

**SANDVIK**  
Coromant

# CoroDrill® 880



# Boost your production economy

Indexable drills are truly cost efficient, and with the reinforced CoroDrill® 880 you can really boost your production economy.

The enhanced drill body is up to 30% stiffer than its predecessor for applications of four to five times the drill diameter. This gives you a more reliable drilling experience and a much better hole quality.

Combine this experience with the new grade chain for steel and cast iron for improved insert tool life. Two of the insert grades are designed with Inveio™ coating for better wear resistance, while the third, optimized for tough machining conditions, has a thin PVD coating with excellent edge-line properties. These three grades complete the full grade chain with solutions for all materials and a large variety of applications.

The new grade positioning is designed to make it easier to select the right grade from the start.



Patrik Pichler  
Global Product Manager,  
indexable short hole drills

## Application

The CoroDrill 880 product range covers hole diameters from 12 to 84 mm (0.472-3.307 inch) off the shelf, as well as engineered solutions up to 129 mm (5.078 inch). The drills produce holes with tolerances of H12-13 and are suitable for holes up to five times the drill diameter.

## Avoiding undersized holes

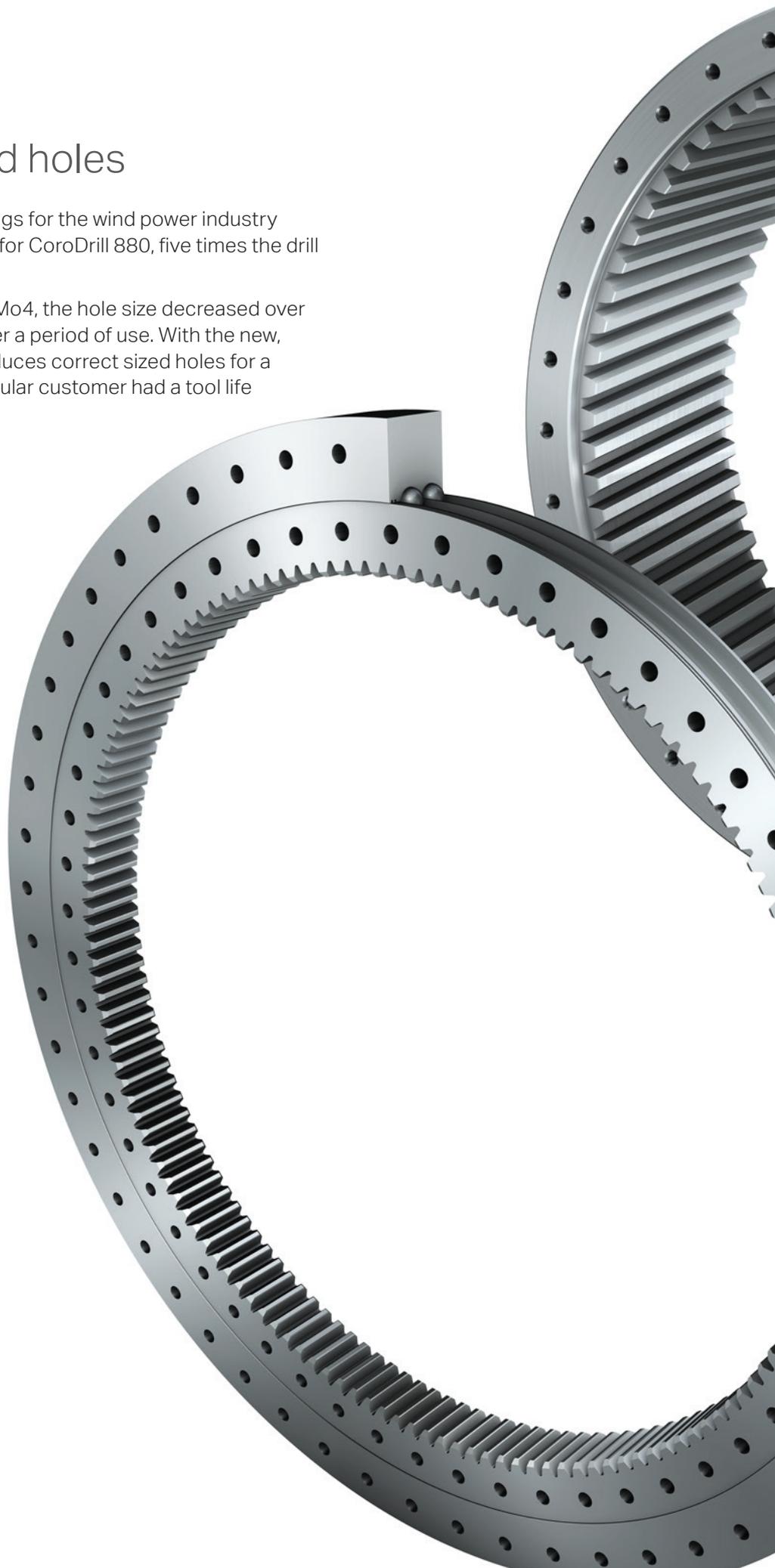
A customer manufacturing slewing rings for the wind power industry tried the new and improved tool body for CoroDrill 880, five times the drill diameter.

With the old tool body, drilling in 42CrMo4, the hole size decreased over time providing an undersized hole after a period of use. With the new, stronger tool body, CoroDrill 880 produces correct sized holes for a much longer period of use. This particular customer had a tool life increase of 975%!

### Did you know...

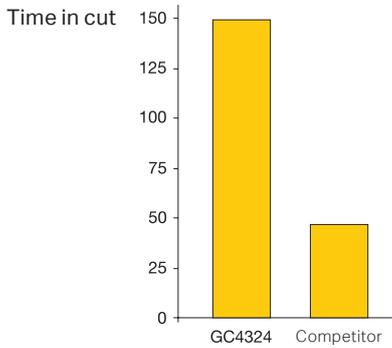
... that with the new GC4344 at hand, you now have a complete grade chain available for steel and cast iron.

- GC4324: Productivity booster for stable conditions
- GC4334: First choice for good to average conditions
- GC4344: Excellent performance in difficult conditions



## Automotive

CoroDrill 880 provides a smooth drilling process for components like wheel suspension arms, flanges and many more. A customer drilling through holes in a wheel suspension arm replaced the existing insert grade to the new GC4324 with Inveio coating. Thereby, tool life increased by more than 200%.

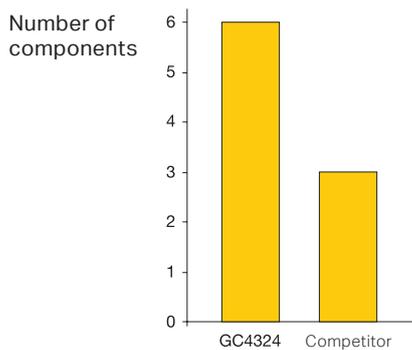


## Oil and gas

Both large and small diameter holes are usually required in the oil and gas industry. CoroDrill 880 is available for 65.00–84.00 mm (2.559–3.307 inch) holes, with rigid cartridge design and fast deliveries worldwide.

## Power generation

A power generation customer producing through holes in a flange. The hole diameter was 39 mm (1.535 inch). With the same cutting data, the tool life was increased by 100% compared to the existing solution.



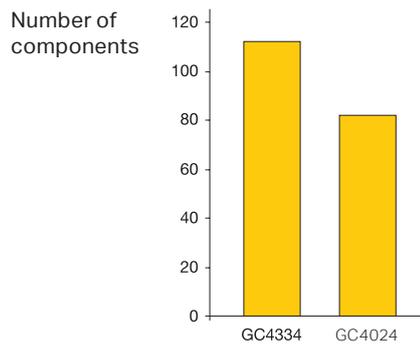
## Pump and valve

A customer producing valve bodies in various sizes exchanged his existing solution to GC4324. Thanks to the switch, the customer increased penetration rate by 30% and the number of produced components by more than 200%.

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## Mechanical engineering

Through holes are common features for a number of components. A customer decided to use our first choice GC4334 instead of existing GC4024 for his internal gear ring. With the same cutting data, the customer perceived a tool life increase of 30%.



# Bringing you the best combination of process stability and productivity

CoroDrill 880 provides high performance in most materials. With a reinforced drill body and new insert grades with a central insert featuring Step Technology™, your machining is characterised by a smooth step-by-step entrance into the workpiece, excellent cutting force balance and efficient chip evacuation.

CoroDrill 880 is also available for larger holes, equipped with replaceable rigid cartridges for high reliability, flexibility and process security.

## Benefits

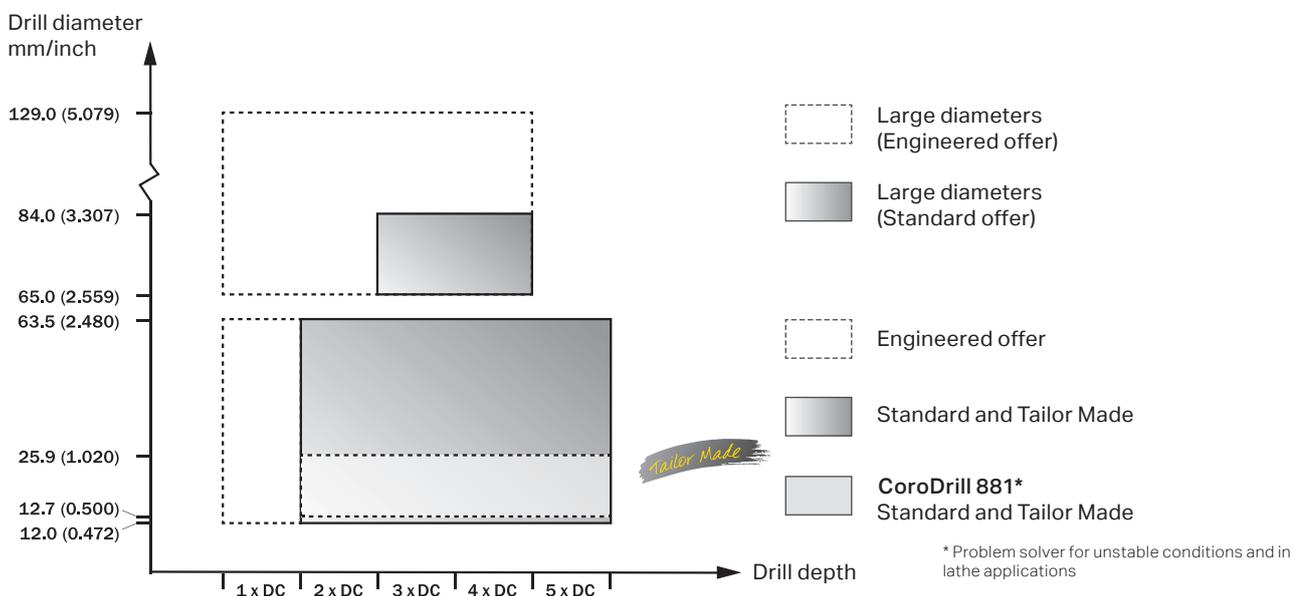
- Up to 100% productivity increase
- Four true cutting edges and long insert tool life
- Wiper technology, providing excellent surface finish or improved productivity
- Excellent chip control and evacuation

## Tailor Made

Tailor Made available in intermediate sizes with different connection types within the assortment range. Step and chamfer drills are also available as Tailor Made.

## Choosing the right drill and insert

There is a large assortment of CoroDrill 880 off the shelf, with overnight delivery, as well as the option to order engineered solutions designed exactly to suit your needs. CoroDrill 880 provides a number of grades and geometries for most materials and applications.



# Choosing the right insert grade for ISO P and ISO K

## Complete grade chain for all materials

The grade chain for CoroDrill 880 is designed to suit a large variety of materials and applications. This page will guide you to make the best choice for our new insert grades for steel and cast iron. Find the complete assortment on the web: [www.sandvik.coromant.com/corodrill880](http://www.sandvik.coromant.com/corodrill880).

### GC4334 – first choice in ISO P and ISO K

- Grade GC4334 is the first choice in applications with good to average conditions
- Inveio technology provides a high level of wear resistance
- Long tool life and reliable wear that is easy to follow, in order to detect in advance when it is time to index the insert



### Stable conditions

#### GC4324 – your productivity choice

- Grade GC4324 is the productivity choice in stable conditions
- Withstanding high cutting temperatures, making it suitable for high cutting speed, high feed, or long time in cut under stable conditions
- GC4324 will achieve a high level of productivity without compromising tool life, using Inveio technology



### Average to difficult conditions

#### GC4344 – for demanding operations

- When machining in average to difficult conditions, select grade GC4344 for good edge-line properties and reliable tool life
- The PVD surface coating is optimised to provide edge-line toughness and high wear resistance



## Latest technology coating for reliable operations

### Inveio™

GC4324 and GC4334 have Inveio coatings, where tightly packed uni-directional crystals create a strong barrier towards the cutting zone and chip. In combination with fine-structured TiCN technology, featuring a hard, wear-resistant coating against abrasive wear, these grades also provide improved crater and flank wear resistance.

### Zertivo™ technology

GC4344, produced with Zertivo™ technology, provides great edge-line security as a result of an optimized cutting-edge integrity with optimal coating and substrate adhesion properties.

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