



The New Generation



PHM Mobile Honing Machines for Cylinder Liners

The Key Features

- ★ **FULLY AIR POWERED.**
Powerfull air motor for rotary motion of honing head, air hoist for stroke motion and, as an unique feature, air operated actuators for honing stone to cylinder wall pressure.
- ★ **SUPERIOR CONTROL.**
Control knobs are provided for fine adjusting setting of honing head RPM, stroking rate and stone feed pressure.
- ★ **PRESSURE GAUGES.**
Pressure gauges are provided to display the selected setting of honing head RPM, stroking rate and stone feed pressure.
- ★ **STURDY HONING HEADS.**
Only three honing heads are required for cylinder liner bores from 150 to 640 mm diam.
Head type 150-250 mm for honing diam. 150-250 mm.
Head type 240-340 mm for honing diam. 240-340 mm.
Head type 320-640 mm for honing diam. 320-640 mm.
Each honing head can be easily set to the required honing diameter by inserting spacers between the central shaft and the stone holder units.
- ★ **PIVOT-MOUNTED STONE HOLDERS.**
The stone holders are pivot-mounted and radially offset to assure a wiping-type honing stone to cylinder wall contact for superior honing performance.
- ★ **AUTOMATIC STROKING.**
Automatic stroking between adjustable end stops is a standard for ease of operation.
- ★ **COMFORT CONTROL (OPTION).**
A comfort control panel can be provided at the lower end of the preassembled drive unit for ease of operation while standing at cylinder liner level.
- ★ **PREASSEMBLED DRIVE UNIT.**
The drive unit including the central controls, the air hoist for stroking and the air motor for rotating the honing head is completely assembled in the factory and stored in the transport case so that only a short setup time is required for preparing the machine for honing a cylinder liner in the the engine block.

Hunger PHM

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**Preassembled
Drive Unit
with Comfort Control**

Features:

The PHM is a sturdy and solid mobile machine protected by a strongly adhering color layer.

Rotary motion and linear stroke motion of the honing head are infinitely variable through simple pressure regulation of the air supply to obtain the desired crosshatch surface pattern. Stone feed pressure is also infinitely variable through regulation of air supply to the stone feeding actuators.

When air supply to the stone feeding actuators is shut off, the spring biased stone holders are pivoting inwards so that vertical scratches in the cylinder liner wall can be avoided when the honing head is inserted into or removed from the cylinder liner bore.

The powerful air motor permits adjustment of the rotation speed of the honing head within a broad range by the mere turn of a control knob without changing any gear boxes.

The central control panel is equipped with regulator valves combined with manometer gauges for selecting the RPM of the honing head, the stroking rate and the stone contact pressure. Thus, the pressure settings which once proved as resulting in perfect surface finish, can be repeated time and again.

Automatic stroking is a standard feature.

The stroking length can be infinitely adjusted by means of end stops.

A single central air treatment unit with air filter and lubricator is also provided for trouble free operation.

An optional comfort control panel including the regulator valves and the manometer gauges can be provided at the lower end of the pre-assembled drive unit within easy reach of the operator while standing at cylinder liner level.

Setting up the PHM for honing requires only three simple steps:

1. Sliding mounting tubes over two opposite studs at the engine block.
2. Placing the preassembled drive unit onto the mounting tubes.
3. Attaching the honing head to the air motor of the drive unit.



Honing head Ø 320-640 mm

Specifications:

Capacity:	PHM 340	PHM 640
Honing diameter range	150 - 340 mm	150 - 640 mm
Feed motions:		
Honing head RPM range	20 - 70 rpm	
Stroke speed	up to 19 m/min	
Air supply:		
Air supply pressure	6 - 10 bar	
Air consumption	up to 3,7 m ³ /min	
Storage case:		
Length/Width/Height	1700/850/630mm	1700/910/630mm
Gross weight	ca. 250 kg	ca.300 kg

Information and specifications subject to change without notice.

Ludwig Hunger GmbH

Graefelfinger Str. 146
81375 Munich/Germany

Phone: +49 89 7091-0
Fax: +49 89 7091-26

info@ludwig-hunger.de
www.ludwig-hunger.de