

CoroCut® 2

Versatile parting and grooving



CoroCut® 1-2, the number one versatile parting and grooving concept on the market, will now be upgraded.

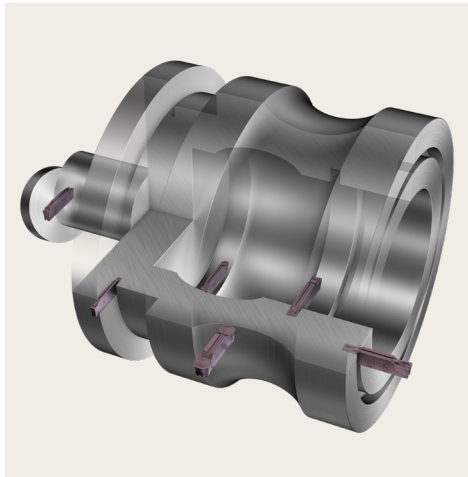
You can expect the same outstanding performance with CoroCut® 2 – and more. Upgraded state-of-the-art inserts, new and updated grades and improved stability, always with two cost-efficient edges.

Amazingly safe, amazingly versatile

- Rail insert interface ensures a stable and precise insert position
- Wiper insert design for excellent surface finish
- Neutral, right- and left-hand style inserts with geometries designed for parting off
- Grooving inserts with multiple widths and corner radii
- Profiling inserts for high-precision profiling operations
- Optimized geometries for turning wider grooves
- Tools with precision coolant for process security and longer tool life



Main benefits



Versatility

- Geometries covering all parting and grooving applications
- Grades for a wide range of workpiece materials
- Tool holders available for all common machines



Cost efficiency

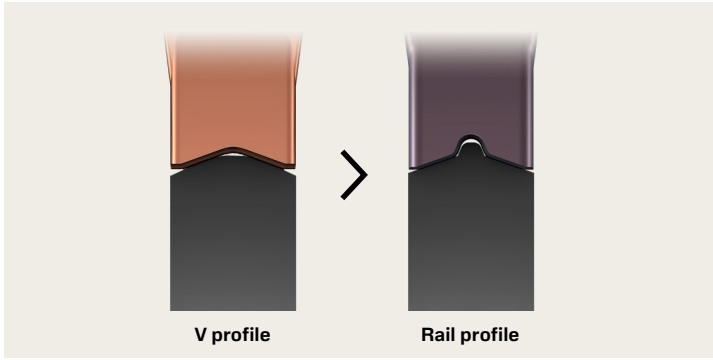
- First choice for cost-efficient machining in applications where it is possible to use double-edged inserts
- Two edges offer a longer tool life per insert compared to single-edged concepts designed for one specific application



Secure, productive machining

- Process security and productivity are crucial in parting and grooving — the correct set-up and choice of tools prevent problems
- The wide range of geometries and tools with precision coolant enables optimization for different machining conditions

New features



Improved stability for small insert seats

CoroCut® 2 features the well established rail interface for all insert sizes, even the smaller ones.

The rail design ensures a more precise insert position and minimizes insert movement for improved stability, especially when lateral forces are exerted on the inserts.



New high-performance grades with enhanced edge line security

CoroCut® 2 inserts are produced using a unique, in-house developed patented technology which results in higher quality and less spreading of the edge line.

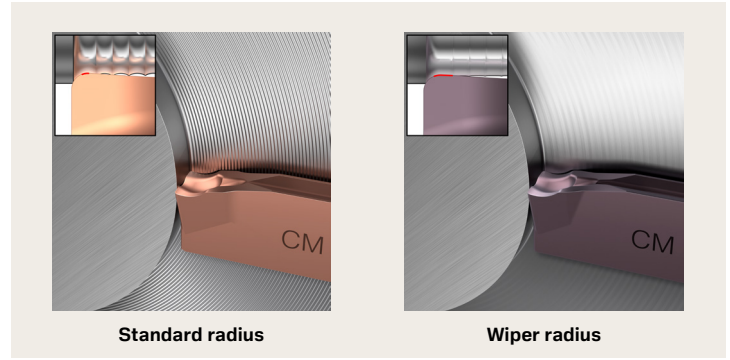
The first choice grade GC1225, which offers superior flank wear resistance and edge line toughness, is ideal for all parting, grooving and turning operations in good conditions.

Grade GC4425 offers an excellent combination of high wear resistance and good edge security for grooving, turning and parting off operations in stable conditions.

Application

CoroCut® 2 is a cost-efficient solution for cutting depths where double-edged inserts can be used. CoroCut® QD and CoroCut® QF are the best choices for larger depths of cut, while CoroCut® QI is recommended for face and internal grooving in small diameters.

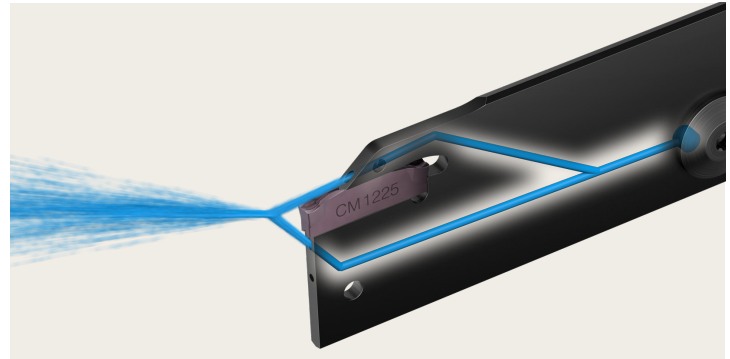
- Parting off
- External grooving
- Internal grooving
- Face grooving
- Profiling
- Hard part turning
- Roughing to finishing



Wiper design for all geometries

Wiper inserts allow you to machine components at high feed rates without compromising on the surface finish and chip breaking capability.

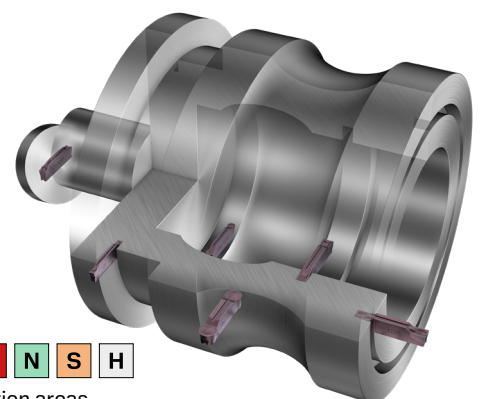
A general guideline is: twice the feed rate, same surface finish. Same feed rate, twice the surface finish quality.



Improved clamping design

CoroCut® 2 parting blades are upgraded with internal coolant and an improved clamping finger design, which ensures a higher clamping force and better lateral stability. This results in enhanced performance when making chamfers before parting off.

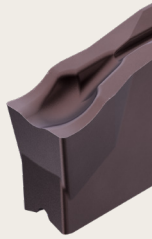
Tool holders with precision coolant are updated with a screw clamp solution. Combined with the new rigid rail insert seat design, machining is more reliable than ever, keeping insert movement to a minimum with no reduction in clamping force.



ISO application areas

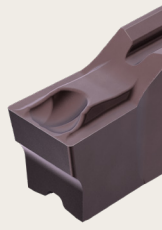
Geometries

First choice for optimal center parting off in most materials and light intermittent applications, for example parting hexagonal bars.



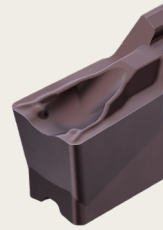
-CM

Ground geometry used with low feed for precision grooving. Low cutting forces and good surface finish. Available in many cutting widths and grades.



-GF

The most universal geometry in CoroCut®, ideal for use in all application areas. Designed for low feed and good chip control. Good surface finish thanks to the wiper design.



-TF

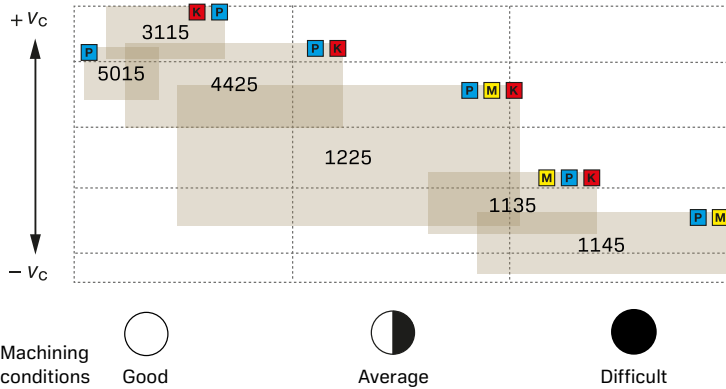
Universal profiling geometry with a wide cutting data window. Excellent performance when used in non-linear profiling. Flashlight technology for edge line quality, enabling -RM in grade S205.



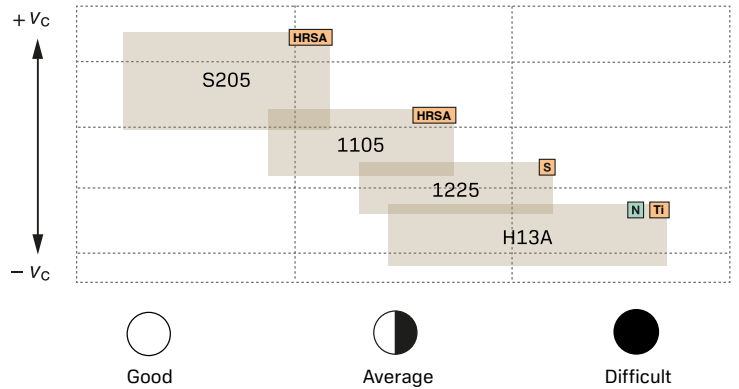
-RM

Grade positioning

Main grades



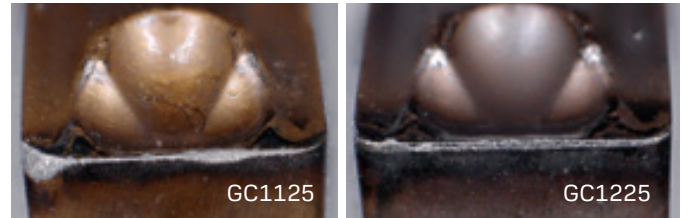
Complementary grades



Performance case: Grade GC1225

Component: Automotive component
Workpiece material: Machined, P2.1.Z.AN, 180 HB
Operation: External grooving, finishing, emulsion

	GC1125	GC1225
Insert	N123H2-0400-0004-GF 1125	C2I-H2N-0400-0004-GF 1225
v_c , m/min (ft/min)	260 (853)	260 (853)
f_n , mm/rev (in/rev)	0.15 (0.006)	0.15 (0.006)
Tool life, pcs	178	243



Result: Grade GC1225 increased the tool life by 36% compared to the existing grade GC1125.

Learn more about CoroCut® 2
sandvik.coromant.com/corocut2



Authorized distributor

