

APPLICATION EXAMPLES

In these two cases, a Liteline assembly has been compared to one of our competitors' low weight modular system. These tests have been run with the same conditions (same machine, insert and workpiece). The cutting conditions have been increased until reaching the maximum productivity with an appropriate result. In both cases, Liteline has proven its superiority.

	LITELINE™	REFERENCE
A length	235 mm	170 mm
L/D ratio	2,4	2,1
Insert	r=0.4 mm (Cermet CCGT09T304-51G1)	
Vc	400 m/min	
ae	0.20 mm	0.15 mm
Result	PRODUCTIVITY + 33%. Using a Seco Liteline assembly, the productivity has been increased by 33%, despite a larger L/D ratio	

	LITELINE™	REFERENCE
A length	460 mm (2 extensions 100 mm + 225 mm)	345 mm (1 extension 175 mm)
L/D ratio	4,6	4,3
Insert	r=0.4 mm (Cermet CCGT09T304-51G1)	
Vc	300 m/min	110m/min
ae	0.15 mm	
Result	PRODUCTIVITY + 60%. Using a Seco Liteline assembly, the cutting speeds could be increased up to 300m/min, proving the superiority of the Liteline boring assembly.	

CONTACT & INFORMATION

SECO MACHINING NAVIGATOR:

Holemaking Catalogue 2010

ONLINE INFORMATION:

Complete Liteline information:

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

Seco Tools international website:

<http://www.secotools.com>

TOOLS

HOLEMAKING

LITELINE™



**LIGHTWEIGHT FINE BORING HEADS
AND MODULAR HOLDERS**

SECO

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

www.secotools.com

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SECO

LIGHTWEIGHT MODULAR FINE BORING ASSEMBLIES

In small and medium size machine tools, standard steel boring tool assemblies are often too heavy for both the tool changer and the machine tool spindle. With the new Liteline fine boring modular system this limitation is reduced. Made from high tensile aluminium, Liteline assemblies weigh up to 60% less than comparative steel solutions.

LONGER AND LARGER BORING OPERATIONS

Reduced stress on the spindle allows for longer horizontal fine boring with higher cutting data and increased precision. Shorter machining time, faster tool changes and quicker spindle acceleration is possible and leads to significant productivity increases.

LIGHTWEIGHT BUT RIGID

Liteline systems are made of a combination of materials. The aluminium body is enlarged in size and extra rigid. Added durability is ensured with a wear, scratch and corrosion resistant coating.

LITELINE RANGE

Diameter range: Dia 6-4205 mm (4 different boring heads)

Machine tool interfaces: HSK, DIN, BT, CAT and Seco-Capto™

Machine tool interfaces: Extensions, reducers, Liteline to classic Graflex adapters

Balance: pre-balanced and fine balanced modular components

Accessibility/reach: short, medium and long reach

MAIN BENEFITS

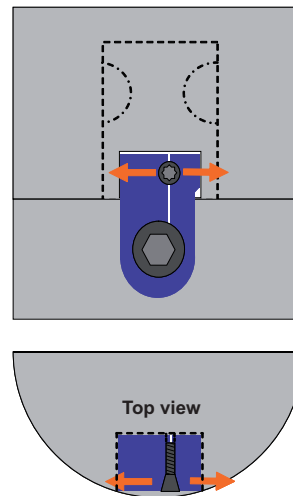
- Low weight assembly for easy handling and machining
- Up to IT5 bore tolerances
- Faster tool changes
- Faster spindle acceleration and deceleration
- Lower risk of deflection and higher bore precision with long assemblies compared with traditional steel tools in horizontal boring.
- Longer and larger bores possible on smaller machine tools
- Lower stress on machine tool spindle

LITELINE TECHNICAL CHARACTERISTICS

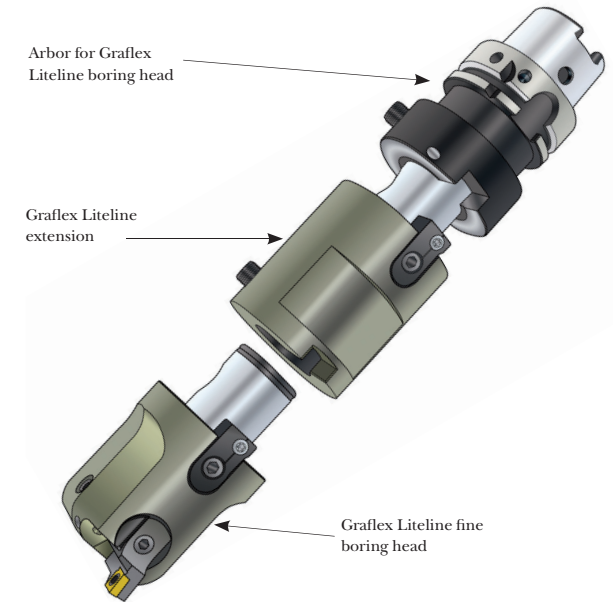


LITELINE EXPANDABLE TENON

To protect the aluminium body, an expandable tenon eliminates the tenon/slot clearance and provides bi-lateral plain face clamping.



LITELINE GRAFLEX ASSEMBLY



CLASSIC AND LITELINE GRAFLEX ASSEMBLY

