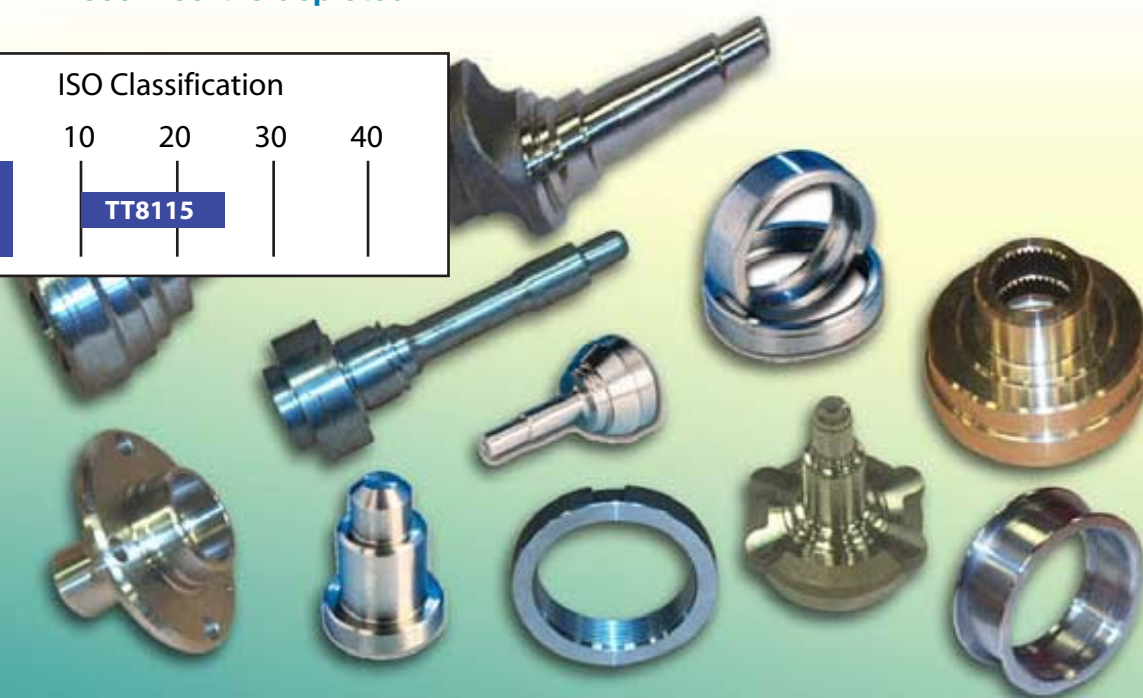
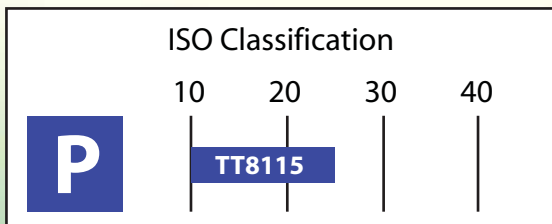


New CVD Coated Grade **TT8115**

Ingersoll has launched another innovative insert grade within its TAEGUline of turning products. TT8115 is a cemented carbide grade developed for high performance turning of steels at elevated speeds. This new grade has improved wear resistance and toughness of steels compared to our existing TT1500 grade.

The TT8115 grade has a new carbide substrate and coating designed to offer superior wear resistance and toughness. The new substrate is extremely hard and its exceptional edge toughness is credited to a cobalt-enriched layer. The result of this combination is a grade that can be used in steel applications at high cutting speeds in continuous cutting and for parts with light interrupted cuts.

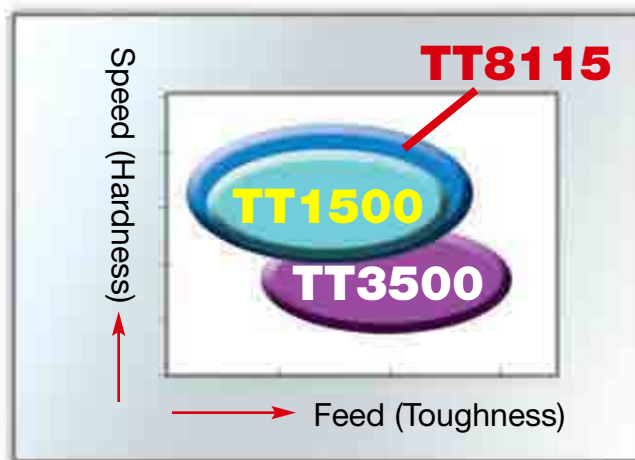
Ingersoll has decided to phase out the remaining TT1500 coated carbide inserts since the new TT8115 grade has shown better performance in all of our Tech Center and field-based tests. Accordingly, there will be an ongoing transition taking effect as stock of each TT1500 insert is depleted.



- **Features**

- High cutting speeds for continuous to light interrupted turning applications on steel.
- Wet and dry cutting
- Longer tool life compared to TT1500
- Optimized tool life for mass production
- Suitable for a wide range of applications
- Improved plastic deformation resistance

- **Application Range**



- **Recommended Cutting Speed**

- Low carbon steel and low carbon alloy steel: 980 sfm - 2600 sfm
300 m/min - 800 m/min
- Carbon steel and alloy steel: 320 sfm - 1300 sfm
100 m/min - 400 m/min

- **Availability and Supply**

- All items available in TT1500 will be available in TT8115
- TT8115 will be supplied after stock of TT1500 is depleted for each item.

• Tech Center Example

| PARAMETERS | | | WORKPIECE | |
|--------------|--------------|----------|----------------|-------------------|
| Speed: (SFM) | 500 | ft./min. | Material: | 4340 Steel, Scale |
| Feed: (APR) | .014 | inches | Specification: | |
| DOC: | .100 | inches | Hardness: | 32 - 36 Rc |
| | | | Diameter: | 4.0 inches |
| | With Coolant | | Length: | 11.5 inches |



CNMG432MT TT8115
After 300 linear inches



Competitor A
After 280 linear inches



Competitor B
After 240 linear inches



Competitor C
After 208 linear inches

• Case History

1. Component: Hub front

| Material | V | f | d | Operation | Coolant | Insert Designation | Tool life |
|---------------------------|-----------------------|------------------------------------|----------------|-----------------------|---------|-----------------------------------|---------------------|
| Medium carbon alloy steel | 656 sfm (200m/min) | .012-.016 ipr (0.30-0.40mm/rev) | .040" (1mm) | Ext. Turning & Facing | Yes | CNMG434 (120416) PR GC4005 | 100 pcs/edge |
| | | | | | | CNMG434 (120416) RT TT8115 | 120 pcs/edge |

2. Component: Lower Roller

| Material | V | f | d | Operation | Coolant | Insert Designation | Tool life |
|---------------------------|-------------------------------|--------------------------|---------------------------|-----------------------|---------|-----------------------------------|--------------------|
| Medium carbon alloy steel | 551-673 sfm (168-205m/min) | .010 ipr (0.25mm/rev) | .080-.098" (2.0-2.5mm) | Ext. Turning & Facing | Yes | CNMG432 (120408) MA UC6010 | 12 pcs/edge |
| | | | | | | CNMG432 (120408) MT TT8115 | 28 pcs/edge |

3. Component: Outer Race

| Material | V | f | d | Operation | Coolant | Insert Designation | Tool life |
|---------------------------|-----------------------|------------------------------------|---------------------------|--------------|---------|-----------------------------------|---------------------|
| Medium carbon alloy steel | 656 sfm (200m/min) | .013-.017 ipr (0.33-0.44mm/rev) | .050-.060" (1.3-1.5mm) | Ext. Turning | Yes | CNMG433 (120412) PM GC4015 | 81 pcs/edge |
| | | | | | | CNMG433 (120412) MC TT8115 | 152 pcs/edge |
| Medium carbon alloy steel | 591 sfm (180m/min) | .012-.016 ipr (0.30-0.40mm/rev) | .050-.060" (1.3-1.5mm) | Ext. Turning | Yes | CNMG433 (120412) PM GC4015 | 250 pcs/edge |
| | | | | | | CNMG433 (120412) MC TT8115 | 270 pcs/edge |

4. Component: Hub Front

| Material | V | f | d | Operation | Coolant | Insert Designation | Tool life |
|---------------------------|-----------------------|------------------------------------|---------------------------|--------------|---------|-----------------------------------|---------------------|
| Medium carbon alloy steel | 820 sfm (250m/min) | .008-.010 ipr (0.20-0.25mm/rev) | .040-.060" (1.0-1.5mm) | Ext. Turning | Yes | CNMG432 (120408) MC TT1500 | 68 pcs/edge |
| | | | | | | CNMG432 (120408) MC TT8115 | 123 pcs/edge |

5. C/V Joint

| Material | V | f | d | Operation | Coolant | Insert Designation | Tool life |
|-------------------------|--------------------------------|------------------------------------|---------------------------|----------------------------|---------|-----------------------------------|---------------------|
| High carbon alloy steel | 407-1115 sfm (124-340m/min) | .012 ipr (0.30mm/rev) | .040-.080" (1.0-2.0mm) | Ext. Turning (interrupted) | Yes | CNMG432 (120408) MC TT1500 | 70 pcs/edge |
| | | | | | | CNMG432 (120408) MC TT8115 | 140 pcs/edge |
| High carbon alloy steel | 410-1125 sfm (125-343m/min) | .010-.011 ipr (0.25-0.28mm/rev) | .040-.080" (1.0-2.0mm) | Ext. Turning (interrupted) | Yes | CNMG432 (120408) MC TT1500 | 81 pcs/edge |
| | | | | | | CNMG432 (120408) MC TT8115 | 112 pcs/edge |

• Prices

- Please refer to Ask Margaret.