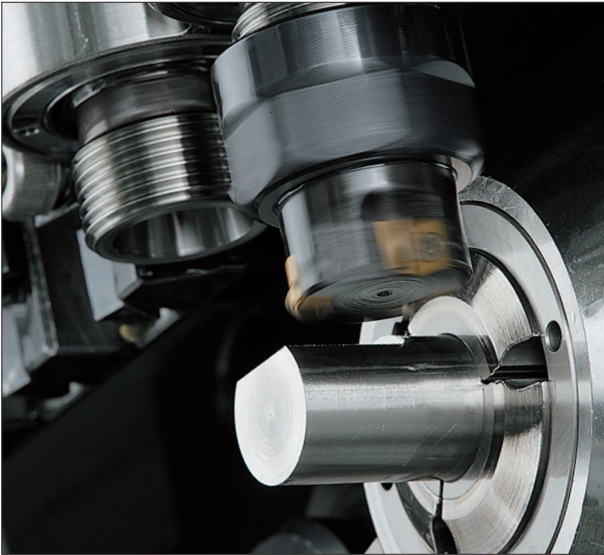
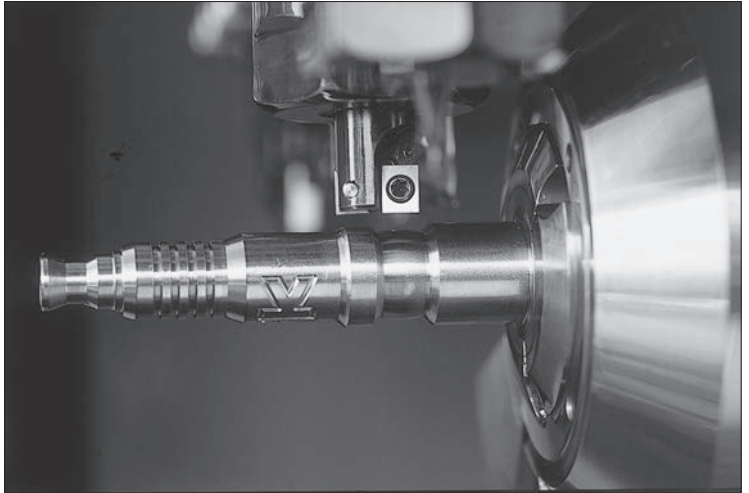


Small Diameter Indexable Endmills



Features

- Attach 20mm end mills in ER16 collet
- Just change inserts to index. No need to make any adjustments
- High quality surface finish, as low as 1um (Rz) when wiper inserts are used
- Corner radius as small as 0.05mm
- In addition to D cut, ramp machining can be performed*

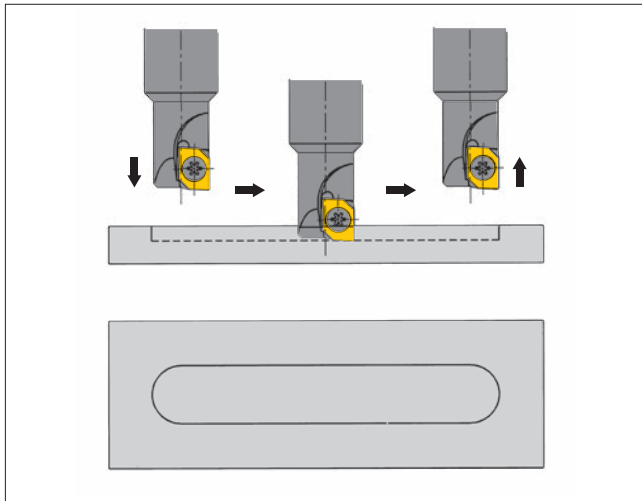
*A combination of single-blade type endmills and inserts with center blade is required

[Recommended Cutting Conditions]

Work Material	Speed (m/min)	Axial feed (mm/t)	Traverse feed (mm/t)	Depth of cut (mm)	Width of cut
Steel	80 - 120	~0.03	~0.05	~3.0	~50% of cutter diameter
Stainless Steel	40 - 60	~0.02	~0.04	~2.0	~50% of cutter diameter

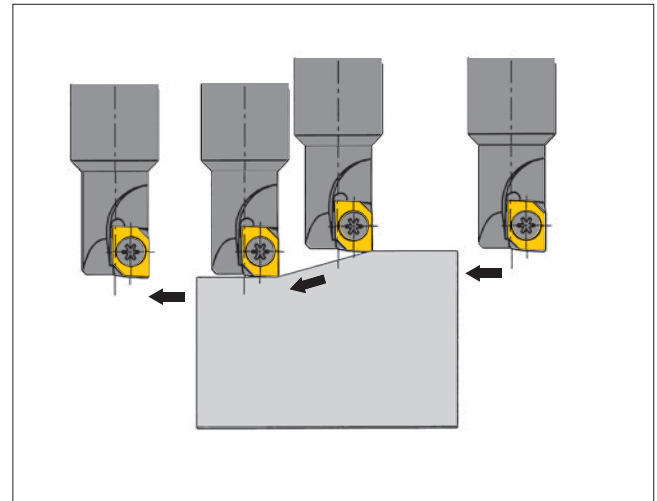
Application Example

Application Example-1



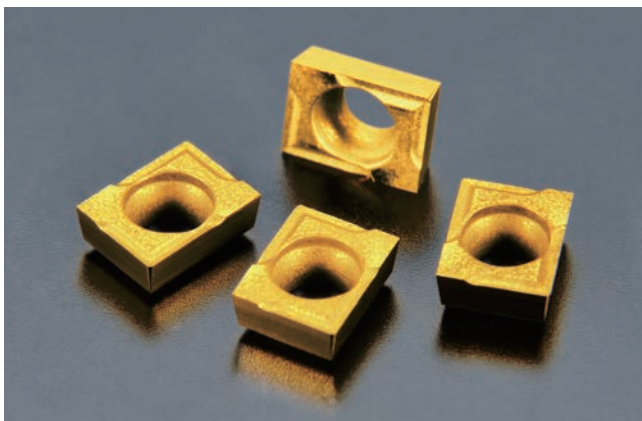
- A single tooth endmill equipped with a center cutting edge insert can be used for both plunge and side cut operations.

Application Example-2



- A single tooth endmill equipped with a center cutting edge insert can be used for slope milling operations.

Insert



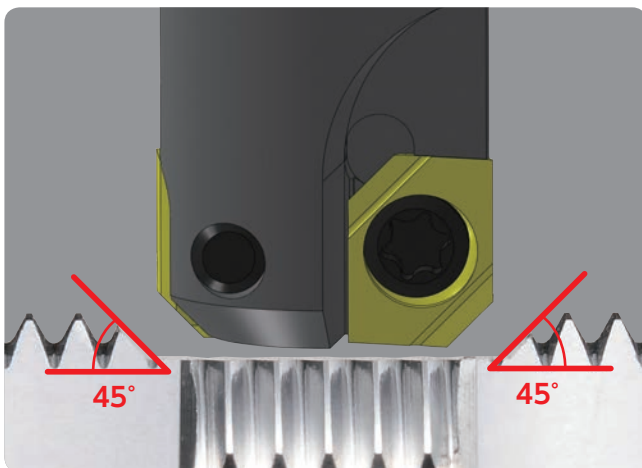
Wiper

- Excellent surface finish obtained with new wiper insert

Chipbreaker

- Less tool pressure with chipbreaker

45°



Chamfered surface finish insert

S45C	
Speed : 95 m/min	
Feed : 0.14 mm/rev	
DOC : 1.0 mm	
WET	
NTK : QM3 C45 type	700 pcs
Competitor's solid endmill	500 pcs

Endmills

REZ Series

REZ

<D cutting = lead angle 90 type end milling tool>

<D cutting = lead angle 45 type end milling tool>

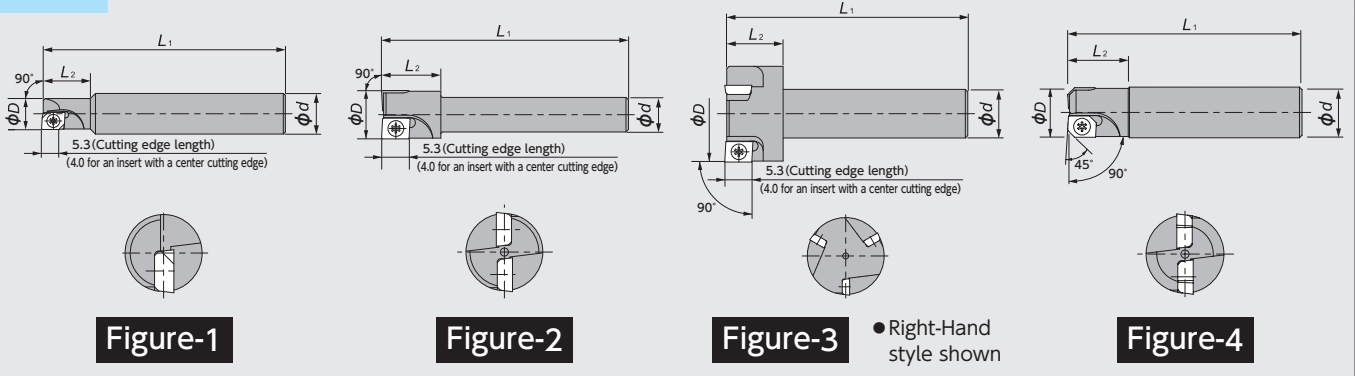


Figure-1

Figure-2

Figure-3

Figure-4

● Right-Hand style shown

REZ Series - Toolholders

Figure	Code No.	Item Number	Stock		No. of teeth	Dimensions (mm)				Gage insert	Spare Parts				
			R	L		ϕD	ϕd	L_1	L_2		Clamp screw	Wrench			
1	5276498	REZ080C1R212	●		1	8	10	60	12	CZH04: : CFR: :	FS102-2.2 * 4.0	T-07			
	5285812	100C1R218	●										75		
2	5520317	REZ100B2R329	●		2	10	5	40	10	CZH04: : CFR: :	FS102-2.2 * 4.3	T-07			
	5120936	100C2R133	●										6		
	5120951	100C2R132	●										7		
	5137971	100C2R141	●										50	12	
	5355458	120C2R141	●												12
	5355466	140C2R141	●												14
3	5520325	REZ150B3R330	●		3	15	5	40	10	CZH04: : CFR: :	FS102-2.2 * 4.3	T-07			
	5496088	200M3R319	●										7		
	5496096	200M3R320	●										10		
4	5880281	REZ100C2R461	●		2	10	10	50	12	CZH0400CFR-C45 CZH04: : CFR: :	FS102-2.2 * 4.3	T-07			
	5880299	100C2R466	●										7		

REZ Series - Inserts

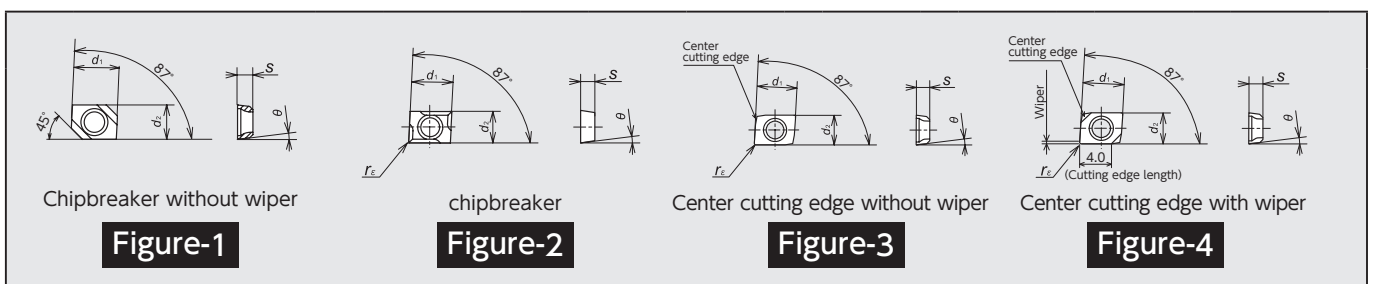


Figure-1

Figure-2

Figure-3

Figure-4

Figure	Item Number	Dimensions (mm)					PVD Coated Carbide									
		d_1	d_2	s	θ	C or r_E	ZM3	Stock	TM4	Stock	DT4	Stock	QM3	Stock	DM4	Stock
1	CZH0400CFR-C45 ※	5.56	4.20	1.88	7°	C1.35					5880315	●	5880307	●		
2	CZH04005CFR-BL 0402CFR-BL	5.56	4.20	1.88	7°	0.05			5819008	●					5900907	●
									5818984	●				5900915	●	
3	CZH04005CFR-070 0402CFR-070	5.56	4.20	1.88	7°	0.05	5230479	●	—	—	5849815	●				
							5120944	●	—	—	5849823	●				
4	CZH04005CFR-140 0402CFR-140	5.56	4.20	1.88	7°	0.05	5310883	●	—	—	5849831	●				
							5310958	●	—	—	5849849	●				
	CZH05005CFR-141 0502CFR-141	5.28	5.56	2.18	10°	0.05	5310925	●	—	—						
							5310909	●	—	—						

※ Must be used with REZ100C2R461/466Cutters.