



PF Chipbreaker

for Micro Boring



Excellent Chip Control and Low Cutting Force for Micro Boring

Superior Chip Control in a Wide Range of Cutting Conditions

Minimum Cutting Diameter $\varnothing 5\text{mm}$ ~

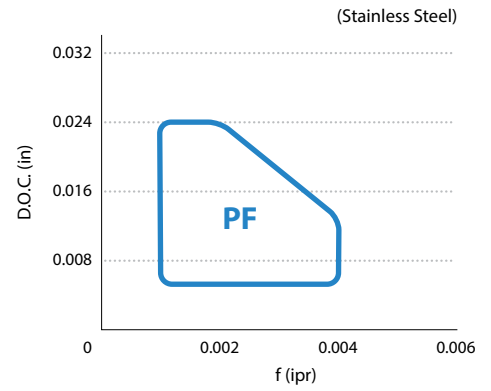
Anti-welding Properties with Improved Mirror Surface Finish



PF Chipbreaker

Excellent Chip Control and Low Cutting Force for Micro Boring

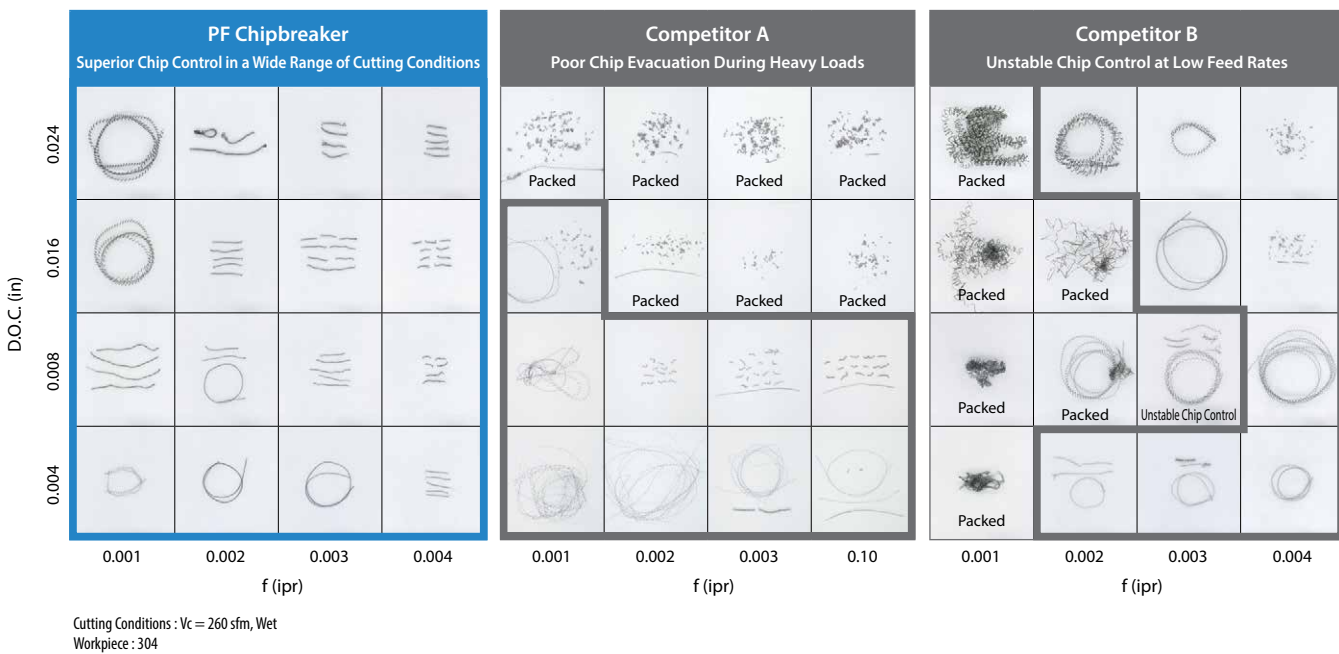
Applicable Chipbreaker Range



1 Excellent Chip Control

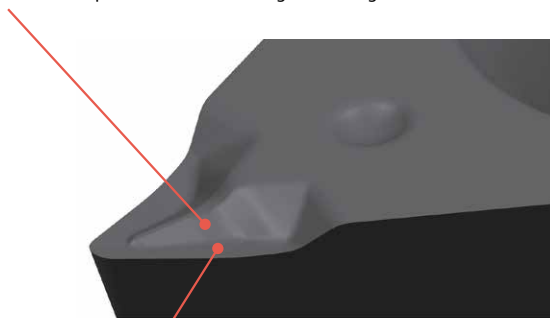
Superior chip control for micro boring (Minimum cutting diameter $\varnothing 5\text{mm}$ ~)

Chip Control Comparison (Internal Evaluation)



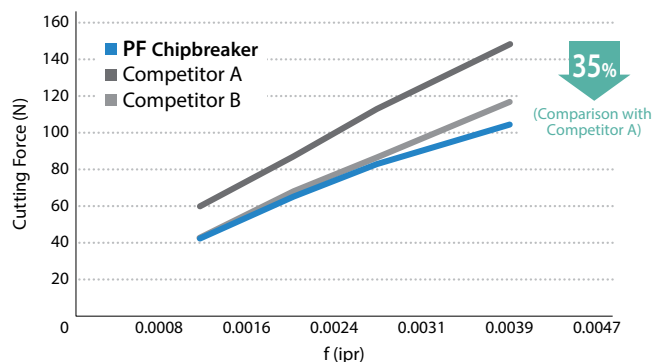
2 Improved Cutting Edge with a Low Cutting Force Design

Optimized Edge Design
Excellent Chip Control in a Wide Range of Cutting Conditions



Large Rake Angle and Low Cutting Forces
Sharpened Cutting Edge Reduces Cutting Forces

Cutting Force Comparison (Internal Evaluation)



Lower Cutting Force Compared with Competitor A and B

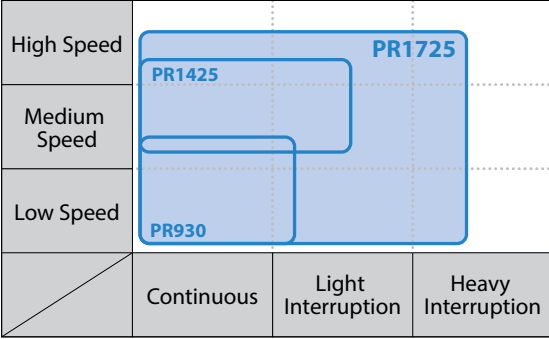
Cutting Conditions : $V_c = 260 \text{ sfm}$, D.O.C. = 0.016", Wet
Workpiece : 304

3 High Precision with Periphery Grinding and Sharp Edge Specification

4 Anti-welding Properties with Improved Mirror Surface Finish

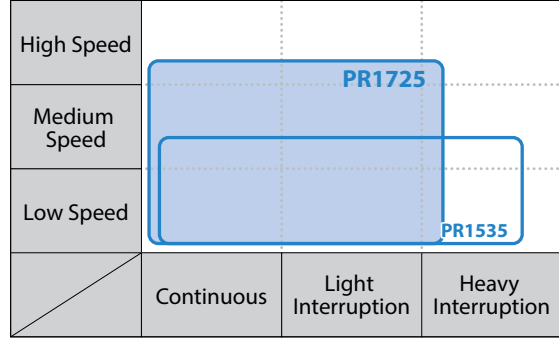
Application Maps

Steel



PR1725 : 1st Recommendation for Steel

Stainless Steel



PR1725 : For general purpose high-speed machining

PR1535 : 1st Recommendation for stainless steel machining with long tool life and high-quality surface finish

High Precision Machining when Combining with EZ Bar PLUS

EZ Bar PLUS Indexable EZ Bar for Small Diameter Boring High Precision Solid Bar with Convenience of Indexable Inserts Reduces Machining Costs

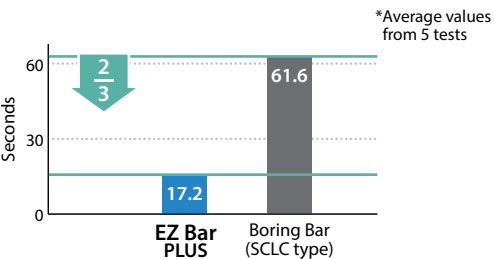
● Minimum Bore Diameter 5mm

Carbide or steel bars can be selected depending on the machining purpose

● Reduces Instal Times by 1/3

The EZ adjust structure features much lower mounting times compared to conventional boring bars

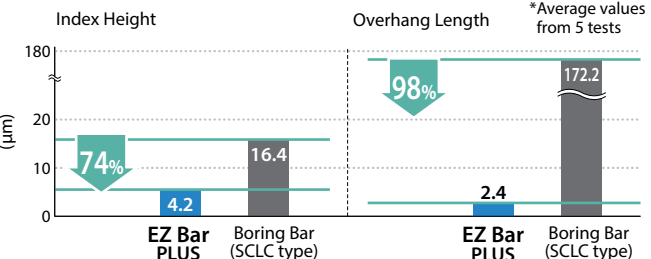
Mounting Time Comparison (Internal Evaluation)



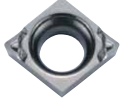
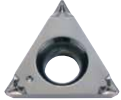

● Excellent and Accurate Repeatability

The EZ adjust structure features higher repeatability accuracy compared with conventional boring bars

Repeatability Comparison (Internal Evaluation)

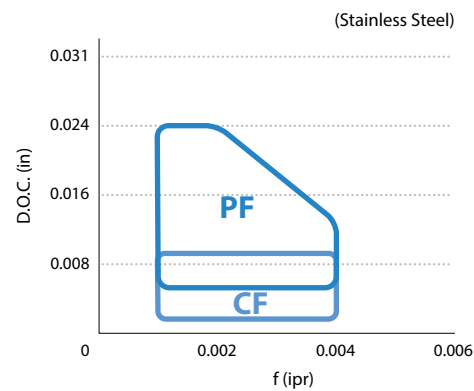
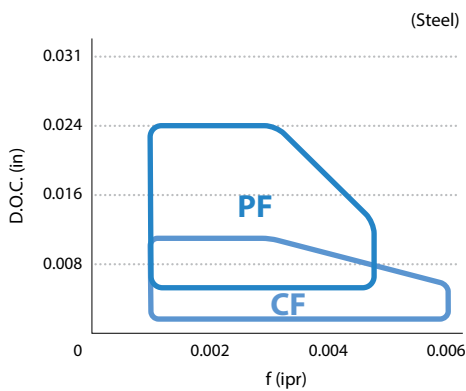


Inserts

Shape	Part Number	Dimensions (in)					Grade		
		IC	Thickness	Hole	Corner-R (RE)	Relief Angle	MEGACOAT NANO		
							PR1725	PR1535	PR1425
 Sharp Edge / Polished	CCGT 110902MFP-PF	0.138	0.055	0.075	< 0.004	7°	●	●	●
	110905MFP-PF				< 0.008		●	●	●
	CCGT 141102MFP-PF	0.169	0.071	0.091	< 0.004	7°	●	●	●
	141105MFP-PF				< 0.008		●	●	●
	CCGT 21502MFP-PF	1/4	3/32	0.110	< 0.004	7°	●	●	●
	21505MFP-PF				< 0.008		●	●	●
2151MFP-PF	< 1/64				●		●	●	
 Sharp Edge / Polished	TBGT 12102MFP-PF	5/32	1/16	0.091	< 0.004	5°	●	●	●
	12105MFP-PF				< 0.008		●	●	●
	1211MFP-PF				< 1/64		●	●	●
	TPGT 181502MFP-PF	7/32	3/32	0.118	< 0.004	11°	●	●	●
	181505MFP-PF				< 0.008		●	●	●
	18151MFP-PF				< 1/64		●	●	●
 Sharp Edge / Polished	WBGT 12102MFP ⁹⁰ L-PF	5/32	1/16	0.091	< 0.004	5°	●	●	●
	12105MFP ⁹⁰ L-PF				< 0.008		●	●	●
	WBGT 151502MFP ⁹⁰ L-PF	3/16	3/32	0.091	< 0.004	5°	●	●	●
	151505MFP ⁹⁰ L-PF				< 0.008		●	●	●

● : Standard Item

Applicable Chipbreaker Range



KYOCERA Precision Tools

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