ISO P Steel turning stars

GC4225 and GC4235

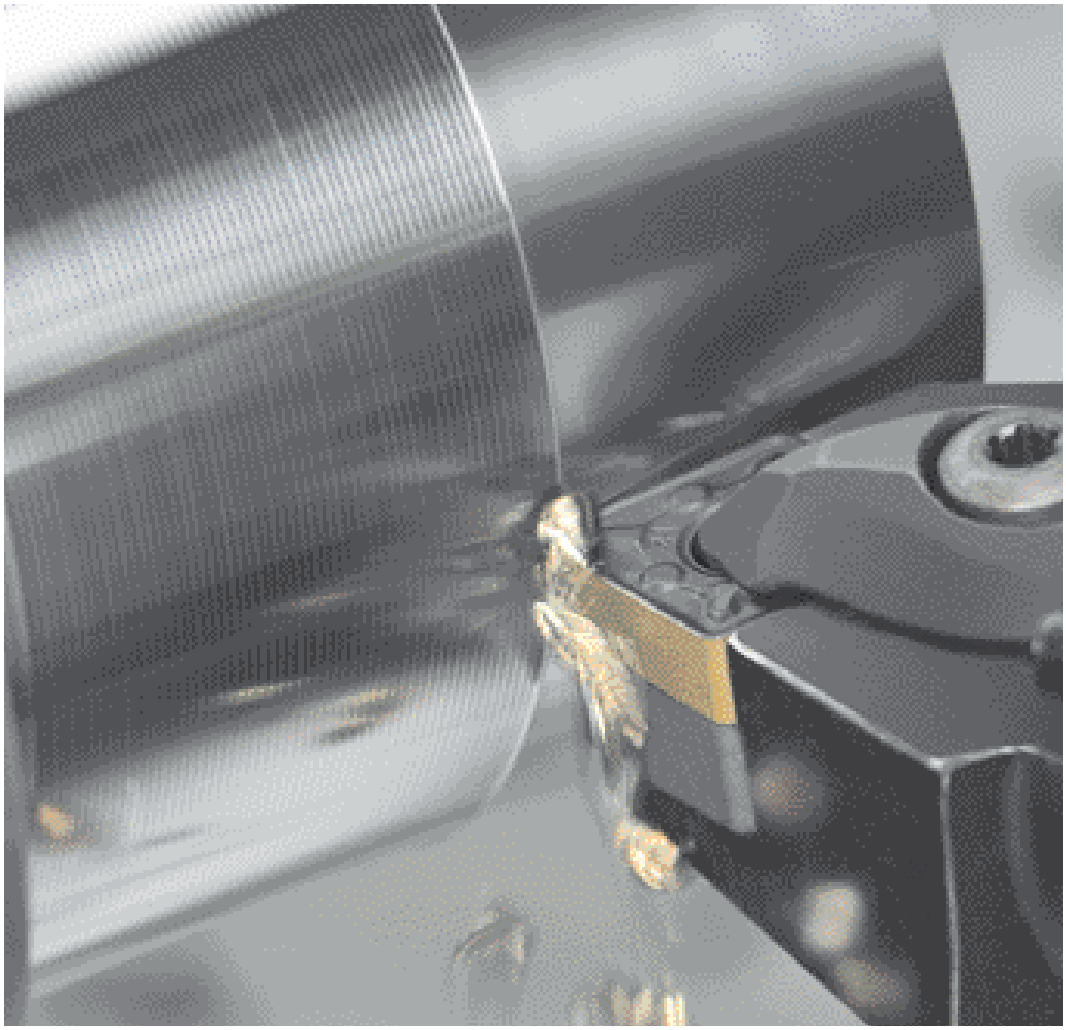
Pushing the boundaries

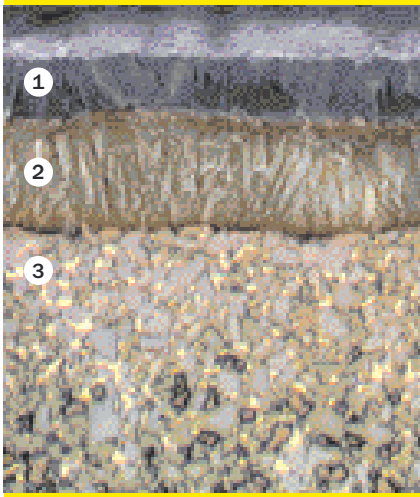
These two grades:

- Elevate steel turning productivity
- Widen application areas
- Improve wear resistance
- Can cut for longer
- Are designed for modern machining
- Are tougher and stronger
- Are part of the new insert generation from Sandvik Coromant

GC4225

Higher speeds and feeds.





1. PERFORMANCE ENHANCED ALUMINA COATING (Al_2O_3)
This new type of alumina coating provides maximum thermal and chemical protection, without the traditional drawbacks of the thick coating.

2. MTCVD TiCN
A thick coating for best possible mechanical wear protection.

3. GRADIENT SUBSTRATE
A hard centre of the insert ensures enough hot hardness to run at high productive cutting data. The cobalt enriched gradient zone provides superior edge line toughness.

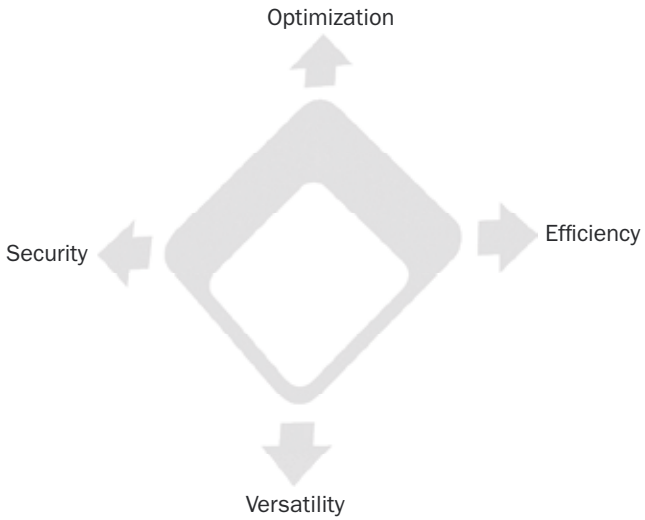
Best performance and a wider application.

The new generation of steel turning grades was launched with GC4225, a technological break-through designed to push productivity boundaries and improve in every direction.

Optimized grade properties mean that GC4225 is versatile enough to cover our widest application area – from roughing to finishing, small part machining to bar peeling – all at improved levels of performance.

Giving you control of your own machining success to achieve more than you thought possible with just one insert.

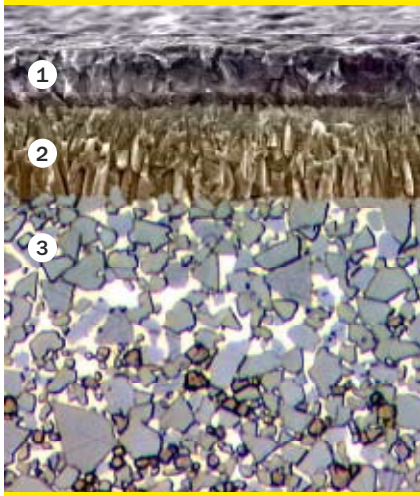
We deliver the best solution for turning steel and hardened steels.



From turning to milling in cast iron and steel - the new generation of inserts from Sandvik Coromant have improved machining performance in every direction!

GC4235

Stronger and sharper.



1. Al_2O_3 LOW STRESS ALUMINA COATING
offers maximum thermal and chemical protection.

2. MTCVD TiCN COATING
For good wear resistance and adherence to substrate.

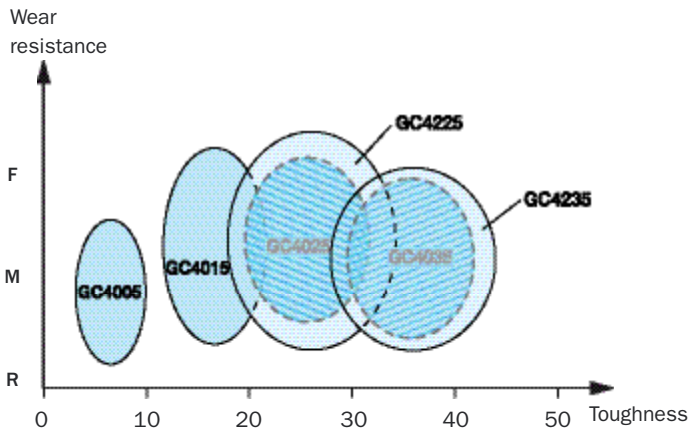
3. GRADIENT SUBSTRATE
Optimized for toughness and deformation resistance.

The toughness needed for demanding steel turning

Introducing an equally impressive new grade in GC4235. Extreme toughness is the key to a secure and reliable performance during intermittent cuts, demanding and unstable conditions.

Increased metal removal rates and better feeds and speeds will have a big impact on your productivity. Thanks to stronger edge lines, GC4235 is the new star in the toughness demanding P35 area - for steels, and being a versatile grade GC4235 also works well in stainless steels.

Why not go for improved results in a wider application area with the toughest new member of the steel turning family. Don't just take our word for it.



The improved properties of the two grades extend application areas in every direction.

Success story

GC4235
vs. a competitor grade

Component:
Forged helical gear

Material:
SAE CMC 02.1
CNMG120412-PR vs T9025 -DM
Roughing, O.D and facing

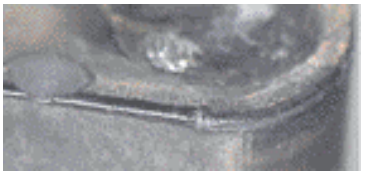
Coolant: Yes

Depth of cut (a_p):
2 mm

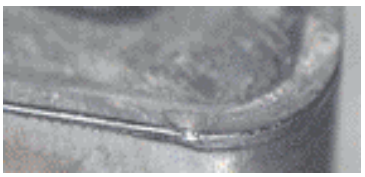
Cutting speed (v_c):
100 m/min

Feed (f_n):
0.45 mm/rev

A competitor grade after 70 pcs

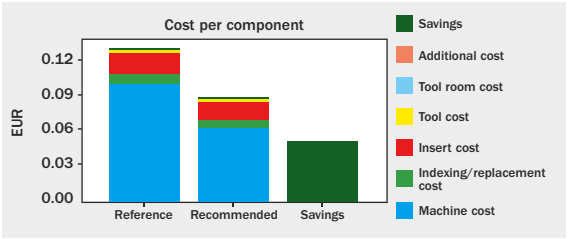


GC4235 after 120 pcs

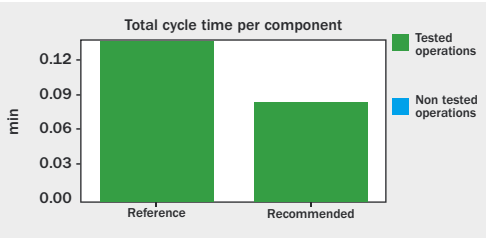


Results:
In difficult conditions and at lower speeds, GC4235 shows an improvement over the other P35 grade by producing 70% more parts.

Productivity
GC4235: 120 pcs
Competitor grade: 70 pcs



Savings per year is €14.914



Savings in production time is 236 (hour)

NO

Say your job was to develop a new generation of inserts for metal cutting. They had to be faster, safer, harder, tougher. And more versatile than their predecessors, too. No easy task, you'd say. A job that would leave absolutely no room for compromise. **That's right.**

Head office:
AB Sandvik Coromant
SE-811 81 Sandviken, Sweden
www.coromant.sandvik.com
E-mail: info.coromant@sandvik.com

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