

Anti-Vibe Bars



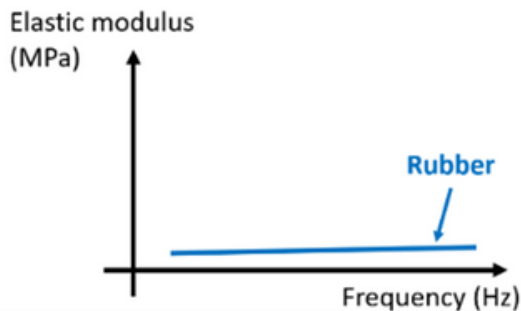
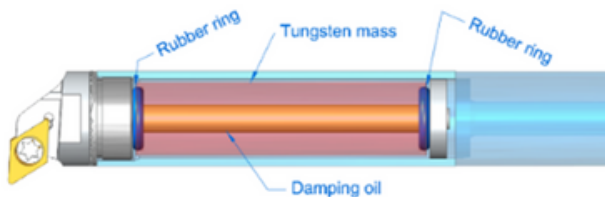
You need a better tool with great value!
Simplify your machining process with a Self-Tuning Mass Damper!

Are you . . .

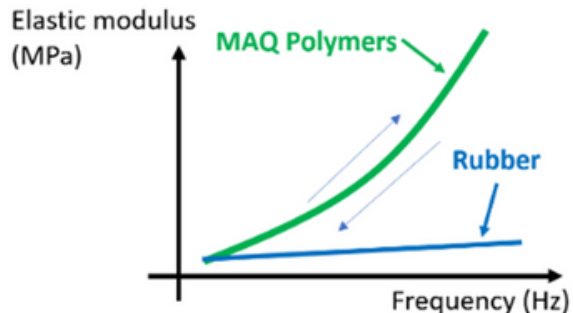
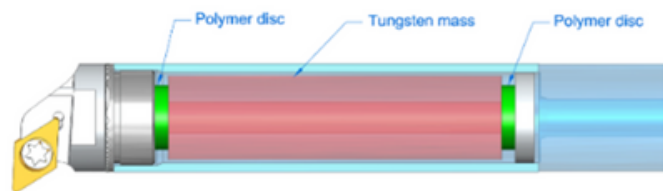
- Experiencing vibration in your machining operations?
- Skeptical of trying de-vibe tools due to cost?
- Experiencing leakage of oil in your de-vibe tools?
- Suffering from low productivity due to vibration?

CNC internal turning operations frequently face vibration problems. The use of damped turning tools will reduce vibrations in your machining operations. To improve your surface quality and to make your machine cut smoother and faster, MAQ has developed the Self-Tuning Mass Damper (STMD) technology on turning tool holders. STMD takes control of the inherent vibrations in the machining process.

4th Generation –
Rubber rings with damping oil



5th Generation – from MAQ
Polymers with frequency dependent stiffness



STMD technology uses special polymers which automatically adjust their elastic modulus over multiple vibration frequencies and fine-tunes itself to adapt to your machining conditions. With a wider operation range of the tool and a better dampening efficiency, the STMD technology will boost your productivity resulting in:

- Smoother surface finishes
- Straighter holes and bores
- Better tolerance
- Longer tool life

[Click Here to visit WWW.MAQab.com](http://WWW.MAQab.com) for more information.

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With STMD technology, we have helped our customers to reduce their post-operation efforts due in part to the component being qualified right after the turning operation!

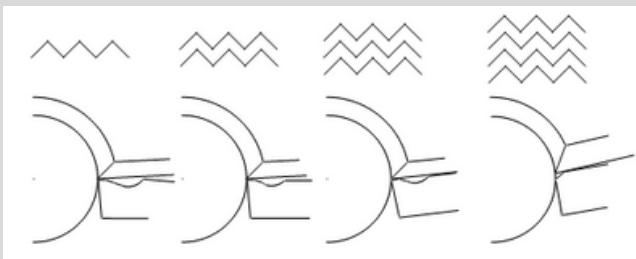
Are you ready to put the technology to the test?

Below are four (4) of our most popular kits. One is sure to fit your application!

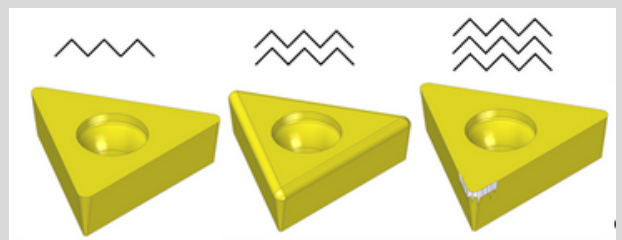
Item No.	Contains	Bar Diameter	Min. Hole Diameter	Max. Hole Depth	List Price for Kit
300662	1 ea. 300040 - STMD I 1/2-5.7 Bar 1 ea. 300059 - SDUCR 12-1/2 Head 1 ea. 300175 - Digital Protractor 1 ea. 300238 - RS 1 1/4 - 1/2-2.5 Reduction Sleeve	1/2 inch	0.63 inch	4 inches	\$832.76
300663	1 ea. 300041 - STMD I 5/8 - 6.7 Bar 1 ea. 300060 - SDUCR 16-5/8 Head 1 ea. 300175 - Digital Protractor 1 ea. 300237 - RS 1 1/4 - 5/8-2.5 Reduction Sleeve	5/8 inch	0.79 inch	5 inches	\$1,022.18
300664	1 ea. 300042 - STMD I 3/4 - 7.9 Bar 1 ea. 300061 - SDUCR 20-3/4 Head 1 ea. 300175 - Digital Protractor 1 ea. 300236 - RS 1 1/4 - 3/4-2.5 Reduction Sleeve	3/4 inch	0.98 inch	6 inches	\$1,159.63
300665	1 ea. 300043 - STMD I 1-10 Bar 1 ea. 300062 - SDUCR 25-1 Head 1 ea. 300175 - Digital Protractor 1 ea. 300230 - RS 1 1/2 - 1-2.9 Reduction Sleeve	1 inch	1.26 inch	8 inches	\$1,205.83

Recommendations for reducing vibrations in machining?

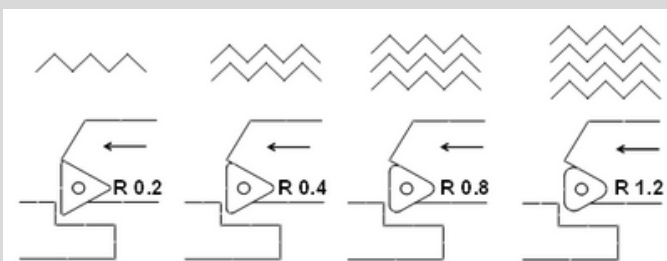
Positive inserts have less vibration



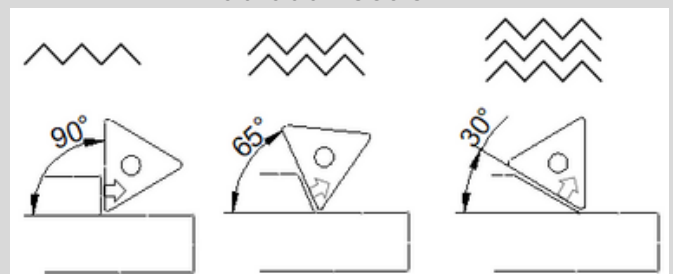
New and sharp edge has less vibration



Small nose radius has less vibration



Lead angle close to 90° to reduce force in radial direction



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You need a better tool with great value!

Recommended cutting parameters to start with are listed below.

Material	Cutting Insert	Cutting Speed	Ap	Feed
P ex. Alloy steel	DCMT XXXX04 FP P25C DCMT XX.51 FP P25C	200 m/min (656 ft/min)	0.5 mm 0.02inch	0.15 mm/rev 0.006 inch/rev
M ex. Stainless steel	DCMT XXXX04 FM M20P DCMT XX.51 FM P25C	165 m/min (541 ft/min)	0.5 mm 0.02 inch	0.15 mm/rev 0.006 inch/rev
K ex. Cast iron	DCMT XXXX04 FK K05C DCMT XX.51 FK K05C	250 m/min (820 ft/min)	0.5 mm 0.02 inch	0.15 mm/rev 0.006 inch/rev
N ex. Aluminium	DCGT XXXX04 FM M20P DCGT XX.51 FM M20P	1 300 m/min (4 265 ft/min)	0.5 mm 0.02 inch	0.15 mm/rev 0.006 inch/rev
S ex. Ni or Ti alloy	DCMT XXXX04 FM S10P DCMT XX.51 FM S10P	105 m/min (344 ft/min)	0.5 mm 0.02 inch	0.15 mm/rev 0.006 inch/rev
H ex. Hardened steel	DCGW XXXX04 S2513 Z2 H20CBN DCGW XX.51 S2513 Z2 H20CBN	125 m/min (410 ft/min)	0.25 mm 0.01 inch	0.15 mm/rev 0.006 inch/rev

Disclaimer: The suggested machining parameters are used for reference only. Different machines, grades of material, selections of insert, and work hardening may have various impact on machining performance. MAQ takes no responsibility for any consequences.

With a first trial of success, you can gradually find the limit of your system by:

- Increasing your cutting speed to gain productivity!
- Increasing your depth of cut to gain productivity!
- Reducing the feed rate (not below 25% of the nose radius) to gain better surface finish!
- Changing to a bigger nose radius to gain productivity!

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