Grinding & Machining

Portable Surface Lathe

CHRIS-MARINE®

PSL

PSL is a versatile precision lathe for restoring liner and cylinder head sealing surfaces, designed for use both onboard and in workshops. With fast setup and precise alignment, it mounts easily and can be operated by a single technician while effectively preventing leakage of high-pressure combustion gases in small and medium bore diesel and gas engines.

Thanks to its high-accuracy machining and ability to service multiple sealing areas, it delivers significant savings compared to outsourcing. The PSL restores sealing surfaces with a perfectly concentric finish for optimal pressure retention, something grinding and milling methods cannot achieve









Application areas

- Sealing surface of engine frame, cylinder head and cylinder liner

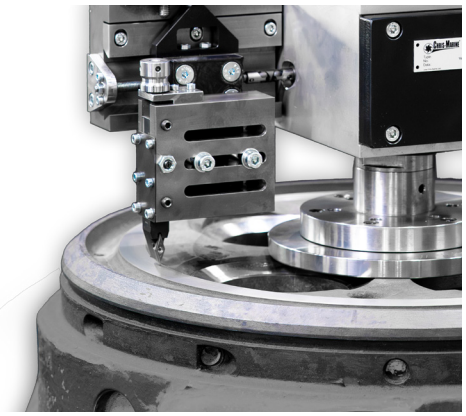
Key benefits

- Operating range: 190-600mm
- Quick and easy set-up
- Robust, compact design
- Single-operator functionality
- Electrically driven
- Dual-direction feed
- Concentric sealing pattern
- 5 times faster than grinding

Sustainable engine operation

PSL is a robust, high-precision lathe developed to comply with Wärtsilä's requirements for concentric sealing patterns. Designed for liner and cylinder head sealing surfaces, it can be operated by a single technician and delivers 5x faster results than traditional grinding.

The PSL enables in-situ and workshop machining, making it a cost-efficient solution for maintaining engine integrity. With stepless variable-speed control for optimal cutting, it restores surfaces with a perfectly concentric finish.



Treats various surfaces

Treats multiple critical surfaces

Equipped with an automatic feed mechanism, the PSL precisely machines the sealing surfaces of the cylinder head, engine frame, and cylinder liner.



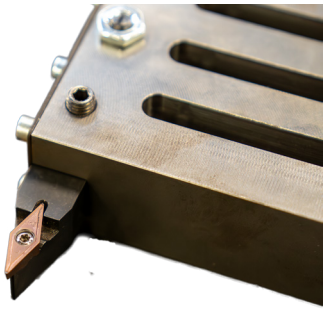
Easy to mount and operate

Few parts to assemble to get the machine up and running.



Control unit

Featuring stepless, variable-speed control for precise adjustment of cutting speed, ensuring optimal performance.



Holders with cutting bit

Precision tooling for optimal machining.

Technical specifications	
• Electric power supply	230-240 V, 50-60 Hz, Single phase
• Power requirement	0,75 kW
• Weight	Base machine: 52 kg
• Min dimensions	H: 570 mm W: 220 mm L: 470 mm / 585 mm
Sealing surface machining	
• Range	190-600 mm diameter operating range
• Length of cut	70 mm / 130 mm

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