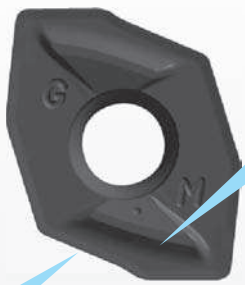
design developed through comprehensive technology

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 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

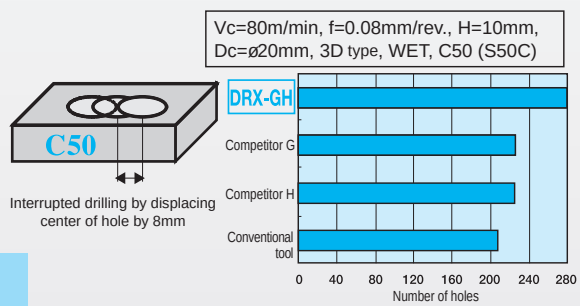
1st recommended chipbreaker for hard materials interrupted operation

Cutting edge strength oriented design of Chipbreaker

① Wider chipbreaker control breakage by pressed chips

② Cutting edge strength oriented design

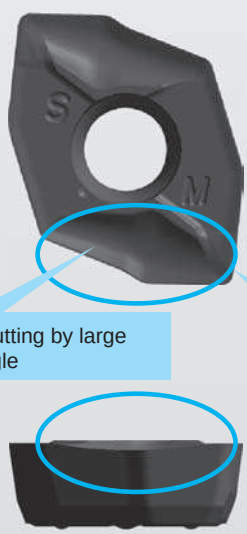
• Chipping resistance comparison



Better chipping resistance than competitors

SM Chipbreaker…Sharp Cutting, for Deeper Drilling

For Stainless Steel, Low Carbon Steel: PR1225



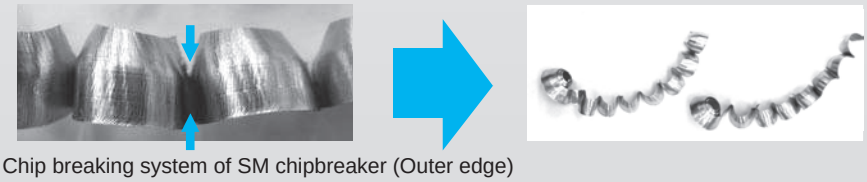
For deep drilling of difficult to control chip materials such as stainless steel and low carbon steel

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

② Sharp cutting by large rake angle

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

Outstanding chip control achieved by splitting chips from the leading edges



Chip breaking system of SM chipbreaker (Outer edge)