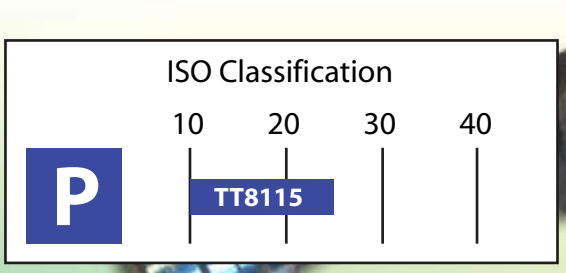
New CVD Coated Grade
TT8115

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.

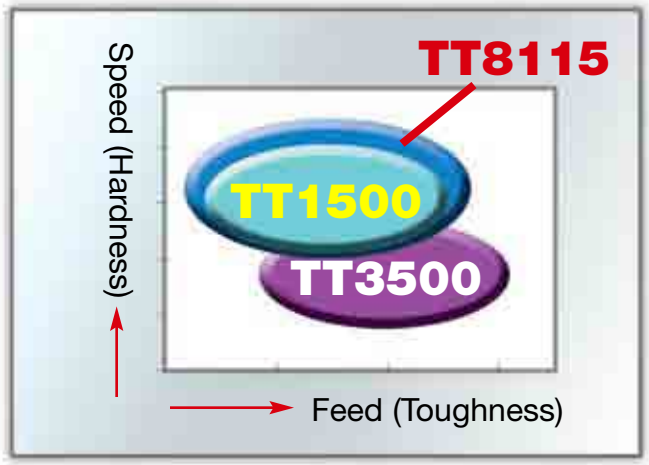


Ingersoll TAEGU line

• 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

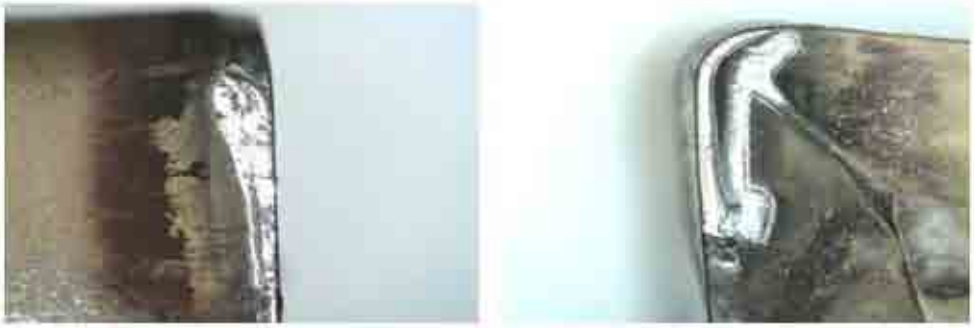
- Low carbon steel and low carbon alloy steel: 980 sfm - 2600 sfm
  300 m/min - 800 m/min
- Carbon steel and alloy steel: 320 sfm - 1300 sfm
  100 m/min - 400 m/min

• Availability and Supply

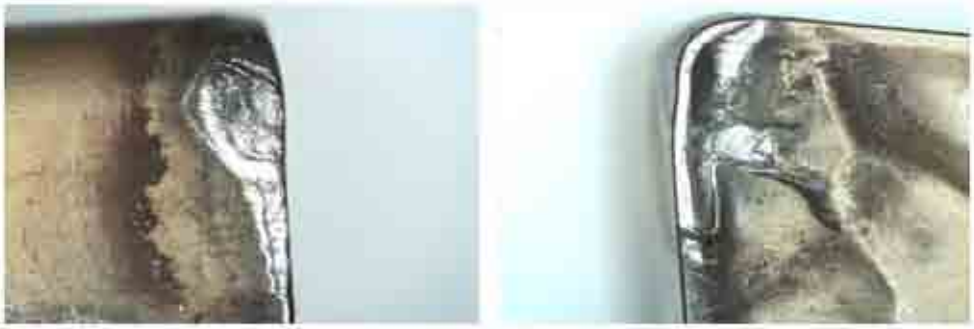
- All items available in TT1500 will be available in TT8115
- TT8115 will be supplied after stock of TT1500 is depleted for each item.

• 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.

Member IMC Group Ingersoll Cutting Tools

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