



SECO TH1000 & TH1500 GRADES TURNING

PRODUCT SUMMARY

FORMIDABLE TURNING MADE QUICK AND EASY TH1000 & TH1500

Maximize machine productivity with fewer insert changes and less offset changes — all while achieving a superior surface finish. With the speed of TH1000 & TH1500, complete your turning of challenging materials like superalloys and hardened steels in half the time as traditional carbide inserts.

Both grades are compatible with all major ANSI and ISO geometries. Combine a Seco-Capto™ machine-side interface with rigid P-lever-clamping and Jetstream Tooling® technology, to create the highest process security and greatest productivity, particularly in difficult materials.

TH1000 — PVD-coated grade ideal for finishing operations or interrupted cuts in hardened steels from 50 to 62 HRC. Excels in long, continuous finishing and semi-finishing operations in superalloys such as Inconel 718, Waspaloy and Nimonic C263.

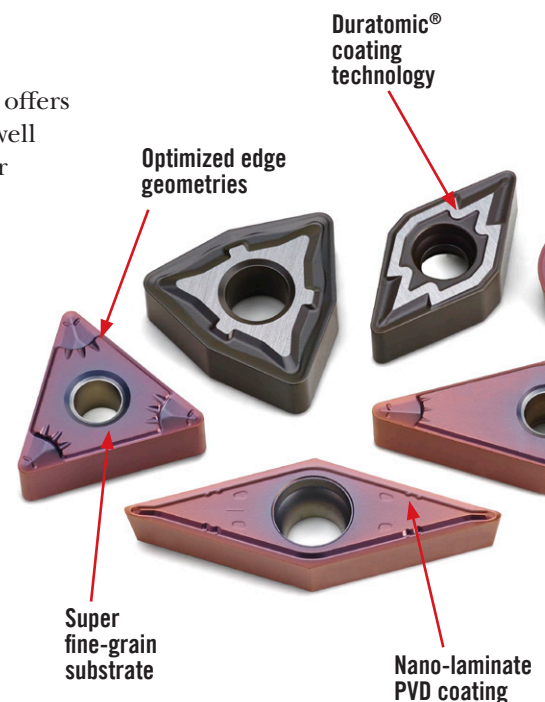
TH1500 — Incorporating our unique Duratomic® coating technology, this grade offers premium performance in hardened steel applications with high cutting data, as well as continuous cuts in materials from 40 to 55 HRC. TH1500 also achieves superior finish turning of grey and ductile cast irons.

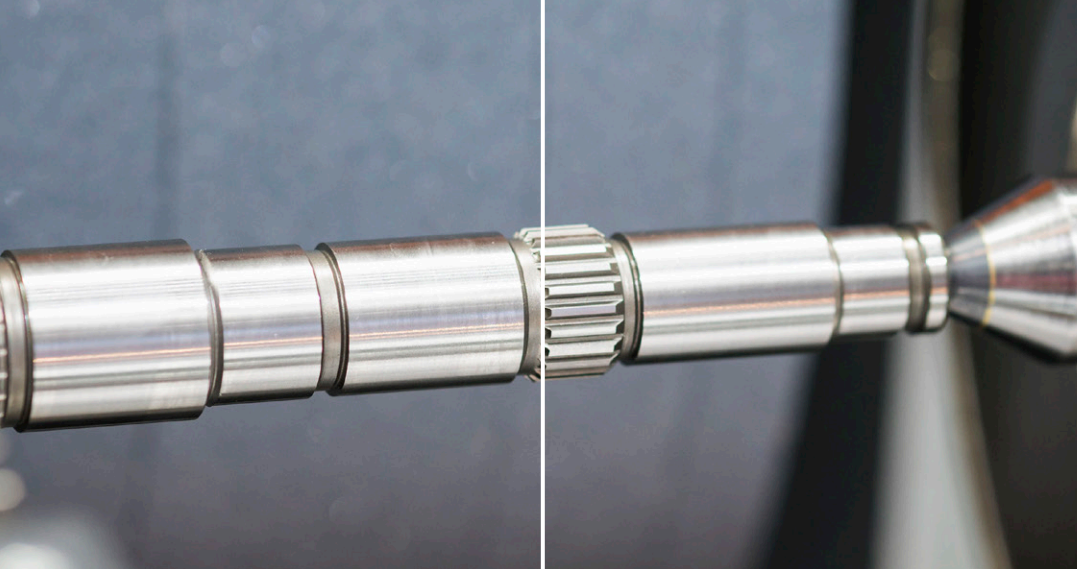
KEY BENEFITS

- Proven reliability with high chipping resistance from greater edge toughness
- Outstanding wear and deformation resistance
- Attractive performance alternative to ceramic
- Excellent surface finish ensures superior part quality
- Achieve significant cost savings through increased tool life and maximum productivity

RANGE OVERVIEW

- Comprehensive ANSI & ISO geometry selection, over 60 different insert options
- 7 optimized chipbreaker variations for premium chip control





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INDUSTRY TARGETS & APPLICATIONS

- **Aerospace:** Attain superior surface finish requirements at high speeds without the concern of insert failure and breakage — ending the cycle of purchasing expensive hardware repeatedly.
- **Automotive:** Worry-free production with safe and secure processes through edge reliability, for peace of mind during long production runs.

COMPONENTS

- **Engine:** Blisks, Casings, Discs, Shafts, Pinons
- **Landing Gear:** Axle Beams & Main Cylinders, Sliders, Links & Brackets
- **Airframe:** Flap Tracks, Engine Mounts, Ribs, Composite Structures

MATERIAL GROUPS
Cast Iron K1-K7
Superalloys S1-S3
Hardened Steels H5-H21

CASE STUDY APPLICATION HIGHLIGHTS

GGG50 DUCTILE IRON SLIP YOKE - INCREASE TOOL LIFE

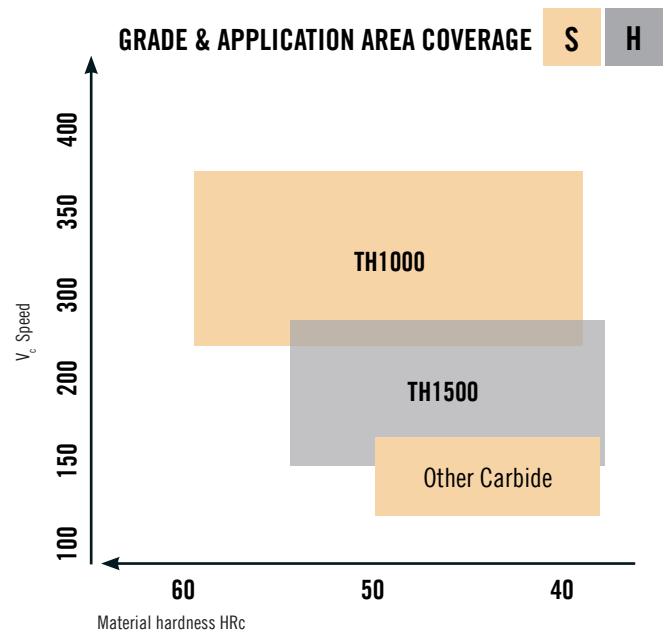
Competitor	Seco TH1500
Vc: 700 sfm	Vc: 700 sfm
f: 0.24 in/rev	f: 0.24 in/rev
Ap: 0.030 in	Ap: 0.030 in
Components: 40	Components: 55

**TOOL LIFE
INCREASED BY 37.5%**

INCONEL 718 SEAL - CYCLE TIME REDUCTION

Competitor	Seco TH1000
Vc: 130 sfm	Vc: 300 sfm
f: 0.007 in/rev	f: 0.007 in/rev
Ap: 0.01 in	Ap: 0.01 in
Cycle Time: 1 min. 11 sec.	Cycle Time: 32 sec.

**CYCLE TIME
REDUCED BY 55%**



IMPACT	BENEFITS	ADVANTAGES	FEATURES
• Improve part quality & reduce part scrapping	• Excellent surface finish	• Superior performance at high speeds	• Optimized edge geometries
• Cut tooling costs per unit	• Less tool changes	• Significant increase in tool life	• Super-fine grain substrate
• Improve machine utilization	• Improve process reliability	• Increased edge toughness	• Nano-laminate PVD coating