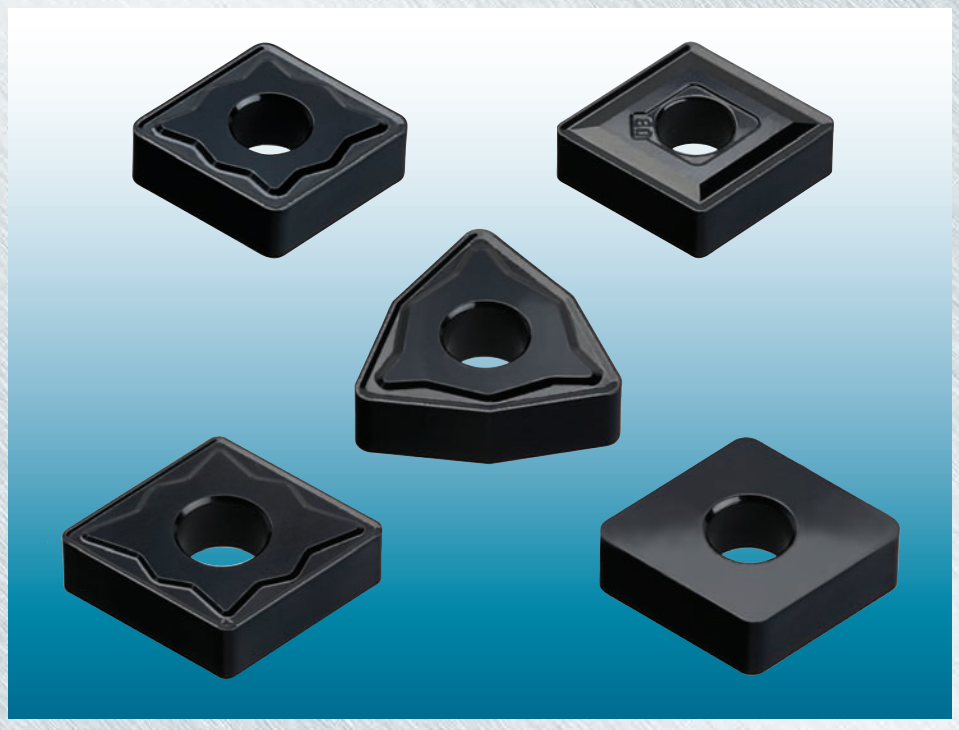
BLACK RUSH



# TT7015

## Now With GOLD-LIFE+™ Technology

*An Improved CVD Coated Grade for Cast Iron Machining*

**ISO Class**
K10-K30

**More than 200 unique inserts!**

| Negative | Positive |
|---|---|
| CNMA/G | CCMT |
| DNMA/G | CPMT |
| HNMG | DCMT |
| SNMA/G | RCMT/X |
| TNMA/G | SCMT |
| VNMG/X | TCMT |
| WNMA/G/X | TPMR/T |
| VNMX | VBMT |

**Sizes (IC)**
.250", .375", .500", .625", .750"

**Chip breakers**
- Common style
- MT
- RT
- KT
- Flat Top
- PC (positive inserts only)
- Wipers

NEW PRODUCT ANNOUNCEMENT 2016

## Features & Benefits

- Suitable for general purpose machining of gray cast iron and ductile cast iron
- Advanced coating and substrate design enables improved wear resistance and toughness
- High anti-chipping capability provides stable tool life
- Unexpected insert failure minimized even under interrupted cutting conditions
- Excellent surface finish generated due to its alligned structure coating layer
- All inserts also feature post-coat Gold-Rush surface treatment

Member IMC Group Ingersoll Cutting Tools

# BLACKRUSH
With GOLDLIFE+ Technology

Ingersoll is pleased to launch an improvement to its popular TT7015 BlackRush grade. This change involves an enhanced coating with **GoldLife+** technology that increases wear resistance and toughness in cast iron turning & boring applications. The new TT7015 inserts will remain black in color in order to easily distinguish them from Ingersoll's other **GoldLife+** TT81xx series grades for turning steel.

It's not uncommon to experience unstable results when machining cast iron, particularly ductile iron where built-up edge and abrasion can cause a variety of insert failure modes. Ingersoll is introducing this new & improved TT7015 **GoldLife+** grade to provide more consistent results when turning ductile iron, and to address the growing demand for this material. This enhanced grade provides higher stability on a wide range of applications and generates longer tool life, particularly through its anti-chipping capability.

The current TT7015 grade will be phased out and replaced by the TT7015 **GoldLife+** grade as existing stock is depleted. The item numbers and designations will remain unchanged. Inserts featuring this new grade will denote a special **GoldLife+** sticker on the package.

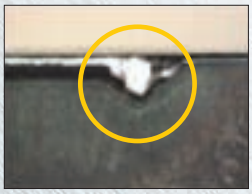
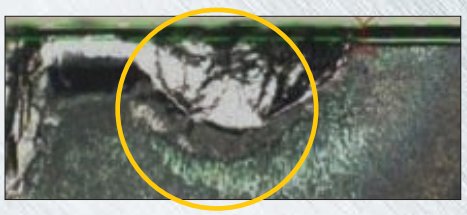
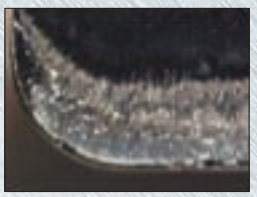
GOLDLIFE+

***Note: Due to the outstanding performance of the improved TT7015 grade, Ingersoll's previous cast iron grade, TT7310, will be phased out as existing stock is depleted.**

## APPLICATION RANGE

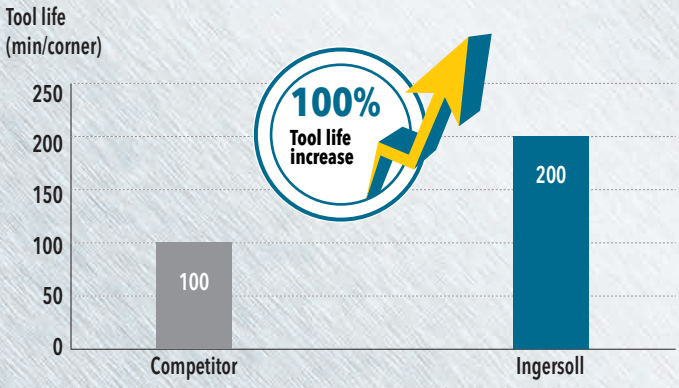
## STABLE WEAR CONDITION

CNMA 432(120408), GGG40 (FCD400, ductile cast iron), V 690 sfm, f .012 ipr, ap .080", wet

| | After 15 passes | |
|---|---|---|
| TT7015 |   |  Severe notch wear |
| TT7015 GOLDLIFE+ |   |  Stable wear |

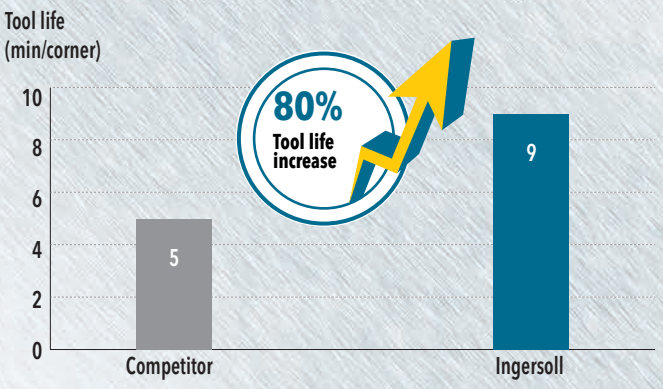
## CASE STUDY #1

| | | Competitor | Ingersoll |
|---|---|---|---|
| Component | | Disk brake | |
| Workpiece material | | Gray cast iron (FC250) | |
| Operation | | Facing | |
| Insert | | CNMG 432 | CNMG 432 KT TT7015 GOLDLIFE+ |
| Cutting speed | V (sfm) | 1300 | 1300 |
| Feed rate | f (ipr) | .024 | .024 |
| Depth of cut | ap (in) | .020 | .020 |
| Coolant | | wet | wet |
| Tool life (min/corner) | | 100 | 200 |



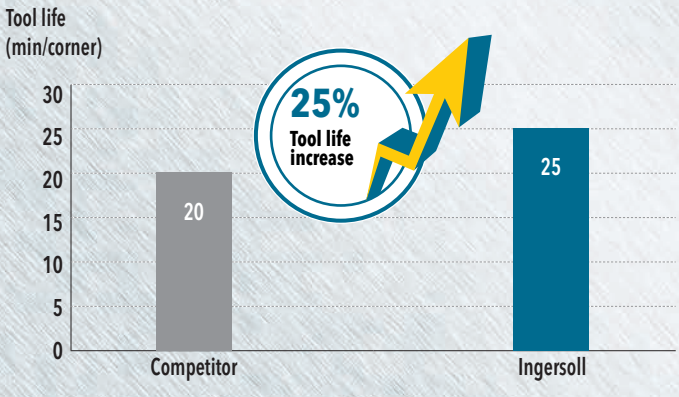
## CASE STUDY #2

| | | Competitor | Ingersoll |
|---|---|---|---|
| Component | | Front hub | |
| Workpiece material | | Ductile cast iron | |
| Operation | | Facing | |
| Insert | | CNMG 432 | CNMG 432 KT TT7015 GOLDLIFE+ |
| Cutting speed | V (sfm) | 930 | 930 |
| Feed rate | f (ipr) | .012 | .012 |
| Depth of cut | ap (in) | .047 | .047 |
| Coolant | | wet | wet |
| Tool life (min/corner) | | 5 | 9 |



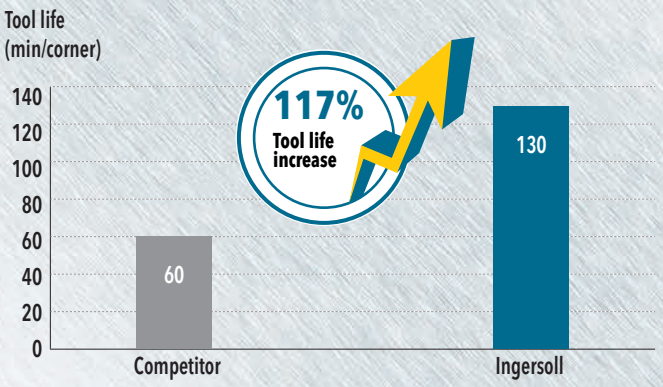

## CASE STUDY #3

| | | Competitor | Ingersoll |
|---|---|---|---|
| Component | | Differential case | |
| Workpiece material | | Ductile cast iron | |
| Operation | | Facing | |
| Insert | | CNMG 433 | CNMG 433 KT TT7015 GOLDLIFE+ |
| Cutting speed | V (sfm) | 900 | 900 |
| Feed rate | f (ipr) | .012 | .012 |
| Depth of cut | ap (in) | .080 | .080 |
| Coolant | | wet | wet |
| Tool life (min/corner) | | 20 | 25 |



## CASE STUDY #4

| | | Competitor | Ingersoll |
|---|---|---|---|
| Component | | Differential case cover | |
| Workpiece material | | Ductile cast iron | |
| Operation | | Internal roughing | |
| Insert | | CNMG 432 | CNMG 432 KT TT7015 GOLDLIFE+ |
| Cutting speed | V (sfm) | 1280 | 1280 |
| Feed rate | f (ipr) | .010 | .010 |
| Depth of cut | ap (in) | .120 | .120 |
| Coolant | | wet | wet |
| Tool life (min/corner) | | 60 | 130 |




## CASE STUDY #5

| | | Competitor | Ingersoll |
|---|---|---|---|
| Component | | Cam plate | |
| Workpiece material | | Ductile cast iron | |
| Operation | | Rough facing | |
| Insert | | CNMG 432 | CNMG 432 KT TT7015 GOLDLIFE+ |
| Cutting speed | V (sfm) | 1250 | 1250 |
| Feed rate | f (ipr) | .006 | .006 |
| Depth of cut | ap (in) | .032 | .032 |
| Coolant | | wet | wet |
| Tool life (min/corner) | | 6 | 8 |