	○	0.8
AOMT 170512PEER-L	○	—	○	—	○	○	○	—	—	○	1.2
AOMT 170516PEER-L	○	—	○	—	○	○	○	—	—	○	1.6
AOMT 170502PEER-G	○	○	○	○	○	○	○	—	—	○	0.2
AOMT 170504PEER-G	●	○	○	○	○	○	○	—	—	○	0.4
AOMT 170508PEER-G	●	○	○	○	○	○	○	—	—	○	0.8
AOMT 170512PEER-G	○	○	○	○	○	○	○	—	—	○	1.2
AOMT 170516PEER-G	○	○	○	○	○	○	○	—	—	○	1.6
AOMT 170520PEER-G	○	○	○	○	○	○	○	—	—	○	2.0
AOMT 170524PEER-G	○	○	○	○	○	○	○	—	—	○	2.4
AOMT 170530PEER-G	○	○	○	○	○	○	○	—	—	○	3.0
AOMT 170532PEER-G	○	○	○	○	○	○	○	—	—	○	3.2
AOMT 170540PEER-G	○	○	○	○	○	○	○	—	—	○	4.0
AOMT 170550PEER-G	○	○	○	○	○	○	○	—	—	○	5.0
AOMT 170564PEER-G	○	○	○	○	○	○	○	—	—	○	6.4
AOMT 170504PEER-H	●	○	○	○	○	○	○	—	—	—	0.4
AOMT 170508PEER-H	●	○	○	○	○	○	○	—	—	—	0.8
AOMT 170512PEER-H	○	○	○	○	○	○	○	—	—	—	1.2
AOMT 170516PEER-H	○	○	○	○	○	○	○	—	—	—	1.6
AOET 170502PEER-F	○	—	—	—	—	—	—	—	—	—	0.2
AOET 170504PEER-F	●	—	—	—	—	—	—	—	—	—	0.4
AOET 170508PEER-F	●	—	—	—	—	—	—	—	—	—	0.8
AOET 170512PEER-F	○	—	—	—	—	—	—	—	—	—	1.2
AOET 170502PEER-P25	○	—	—	—	—	—	—	—	—	—	0.2
AOET 170504PEER-P25	●	—	—	—	—	—	—	—	—	—	0.4
AOET 170508PEER-P25	●	—	—	—	—	—	—	—	—	—	0.8
AOET 170512PEER-P25	○	—	—	—	—	—	—	—	—	—	1.2
AOET 170502PEER-P32	○	—	—	—	—	—	—	—	—	—	0.2
AOET 170504PEER-P32	●	—	—	—	—	—	—	—	—	—	0.4
AOET 170508PEER-P32	●	—	—	—	—	—	—	—	—	—	0.8
AOET 170512PEER-P32	○	—	—	—	—	—	—	—	—	—	1.2
AOET 170502PEFR-S	—	—	—	—	—	○	○	—	—	—	0.2
AOET 170504PEFR-S	—	—	—	—	—	●	●	—	—	—	0.4
AOET 170508PEFR-S	—	—	—	—	—	●	●	—	—	—	0.8
AOET 170512PEFR-S	—	—	—	—	—	○	○	—	—	—	1.2



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 *-P25 is applicable to cutter diameters ø25 and ø28. -P32 is applicable to cutter diameters ø30, ø32 and ø35.

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- (1) Clean the mounting seat surface and contact parts.
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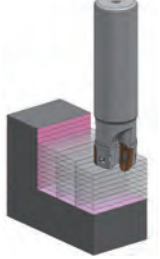
Modify this edge.

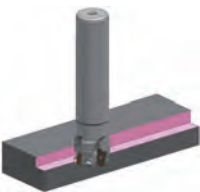
- Reworking guidelines
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 - Nose radius = 3.2: C1 (AOMT170532PEER)
 - Nose radius = 4.0: C2 (AOMT170540PEER)
 - Nose radius = 5.0: C5 (AOMT170550PEER)
 - Nose radius = 6.4: C5 (AOMT170564PEER)

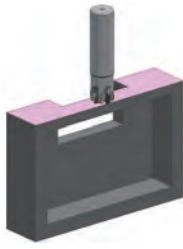
Standard: R1.


Application Examples


S40C Hub		Sumitomo	Competitor's Product
Vertical Machining Centre BT40 	Tool	WEZ17025E02	Double-Sided, 4 Corners
	Grade	ACU2500	—
	Chipbreaker	G	—
	Cutter Dia. (mm)	25	25
	Number of Teeth	2	2
	V_c (m/min)	120	120
	V_f (mm/min)	300	300
	f_z (mm/t)	0.066	0.066
	a_p (mm)	9	9
	a_e (mm)	5	5
	Coolant	Wet	Wet
	Results	The high chattering sound typical of thin workpieces is gone, and stable machining enables longer tool life.	

S50C Machine Component		Sumitomo	Competitor's Product
Vertical Machining Centre BT50 	Tool	WEZ17032E03	Single-Sided, 2 Corners
	Grade	ACU2500	—
	Chipbreaker	G	—
	Cutter Dia. (mm)	32	32
	Number of Teeth	3	3
	V_c (m/min)	75	75
	V_f (mm/min)	225	225
	f_z (mm/t)	0.1	0.1
	a_p (mm)	4	4
	a_e (mm)	22	22
	Coolant	Wet	Wet
	Results	Drastically reduced cutting edge damage with same number of output. Able to continue use, tool life increased	

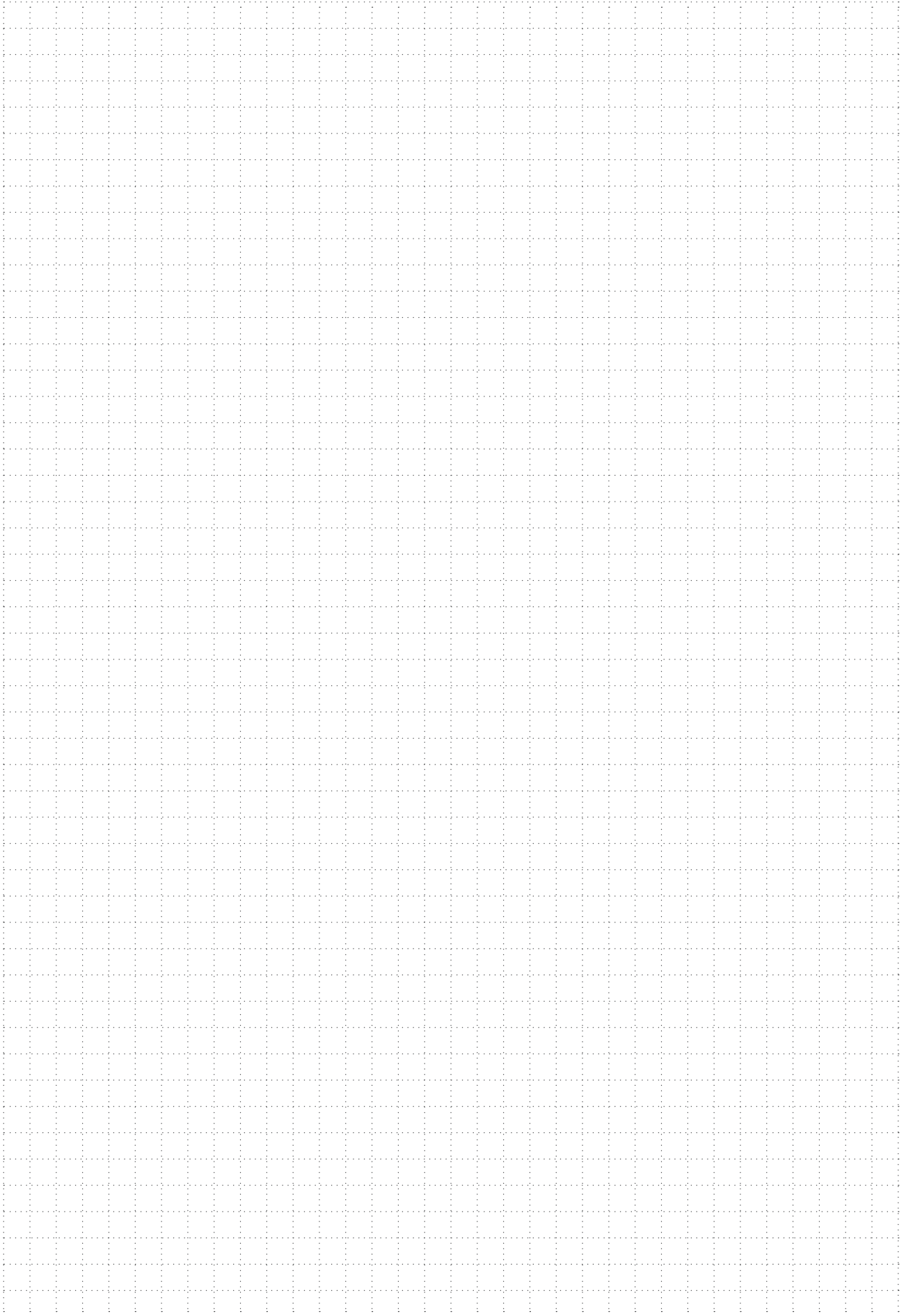
SUS304 Machine Component		Sumitomo	Competitor's Product
Vertical Machining Centre BT40 	Tool	WEZ11028E04	—
	Grade	ACU2500	—
	Chipbreaker	G	—
	Cutter Dia. (mm)	28	28
	Number of Teeth	4	4
	V_c (m/min)	150	150
	V_f (mm/min)	1350	1350
	f_z (mm/t)	0.2	0.2
	a_p (mm)	2	2
	a_e (mm)	10	10
	Coolant	Dry	Dry
	Results	Tool life increased Stable machining achieved	

FC250 Mounting Base		Sumitomo	Competitor's Product
Vertical Machining Centre BT50 	Tool	WEZ11032E05	Single-Sided, 2 Corners
	Grade	ACK3000	—
	Chipbreaker	G	—
	Cutter Dia. (mm)	32	32
	Number of Teeth	5	4
	V_c (m/min)	220	220
	V_f (mm/min)	1100	900
	f_z (mm/t)	0.1	0.1
	a_p (mm)	2	2
	a_e (mm)	20	20
	Coolant	Dry	Dry
	Results	Efficiency increased Even thin areas can be machined without chatter	

FC300 Table		Sumitomo	Competitor's Product
5-axis Control Vertical Machining Centre HSK-A63 	Tool	WEZ11040E06	—
	Grade	ACU2500	—
	Chipbreaker	G	—
	Cutter Dia. (mm)	40	40
	Number of Teeth	6	6
	V_c (m/min)	200	200
	V_f (mm/min)	1300	1300
	f_z (mm/t)	0.135	0.135
	a_p (mm)	2	2
	a_e (mm)	20	20
	Coolant	Wet	Wet
	Results	Stable machining possible even for thin workpieces or low-rigidity machines	

FC250 Machine Component		Sumitomo	Competitor's Product
Horizontal Machining Centre: BT50 	Tool	WEZ11050RS07	Single-Sided, 2 Corners
	Grade	ACU2500	—
	Chipbreaker	G	—
	Cutter Dia. (mm)	50	50
	Number of Teeth	7	5
	V_c (m/min)	180	180
	V_f (mm/min)	805	574
	f_z (mm/t)	0.1	0.1
	a_p (mm)	0.3	0.3
	a_e (mm)	10	10
	Coolant	Wet	Wet
	Results	Quiet machining sounds for improved machining efficiency Good surface finish quality with 3µm parallelism and 4µm flatness	

MEMO





- 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.

< SAFETY NOTES >

- 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.

- 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.

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