# STEADYLINE™ COMBIMASTER





Operating instructions for Steadyline™ vibration damping Combinaster holders

#### WWW.SECOTOOLS.COM

03091152, 60K820E GB(06)
© SECO TOOLS AB, 2024.
All rights reserved. Technical specifications are subject to change without notice.



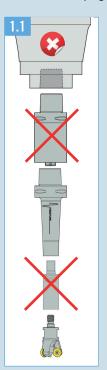
The Steadyline™ Combimaster with passive dynamic damping system, drastically improves the dynamic rigidity of long milling assemblies. This allows much higher cutting conditions than with equivalent solid holders.

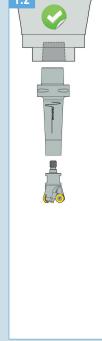
In order to guaranty a fully secured process, please respect the following instructions.

### 1. Mounting recommendations

The Steadyline™ Combimaster holder is a plug-and-play system: the build-in damping system is ready-to-use and set to provide the best results.

It is strongly recommended not to assemble extensions/reductions, as it will result in a lost of the damping effect.



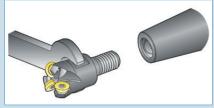


## 2. Combimaster head fitting

Due to high cutting conditions achievable, a reliable clamping of the Combimaster milling cutter into the Steadyline  $^{\text{\tiny{M}}}$  holder must be respected.

It is advised to use a torque key to tighten the Combimaster assembly to the recommended torque (See table A below).

	A	Tightening torque					
		ecting ad mm	M10	M12	M16	M20	
	Mounting key size		15	19	26	32	
	tor	ening que (Lbf.ft)	40 (29.5)	60 (44.25)	80 (59)	120 (88.51)	



# **3.** Recommended cutting conditions

Make sure never to overpass the maximum RPM of the holder (indicated on the holder as also listed in table B below).

В	Maximum Rpm				
_	lolder's ength, mm	≤185	>185 ≤235	>235 ≤285	
	ax. Rpm Tr/min U/min	10.000	8.000	6.000	

It depending on the spindle stiffness, it can be necessary to reduce the maximum Rpm indicated above.

Abusive cutting conditions could generate vibrations of the milling assembly, which would prevent the damper to operate efficiently and would damage holder's components: adapt the cutting conditions in order to remain vibration free.

# **4.** Optimising the cutting condition

In order to optimise the cutting conditions, proceed as follow:

- 1. Cutting speed (Vc) and feed (f): select the average values recommended for the cutters and inserts.
- 2. The width of cut (a<sub>e</sub>) and the depth of cut (a<sub>p</sub>) are the parameters to tune, increasing step-by-step. Make sure to remain within the cutter and inserts recommendations, while remaining vibration free.

BEWARE: contrary to the use of conventional long holders, the machining can not be stabilized through additional radial force (e.g. by raising the feed).

### 5. Maximum temperature of use

Make sure the Steadyline™ holder body never exceeds the maximum temperature of use (See table C below).

# C Maximum temperature of use 80°C/176°F



6. Steadyline™ range

The Steadyline<sup>™</sup> technology is available for:



Combimaster holders



Turning and boring holders

