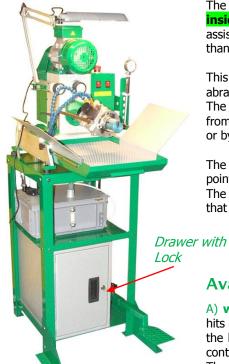


## PORTABLE HONING MACHINE

# model: LP3900+TWR or with Lateral Lever

Easy to use, easy to install in a van (version with bench) and very easy to move (BASE version)



LP3900+TWR390

The main characteristic of this machine is the removable tank with the exhaust pipe located inside the bench and the little dimensions, so it is easier to install it on work- van for the assistance on race. The honing machine has a speed range included between 0 and 800 RPM thanks to an electronic inverter that controls the main engine.

This allows to have the more opportune rotation speed according to the diameter to work. The abrasives expansion is increased by the central frontal wheel.

The dropping of the expansion, to make easier the insertion and the extraction of the cylinder from the mandrels during working, it's obtained through the mechanical pedal (*A and C version*) or by the **Lateral Lever** (*B and D version*)

The second wheel allows to change the cutting pressure of the abrasives; the gravitational pointer allows to visualize the pressure in a range included between 0 e 7.

The machine is completed by a tank to recover the honing oil with the relative electric pump that can be worked by the control console, anti-rotation bar, two lateral splash guard panels, a non-return valve fitted on the honing oil feed pipe and a pliable lamp.

The main engine is **220 Volt Mono-phase**, that works with a standard petrol or diesel oil generator. It is available also in 110 Volt, 60 Hz Mono-phase version.

### **Available version.** The honing machine LP3900 is available in FOUR versions:

A) with bench TWR390 (art. LP3900+TWR390). In this version the machine is mounted on hits appropriate bench equipped with mechanical pedal that replace the pedal switch and the lateral level. In fact, pushing the pedal the mandrel rotation is started and it is possible to control the abrasives opening.

The bench is designed to contain within itself the discharge of the tank with its discharge pipe, the pipe and the power cord for electrical pump; in this way a space of  $60 \times 60$  cm is enough to position the honing machine in the work-shop or on van.



Movement of the exhaust pipe of the honing oil, inside the bench.

- B) with bench TWR199 (art. LP3900+TWR199). this version the machine is mounted on hits appropriate bench which lacks the mechanical pedal. The rotation of the spindle is driving with a "electric switch pedal", the release of the expansion takes place with the side lever of the hone machine.
- C) with the kit KPM300 (art. LP3900+KPM300). If you don't want to buy the appropriate bench TW390, but you have decided for a fixed emplacement and you want to take advantage by the mechanical pedal, the honing machine is supplied with a kit to be applied on every working bench (see the lateral picture). The working bench must have a minimum depth of 640 mm.



D) **Base model** (art. LP3900-BASE). **Without bench**. That is with a pedal switch that controls the mandrel rotation more the **LATERAL LEVER** to disconnect the abrasive. The oil tank with the coolant pump is supplied separately with their tubes. (see photo on page 2). In this version the machine is very easy to move.



LP3900+TWR199

Spindle clutch like Sunnen with a wide range of hones available: from 9,4 to 139 mm. They are available specific hones for kart engine with long stone and short stone for all engine displacements. They are available abrasives with the same specification used in production and on race by some of most popular engine builders; and also diamond abrasives to hone nickel-plated cylinders.

### **Standard Equipment**

2x Lateral splash guard panels

1x Security Bar

1x Spindle Carter

1x Dial Bore Gage Holder (3 positions)

1x Electric Pump 220V Single Phase

1x Oil Tank - cap. 14 liters

1x Level Indicator of Honing Oil

1x Safety Information for Honing Oil 1x Tail Pipe + Feed Pipe

2x Flow Controllers

1x Non-return Valve

15x Liters of Honing Oil

1x Pliable Lamp

4x Antivibration Legs



Open machine "ON WORKING"

Closed machine "RETIRED"

Weight (oil not included)

> Width:

> Width:

> Depth:

> Depth:

### On Request:

> Hone Mandrel type CY48, CY44 and CY56, Mandrels for Ø 9,4 – 139 mm, Measuring Instruments (Bore Gauge Ø 30 – 100 mm, Micrometer 0 – 75 mm)





Hone Mandrels for Kart engines "SHORT stone" (68 - 80 mm)

TWR199: Bench (\*) complete of Coolant tank, capacity 14 liters.

**ON REQUEST: Drawer** 

with Lock

> Version with TW300R bench width:

> Version with TW390 bench width:

(\*) Overall Dimension: cm 48 x 43 x 85H - kg 33

**Dimensions and weights** 

> Base version width:

> Base version width:

> Machine weight of base version:

> Machine weight with Bench TW390:

> Weight of mech. pedal kit KPM300:



600 mm 810 mm (max)

610 mm

450 mm

475 mm

610 mm

Kg 90

1465 mm

1465 mm

### Technical Characteristics

- > Working capacity: Ø 9,4 139 mm
- > Hone rotation speed regulation by Electronic Digital Inverter
- > Hone Rotation speed: 0 800 g/m'
- > Increasing/Decreasing of rotation speed: 1 g/m'
- > Feeding: 220 Volt 50 Hz Single-phase/110 Volt 60 Hz Single phase
- > Main engine: 0,37 Kw
- 0,06 Kw > Pump engine:
- > Abrasives pressure Recordable and visualized
- > Separate Electric pump control
- > Spindle clutch like Sunnen
- > Honing oil Decanter
- > Removable Tank
- > Structure in Anodized Aluminium billet
- > Available colours: Red 3002, Blue 5010, White 9010, Yellow 1023, Green 6026 or 6029, Blue 5021, Black 9005, Silver 9007

- → Version with TW390 bench and mechanical pedal kit KPM300:
  - > Abrasives expansion: controlled by Mechanical pedal that can be modified by central wheel
  - > Main Engine controlled by Mechanical Pedal

### → BASE version and with TWR199 bench:

- > Direct expansion by frontal wheel
- > Lateral Level for the abrasives dropping
- > Main Engine controlled by Pedal Switch

### Gallery:











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**DFALER** 

