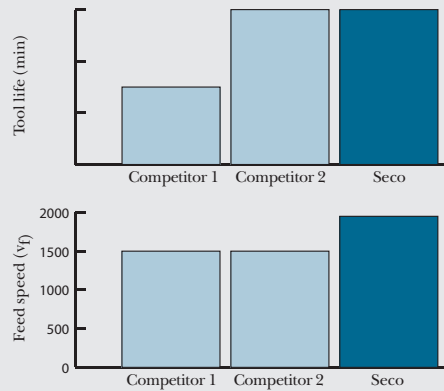


APPLICATION CASES

INCREASED RPM, IMPROVED TOOL LIFE

Competitors' vibration damping holders vs. Steadyline

	Competitor 1	Competitor 2	Steadyline	
Operation	Copy milling			
Material	Bi-material Seco Material Group 13 (cast iron) and Seco material group 3 (steel)			
Tool holder	Steadyline: E3471 5556 27320			
Cutter	R220.29-0066-06.4A			
Insert	RPHT1204M0T-M10, F40M			
	v_c	137 m/min	137 m/min	178 m/min
	f_z	0,56 mm/tooth		
	v_f	1500 mm/min	1500 mm/min	1950 mm/min
Tool life (pieces)	1x	1,5x	1,5x	
Result	Speed +30%, Tool life +50%			



CONTACT & INFORMATION

SECO MACHINING NAVIGATOR:

Update catalogue 2010

ONLINE INFORMATION:

Complete Steadyline information:

<http://www.secotools.com/steadyline>

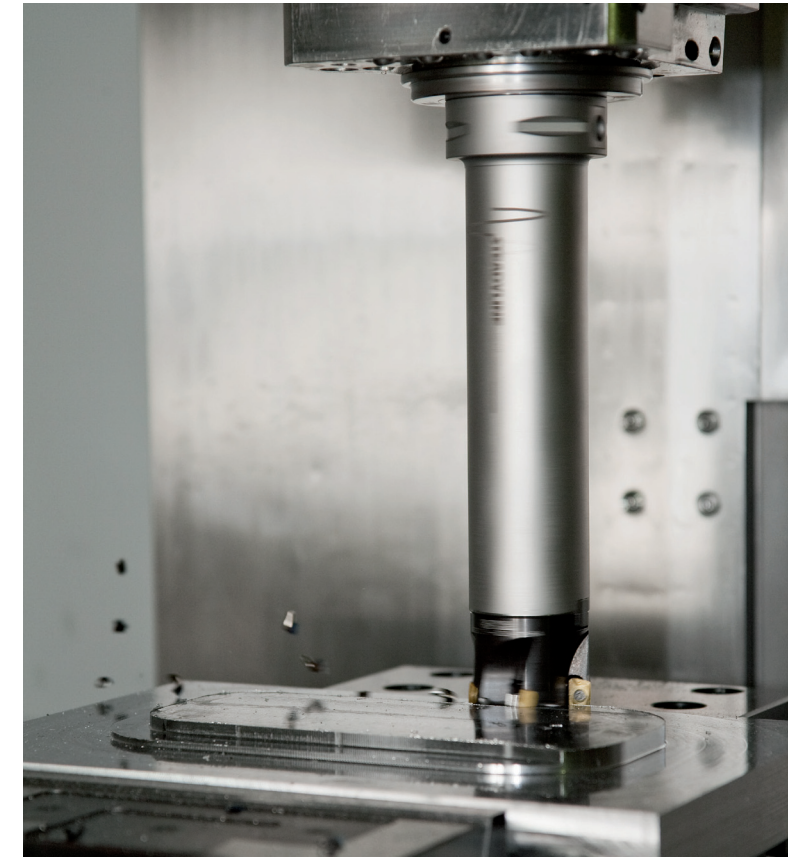
Seco Tools international website:

<http://www.secotools.com>

TOOLS

HOLDERS

STEADYLINE™



VIBRATION DAMPING SHELL MILL HOLDERS

SECO

Seco Tools AB, 737 82 Fagersta, Sweden. Tel +46 223 400 00.
www.secotools.com

02739984 ST20106248 GB SECO TOOLS AB, PA Group Karlstad 2010

SECO

DYNAMIC VIBRATION DAMPING SHELL MILL HOLDERS FOR LONG OVERHANG USE

Steadyline, from Seco, is a unique vibration damping system that drastically improves the dynamic rigidity of milling assemblies.

STEADYLINE WILL BOOST YOUR PRODUCTIVITY

Much higher cutting data is allowed (cutting speeds, $a_p \times 2$ to $\times 4$...): a typical long overhang when milling can be performed, in most cases, at least twice as quickly as with classic systems. Other advantages is improved surface finish, increased tool life and reduced spindle stress.

RANGE

Spigot diameter (mm)	16 to 40 mm as standard, 0,75" to 1,5" as standard
Length (A)	160 to 350 mm as standard, 7.5 to 12" as standard
Connection	HSK-A, DIN, BT, Seco-Capto™, CAT

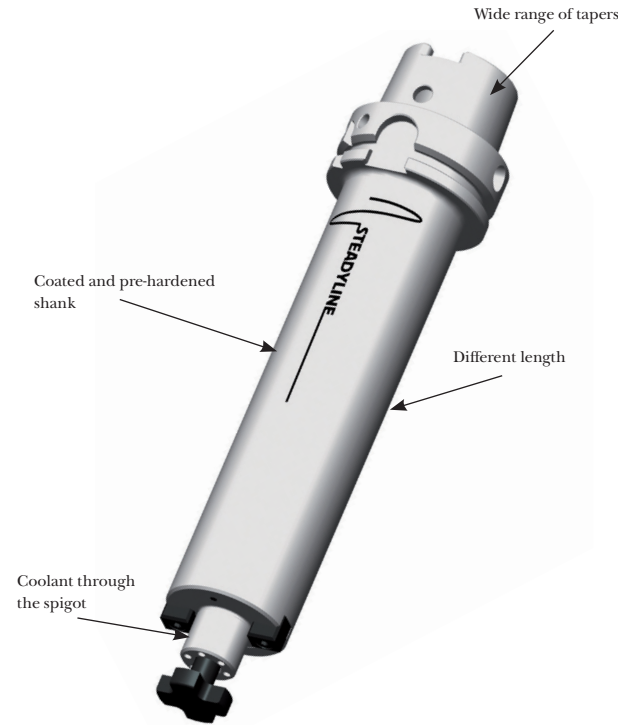
MAIN BENEFITS

- Increased productivity (cutting speeds, feed, width/depth of cut).
- Improved surface finish.
- Longer tool life.
- High flexibility: top-level efficiency in every situation.
- Longer machine tool spindle life.
- Ready-to-use = no tuning required.
- Lower noise level.

QUICK FACTS

Application area:	roughing	semi-finishing	finishing
Flexibility:	solid	extendable	modular
Accessibility/reach:	short	medium	long
RPM range:	up to 8 000 rpm		
Balancing:	-	pre-balanced	fine-balanced
Run-out precision:	good	very good	excellent
Transmittable torque:	good	very good	excellent
Rigidity:	good	very good	excellent

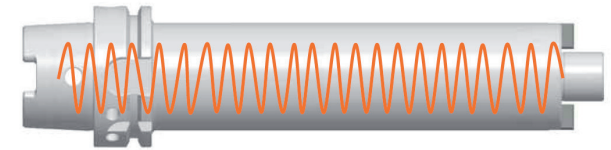
STEADYLINE HOLDERS FEATURES



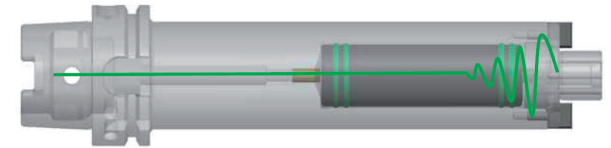
TECHNICAL CHARACTERISTICS

In the Steadyline shell mill holder, the vibration absorber is positioned where the deflection is highest, at the front of the bar. The vibration absorber damps the vibrations as soon as they are transmitted by the cutting tool to the body of the bar. It prevents them from spreading along the bar, thus limiting the deflection of the tool.

The result is greater rigidity that ensures high stability even with extreme cutting conditions: the chip removal rate can be dramatically increased.

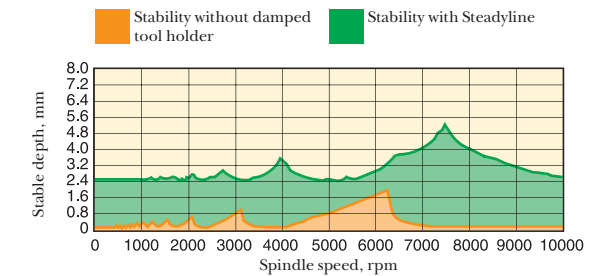


Without the vibration absorber: vibration spreads through the holder.



With the vibration absorber: vibration is eliminated.

COMPARISON BETWEEN CLASSIC MODULAR SYSTEM AND STEADYLINE SHELL MILL HOLDER



The test is realised with a shell mill holder $\varnothing 48$, A length=260 mm. The aim is to measure the depth up to which the holder is stable, at different speeds.

At a given speed, the Steadyline holder's optimal depth of cut (a_p) can be 2 to 4 times that of a modular system and the surface finish is improved dramatically.