

WHEELS

WHEELS WITH INCORPORATED ABRASIVES

LAPI & POLI TOOLS

- The tools are made of polyurethane foam.
- The tools are cooled with water (no added abrasive necessary).
- The tools minimize cracking layer in worked glass thereby polishing is easier.
- The tools are suitable for lathes (vertical way) as well as for flat machines (horizontal way).
- The tools are easily profiled.






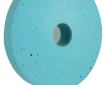


CUTTING – LAPI

- We produce 6 types of LAPI Tools. The difference is in the grit of incorporated abrasives.
- Lapi Pink has the greatest material removal effect and creates the roughest surface on glass, whereas Lapi Blue has the smallest material removal effect and creates the finest surface on glass.

rough cutting ↑

↓ fine cutting

	PINK • is suitable for removing seams after moulding, for rough working within radii of various dimensions, etc.
	VIOLET • has the same use as Pink, however, it creates a finer surface with a slightly lower removal effect on glass than the Pink wheel.
	ORANGE • is suitable for various kinds of manual repairs prior and following chemical polishing as well as for fining before mechanical polishing.
	GREEN • is suitable for fine cutting after rough LAPI. The tool creates surfaces which can be polished mechanically.
	BLACK • can directly polish concave surfaces, wedge cuts, etc. It is well suited for manual repairs of sodium-potassium crystal.
	BLUE • achieves final surface quality comparable to surfaces after processing with the finest pumice. In many cases this tool can be used for the final polishing.

POLISHING - POLI

- We offer 2 types of POLI Tools.
- The difference is in selected polishing powder.



BROWN • the tool contains polishing powder (cerium oxide) in high concentration.



WHITE • the best polishing powder (Cerox 1650) is incorporated inside the tool.

LAPI & POLI TOOLS ARE MANUFACTURED IN THE FOLLOWING TWO GRADES OF HARDNESS

- **T** - 23-29 ShD, the tools are suitable for hand working of glass on lathes
- **SP** - 30-36 ShD, the tools are suitable for automatic and flat machines




RECOMMENDED WORKING CONDITIONS • 11 m/s (LAPI T & POLI T), 20-32 m/s (LAPI SP & POLI SP)

DIAM.	TH.	PINK	VIOLET	ORANGE	GREEN	BLACK	BLUE	BROWN	WHITE
100 mm	20 mm	€ 17.50			€ 16.40			€ 37.60	€ 49.00
200 mm	30 mm	€ 56.80			€ 53.00			€ 121.80	€ 158.90
300 mm	35 mm	€ 79.00			€ 73.70			€ 169.50	€ 221.10
400 mm	35 mm	€ 107.70			€ 102.20			€ 235.20	€ 306.80
500 mm	35 mm	€ 159.70			€ 149.10			€ 342.90	€ 447.20

LAPI, MH, MJ AND NP POINT TOOLS

- We offer point tools with shanks Ø 3 mm or Ø 6 mm.
- Upon prior arrangement, tools can be supplied in various shapes and dimensions to meet customer requirements.



SHAPE	SQUARE SHAPE 			ROUND SHAPE 			BALL SHAPE 			
	SIZE	12x16 mm	25x24 mm	32x24 mm	12x16 mm	25x24 mm	32x24 mm	Ø 15 mm	Ø 20 mm	Ø 25 mm
SHANK		Ø 3 mm	Ø 6 mm	Ø 6 mm	Ø 3 mm	Ø 6 mm	Ø 6 mm	Ø 3 mm	Ø 6 mm	Ø 6 mm
MH TOOL		€ 3.10	€ 3.50	€ 4.10	€ 3.40	€ 4.30	€ 4.60	€ 3.60	€ 3.80	€ 4.20
MJ TOOL		€ 3.20	€ 3.60	€ 4.20	€ 3.50	€ 4.40	€ 4.70	€ 3.70	€ 3.90	€ 4.30
LAPI PINK										
LAPI VIOLET		€ 3.40	€ 3.80	€ 4.40	€ 3.70	€ 4.60	€ 4.90	€ 3.90	€ 4.10	€ 4.50
LAPI ORANGE										
LAPI GREEN		€ 3.30	€ 3.70	€ 4.30	€ 3.60	€ 4.50	€ 4.80	€ 3.80	€ 4.00	€ 4.40
LAPI BLACK										
LAPI BLUE										
A 24 M TOOL		€ 5.40	€ 5.80	€ 6.40	€ 5.70	€ 6.60	€ 6.90	€ 5.90	€ 6.10	€ 6.50
POLI BROWN		€ 5.00	€ 5.40	€ 6.00	€ 5.30	€ 6.20	€ 6.50	€ 5.50	€ 5.70	€ 6.10

WHEELS

CARRIERS OF POLISHING & LAPPING SLURRIES

MH TOOLS

MH tools (discs/wheels) are manufactured from specially treated porous polyurethane foam. The tools are used for the polishing and lapping of glass, natural stones, single crystal materials, etc. The tools are used in all cases where, up until now, traditional materials such as cork, poplar wood, felt, etc., have been used. When compared with traditional materials, MH Tools offer the following advantages:

- Greater durability
- Higher polishing effectivity
- Higher quality of polished articles
- Higher reproducibility
- Greatly improved work safety
- Less physical effort



TOOLS ARE MANUFACTURED IN 4 GRADES OF HARDNESS

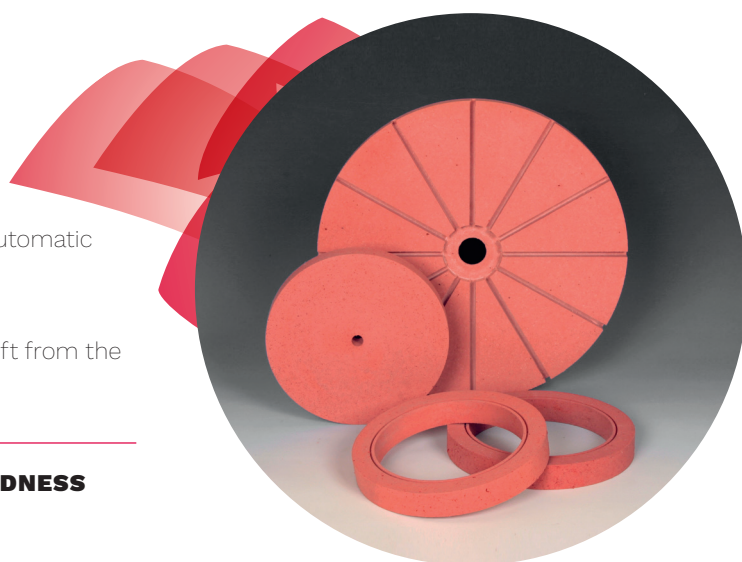
- **MM** - very soft - 7-10 ShD, glass repairs
- **M** - soft - 11-15 ShD, repairs and polishing of large radii or slightly profiled cuts
- **T** - hard - 18-23 ShD, flat surfaces, round R25, wedge cuts 100-150°
- **TT** - very hard - 25-29 ShD, polishing of cuts and other shapes, facets, seams, upper edge of glasses

RECOMMENDED WORKING CONDITIONS • 7 m/s (Cutting lathes), 5 m/s (Flat grinding machines)

DIAMETER	100 mm	200 mm	300 mm	400 mm	500 mm	600 mm
THICKNESS	20 mm	30 mm	35 mm	35 mm	35 mm	60 mm
PRICE	€ 11.70	€ 37.80	€ 52.60	€ 73.00	€ 106.50	€ 190.50

MTV TOOLS

- Polyurethane tools that contain synthetic fibres.
- The tools help to achieve top quality of polished surface.
- MTV tools are prepared for use in automatic and semi-automatic machines with polishing slurry.
- High durability (compared to felt tools).
- The tool advantage is the very low amount of residues left from the tool in the polishing slurry.



TOOLS ARE MANUFACTURED IN 3 GRADES OF HARDNESS

- **M** - soft - 20-24 ShD
- **T** - hard - 25-29 ShD
- **TT** - very hard - 30-34 ShD

DIAMETER	100 mm	200 mm	300 mm	400 mm	500 mm	600 mm
THICKNESS	20 mm	20 mm	35 mm	35 mm	35 mm	40 mm
PRICE	€ 15.20	€ 43.40	€ 68.40	€ 95.00	€ 138.40	€ 217.50

MJ TOOLS

- The tools are filled with natural fibers, thence the tools are suitable for work with pumice and tripoli.
- The MJ material is homogeneous and has the same properties in all directions, thus it can be used in both, vertical and horizontal machines.
- MJ tools are designed for hand polishing.
- MJ tools retain more slurry with large grain (such as pumice) on the wheel surface and therefore give a better polishing and lapping effect.

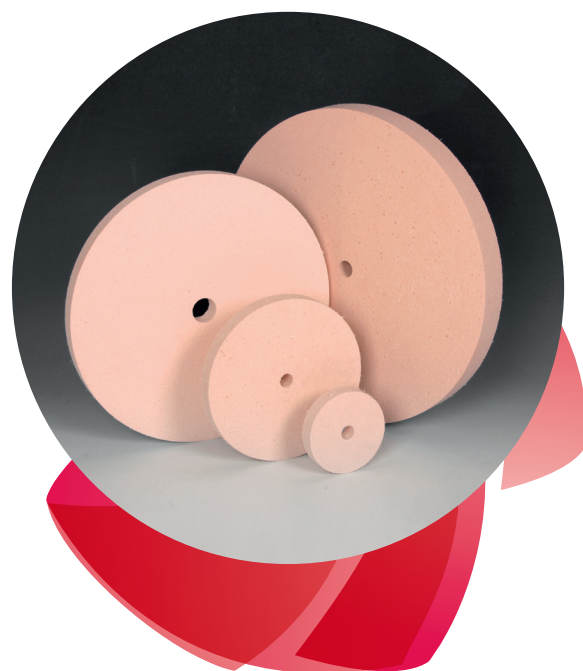
TOOLS ARE MANUFACTURED IN 3 GRADES OF HARDNESS

- **MM** - very soft: < 10 ShD
- **M** - soft: 10-14 ShD
- **T** - hard: 17-22 ShD

GRINDING AND POLISHING SLURRIES • All traditional polishing or lapping slurries can still be used with MJ tools, e.g. pumice, tripoli, alumina or silicon carbide.

RECOMMENDED WORKING CONDITIONS • 7 m/s (Cutting lathes), 5 m/s (Flat grinding machines)

DIAMETER	100 mm	200 mm	300 mm	400 mm	500 mm	600 mm
THICKNESS	20 mm	30 mm	35 mm	35 mm	35 mm	60 mm
PRICE	€ 12.80	€ 41.60	€ 57.90	€ 80.40	€ 117.10	€ 209.60



FELT TOOLS NP

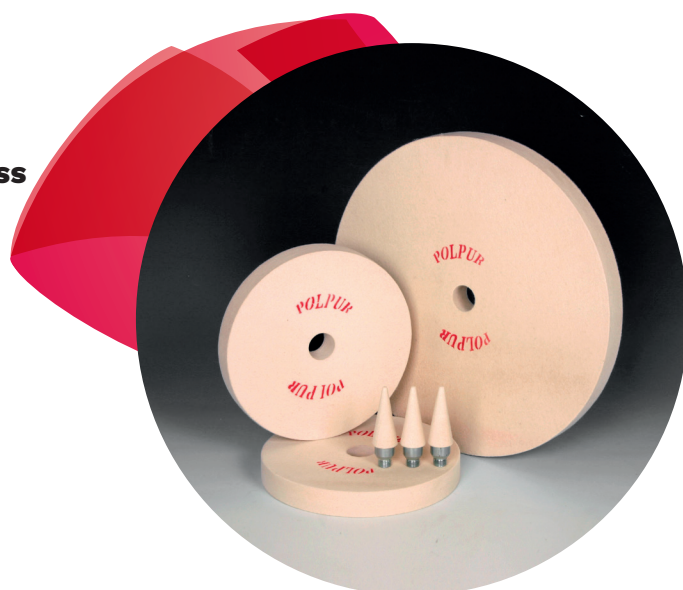
- NP tools are manufactured from pure natural wool.
- High absorption capacity of the tool.
- NP tools excellently carry polishing slurry.

TOOLS ARE MANUFACTURED IN 2 GRADES OF HARDNESS

- **M** - soft: 0,50 g/cm³
- **T** - hard: 0,60 g/cm³

GRINDING AND POLISHING SLURRIES • All traditionally used polishing slurries such as fine pumice, tripoli, oxides cerium, can be used. Due to the fineness of the fiber, it is recommended to use finer types of grinding materials.

RECOMMENDED WORKING CONDITIONS • 8 m/s (Cutting lathes), 4 m/s (Flat grinding machines)



DIAMETER	THICKNESS	CENTRE BORE	HARDNESS M	HARDNESS T
300 mm	40 mm	42 mm	€ 44.30	€ 49.90
500 mm	40 mm	42 mm	€ 115.00	€ 138.10

DIAMOND TOOLS

ROUGH GRINDING: D251, D213, D181
FINE GRINDING: D64, D54, D46, D39



CYLINDRIC DIAMOND WHEEL (1A1)

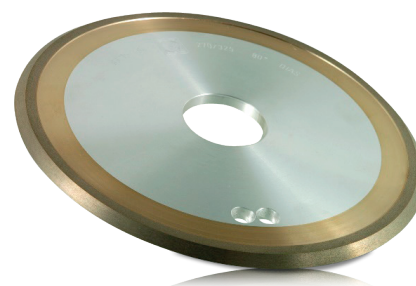
DIAMETER	TH.	CENTER BORE	FINE GRINDING	ROUGH GRINDING
80 mm	30 mm	42 mm	€ 181.48	€ 217.76
120 mm	22 mm		€ 223.04	€ 267.64
150 mm	22 mm		€ 273.20	€ 327.84
200 mm	30 mm		€ 493.08	€ 591.68
250 mm	30 mm		€ 652.52	€ 783.04
300 mm	20 mm		€ 540.92	€ 649.08



ANGULAR DIAMOND WHEEL (1E1)

ANGLES • 80°-130°

DIAMETER	TH.	CENTER BORE	FINE GRINDING	ROUGH GRINDING
80 mm	10 mm	42 mm	€ 103.80	€ 124.56
100 mm			€ 119.68	€ 143.60
120 mm			€ 146.76	€ 176.12
150 mm			€ 177.32	€ 212.80
200 mm			€ 228.84	€ 274.60



RADIUS DIAMOND WHEEL (1F1)

DIAMETER	TH.	CENTER BORE	RADIUS	FINE GRINDING	ROUGH GRINDING
80 mm	30 mm	42 mm	R25	€ 279.32	€ 335.16
100 mm				€ 323.32	€ 387.96
150 mm				€ 504.60	€ 605.52
200 mm				€ 619.96	€ 739.40
250 mm				€ 826.00	€ 991.20



CORE DIAMOND DRILLS

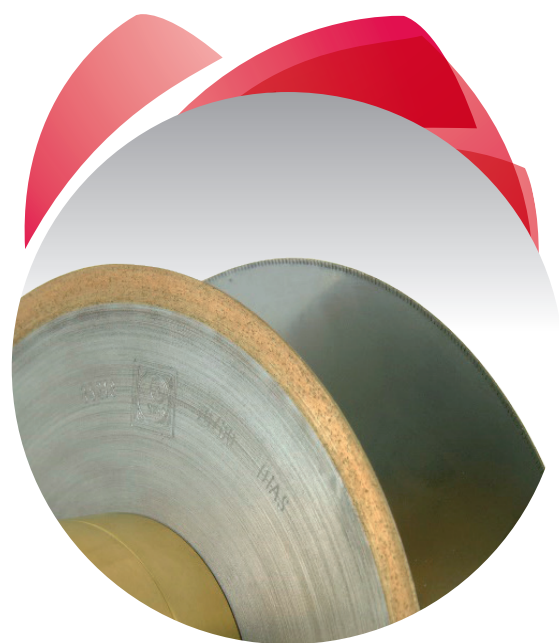
DIAMETER	PRICE	DIAMETER	PRICE
3, 4 mm	€ 31.64	17, 18 mm	€ 34.64
5, 6 mm	€ 22.24	19, 20 mm	€ 36.96
7, 8 mm	€ 25.12	21, 22 mm	€ 38.96
9, 10 mm	€ 27.84	23, 24 mm	€ 41.04
11, 12 mm	€ 29.00	25, 26 mm	€ 44.40
13, 14 mm	€ 28.04	27, 28 mm	€ 46.64
15, 16 mm	€ 32.72	29, 30 mm	€ 50.04

• Sintered drills have diamond layer (D181) at the end of the core. The tool advantage is very high durability, cutting speed and efficiency of drilling. Sintered drills require permanent feeding of cooling water to avoid damages.



DIAMOND SAWS

SINTERED SAWS		CHARGED SAWS	
SIZE	PRICE	SIZE	PRICE
Ø 125×0.8/20 mm	€ 50.40	Ø 120×0.3/30 mm	€ 4.80
Ø 150×0.8/20 mm	€ 48.70	Ø 120×0.4/30 mm	€ 5.00
Ø 150×1.4/30 mm	€ 65.90	Ø 120×0.5/30 mm	€ 7.00
Ø 150×2/16 mm	€ 83.60	Ø 120×0.6/30 mm	€ 7.90
Ø 200×1/20 mm	€ 75.20	Ø 150×0.5/30 mm	€ 8.40
Ø 200×1.4/20 mm	€ 68.10	Ø 200×0.4/35 mm	€ 9.00
Ø 200×2/20 mm	€ 85.80	Ø 200×0.5/35 mm	€ 10.10
Ø 250×1.8/20 mm	€ 131.70		
Ø 300×2.2/20 mm	€ 135.10		
Ø 400×2.2/20 mm	€ 171.80		



METAL FLANGES

- For quick change of tools we recommend using the metal flange. You don't have to re-shape the wheel everytime you change the wheel.

DIAMETER OF THE FLANGE	CENTER BORE OF THE TOOL	THICKNESS OF THE TOOL	PRICE
40 mm	32 mm	25 mm	€ 28.40
56 mm	42 mm	10 mm	€ 31.00
63 mm	42 mm	10 mm	€ 35.00
63 mm	42 mm	20 mm	€ 37.00
63 mm	42 mm	35 mm	€ 44.00
80 mm	42 mm	35 mm	€ 51.00

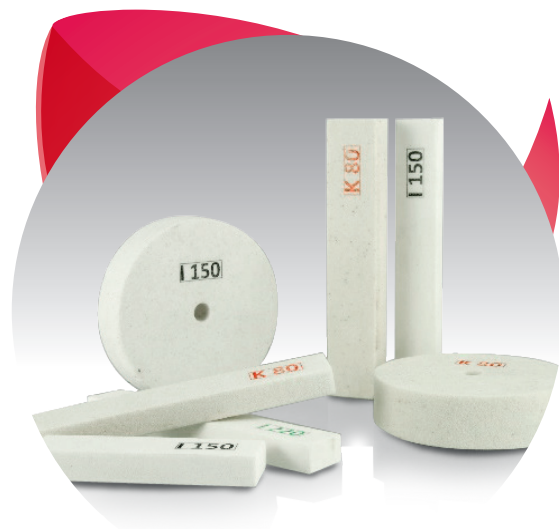


CERAMIC STICKS AND WHEELS

- Material is suitable for redressing or shaping the polyurethane and diamond tools. It is based on abrasive (corundum) bonded by ceramic.

AVAILABLE GRITS • F80, F150, F220

SHAPE	SIZE	PRICE
CUBE	150×25×6 mm	€ 0.90
CUBE	150×25×13 mm	€ 0.90
CUBE	150×30×20 mm	€ 1.10
CUBE	200×50×25 mm	€ 3.53
WHEEL	Ø 100×25/10 mm	€ 3.53
WHEEL	Ø 100×25/20 mm	€ 3.53



ABRASIVES

GRINDING, LAPPING AND POLISHING POWDERS

GRINDING, LAPPING

Carborundum (SiC), White corundum (Al₂O₃)

- Grinding and lapping powders suitable for grinding slurry.
- Two types of SiC: Black 48C, Green 49C (better quality).
- We offer various grit sizes in range of F16-F1200.

CORUNDUM	PRICE FOR KG	BLACK SIC	PRICE FOR KG
F16-F90	€ 1.68	F16-F90	€ 2.52
F100-F220	€ 1.76	F100-F180	€ 2.64
F240	€ 2.51	F220-F360	€ 2.96
F280-F320	€ 2.96	F400	€ 3.20
F360-F400	€ 3.54	F500-F1000	€ 3.59
F600	€ 3.82		
F800	€ 4.92		
F1000	€ 5.16		
F1200	€ 7.08		



POLISHING

Pumice, Tripoli

- Abrasives suitable for pre-polishing or final polishing.

	PUMICE G1	PUMICE 1/0 N	PUMICE 2/0 N	PUMICE 3/0 B	PUMICE 6 (FF)	TRIPOLI
D50	315 µm	42 µm	32 µm	45 µm	16 µm	3.5 µm
PRICE	€ 2.40	€ 2.40	€ 2.48	€ 2.40	€ 2.40	€ 1.95
PACKAGE	25 kg	25 kg	25 kg	25 kg	25 kg	25 kg

Cerium oxide polishing powders (CeO₂)

- Outstanding properties (long life, top quality of polished surface).
- Recommended carriers: Polpur tools (MH, MTV, NP, AB, CZ).
- Recommended concentration of polishing slurry: 100-150 g/l (manual polishing), 55-110 g/l (machine polishing).

TYPE	CEROX™ 1650	CEROX™ 1670G	CEROX™ 2610
PRODUCER	Solvay	Solvay	Solvay
D50	1.0 - 2.0 µm	1.0 - 2.0 µm	2.7 µm
CeO ₂ CONTENT	54 - 63 %	≥ 66.5 %	≥ 47 %
COLOUR	White	White	White
PRICE	€ 30	€ 30	€ 19
PACKAGE	20 kg	20 kg	20 kg



SOLVAY



