MASTERLAM®

AUTOMATIC METALLOGRAPHIC POLISHING MACHINE

AVAILABLE WITH AN OSCILLATING HEAD

The MASTERLAM® is an automatic machine with a single plate Ø 250/ 300 mm. The advanced technologies this machine uses allows obtaining repetitive and quality polishing results on all types of materials. This machine is available with an oscillating central pressure head (MASTERLAM® 1.0), with an individual pressure head (MASTERLAM® 2.0) and a combo head (MASTERLAM® 3.0).

MASTERLAM® 1.0 with oscillating head

Graphic user surface touch screen

ACCESSORIES

- Automatic dosing and distribution unit DISTRILAM controlled from machine display
- Removable aluminium plate lapped flat Ø 250 mm
- Removable aluminium plate lapped flat Ø 300 mm
- PC (central pressure) and PI (individual pressure) sample holder

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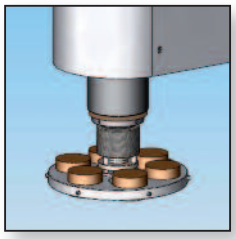
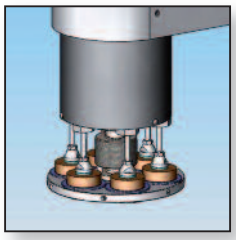
NON CONTRACTUAL DOCUMENT

TECHNICAL CARACTERISTICS

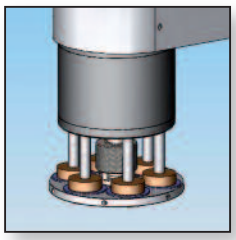
Plate capacity	Ø 250 to 300 mm
Body	aluminium frame and steel casing powder coated color
Bowl	plastic - removable for easy cleaning
Speed of plate	variable speed 20 - 650 rpm clockwise / counter clockwise rotation
Speed of head	variable speed 10 - 150 rpm clockwise / counter clockwise rotation
Load	variable 5 - 400 N (CP) / 0 - 100 N (IP)
Oscillating head	setting of speed and amplitude (option)
Combined power	1,1 kW
Lighting of working area	energy saving DELs
Control	graphical user interface, color touch screen color display 5,7"
Water output	rinsing tap with pulling out tube to clean the basin, automatic water solenoid
Programing	60 programs saved in the machine, optional USB plug to download programs, optional ethernet connection
Required voltage	230 V1 - 50 Hz
Pneumatic output	6 bars
Dimensions L x W x H	670 x 550 x 580 mm
Weight	80 kg



Central pressure head



Individual pressure head



Combo pressure head

ACCESSORIES FOR POLISHING MACHINES

Aluminium working plate
Ø 250 - 300 mm

Clamping ring
Ø 250 - 300 mm

Stainless steel sample holder for central pressure

Stainless steel sample holder for individual pressure

Distance rings
Ø 25, 30, 32, 40 mm

Plate for leveling samples

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LAM PLAN POLISHING TECHNOLOGY®

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COMPAGNY CERTIFIED
ISO 9001

MASTERLAM® 1.0

Automatic polishing machine with central pressure, oscillating head* and stock removal control*.

Automatic, single-plate Ø 250 to 300 mm polishing machine with bidirectional rotation and variable speed. Touch screen controls, intuitive and user-friendly interface. MASTERLAM® machines are equipped with the best programming, parameter storage and export technologies. Control of the 4-circuit DISTRILAM®* dosing system directly integrated.

The MASTERLAM® 1.0 is equipped with a powerful central-pressure head, bidirectional rotation, variable speed and pressure. The distinctive feature of this polishing head is the oscillation function* with oscillation configurable both for amplitude and frequency.

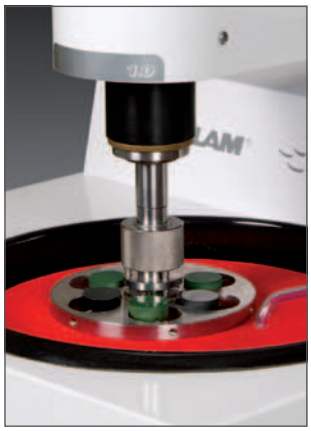
Use of the oscillating head will allow you to achieve unrivalled levels of performance and versatility: the quality of flatness results is improved, stock removal is increased, the service life of polishing supports is increased (uniform wear due to use of the entire surface of the plate).

The MASTERLAM® 1.0, with the oscillation* option, is particularly efficient for polishing large-sized samples and for finishing and appearance polishing of mechanical prototypes or micro-series components.

A stock removal control system with an automatic "stop at measurement" function is also available (accurate to 0.05 mm).

Technical data

Plate capacity	Ø 250 to 300 mm
Body	Steel, coated with epoxy paint
Bowl	Removable resin basin for easy cleaning
Controls	5.7 inch colour touch screen
Plate speed	Variable, from 20 to 650 rpm Bidirectional rotation
Head speed	Variable, from 10 to 150 rpm Bidirectional rotation
Applicable load	5 to 400 N Central Pressure
Capacity	Sample size in central pressure 6 X Ø 40 mm
Head oscillation function	Adjustable speed and amplitude (option)
Stock removal control function	Stock removal measure system with automatic stop, accurate to 0.05 mm (option)
Workspace lighting	LED
Water inlet	Removable pipe, with flow rate adjustment and safety solenoid valve
Programming	60 storable programs, USB connector to backup programs and Ethernet port for networking
Cumulative machine power	1.1 kW
Voltage	230 V – 50 Hz single-phase
Pneumatic feed	6 bars
Dimensions L x H x D	550 x 670 x 580 mm
Weight	80 kg
Reference	60 ML100 00



The MASTERLAM® 1.0 is a high-performance machine intended for intensive use such as in-production inspections.

**equipment available as an option.*

DISTRILAM®

Automatic dosing unit DISTRILAM® controlled by machine touch panel (4 circuits).

MASTERLAM® 2.0

Automatic polishing machine with individual pressure head.

Automatic, single-plate Ø 250 to 300 mm polishing machine, bidirectional rotation and variable speed.

The MASTERLAM® 2.0 is based on the same technology as the MASTERLAM® 1.0 with, in this configuration, a powerful individual-pressure head equipped with 6 pistons and a central drive allowing quick exchange of sample holders. This is the machine "par excellence" in control laboratories for polishing heterogeneous samples singly or simultaneously in batches of 6.

▸ Technical data

Plate capacity	Ø 250 to 300 mm
Body	Steel, coated with epoxy paint
Bowl	Removable resin basin for easy cleaning
Controls	5.7 inch colour touch screen
Plate speed	Variable, from 20 to 650 rpm Bidirectional rotation
Head speed	Variable, from 10 to 150 rpm Bidirectional rotation
Applicable load	0 to 100 N Individual pressure
Capacity	Sample size in individual pressure 1 - 6 X Ø 50 mm
Workspace lighting	LED
Water inlet	Removable pipe, with flow rate adjustment and safety solenoid valve
Programming	60 storable programs, USB connector to backup programs and Ethernet port for networking
Cumulative machine power	1.1 kW
Voltage	230 V – 50 Hz single-phase
Pneumatic feed	6 bars
Dimensions L x H x D	550 x 670 x 580 mm
Weight	85 kg
Reference	60 ML200 00

Sedimentation tank 30L with pump controlled by the machine

MASTERLAM® 3.0

Automatic polishing machine with central and individual pressure and oscillating head*.

Automatic, single-plate Ø 250 to 300 mm polishing machine, bidirectional rotation and variable speed.

This machine has all the functions that make the MASTERLAM® range outstanding and, on this model, a **specific new "combo" head.** The MASTERLAM® 3.0 is the metallographic polishing machine without concession. Polishing can be carried out with central pressure or individual pressure and with oscillation*.

The MASTERLAM® 3.0 is based on the same technology as the MASTERLAM® 1.0 with, in this configuration, a powerful central and individual pressure head equipped with 6 pistons. Changing sample holders is quick and the pressure mode is controlled directly on the screen without having to touch the head, thus, you can switch from one pressure mode to another in a few seconds.

Advanced combo-head

Total versatility for metallographic research or production control applications.

**equipment available as an option.*

MASTERLAM 1.0®

LAM PLAN®

Automatic polishing machine with Central Pressure PC

ESSENTIALS

Aluminium working plate 200/250/300 mm

ACCESSORIES

Cover

Anti splash ring for plate Ø 200/250 mm

Universal sample older Series 610

Sample older for PC

Levelling disc

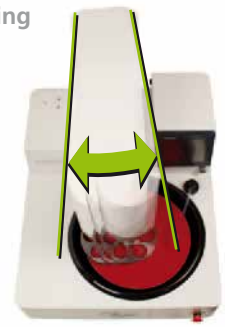
Cabinet

Removal rate sensor *(not compatible with oscillation)*

Full security cover

UPGRADE

Oscillating head



DISTRILAM dispenser

FIXING ACCESSORIES

Clamping ring

For self-adhesive discs and cloths

Disc FAS®

Aluminium or PVC plates

For self adhesive discs and cloths

Disc FAS®M

Magnetic plates

For magnetic discs and cloths

Disc FMS

Aluminium or PVC plates

For magnetic or non-adhesive cloths Series X LAM®

Disc X LAM®

Aluminium or PVC plates

MASTERLAM 2.0®

Automatic polishing machine with Individual Pressure PI

ESSENTIALS

Aluminium working plate 300 mm

ACCESSORIES

Cover

Sample older for PI

Reducer Rings

Cabinet

FIXING ACCESSORIES

Clamping ring

For self-adhesive discs and cloths

Disc FAS®

Aluminium or PVC plates

For self adhesive discs and cloths

Disc FAS®M

Magnetic plates

For magnetic discs and cloths

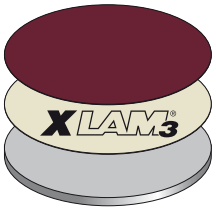
Disc FMS

Aluminium or PVC plates

For magnetic or non-adhesive cloths Series X LAM®

Disc X LAM®

Aluminium or PVC plates



UPGRADE

DISTRILAM dispenser

Full security cover