

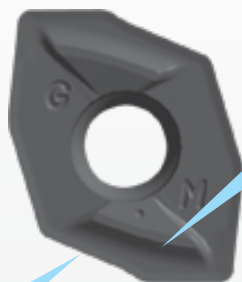


Three chipbreakers for a variety of materials

◆ GM Chipbreaker...General Cutting

For Steel: PR1230

For Cast Iron: PR1210



① Wider chipbreaker can cover a variety of materials

② Achieves good balance of cutting edge strength and sharp cutting

For general cutting

Optimized cutting edge strength, sharpness and chip control

◆ GH Chipbreaker...Tough Edge

For hard materials, interrupted machining: PR1230



1st recommended chipbreaker for hard materials & interrupted operations

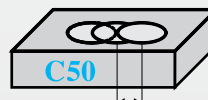
Cutting edge strength oriented design of chipbreaker

② Cutting edge strength oriented design

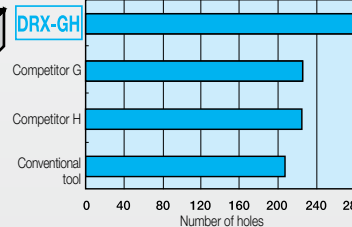
① Wider chipbreaker control breakage by pressed chips

• Chipping resistance comparison

$V_c=260$ sfm, $f=0.003$ ipr, $H=0.39$ ", $D_c=\phi 0.79$ ", 3D type, WET, C50 (S50C)



Interrupted drilling by displacing center of hole by 8mm



Better chipping resistance than competitors

◆ SM Chipbreaker...Sharp Cutting for Deeper Drilling

For Stainless Steel, Low Carbon Steel: PR1225



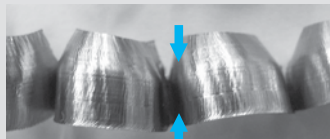
② Sharp cutting by large rake angle

① U-shaped cutting edge breaks chips by growing cracks from both ends

For deep drilling of difficult to control chips materials such as stainless steel and low carbon steel

Sharp cutting by large rake angle
Stable chip control by newly designed chipbreaker and U-shaped cutting edge

Outstanding chip control achieved by splitting chips from the outer edges



Chip breaking system of SM chipbreaker (Outer edge)

