OptoTech
a schunk company

OptoTech

Product Catalogue
Consumables
Ophthalmics

Content

Content

OptoTech Optikmaschinen GmbH

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Lens Protection Tape
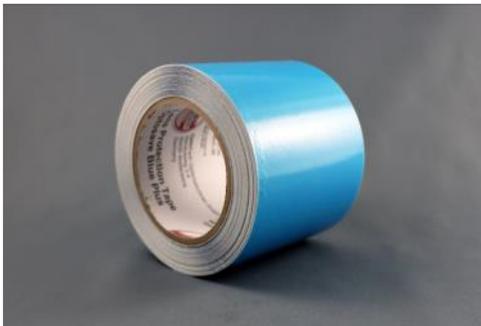
Surface Saver Tape for protecting lenses during the processing cycle in RX production. Excellent conformity and removes cleanly.

It offers moderate tack and adhesion properties, and high cohesion for mineral and organic lenses

Saver tape	Lens material	Dimensions (L x W)	Art. No.
Optosave blue PLUS 35	Mineral + Organic	35 m x 0.1 m	*SC-82-3301*
Optosave blue PLUS 105	Mineral + Organic	105 m x 0.1 m	*SC-82-3304*
Optosave blue PLUS 210	Mineral + Organic	210 m x 0.1 m	*SC-82-3303*

Saver tape	Lens material	Dimensions (L x W)	Art. No.
Optosave Low tack 35	Mineral + Organic	35 m x 0.1 m	*SC-82-3311*
Optosave Low tack 105	Mineral + Organic	105 m x 0.1 m	*SC-82-3314*
Optosave Low tack 210	Mineral + Organic	210 m x 0.1 m	*SC-82-3313*

Lens Protection

Alloy

Alloy is a low melting metal craving for blocking of organic and mineral lenses in RX production.

Alloy	Work piece	Weight	Art. No.
Alloy 47°C / 117°F	Mineral + Plastic	1 Kg	GE-53-3301
Alloy 7 70°C / 158°F	Mineral	1 Kg	GE-53-3302
Alloy 60°C / 145°F	Mineral + Plastic Pb and Cd-free	1 Kg	GE-53-3303
Alloy 47-52°C / 126°F	Mineral + Plastic Cd-free	1 Kg	GE-53-3304

Blocking Chuck

For blocking all kind of lenses incl. axis notch for recognizing free form lens axis.

Ø47mmx50mmx10mm

Aluminium	***Art. No.: 061-90-231***
Stainless steel	***Art.-No.: 061-90-225***

Nozzle Cutter

For cutting alloy nozzles around the alloy block to guarantee a plano contact surface for the collet chuck.

Ø47mmx52mmx15mm

Art. No.: 161-90-011

Blocking

Coolant KE 500

Water soluble coolant additive without mineral oil for processing optical lenses with diamond tools. KE 500 is free of phenols, nitrite, silicon and PCB/PCT, PTBB as well as other dangerous and/or raw materials.

Further advantages of KE 500 are:

- high anticorrosive reserve
- less foaming
- good machine maintenance
- environment-friendly
- good skin tolerance

Coolant GE 44

Fluid G 44 is a full synthetic, mineral-oil free water soluble coolant for processing ceramics, flat-, optical- and crystal glass. It can also be used for processing steel and non iron metals like cupper.

Fluid G 44 is free from chlorine, phenols, nitrite, silicon and PCB/PCT and PTBB labelling obligation as well as other dangerous and/or raw materials with labelling obligation.

Further advantages of Fluid G 44 are:

- high economic
- low foaming
- good rust protection and cooling impact
- good rinsing
- good skin tolerance

Coolants

Article	Color	Viscosity (20°C)	pH-Value	Refractometer Factor	Packing units	Art. No.
KE 500	yellow	12mm²/s	9.3	1.8	10 ltrs, 25 .ltrs or 200 ltrs.	KM-28-0002
GE 44	light yellow	8mm²/s	9.4	2.0	10 ltrs, 25 .ltrs or 200 ltrs.	KM-29-0004

Milling Tools ASM 80 CNC

Bronze bonded tool for fining organic and mineral lenses in RX-production prior to polishing.
Type A Ø 60mm x 40mm x 3mm
Grit sizes D30 / C35

Art. No.: PS-02-0045 (ball)
Art. No.: 063-90-0010 (reception)

Bronze bonded diamond tool with pre- and a fine-generating process to produce RX- and freeform lenses in mineral on the ASM 80 CNC.

Art. No.: PS-03-0001
Art. No.: PS-02-0093
Art. No.: 063-90-0020

Dressing Stone

Silicon carbide dressing stone for dressing diamond tools on the ASM 80 CNC.
Dressing stone Ø70mm x 25mm,
Ø45mm x 50mm x 10mm

Art. No.: 062-90-0018

Milling Tools

Milling Tools

Milling tool with 11 PCD inserts

Machine designed milling cutter with PCD inserts for generating all types of lenses in RX production on OptoTech Digital Surfacing Turning Machines.

Setting a standard with high cost-effectiveness and consistent quality for milling and diameter reduction enable to cut all kind of organic lens indices.
Re-sharpening up to 3 times is possible.

Ø 60mm x 55mm x 14mm R7 HD 20
11 inserts   *Art. No.: FC-76-0013*

Milling tool with 12 PCD inserts

Ø 66mm x R 6.0 / Z12 HSK 32
12 inserts *Art. No.: FC-80-0001*

Ø 66mm x R 6.0 / Z15 HSK 32
15 inserts *Art. No.: FC-80-0007*

Milling tool with 15 PCD inserts

Milling Tools

PCD Turning Tool

Electroplated turning tool for fining the lens after generating process prior to polishing. Recommended for toric RX prescription lenses in standard CR 39
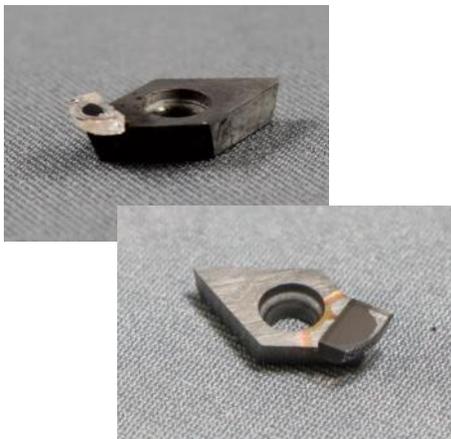
PCD Radius 5.5 mm **Art. No.: WZ-05-0112**
Holder Art. No. 064-90-0016

PCD Radius 2.0 mm **Art.No.: WZ-05-0111**
Holder Art. No. 064-90-0015

Diamond Turning Tool

Natural diamond for turning generated surfaces prior to polishing. Recommended for all free form processes in 1.6, 1.67, trivex and polycarbonate.

ND R 2.0 mm 120° **Art. No.: WZ-05-0110**
ND R 5.0 mm 40° **Art. No.: WZ-05-0119**

Diamond Tools

Holder for Turning Tool

Holder Titanium Version

Titanium holder natural diamond **Art. No. 064-90-0065**
Titanium holder pcd cutting plate **Art. No. 064-90-0066**

Holder Stainless Steel Version

Stainless steel holder natural diamond **Art. No. 064-90-0015**
Stainless steel holder pcd cutting plate **Art. No. 064-90-0016**

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Polishing Tool ASP 80 Twin-A

New OptoTech HPT Tools
(Hybrid Polishing Technology)

The ASP 80 Twin-A is equipped with a new processing method to bring down process times and increase tool lifetime while producing high value products. With these materials, OptoTech has the fastest machine in the market, polishing 2 lenses simultaneously.

The process depends always on :

- Diameter
- Material index
- Curve geometry
- Quality of turned surface

HPT Polishing Membrane
Ø61 R43

Art. No. PT-15-2180

HPT Polishing Membrane
Ø50 R38

Art. No. PT-15-2179
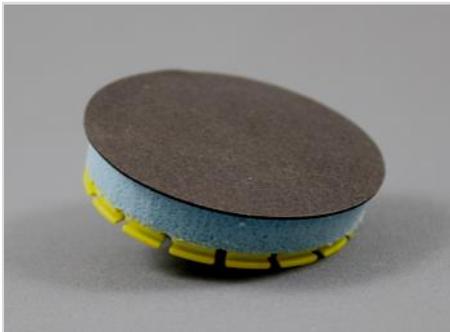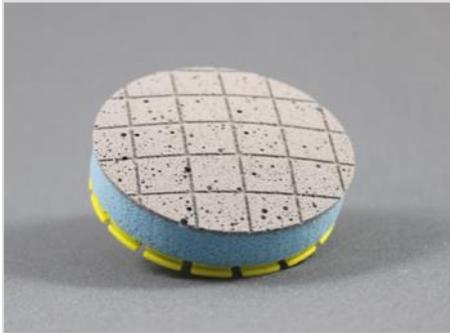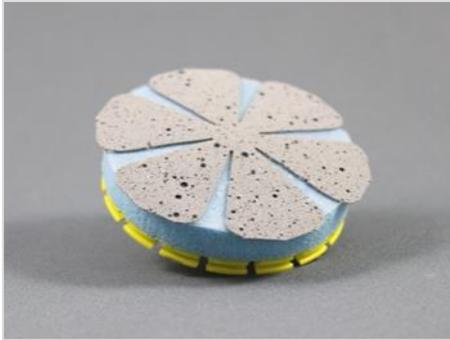

HPT Fine Polishing Membrane Ø50 R38

Art. No. PT-15-2173

Holder for HPT Polishing Membrane
Ø50 R38
Art. No. 196-90-0126

Holder for HPT Polishing Membrane
Ø61 R43
Art. No. 196-90-0127

HPT Fine Polishing Membrane Ø33 R26

Art. No. PT-15-2187

Polishing Tools ASP 80 Twin-A

Spring Tool ASP 80 CNC / Torilab Store

Polishing spring tools for RX-production

Different polishing ground for polishing free form and other lenses in RX-production. Various types are available, e.g. GR 35, LP46, black felt and LSF-material.

Radius	Material	Art. No.
45		PT-17-5023
75		PT-17-5022
250	Polyurethane	PT-17-5021
1000	flower structure	PT-17-5027
-90		PT-17-5028
-50		PT-17-5029
45		PT-17-5003
75		PT-17-5002
250	Polyurethane	PT-17-5001
1000	round	PT-17-5007
-90		PT-17-5008
-50		PT-17-5009
45		PT-17-6003
75		PT-17-6002
250	Black	PT-17-6001
1000	felt	PT-17-6007
-90		PT-17-6008
-50		PT-17-6009
45		PT-17-3003
75		PT-17-3002
250	Black	PT-17-3001
1000	LSF	PT-17-3007
-90		PT-17-3008
-50		PT-17-3009

Polishing Organic Freeform

Polishing Tools Easy Twin

Highly flexible polishing method with combined membrane and spring tool process. Our variety of tools offers individual solution for all lens materials to bring out the best quality standards possible.

Membrane Ø69 R42
Art.No.: PT-15-2164/1

Flatback Tool R42
Art.No.: 150-90-0558

Ø50 R45 GR35 0,51
Art.No.: PT-17-5023
For large minus surfaces up to
−14 dpt for pre-polishing

Ø55 R75 GR35 0,51
Art.No.: PT-17-5022
For flat curves
(Frame blending positive)

Ø60 R250 Black Foil
Art.No.: PT-17-3001

Ø50 R45 Black Foil
Art.No.: PT-17-3003

Adaptor Flatback
Art.No.: 151-90-0005

Polishing Tools Easy Twin

Polishing Tool ASP 80 Twin-A

Polishing wheel with PU

Polishing wheel covered with special polyurethane foil. Type 126 Polyurethane polishing foil for polishing free form and other lenses in RX-production.

Art. No. 16900700500351

Ball with PU Polishing Strip

Polishing wheel covered with special polyurethane foil Type 126 Polyurethane polishing foil for polishing free form and other lenses in RX-production. Various types are available, e.g. GR 35, LP46, LP66
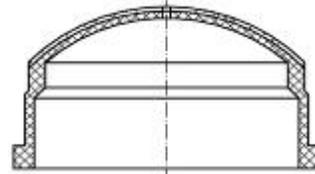
Art. No. 195-90-0014 (Ball)
Art. No. FZ-026-127-003 (PU Strip)

Polishing Mineral Glass Freeform

Polishing membrane for FEM - tool in RX-production
Polyurethane polishing foil for polishing free form and other lenses in RX-production.

Dimensions	Material	Article Number
Ø78 R45 Ø55 R35	Polyurethane structured	PT-15-2151/1 PT-15-2160/1
Ø78 R45 Ø55 R35	Black felt	PT-15-2152 PT-15-2161
Ø78 R45 Ø55 R35	to stick polishing pads	136-90-154 136-90-175

Polishing Membranes Ø55/78mm

Fining / Polishing Conventional

Flat-back 2" Tool

Polishing membrane tools as additional tool for the ASP Wheel MULTItool.
With polyurethane polishing foil or black felt for polishing free form and other lenses in RX-production.

Art. No.: 150-90-0512
Art. No.: 150-90-0518

Black 1 Step Fining Pad Conventional

The surface structure of the pad is designed to give excellent stock removal characteristics while maintaining a quality lens surface without extending polishing times.

250 Pads / Roll
Art. No.: BP– 37-1104 (76mm 6-leaf)
Art. No.: BP– 37-1105 (89mm 6-leaf)

Green Hi Index 1 Step Fining Pad Conventional

The Green Hi-Index 1 Step fining pad is a major advance in pad technology that produces a superb finish on all the latest CR39 and Hi-Index lens materials.
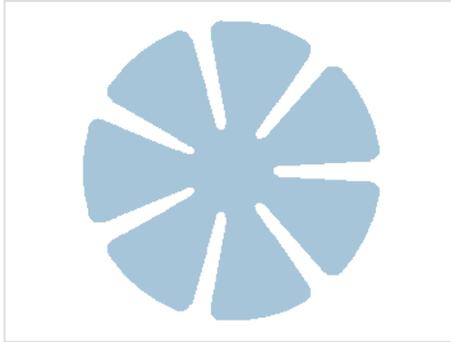
The special abrasive is unique and will give the highest quality surface with the minimum running times, providing an excellent foundation for the successful AR coating of the lenses.

250 Pads / Roll
Art. No.: BP-37-1103 (83mm 6-leaf)

Fining / Polishing Conventional

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Polishing Pad Conventional

OptoTech "PP Pad light blue" is a high quality universal polishing pad with low fiber erosion with special adhesive for polishing organic lenses in RX-production.

250 Pads / Roll
Art. No.: BP-31-2205 (76mm)
Art. No.: BP-31-2203 (83mm)
Art. No.: BP-31-2201 (89mm)

Polishing Conventional

Diamond Smoothing Pad Mineral Conventional

OptoTech SG Diamond Pad is a sintered diamond foil for smoothing glass materials in RX production. The SG Diamond Pad works very cost effective and gives an excellent finishing.

Available types:
SG Diamond Pad 15-20 micron Ø 76
Art. No.: BP-02-1101
SG Diamond Pad 20-30 micron Ø 76
Art. No.: BP-02-2030
SG Diamond Pad 20-30 micron Ø 79
Art. No.: BP-02-1102

Polishing Pad Mineral Conventional

OptoTech Blue polishing pad for glass materials in RX-production.

Available types:
PB Polishing Pad Ø 76 mm   *Art. No.: BP-31-2207*
PB Polishing Pad Ø 83 mm   *Art. No.: BP-31-2227*
PB Polishing Pad Ø 89 mm   *Art. No.: BP-31-2211*

Polishing Mineral Glass Conventional

IQ Polish

IQ Polish

Aluminum oxide polishing compound, especially designed for one-step fining applications for CR 39, high index and polycarbonate. Tight particle size distribution for high removal rate and superior finish
Ideal for A/R and hard coated lenses.
Ideal for cut to polish applications.

Technical Data

Appearance:	white slurry
Viscosity (20°C):	10mm²/s
pH-Value:	3.6
Baumè:	22 to 20
Particle size:	1.9μ

Packing unit: 1 Gallon
Art. No.: PM-14-2101

Polishing Liquid Organic

Polishing Compound Mineral Glas Ceri 5005

Water-mixable polishing compound based on cerium oxides made from rare earths for polishing optical elements in mass and RX production.

Benefits:

New cerium oxide offers excellent clean-up benefits. Superior stock removal and finish. No hard settle- even without agitation

Applications:

Low speed ophthalmic applications (1500 RPMS)

For use in single bowl and central slurry systems

Appearance: white powder
Ph-value: 5.8-7.5
Particle size: 1.1-1.8µ
Packing unit : 20 kg Container

Art. No.: PM-14-2202

Polishing Compound Mineral Glas Ceriox 1663

Water-mixable polishing compound based on cerium oxides made from rare earths for polishing optical elements in mass and RX production.

Appearance: white powder
Ph-value: 6.0-7.0
Particle size: 0.9-1.6µ
Packing units: 20 kg Containers

Art. No.: PM-19-2201

Polishing Compound Mineral Glass

Manual Refraktometer

A measuring unit for checking the concentration of coolant suspensions in ophthalmic and precision optics.

Art. No.: GE-39-3301

Aerometer

Measuring device for testing the concentration and the specific weight of fluids like polishing fluid.
Integrated thermometer (0 to +35°C)
Length: approx. 350 mm
Also available: Measuring cylinders with hexagonal stand and nozzle in many different sizes.

Art. No.: GE-40-3303

Measuring Equipment

Thickness Gauge For Blocked Lenses

Thickness gauge for blocked lenses to measure the center thickness
Clock gauge increments: 0.01 mm

Art. No.: 605-90-0006

Options:
- Support for finished lenses
- Digital gauge

Spherometer

Spherometer for convex- and concave measuring.

Art. No.: 605-90-0003

Torometer

Torometer for convex- and concave measuring.

Art. No.: 605-90-0001

Magnifier

Very stable magnifier, available in 6x, 8x, 10x and 15x.

6x   Art. No.: GE-15-0002
8x   Art. No.: GE-15-0003
10x   Art. No.: GE-15-0004
15x   Art. No.: GE-15-0005

Measuring Equipment

Contact Glue 3M Scotch Grip

This special adhesive based on polychloropren is suitable to glue all kind of polishing foils like polyurethane, desmopan, desmoflex or polishing felt on tools which you need in ophthalmic optics or precision optics.

1 Ltr. Tin   **Art. No.: KK-57-3301**
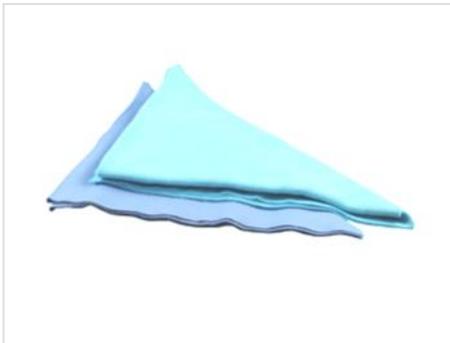
Cleaning Sponge

Highly absorbent and durable viscose sponge

Silicone free

Colour: Yellow   **Art. No.: RM-35-0001**

Glue & Cleaning

Cleaning Cloth

Soft and lint-free cotton cloth for cleaning very sensitively surfa-ces in optical industry.
The clothes are free from silicone and washable by 90 °C in usual washing machines.

100% Cotton
Colour: white or blue
Size: 40mm x 40mm, 50mm x 50mm

Art. No.: RM-19-3301 white
Art. No.: RM-21-3301 blue

Other qualities on request

Cleaning Cloth Kanebo

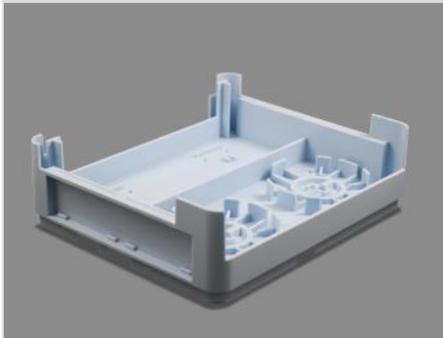Material for easy cleaning of polycarbonate and trivex, scratch-free.
Material is washable in usual washing machine

Colour: white
Size: 1 sqm

Art. No.: RM-83-3301 white

Cleaning

Multi Job Tray

Colours:

Beige: **Art. No.: GE-30-0010**

Blue: **Art. No.: GE-30-0020**

Green: **Art. No.: GE-30-0030**

Red: **Art. No.: GE-30-0040**

Coating Job Tray

Colour:

Black: **Art. No.: GE-31-0010**

Other colours on request.

Job Trays

Contact

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