

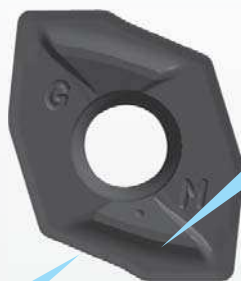
design developed through comprehensive technology

3 chipbreakers to cover various materials

◆ GM Chipbreaker...General Cutting

For Steel: PR1230

For Cast Iron: PR1210



① Wider chipbreaker can cover variety of materials

② Achieved 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

• Chipping resistance comparison

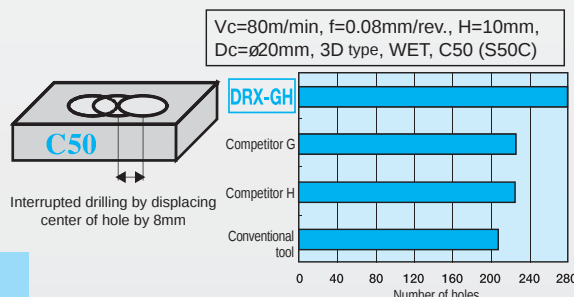


1st recommended chipbreaker for hard materials interrupted operation

Cutting edge strength oriented design of Chipbreaker

② Cutting edge strength oriented design

① Wider chipbreaker control breakage by pressed chips



Better chipping resistance than competitors

◆ SM Chipbreaker...Sharp Cutting, for Deeper Drilling

For Stainless Steel, Low Carbon Steel: PR1225

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



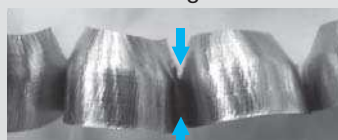
**Sharp cutting by large rake angle
Stable chip control by newly designed chipbreaker and U-shaped cutting edge**



② Sharp cutting by large rake angle

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

Outstanding chip control achieved by splitting chips from the enter edges



Chip breaking system of SM chipbreaker (Outer edge)

