

# 1-Wheel Lapping, Polishing and Flat Honing

Increased quantities – More performance – Series production – High productivity  
User-friendliness – Precision and Safety



## 1-Wheel Lapping, Polishing and Flat Honing

### ***Inspiration.***

*Nature is our model: Inspiration and standard for our endeavours towards innovation and perfection.*



Lapping or polishing with free-rolling particles or flat honing with fixed or super abrasive wheels – the machines of our FLM 750 – 1500 range are real all-rounders. Their employment in both large and small manufacturing shops is multipurpose and includes single piece machining as well as performance oriented series production. Their technological advantages are well

in evidence:

- Quick adjustment of the lapping wheel by means of central screw
- Minimum loading, turning and unloading times with user-friendly special facilities
- Optimal maintaining of a flat working wheel
- Wheel cooling
- Quick and easy wheel change

- Stable bearing arrangement for quiet operation
- Modern singlearm pneumatic construction for optimal accessibility and reduction of working times
- Various dosage systems of lapping and polishing materials for economic consumption
- Integrated inching system
- Robust construction

If you put economic efficiency, flexibility and reliability at the top of your list of requirements for the production of medium to large work pieces, then everything speaks well for our FLM 750, 1000, 1250, 1500 range of machines.

### Technical data

	FLM 750	FLM 1000	FLM 1250	FLM 1500
Lapping-plate, outer Ø	750 mm	1000 mm	1250 mm	1500 mm
3 conditioning-rings, inner Ø	300 mm	400 mm	500 mm	600 mm
Rotating speed of lapping plate	70 min <sup>-1</sup>	60 min <sup>-1</sup>	50 min <sup>-1</sup>	35 min <sup>-1</sup>
Timer	digital	digital	digital	digital
Main drive	4 kW	7,5 kW	15 kW	22 kW
Voltage	3x400-480 Volt 50/60 Hz	3x400-480 Volt 50/60 Hz	3x400-480 Volt 50/60 Hz	3x400-480 Volt 50/60 Hz
Dimension L x W x H	125x167x215 cm	150x200x218 cm	185x250x230 cm	200x250x230 cm
Weight	ca. 1500 kg incl. pneumatic	ca. 2500 kg incl. pneumatic	ca. 3950 kg incl. pneumatic	ca. 5850 kg incl. pneumatic
Colour	Pearl white RAL 1013 Vermilion RAL 2002	Pearl white RAL 1013 Vermilion RAL 2002	Pearl white RAL 1013 Vermilion RAL 2002	Pearl white RAL 1013 Vermilion RAL 2002

Options				
Variable speed of lapping plate*	0-70 min <sup>-1</sup>	0-60 min <sup>-1</sup>	0-50 min <sup>-1</sup>	0-35 min <sup>-1</sup>
Main drive	4 kW	7,5 kW	15 kW	22 kW
Pneumatic pressure adjustable, 3 cylinders	50-1800 N	50-2700 N	50-4850 N	50-6880 N
Compressed air supply	6 bar	6 bar	6 bar	6 bar
Cooling, tank capacity	150 l	150 l	150 l	150 l
Cooling unit			yes	
Loading- and unloading table			yes	
Turning device			yes	
Indexing for loading/turning/unloading			yes	
Polishing systems			yes	

\* Rotating speed of lapping plate, variable speed with frequency inverter.



## 1-Wheel Production Flat Lapping and Polishing Machines

In the manufacture of small to medium sized work pieces, absolute precision, superior quality and economic efficiency are often of paramount importance. Requirements that are fully and comprehensively satisfied by our FLM 500 and 550 range of machines.

Lapping or polishing with free-rolling particles or flattening with fixed abrasives wheels- the machine of our FLM 500 and 550 range are space-saving in their dimensions but high in performance.

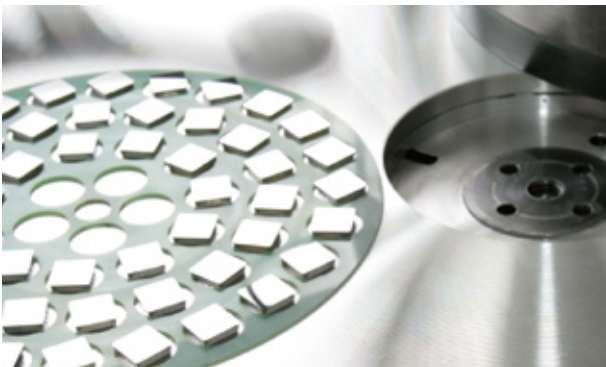
Their operational application is mainly concentrated on small to medium series. And their technological advantages are well in evidence:

- Quick adjustment of the lapping wheel by means of central screw
- Minimum loading, turning and unloading times with user-friendly special facilities
- Wheel cooling
- Optimal maintaining of a flat working wheel
- Quick and easy wheel change
- Robust pneumatic construction to reduce machining times
- Various dosage systems of lapping and polishing materials for economic consumption
- Cost effective manufacturing

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## Technical data

	FLM 500	FLM 550
Lapping-plate, outer Ø	500 mm	550 mm
3 conditioning-rings, inner Ø	190 mm	220 mm
Rotating speed of lapping plate	70 min <sup>-1</sup>	70 min <sup>-1</sup>
Timer	digital	digital
Main drive	1,5 kW	1,5 kW
Voltage	3x400-480 Volt 50/60 Hz	3x400-480 Volt 50/60 Hz
Dimension L x W x H	85x100x50 cm	85x100x50 cm
Weight	ca. 480 kg incl. pneumatic	ca. 480 kg incl. pneumatic
Colour	Pearl white RAL 1013 Vermilion RAL 2002	Pearl white RAL 1013 Vermilion RAL 2002

Options		
Variable speed of lapping plate*	1-75 min <sup>-1</sup>	1-75 min <sup>-1</sup>
Main drive	2,2 kW	2,2 kW
Pneumatic pressure adjustable, 3 cylinders	50-750 N	50-750 N
Compressed air supply	6 bar	6 bar
Cooling, tank capacity	150 l	150 l
Cooling unit		yes
Loading- and unloading table		yes
Turning device		yes
Polishing systems		yes
Dimension with pneumatic	85x100x190 cm	85x100x190 cm



## Special Purpose Machinery Manufacture

### FLM 505 2R

Production Flat Honing Machine with loading and unloading table as well as integrated measuring system, loading and unloading by means of "Sandwich-System" used on 2-wheel machines.



### FLM 755-4R-H

Production Flat Honing Machine with loading and unloading table as well as integrated measuring system, loading and unloading by means of "Sandwich-System" used on 2-wheel machines.



## FLM 2200-P 2R



High-End Optic Polishing Machine with pitch coating for highest polishing qualities in terms of flatness and surface roughness. Integrated CNC milling system, washing station, polishing liquid tank for cleanroom polishing works on glass and zerodur in 24 hours operation.

## FLM 3250-3R



Production lapping machine for parts up to 1500 mm in diameter. Programmable force on work pieces between 0-750 daN.

*We are one of the leading companies worldwide in the manufacture of flat honing, lapping and polishing machines. At our customers we are known just as much by our standard products as by custom-made and need-oriented special products. This*

*special know-how results from decades of experience from daily new assignments in contract work and the support of our expert and committed workforce. We are happy to pass on our know-how to our customers within the framework of contract*

*work, tests and complex or experimental project studies. Put to the test our reliability and innovative dynamism. Further information may be obtained from the addresses listed or from our homepage.*

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