

THE NEW VALUE FRONTIER



CERATIP®

KYOCERA Cutting Tools

CP152-1-E

# CJ Chipbreaker

Specialist of shaft processing

## Advantages

1. Smooth chip evacuation and low cutting force at small depth of cut high feed rates
2. Improved chip evacuation at profiling and pulling up
3. When combined with the CA55 series, high efficiency and long tool life is assured for shaft profiling

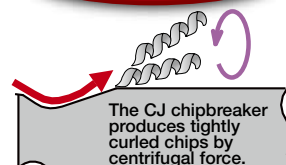
## Chipbreaker geometry

Moderate slant chipbreaker for large D.O.C and high feed rate cutting

Make curl with chipbreaker for small D.O.C and high feed rate cutting

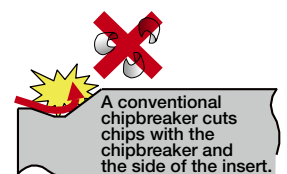
Improve chip evacuation for up cutting by rake angle of edge line cutting

### CJ chipbreaker



Smooth and stable cutting high feed rates




### Conventional chipbreaker



Chip stuck, on the surface, dots damage

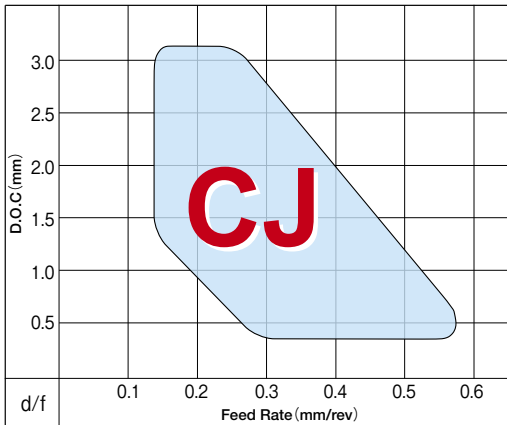


## Stock Items

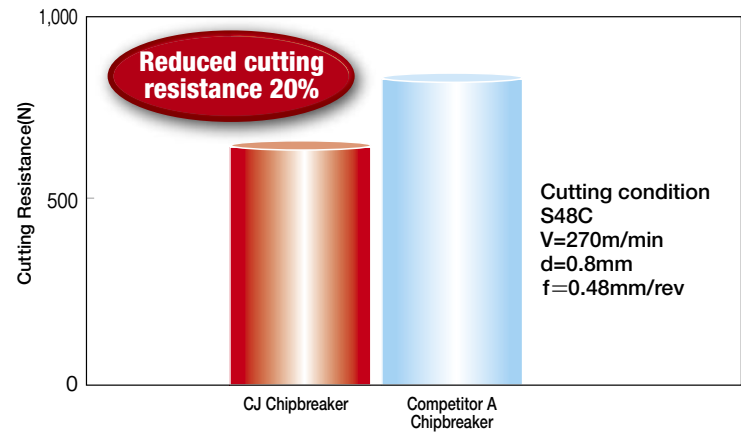
Shape	Description	Dimension (mm)						Stock Grades			
		I.C.	Thickness	Hole	Corner-R	Relief Angle	CVD Coated				
							CA5505	CA5515	CA5525	CA5535	
	CNMG 120408CJ 120412CJ	12.70	4.76	5.16	0.8 1.2	-	● ●	● ●	● ●	● ●	
	CNMG 160612CJ 160616CJ	15.875	6.35	6.35	1.2 1.6	-	● ●	● ●	● ●	● ●	
	DNMG 150408CJ 150412CJ	12.70	4.76	5.16	0.8 1.2	-	● ●	● ●	● ●	● ●	
	DNMG 150608CJ 150612CJ	12.70	6.35	5.16	0.8 1.2	-	● ●	● ●	● ●	● ●	
	WNMG 080408CJ 080412CJ	12.70	4.76	5.16	0.8 1.2	-	● ●	● ●	● ●	● ●	

● : Standard Stock

## Chip Control Range

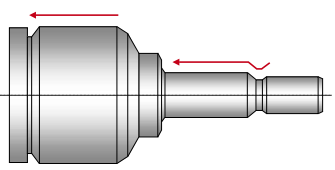


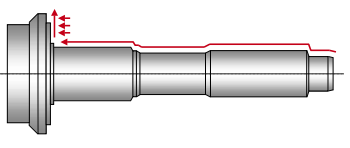
## Cutting Force Comparison



Internal evaluation

## Case Studies

<b>S50C</b>	<ul style="list-style-type: none"> <li>·CVJ</li> <li>·V=250 m/min</li> <li>·d=0.5~1.0 mm</li> <li>·f=0.3~0.35 mm/rev</li> <li>·WET</li> <li>·DNMG150412CJ (CA5515)</li> </ul> 
<b>CJ Chipbreaker</b>	130pcs/edge
Competitor B	100pcs/edge
<p>The Chipbreaker improved tool life more than 30% compared to the competitor B and showed better chip evacuation.</p> <p style="text-align: right;">Evaluation from the user</p>	

<b>S45C</b>	<ul style="list-style-type: none"> <li>·Shaft</li> <li>·V=150~260 m/min</li> <li>·d=0.5~1.2 mm</li> <li>·f=0.2 mm/rev</li> <li>·WET</li> <li>·DNMG150412CJ (CA5515)</li> </ul> 
<b>CJ Chipbreaker</b>	90pcs/edge Stable
Competitor C	80pcs/edge
<p>The CJ Chipbreaker shows better chip evacuation and stable edge condition compared to competitors'.</p> <p style="text-align: right;">Evaluation from the user</p>	