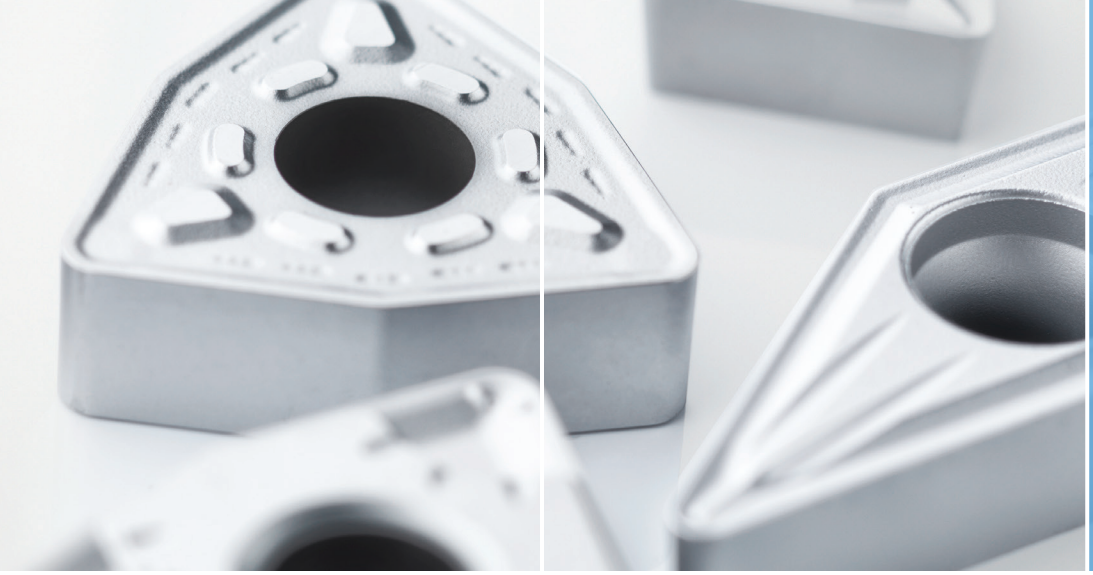


SECO PRODUCT SUMMARY

TURNING

NEVER WASTE ANOTHER INSERT

DURATOMIC®

The UED feature of our Duratomic inserts makes it impossible to overlook edges that have yet to be used, increasing productivity and reducing waste.

By arranging aluminum and oxygen atoms in a unique way, we created a superior α-based Al_2O_3 coating that improves mechanical properties as well as the thermal and chemical inertness of our grades. This results in a smoother surface that creates less friction and heat during the cut for unmatched tool life and speed capabilities.

Over the past decade, we have continued extensive research into the technology that produces our Duratomic based coatings. We have now incorporated all of that knowledge into six new grades: TP3501, TP2501, TP1501 and TP0501 for steel turning and TK1501 and TK0501 developed for cast iron turning.

RANGE OVERVIEW

- Comprehensive geometry selection from roughing to finishing
- Wide variety of chip breakers

Steel Grades

- TP3501, TP2501, TP1501 & TP0501

Cast Iron Grades

- TK1501 & TK0501

YOUR BENEFITS

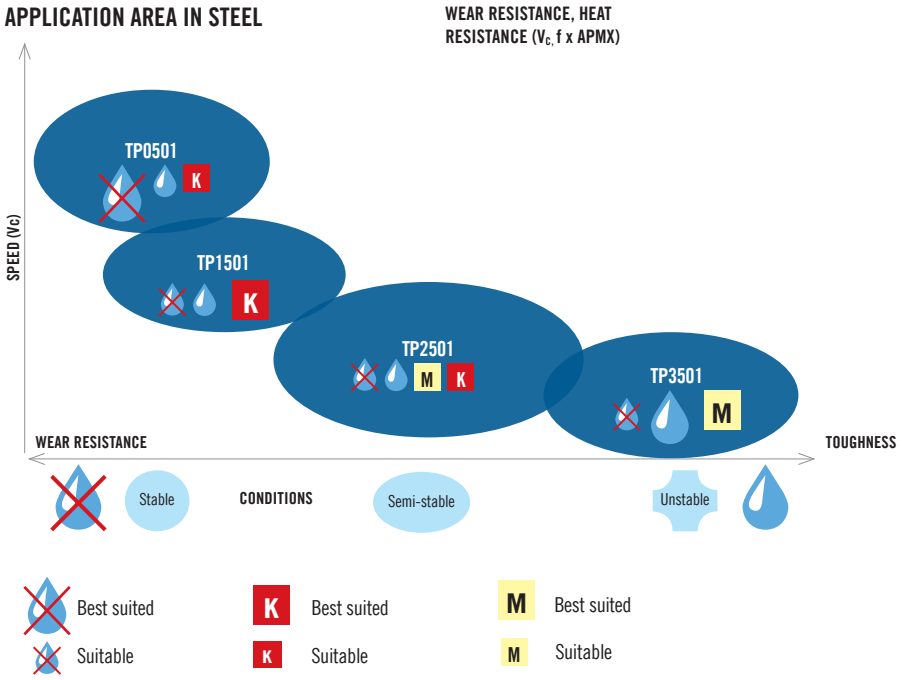
- Increase productivity
- Reduce waste
- Unique high contrast used edge detection feature
- Grade coverage for all turning applications
- Consistent part quality

SECO

SECO DURATOMIC®

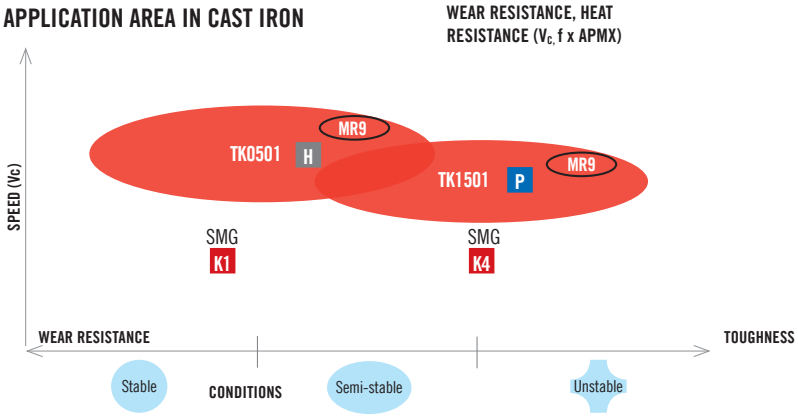
PRODUCT SUMMARY

APPLICATION AREA IN STEEL



- **TP0501** (High-speed) High-heat profile roughing in in high-alloy steels also dry machining effective in gray cast iron
- **TP1501** (Balance) Finishing using lower speeds in low-alloy steels
- **TP2501** (Versatility) Roughing/Finishing in steels
- **TP3501** (Security) Roughing/Finishing in steels

APPLICATION AREA IN CAST IRON



- **TK0501** (Balance) Finishing in gray cast iron
- **TK1501** (Security) Roughing using lower speeds in ductile cast iron

Note: The complementary capability of TP1501 from the TP grade chain in cast irons especially at higher speed in ductile irons with some level of interrupted cuts. The ability of the MR9 breaker to drastically shift both of the grades to higher toughness keeping the highest wear resistance.

INDUSTRY TARGETS

- **Automotive:** Steering knuckle, rotor, housing and slip yoke. Producing many turned components from steel in transmission and engines parts. Some parts are difficult to fixture due to shape and cannot be run at high speed. Since many of these are forgings, they are interrupted in nature and need a tougher grade to hold up.
- **General Machining:** Batch work and small production runs require highly versatile inserts that can keep up with the demand from job to job.
- **Oil & Gas:** Heavily using steel pipe for drilling and transportation, every pipe that is threaded needs to be turned prior to the threading operation.
- **Power Generation:** Large to small diameter work pieces.

FEATURES	ADVANTAGES	BENEFITS	IMPACT
Tougher substrate	• Secured machining process • Decrease risk of insert breakage	• Improved machining process (less risk of machine down time) • Process security	Where and how will you benefit from maintaining part dimensions longer?
Used Edge Detection (Edge Intelligence)	• Can see which edges are used • Less inventory	• Avoids throwing away unused edges • Fewer insert changes	How will you benefit from utilizing all edges on your insert?

P-1901-2500 GT19-540 Duratomic® Product Summary