Grinding & Machining of sealing surfaces

Surface Grinding Machine



For workshops onboard and ashore

CHRIS-MARINE®

CPL

CPL is a versatile surface grinding machine ideal for workshops onboard and ashore. In less than 30 minutes it can be set up, mounted, aligned and run by one man. CPL efficiently eliminates and prevents water and gas leakages on small and medium bore diesel engines. Thanks to its high-precision grinding and milling functions as well as its many application areas, CPL provides substantial savings compared to when outsourcing grinding and milling jobs.







Application areas

- Grinding of sealing surfaces between cylinder head and cylinder liner
- Grinding of sealing surfaces between cylinder liner and engine frame
- In-situ grinding and milling of cylinder heads, liners and engine blocks
- Grinding of sealing surface between piston crown and piston skirt.

Key benefits

- Standard operating range diameter: 200-650 mm
- For workshops onboard and ashore
- In-situ grinding
- Quick and easy set-up
- Easily operated by one man
- Versatile
- Optional milling equipment
- Pneumatically operated
- Cost-efficient

Sustainable engine operation

CPL is a versatile high-precision machine that can be operated by one single person. Its many application areas makes CPL a cost efficient choice in any workshop onboard or ashore. Owning a CPL means that the cost per job will be approximately a tenth of the cost associated with outsourcing the job. In addition, as service is performed in-house, logistics costs decrease, thus the carbon footprint will be much lower. When performing the service by yourself you can avoid unnecessary waiting time and keep your engines in top condition at all times. By maintining engine parts in good condition, fewer investments in new engine parts have to be made. Last but not least, a healthy engine runs more efficiently and realeases fewer emissions.



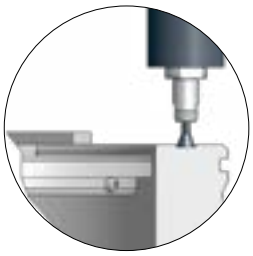
CPL mounted on engine frame
Standard application for grinding landing surface on engine frame.



CPL mounted on cylinder cover and on cylinder liner
A wide range of specific mounting adapters is available to fit various grinding applications on all medium 4-stroke engines.



CPL mounted on cylinder liner with accessories for under-up grinding
Frequently used application for eliminating water leakage due to corroded landing surfaces.



Milling
Milling groove in cylinder liner/cylinder cover with high-speed carbide tool.

CPL versus manual lapping

Manual lapping is a labour intensive and expensive method of restoring sealing surfaces. The method often results in an incorrect angle, and a concave or convex surface over time. This shortens the lifetime of the sealing surface as it allows hot exhaust gas to corrode and circulate on the sealing surface.
CPL on the other hand, will always keep the correct angle on the surface. It is faster and guarantees a good result, according to the engine maker's specification. In addition, the CPL can restore a previously lapped surface.

CPL	Technical data
• Machine capacity	Ø200 - Ø650 mm
• Air pressure	0.6 - 0.9 MPa (6 - 9 bar or 85 - 130 psi)
• Air consumption	1300 l/min
• Air hose connection	12.5 mm (1/2")
• Weight	Basic machine 30- 35 kg
• Max dimansions	H: 704 mm



Chris-Marine Headquarters and Subsidiaries

CHRIS-MARINE SWEDEN HEADQUARTERS
Tel: +46 - 40 671 2600
info@chris-marine.com

CHRIS-MARINE DENMARK
Tel: +45 - 4498 3833
iop@chris-marine.com

CHRIS-MARINE GERMANY
Tel: +49 4101 5880 0
lemag@chris-marine.com

CHRIS-MARINE SINGAPORE
Tel: +65 - 6268 8611
chrism@chris-marine.com.sg

CHRIS-MARINE CHINA
Tel: +86 - 21 6575 9331
info.cn@chris-marine.com

CHRIS-MARINE INDIA
Tel: +91 - 712 224 2719
info.in@chris-marine.com

CHRIS-MARINE ECUADOR
Tel: +593 979 000 379
info.ec@chris-marine.com

CHRIS-MARINE USA
Tel: +1 786 212 9592
info.us@chris-marine.com

Contact one of our offices to get in touch with your local agent.

B148-2537/E