

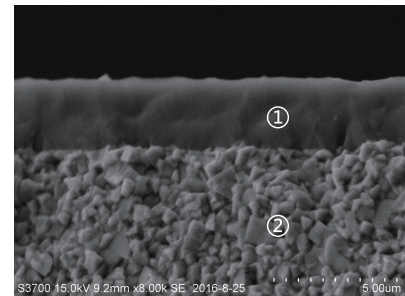
ISO M Turning Indexable: New SM Geometry+M3225/M3215

NEW

Updated PVD Grade for ISO M

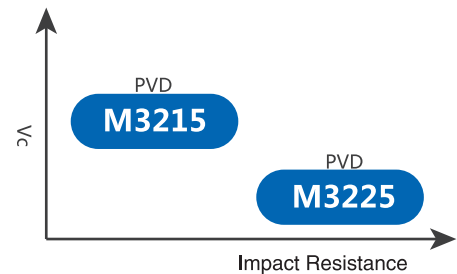
M3225: ISO M Turning First Choice General Application

- ① Brand New TiAlN Nano Coating
 - Optimized Coating Coherence
 - High Coating-Substrate Binding Force
 - Fine Heat Resistance
- ② Sub-Micro Matrix Solid Carbide Substrate



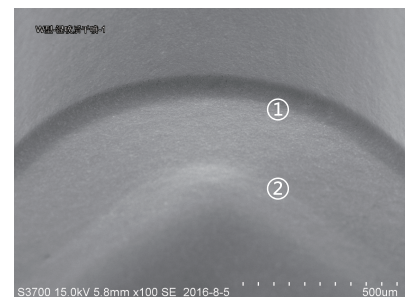
M3215: Additional Grade For Stable Application

- TiAlN Nano Coating
- Optimized Co Content and additive improves wear resistance



Optimized Geometry

- ① Brand New Cutting Edge Form
 - Smooth edge transition reduces chip force
 - Minimizes metal floating dead zone, significantly reduces working hardening layer thickness.
- ② Brand New Pre-coating Treatment
 - Significantly improves surface quality and coating coherence



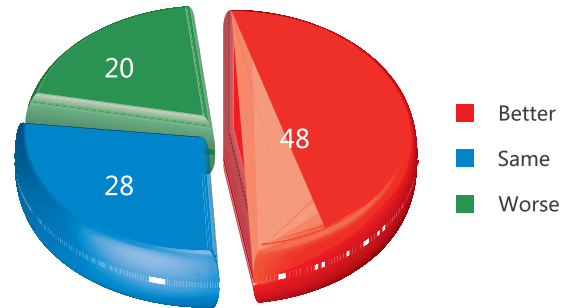
Application Range

- ① New SM+M3225 For ISO M Semi-Finishing to Roughing, continuous or interruptive low speed machining.
- ② New SM+M3215 For stable semi-finishing.

Application Cases

M3225 Testing Result Summary

Result	Times	Percentage
Better	48	50%
Same	28	29%
Worse	20	21%



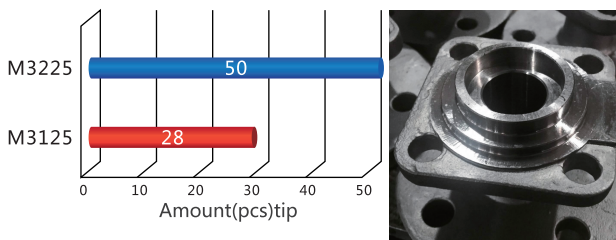
Case1

Workpiece Material	304
Processing Method	External Cylinder and Face machining
Cutting Parameters	Vc=150m/min f=0.15mm/r ap=1.3mm
Inserts	WNMG080408-SM

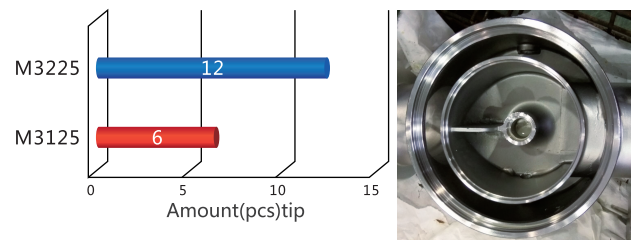
Case2

Workpiece Material	304
Processing Method	External Cylinder and Face machining
Cutting Parameters	Vc=120m/min f=0.14mm/r ap=0.7mm
Inserts	WNMG080412-SM

↑ +78%



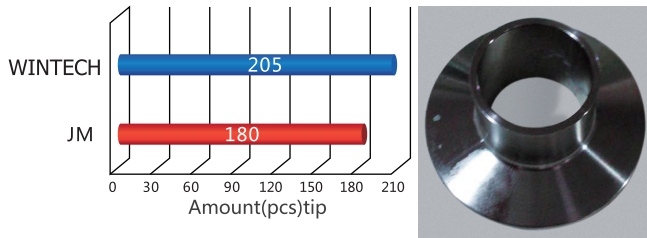
↑ +100%



Case3

Workpiece Material	321
Processing Method	External Cylinder and Face machining
Cutting Parameters	Vc=120m/min f=0.1mm/r ap=0.1mm
Inserts	TNMG160404-SM- M3225

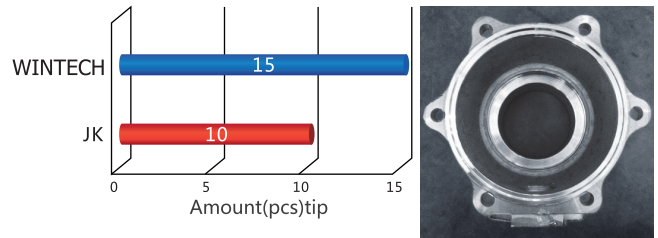
↑ +15%



Case4

Workpiece Material	304
Processing Method	External Cylinder and Face machining
Cutting Parameters	Vc=115m/min f=0.15mm/r ap=1.45mm
Inserts	WNMG080408-SM- M3225

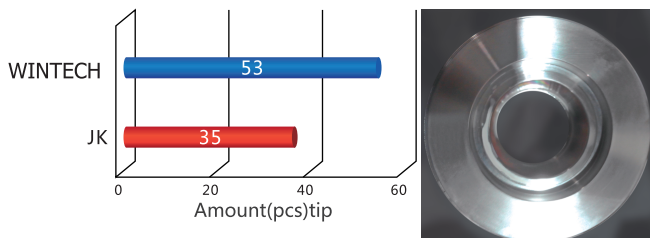
↑ +50%



Case5

Workpiece Material	304
Processing Method	External Cylinder and Face machining
Cutting Parameters	Vc=206m/min f=0.08mm/r ap=0.1mm
Inserts	CNMG120408-SM-GM3225

↑ +51%



Case6

Workpiece Material	304
Processing Method	External Cylinder and Face machining
Cutting Parameters	Vc=170m/min f=0.12mm/r ap=3mm
Inserts	WNMG080408-SM-GM3225

↑ +54%

