

Bohle

Professional Glaziers Tools

Quality - Made in Germany

Discover Bohle

The Bohle Group is Europe's leading manufacturer and distributor of tools, machinery and accessories for glass processing and glass finishing. The family business, founded in 1923, is now

represented by over 300 employees at 14 locations in Germany and abroad. Divided into the product divisions Handling, Glass Cutting, Glass Bonding, Glazing, Tools, Machinery, Fittings and Surface Protection,

the total product range is precisely tailored to the respective customer groups from trade, industry and retail.

The Bohle Visitor Centre



In our Bohle visitor centre, located in our Haan headquarters, we present numerous products in a generous exhibition area. Whether fittings, machines, measuring devices or consumables: Next to a shipping area where you can buy products right on the spot, another high-light is a little museum giving an overview of Bohle's 90-year history and exhibiting historical products and documents. Why not visit us – we look forward to welcoming you!

The Bohle Glass Academy



The Bohle Glass Academy offers you an extensive seminar programme on many glass processing topics. Learn new technologies or broaden your knowledge in well-known sectors.

Our Practical Seminars:

- UV Bonding
- Surface Bonding
- Manual Glass Cutting
- Sliding Door Installation

Each seminar comprises:

- Seminar materials
- Use of materials and tools
- Fabrication of reference samples
- Customised troubleshooting
- Drinks, snacks and lunch
- Bohle Seminar Certificate

For current seminar dates, please visit our website www.bohle-group.com.

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01 | Manual Glass Cutting

Glass Cutters with Steel Wheels

Cutting wheels made of hardened steel were the first items Josef Bohle started to produce in 1923. Some of the best known and most widely produced glass cutters around the world - like the legendary 100.0 - are equipped with them. Glass cutters with steel wheels provide a particularly economical way of cutting glass.

▶ Glass Cutters Silberschnitt®



Glass cutter for general cutting tasks, especially economical as wheels are exchangeable and turrets and cutting heads are nickel-plated · 6 cutting wheels made of stainless steel and tempered by a patented method guarantee high cutting quality and long service life.

i Cutting angle 130° · Straight edge stand-off distance 2.5 mm · Glass thickness 3 - 6 mm · Packaging unit 12 items

Art. No.	Description
BO 100.0	Glass Cutter

▶ Spare Wheels Silberschnitt®



Stainless steel, specially tempered · for all Silberschnitt® glass and circle cutters

i Cutting angle 130° · Packaging unit 120 items in a practical dispenser

Art. No.	Description
BO 102.0	Spare Wheels

▶ Spare Turret Silberschnitt®



Suitable for Silberschnitt® glass cutters as well as circle cutter BO 516.0

i Cutting angle 130° · Packaging unit 12 items

Art. No.	Description
BO 101.0	Spare turret Silberschnitt®

▶ Spare Wheels Silberschnitt®



Stainless steel · specially tempered · suitable for all Silberschnitt® glass and circle cutters · in a plastic bag

i Cutting angle 130° · Packaging unit 12 items

Art. No.	Description
BO 102.1	Spare Wheels

▶ Glass Cutter Diamantor®



With rounded wooden handle · with one steel wheel

i Cutting angle 130° · Straight edge stand-off distance 1.5 mm · Glass thickness 3 - 6 mm · Packaging unit 12 items

Art. No.	Description
BO 200.1	Glass Cutter

▶ Glass Cutter Silberschnitt®

Heavy duty model



i Cutting angle 130° · Straight edge stand-off distance 2.5 mm · Glass thickness 3 - 6 mm

Art. No.	Description
BO 110.0	Glass Cutter

▶ Jobo® Glass Cutter

Six cutting wheels made of special steel, round wooden handle, straight edge



i Glass thickness 3 - 6 mm · Cutting angle 125° · Straight edge stand-off distance 2.5 mm · Packaging unit 12 items

Art. No.	Description
BO 320.0	Glass Cutter

Oil Glass Cutters

A proper cut requires cutting fluid - to open the cut more easily (the cutting fluid penetrates into the fissure) and to lubricate the wheel and axle. Make your daily work easier with glass cutters with integrated reservoir for cutting fluid.

Silberschnitt® 2000 Oil Glass Cutters - Perfect Cutting of any Glass

This unique oil glass cutter is the basis of the Silberschnitt® 2000 system. It can be configured individually and is therefore ideal for complicated applications - whether for thick or thin glass, shaped or straight cuts. Ideal especially in combination with the ergonomically shaped T-handle.

▶ Oil Glass Cutter Silberschnitt® 2000



Perfect glass cutting · optimal application of cutting fluid ensures smooth glass breaking · 2-valve technology · round cutting head · trailing, exchangeable Toplife cutting wheels · sturdy brass handle · for shape and straight cutting

i Straight edge stand-off distance 6 mm

Art. No.	Description · Cutting angle · Glass thickness
BO 2000.M	Oil Glass Cutter Silberschnitt® 2000 MASTER · 155° · 6 - 12 mm
BO 2000.S	Oil Glass Cutter Silberschnitt® 2000 STANDARD · 145° · 3 - 6 mm
BO 2000.P	Oil Glass Cutter Silberschnitt® 2000 POWER · 158° · 12 - 19 mm

▶ Spare Wheel Holder Silberschnitt®

For Silberschnitt® 2000 oil glass cutters and circle cutters



Art. No.	Glass thickness · Cutting angle
BO 2449.0	0.8 - 2 mm · Wheel holder 120°
BO 2449.1	1 - 2 mm · Wheel holder 127°
BO 2449.2	2 - 4 mm · Wheel holder 135°
BO 2449.3	3 - 5 mm · Wheel holder 140°
BO 2449.4	4 - 6 mm · Wheel holder 145°
BO 2449.5	4 - 8 mm · Wheel holder 150°
BO 2449.6	6 - 12 mm · Wheel holder 155°
BO 2449.7	12 - 19 mm · Wheel holder 158°
BO 2449.8	19 - 25 mm · Wheel holder 160°
BO 2449.9	19 - 25 mm · Wheel holder 165°

▶ Transverse Handle



Ergonomic transverse handle for optimum application of higher cutting pressure · can be fitted to the metal models of Silberschnitt® oil glass cutters of the series 2000 and 5000 as well as BO 448.8 · individually adjustable to hand size

Art. No.	Description
BO 2045.0	Transverse Handle for Oil Glass Cutters Silberschnitt®

▶ Thick Glass Cutter Silberschnitt® 2000



Higher cutting pressure · ball-bearing, trailing wheel holder · cutting wheel in Toplife quality · with round cutting head and rotating handle

i Cutting angle 158° · Straight edge stand-off distance 6 mm · Glass thickness up to 12 - 19 mm

Art. No.	Description · Glass thickness · Cutting angle
BO 2003.0	Thick Glass Cutter
BO 2449.7	12 - 19 mm · Wheel holder 158°

Silberschnitt® 5000 Oil Glass Cutter - Optimum Cut at Low Cost

The new Silberschnitt® 5000 oil glass cutter is equipped with a Toplife carbide cutting wheel with improved cutting characteristics. The precisely tailored cutting angle and grind ensure optimum cutting results with extraordinary edge quality. The cutting head is manufactured from wear resistant materials in a specialised procedure and stands out due to its service life which is up to twice as long as similar products. The Silberschnitt® 5000 oil glass cutter exhibits a smooth oil flow even under the toughest working conditions. Available with brass or plastic reservoir.

▶ Oil Glass Cutter Silberschnitt® 5000



Brass handle with improved cutting characteristics · wide cutting head · original Toplife quality with considerably extended service life · Excellent value for money!

i Cutting angle 140° · Straight edge stand-off distance 2.5 mm · Glass thickness 3 - 12 mm · Wide cutting head

Art. No.	Description
BO 5000.0	Brass handle

▶ Oil Glass Cutter Silberschnitt® 5000



Transparent blue plastic handle with improved cutting characteristics · wide cutting head · original Toplife quality with considerably extended service life · Excellent value for money!

i Cutting angle 140° · Straight edge stand-off distance 2.5 mm · Glass thickness 3 - 12 mm · Wide cutting head

Art. No.	Description
BO 5001.0	Plastic handle

▶ Spare Cutting Head Silberschnitt®

For all Silberschnitt® oil glass cutters and speed cutters



i Cutting angle 140° · Glass thickness 3 - 12 mm · Wide cutting head

Art. No.	Description · Cutting angle · Cutting head
BO 5010.0	Spare Cutting Head · 140° · wide

▶ Cutting Head Silberschnitt®

For all Silberschnitt® oil glass cutters and speed cutters



i Cutting angle 138° · Glass thickness 3 - 10 mm · Narrow cutting head

Art. No.	Description · Cutting head
BO 4010.1	Spare cutting head, narrow · 138°

▶ Oil Glass Cutter Silberschnitt® 4000

Brass handle with finger grip



i Cutting angle 138° · Straight edge stand-off distance 2.5 mm · Glass thickness 3 - 10 mm · Cutting head turns 30° · Narrow cutting head

Art. No.	Description · Cutting head
BO 4000.1	Oil Glass Cutter Silberschnitt® 4000 · 138°
BO 4010.1	Spare cutting head, narrow · 138°

▶ Oil Glass Cutter Silberschnitt® 4000

Transparent blue plastic handle



i Cutting angle 138° · Straight edge stand-off distance 2.5 mm · Glass thickness 3 - 10 mm · Cutting head turns 30° · Narrow cutting head

Art. No.	Description · Cutting head
BO 4001.1	Oil Glass Cutter
BO 4010.1	Spare cutting head, narrow · 138°

▶ Oil Glass Cutter Silberschnitt®

With replaceable cutting head · carbide cutting wheel · solid brass model with rubber collar · option: BO 2045.0 transverse handle



i Cutting angle 140° · Straight edge stand-off distance 2.5 mm · Glass thickness 3 - 12 mm · Cutting head turns 30°

Art. No.	Description · Cutting angle · Cutting head
BO 448.8	Wide cutting head · 140°
BO 447.8	Narrow cutting head · 138°
BO 5010.0	Spare Cutting Head, wide · 140°

▶ Oil Glass Cutter Silberschnitt®

With replaceable, wide cutting head · high quality carbide cutting wheel · plastic handle with transparent oil reservoir · solid brass finger grip · traditional shape



i Cutting angle 140° · Straight edge stand-off distance 2.5 mm · Glass thickness 3 - 10 mm

Art. No.	Description · Cutting angle · Cutting head
BO 441.0	Swivelling cutting head 30°
BO 441.2	Fixed cutting head
BO 5010.0	Spare Cutting Head, wide · 140°

Glass Cutters with Carbide Wheels

Carbide metal cutting wheels are a prerequisite for achieving good cutting results and a long service life. Bohle's long experience in the production of these wheels leads to high quality products for various applications.

▶ Special Glass Cutter Silberschnitt® 2000



Glass cutter in Silberschnitt® 2000 quality · Toplife cutting wheel · plastic handle with traditional glazier's shape · can be placed underneath the score to break the glass · very lightweight cutting head made of special alloy · very fine, smooth cutting · an ideal all-purpose glass cutter · wheels not exchangeable

i Cutting angle 138° · Straight edge stand-off distance 2.5 mm · Glass thickness 2 - 6 mm

Art. No.	Plastic handle
BO 2004.0	blue
BO 2004.01	orange

▶ Carbide Glass Cutter Silberschnitt® Easy Grip



Plastic handle · length individually adjustable to hand size · carbide cutting wheel for opalescent or hard glass · spare cutting heads BO 427.2 + BO 427.3

i Cutting angle 120° · Straight edge stand-off distance 1.5 mm · Glass thickness 2 - 5 mm

Art. No.	Colour · Description · Cutting angle · Glass thickness
BO 424.0	grey
BO 428.0	green · integrated guide piece for straight-edge cutting
BO 427.2	Spare Cutting Head · 120°
BO 427.3	Spare Cutting Head · 135° · 3 - 6 mm

▶ Carbide Glass Cutter Silberschnitt®



Wooden handle · replaceable, tempered turret · especially selected carbide metal guarantees high wear resistance · especially suitable for thick or hard glass

i Cutting angle 135° · Straight edge stand-off distance 2.5 mm · Glass thickness 3 - 6 mm · Carbide Cutting Wheels 5 mm Ø

Art. No.	Description
BO 400.0	Carbide Glass Cutter

▶ Carbide Glass Cutter Silberschnitt®



Carbide cutting wheel for thin and/or hard glass · little cutting pressure required · especially suitable for technical glass like Ceran and Tempax or glass resistant to high temperature changes

i Cutting angle 120° · Straight edge stand-off distance 2.5 mm · Glass thickness 2 - 6 mm

Art. No.	Description
BO 400.1	Carbide Glass Cutter

▶ Carbide Glass Cutter Diamantor®



i Cutting angle 135° · Straight edge stand-off distance 2.5 mm · Glass thickness 3 - 8 mm

Art. No.	Description
BO 260.0	Carbide Glass Cutter

▶ Carbide Glass and Tile Cutter Silberschnitt®



Ergonomic plastic handle especially for cutting tiles with strong pressure · replaceable, hardened turret with a carbide cutting wheel ø 5 mm

i Cutting angle 135° · Straight edge stand-off distance 2.5 mm · Glass thickness 3 - 8 mm

Art. No.	Description
BO 410.0	Carbide Glass and Tile Cutter

▶ Carbide Wheels Silberschnitt® Basic



For glass cutters BO 400.0, BO 410.0 and BO 400.1

i Grind Basic · Diameter 5 mm · Thickness 1 mm · Bore hole 1.3 mm

Art. No.	Angle · Grind · Sales unit · For
BO 02B120	120° · Basic · 10 items
BO 02B135	135° · Basic · 10 items
BO 02B120H	120° · 100 items · BO 400.1
BO 02B135H	135° · 100 items · BO 400.0 / 410.0

▶ Container for Glass Cutters



Made of aluminium for safe storing

Art. No.	Description
BO 671.1	Container for Glass Cutters

Glass Cutters with Cutmaster® Platinum* Wheels

The innovative Cutmaster® Platinum series cutting wheels have been especially developed to achieve high quality cutting edges. These wheels have a patented microstructure and produce excellent cutting results with minimal cutting pressure resulting in minimal damage of the glass edge. Different cutting angles allow glass from a thickness of 0.1 mm to be cut by hand.

Cutmaster® Platinum

The new manual glass cutter in our Cutmaster® Platinum range is equipped with microstructure cutting wheels and designed for use in various applications of hand-cut, high-quality glass items. Borosilicate glass, glass ceramics (Ceran, NeoCeran, Robax), silica glass, as well as opalines and fine glass can now be cut at the lowest cutting pressures. The result: top-quality edge properties and stability. The improved cutting quality is based on the microstructure, which helps to significantly reduce the cutting pressure and splintering.



▶ Manual Glass Cutter Cutmaster® Platinum



Special glass cutter with Cutmaster® Platinum cutting wheel · highest edge quality · minimum cutting pressure · can be used for dry cutting

i Straight edge stand-off distance 2.5 mm

Art. No.	Cutting angle · Glass thickness
BO 2125.4P	125° · up to 2 mm
BO 2138.4P	138° · 2 - 6 mm

▶ Oil Glass Cutter Cutmaster® Platinum



Special glass cutter with Cutmaster® Platinum cutting wheel · highest edge quality · minimum cutting pressure · for straight cuts on float glass

Art. No.	Cutting angle · Glass thickness
BO 5125.P	125° · up to 2 mm
BO 5138.P	138° · 2 mm
BO 5145.P	145° · 3 mm
BO 5025.OP	125° · Spare Cutting Head Cutmaster® Platinum
BO 5038.OP	138° · Spare Cutting Head Cutmaster® Platinum
BO 5045.OP	145° · Spare Cutting Head Cutmaster® Platinum

Thick Glass Cutting

Cutting thick glass is continuously gaining in importance. However, it may cause problems depending on the glass quality and the expectations you have of the finished piece. The solution: Innovative Bohle products for thick glass processing. For cutting and opening cuts, for straight or shaped cuts - here you'll find everything you need!

▶ Thick Glass Cutting Kit in Aluminium Case



This kit contains all necessary tools for cutting circles and straight cuts in glass. For 25 mm glass we recommend wheel holder BO 2449.8 with 160° and glass tapper BO 710.1. Oil glass cutter BO 2000.P POWER and practical aluminium carrying case included.

i Glass thickness up to 20 mm · Diameter max. 120 cm

This set comprises the following items:

BO 2000.P	Oil Glass Cutter	1 pc.
BO 2045.0	Transverse Handle for Silberschnitt® Oil Glass Cutters	1 pc.
BO 702.0	Silberschnitt® Cut Running Pliers	1 pc.
BO 710.0	Silberschnitt® Cut Opening Tapper for Thick Glass	1 pc.
BO 521.0	Silberschnitt® Thick Glass Circle Cutter	1 pc.
BO 5002800	Silberschnitt® Cutting Fluid for Thick Glass	1 Bottle
BO 5002810	Dispenser for Cutting Fluid	1 pc.

Art. No.

BO 2740.0

▶ Thick Glass Cutting Sledge Set



Used with special Bohle straight edges (10 mm) · used with the Silberschnitt® 2000.P POWER oil glass cutter (included), with its trailing wheel and integrated cutting fluid, excellent results are achieved. For 25 mm glass we recommend wheel holder BO 2449.8 with 160°.

i Glass thickness up to 20 mm

Art. No.	Description
BO 2720.0	Thick Glass Cutting Sledge Set

▶ Thick Glass Circle Cutter Silberschnitt®



High level of operational safety due to heavy-duty construction · the ball handle above the wheel holder ensures the even distribution of high cutting pressure

i Cutting angle 158° · Glass thickness 10 - 25 mm

Art. No.	Diameter · Glass thickness · Cutting angle
BO 521.0	20 - 120 cm
BO 521.1	20 - 180 cm
BO 521.5	Spare Sliding Cutting Head, plastic
BO 2449.7	12 - 19 mm · Wheel holder 158°

▶ Cut Opening Tapper for Thick Glass



Heavy-duty, all-metal construction · works according to striker principle · adjustable tapper force · for controlled breaking with clean edges, even in difficult cases

Art. No.	Glass thickness
BO 710.0	10 - 20 mm
BO 710.1	15 - 25 mm

▶ Oil Glass Cutter Silberschnitt® 2000 POWER

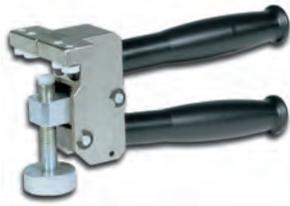


Perfect glass cutting · optimal application of cutting fluid ensures smooth glass breaking · 2-valve technology · round cutting head · trailing, exchangeable Toplife cutting wheels · sturdy brass handle · for shape and straight cutting

i Cutting angle 158° · Straight edge stand-off distance 6 mm · Glass thickness up to 12 - 19 mm

Art. No.	Description
BO 2000.P	Silberschnitt® 2000.P POWER Oil Glass Cutter

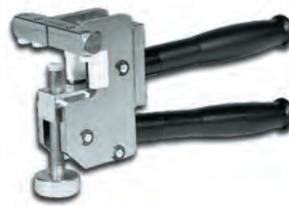
▶ **Cut Running Pliers Silberschnitt®**



All-metal · with adjustment screw to set to individual glass thickness · optimum load transmission · also ideal to open straight cuts, corner cut-outs, etc. · Recommended: BO 704.5 for opening narrow strips

Art. No.	Description · Glass thickness
BO 704.0	Cut Running Pliers - 6 - 15 mm
SP B0734.1	Spare plastic tip 10 x 14 mm
BO 704.5	Pressure Bar 60 x 12 mm

▶ **Cut Running Pliers Silberschnitt®**



Heavy-duty · all-metal construction · precisely adjustable to glass thickness · optimum distribution of pressure · Recommended: BO 702.5 for opening narrow strips

i Cutting length up to 6 m

Art. No.	Description · Glass thickness
BO 702.0	Cut Running Pliers - up to 25 mm
SP B0734.1	Spare plastic tip 10 x 14 mm
BO 702.5	Pressure Bar 80 x 12 mm

Shape Templates

Cutting shapes is made considerably easier with the comprehensive range of Bohle templates, most of which are designed to be used with the Silberschnitt® 2000 system. Almost any difficult cutting problem therefore has a simple solution.

▶ **Template for Corner Cut-Outs**



Plastic · with 2 suction pads for secure fixing · infinitely adjustable from 45 to 175 mm

i Corner radius 7 mm

Art. No.	
BO 078	

▶ **Tool Kit for Corner Cut-Outs**



Corner cut-outs can be produced quickly and effortlessly · no more troublesome drilling or sawing · reduces workload e.g. when producing toughened glass · for manual corner cutting in flat glass · comes in a practical storage case

i Radius 7 mm · Glass thickness 3 - 15 mm

Art. No.	
BO 578.0	

▶ **Tool Kit for Lateral Cut-Outs**



The combination of adjustable template, Silberschnitt® 2000 oil glass cutter with 360° revolving cutting head and cut opener makes lateral cut-outs possible · ideal for the production of toughened glass and shop fitting · includes case

i Radius 7 mm · Glass thickness up to 10 mm

Art. No.	
BO 578.2	

▶ **Template for Cut-Outs**



Plastic · with 2 suction pads for secure fixing · stoppers adjustable for corner or lateral cut-outs · infinitely adjustable · corner cut-outs adjustable from 45 to 400 mm, lateral cut-outs adjustable from 45 to 350 mm

i Corner radius 7 mm

Art. No.	
BO 078.1	

▶ Template for Lateral Cut-Outs



Plastic · 2 suction pads for secure fixing · infinitely adjustable from min. 40 x 10 mm to max. 240 x 100 mm

❶ Corner radius 7 mm

Art. No.	Description
BO 078.2	Template for Lateral Cut-Outs

▶ Radius Corner Template



With two suction pads for fixing · for use with glass cutter 2000.M, 2000.P or 2000.S

❶ Straight edge stand-off distance 6 mm · Radius 10 - 70 mm

Art. No.	Description
BO 078.5	Radius Corner Template

▶ Flexible Shape Template



For cutting shapes in glass · ideal for the repair of arched glass doors and windows · suitable for inner and outer arcs · held in place with suction holder BO 670.5 (please order separately) · Recommended: three suction holders for 90 cm, six suction holders for 180 cm

❶ Material made of flexible metal band

Art. No.	Length · Width
BO 5140509	90 cm · 40 mm
BO 5140518	180 cm · 40 mm

▶ Cut Opener Silberschnitt®



For complicated cuts · ideal for opening corner, lateral or other shaped cuts · turnable pressure ring for optimum adjustment to all cuts · max. reach 100 mm

❶ Glass thickness 6-10 mm

Art. No.	Glass thickness
BO 706.0	6 - 10 mm

▶ Suction Holder



For shape templates BO 5140509 / BO 5140518 · for fixing onto glass surfaces

Art. No.	Description
BO 670.5	Suction holder
BO 519.5	Spare Suction Pad

Circle Cutters

Cutting circles requires high standards of cutting quality - especially when working with thick glass. Aside from the traditional circle cutters for „normal“ glass thicknesses, Bohle offers a great variety of circle cutters for all kinds of applications.

▶ Circle and Oval Cutting Machine



Precise cuts for either 22 - 122 cm or 9" - 48" - for glass up to 25 mm thick using different wheel holders · minimum diameter difference 6 cm · includes oil glass cutter 2000.S STANDARD 145°, T-handle, Jobo glass breaking device BO 705.0, cutting fluid, 2 felt-tip pens with adaptor · in practical aluminium case

Art. No.	Diameter · Description
BO 2550.0	22 - 122 cm
BO 2550.1	9 - 48"
BO 2551.0	Extension set 182 cm
BO 2551.1	Extension set 70"

▶ Circle Cutter with Ball-bearing Cutting Head



Trailing carbide wheel in Toplife quality · improved break quality even for small radii · long service life · less cutting pressure

i Cutting angle 135° · Diameter min. 72 mm

Art.-No.	Diameter · Description
BO 511.5	60 cm
BO 511.51	24"
BO 514.5	120 cm
BO 514.51	48"
BO 515.5	160 cm
BO 516.5	200 cm
BO 516.51	80"
BO 2449.2	2 - 4 mm · Wheel Holder 135°
BO 518.5	Spare Cutting Head · Metal
BO 519.5	Spare suction pad

▶ Cutting Fluid Silberschnitt®



Ensures a soft, precise break · binds glass particles · consistently unhindered run of wheel · low surface tension allows easy penetration into the cut

Art. No.	Contents · Description
BO 027	50 ml · Dispenser bottle
BO 026	1 litre · for manual cutting

▶ Circle Cutter Silberschnitt®



Wheels and turret can be easily exchanged

i Cutting angle 130° · Diameter min. 72 mm

Art. No.	Diameter · Description
BO 511.0	60 cm
BO 511.1	24"
BO 514.0	120 cm
BO 514.1	48"
BO 516.0	200 cm
BO 516.1	80"
BO 518.0	Cutting Head for Circle Cutters

▶ Circle Cutter Silberschnitt® System 2000



For use with oil glass cutters 2000.S, M or P · produces excellent cutting quality by trailing Toplife cutting wheels and integrated supply of cutting fluid · oil glass cutter and transverse handle are not included (please order separately).

Art. No.	Diameter
BO 2511.0	60 cm
BO 2514.0	120 cm
BO 2516.0	200 cm

▶ Circle Cutter Silberschnitt®



For precise cutting of medium, round panes · turret with 6 steel wheels · easy mounting onto a base plate (not included)

i Cutting angle 130°

Art. No.	Diameter · Description
BO 530.0	30 cm
BO 532.0	60 cm
BO 532.1	60 cm
BO 518.1	Spare wheel holder Silberschnitt®

▶ Bohle Speed Cutter



For quick and easy cutting of large glass panes · with integrated supply of cutting fluid and Silberschnitt® cutting head with Toplife cutting wheel

i Cutting angle 138°

Art. No.	Cutting width · Description · Cutting angle
BO 4580.0	110 - 600 mm
BO 4580.1	110 - 1200 mm
BO 4580.2	110 - 1800 mm
BO 4580.5	Spare cutting head, complete
BO 4580.6	Spare roller
BO 4580.7	Spare Cutting Head 138°
BO 4580.145	Spare Cutting Head 145°
BO 4580.155	Spare Cutting Head 155°

▶ Geo-Master Silberschnitt®



Efficient cutting of glass: strips, parallelograms, mitres, diamond shapes, trapezoids, hexagons, octogons, for decorative wall lamps, star motifs, for small greenhouses, etc.

Art. No.	Description
BO 536.1	Geo-Master

▶ Silberschnitt® Roll-up Workplace



The mobile, roll-up workplace for glass artists and hobbyists · uses: work mat, strip cutter, circle cutter, trapezoid cutter · includes guide rail, strip and circle cutter, turret with 1 carbide cutting wheel 135° and detailed instruction manual · The Silberschnitt® GEO-Master is a practical accessory for the Silberschnitt® Pad 536.0.

Art. No.	Description
BO 536.0	Silberschnitt® Roll-up Workplace
SP 3603.01	Spare Cutting Head

▶ Circle Cutter Silberschnitt®

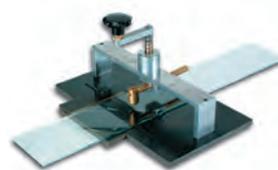


Ball-bearing · for small circles up to 9 cm ø · replaceable steel holder with Silberschnitt® carbide micro wheel for small radii

i Glass thickness up to 6 mm · Cutting angle 140°

Art. No.	Description · Version
BO 533.0	Circle Cutter
BO 415.0	Spare wheel holder, 140°
BO 518.2	Spare wheel holder · With wheel

▶ Circle Cutter for Repetitive Cuts



Especially to cut small, round glass parts of 10 - 185 mm ø in series · trailing carbide cutting wheel with 155° cutting angle · different cutting angles for different glass thicknesses available separately · extension plates made of laminated paper only available separately

i Recommended: BO 701.5 - to nibble glass panes efficiently!

Art. No.	Description · Glass thickness · Cutting angle
BO 534.0	Circle Cutter
BO 534.1	3/8" - 7-5/16"
BO 2449.6	6 - 12 mm · Wheel holder 155°

L-Squares and Straight Edges

L-squares and straight edges from Bohle are manufactured on high precision CNC machines to the highest possible tolerances. Accurately produced from high quality materials.

L-Squares

Bohle L-squares are made of especially wear-resistant synthetic material and are produced to exceed DIN norms for tolerances. Tolerances of each L-square are controlled before leaving our works. L-squares with special tolerances are available on request.

L-Squares Bohle without Brace



These L-squares made of high quality material have two pegs made of blue plastic allowing the glass edge to be fully visible when positioned. The light grey material provides good contrast to the black felt on the cutting table.

Art. No.	Length · Width · Colour · Description
BO 029.5	30 cm · 17 cm · black
BO 029.00	30 cm · 17 cm · black · without pegs
BO 030.5	50 cm · 27 cm · grey
BO 031.5	60 cm · 27 cm · grey
BO 032.5	80 cm · 37 cm · grey
BO 033.5	105 cm · 37 cm · grey
BO 034.5	135 cm · 47 cm · grey
BO 035.5	150 cm · 47 cm · grey
BO 036.5	175 cm · 47 cm · grey

L-Squares Bohle with Brace black



These L-squares are manufactured in one piece from high-quality material. The integrated brace ensures especially high precision.

Art. No.	Length · Width
BO 031.1	60 cm · 30 cm
BO 032.1	80 cm · 34 cm
BO 033.1	105 cm · 40 cm
BO 034.1	135 cm · 45 cm
BO 035.1	150 cm · 45 cm
BO 036.1	175 cm · 50 cm
BO 037.1	205 cm · 60 cm
BO 038.1	250 cm · 70 cm

Straight Edges

Bohle straight edges are available in different material thicknesses (5 and 10 mm) as well as with or without integrated suction pads. For the fixing of straight edges without suction pads, we recommend the straight edge holder art. no. BO 670.0. All straight edges (10 mm) with integrated suction pads are suitable to be used with the Silberschnitt® cutting sledge art. no. BO 2720.0.

▶ Straight Edges with Integrated Suction Cups



Made of high-quality synthetic material · BO 051.xxx = 5 mm thick · BO 052.xxx = 10 mm thick, thus suitable for Silberschnitt® Cutting Sledge for thick glass BO 2720.0

Art. No.	Länge · Width · Sauger
BO 051.152	150 cm · 8 cm · 2
BO 051.202	200 cm · 8 cm · 2
BO 052.203	200 cm · 8 cm · 3
BO 051.253	250 cm · 8 cm · 3
BO 052.202	200 cm · 8 cm · 2
BO 052.253	250 cm · 8 cm · 3
BO 052.304	300 cm · 8 cm · 4
BO 052.355	350 cm · 8 cm · 5
BO 052.405	400 cm · 8 cm · 5
BO 051.01	Spare Suction Pad

▶ Straight Edges Bohle



Made of high-quality synthetic material

i Length 80 - 350 cm

Art. No.	Length · Width · Thickness
BO 045.0	150 cm · 8.0 cm · 5 mm
BO 046.1	200 cm · 7.0 cm · 10 mm
BO 047.0	250 cm · 8.0 cm · 5 mm
BO 047.1	250 cm · 7.0 cm · 10 mm
BO 048.0	300 cm · 7.0 cm · 10 mm
BO 049.0	350 cm · 7.0 cm · 10 mm

▶ Straight Edge Holder Silberschnitt®



Straight edges can be fixed using the straight edge holders stop bracket, thus making them suitable for carrying out long cuts. The stop bracket can also be adjusted precisely to the nearest millimetre. This suction holder is especially suited to fixing displays or other holding and fixing products. The suction holder can be optionally equipped with a height adjustable stopper (BO 670.1).

i Suction pad ø 55 mm · Number of suction pads 1 · suitable for Glass · suitable for Plastic · suitable for Metal · suitable for Coated wood · suitable for Marble / Stoneware

Art. No.	Description · Version · Diameter · Height
BO 670.0	Straight Edge Holder · standard
BO 670.1	Straight Edge Holder · adjustable
BO 670.0U	55 mm · 75 mm · unassembled
BO 519.5	Spare Suction Pad

02 | Glass Breaking

Glass Breaking Pliers

Bohle glass breaking pliers made of high quality materials are suitable for a large variety of applications. Like all Bohle glass tools - great quality and exceptional accuracy!

Glass Breaking Pliers Made in Germany



With drop jaw · plastic coated handle · ground head · Made in Germany

i Length 180 mm · Jaw width 14 mm

Art. No.	Description
BO 5008218	Glass Breaking Pliers

Cut Running Pliers



With adjustment screw · centre mark on upper jaw · especially suitable for breaking narrow strips

i Glass thickness 3 - 5 mm · Length 200 mm · Jaw width 24 mm

Art. No.	Description
BO 5008800	Cut Running Pliers

Glass Breaking Pliers Made in Germany



Lacquered blue · ground head · Made in Germany

i Colour blue · Length 200 mm · Jaw width 20 mm

Art. No.	Description
BO 5008120	Glass Breaking Pliers

Glass Breaking Pliers Made in Germany



Plastic coated handles · ground head · Made in Germany

i Colour black · Length 200 mm · Jaw width 24 mm

Art. No.	Description
BO 5008020	Glass Breaking Pliers

Grozing Pliers Silberschnitt®



Plastic coated handles · ground head · ideal for art glass work · small contact area · little strength required · less risk of breaking · Made in Germany

i Length 160 mm · Jaw width 4 mm

Art. No.	Description
BO 089	Grozing Pliers

Glass Nibbling Pliers



With carbide jaws · lacquered · handles plastic coated · easy nipping of small glass parts · ideal for working on edges

Art. No.	Description
BO 5009520	Glass Nibbling Pliers

▶ Grozing Pliers Knipex Made in Germany



For art glazing · plastic coated handles · ground head · Made in Germany

i Length 160 mm · Jaw width 9.5 mm

Art. No.	Description
BO 5008300	„KNIPEX“ Grozing Pliers

▶ Scalloping Tool Silberschnitt®



Quickly produces a regular scalloped design on edges of flat glass without the need for expensive machinery. The depth and width of the scallops can be adjusted to the desired dimensions regardless of the glass thickness.

Art. No.	Description · Glass thickness
BO 719.0	Scalloping Tool · 3 - 25 mm
BO 719.1	Spare chisel

▶ Glass Nibbling Pliers Zag-Zag



„The red one“ · the all-purpose tool for universal Tiffany and mosaic work · with spring joint and splinter bag · for the correction of breaking edges on outer radii · cuts like scissors!

Art. No.	Description
BO 703.01	Glass Nibbling Pliers
BO 703.1	Spare cutting wheel
SP B0803	Spare spring joint

▶ Glass Nibbling Pliers Zag-Zag



„Junior“ · the basic model for beginners · with spring joint and splinter deflector · for the correction of breaking edges on outer radii · cuts like scissors!

Art. No.	Description
BO 703.5	Glass Nibbling Pliers Zag-Zag
SP B0856	Spare cutting wheel

▶ Radius Glass Breaking Pliers



Ideal for rounding off corners of glass sheets quickly and easily before final polishing · precise break and long service life due to diamond polished jaws

i Colour black

Art. No.	Radius
BO 5008233	10 mm
BO 5008234	20 mm
BO 5008235	30 mm

▶ Cut Running Pliers Silberschnitt®



For Tiffany and art glass work · turnable pressure bar · splinter-free breaking of inner curves and narrow strips of glass · pressure bar and plate available as spare parts

i Glass thickness up to 5 mm

Art. No.	Description
BO 700.0	Cut Running Pliers
SP 7002	Spare pressure plate
SP 7003.01	Spare pressure bar

▶ Glass Nibbling Pliers Zag-Zag



„Professional“ · a top quality tool · the professional pliers for the most demanding art glass requirements · with splinter bag · for Tiffany and art glass work · easy cutting of small glass parts

Art. No.	Description
BO 701.0	Glass Nibbling Pliers Zag-Zag
BO 701.1	Spare cutting wheel
BO 701.9	Splinter tray, complete

03 | Measuring Tools

Measuring Tools for Analysing Glass

Modern developments make new technology necessary. Our electronic measuring tools can determine the various characteristics of panes and thus meet changing needs. The high-quality measuring tools in the Bohle portfolio make it easy for the glazier to determine glass thickness, the dimensions of the pane, etc.

▶ Bohle GlassBuddy®



The multi-functional tool for the accurate analysis of flat glass. No matter whether single-pane, laminated or insulated glass, whether installed or not - in seconds the laser technology supplies information about glass thickness, configuration of panes, coatings, films and the exact position of films. GlassBuddy® from Bohle. One device that does it all. · Included in delivery: GlassBuddy® · protective case · operating instructions · Software for evaluation at the PC (on USB stick) · micro USB cable

Art. No.	Description
BO 5164760	Bohle GlassBuddy® Basic
BO 5164755	Bohle GlassBuddy® Plus

Art. No.	Description
BO 5164761	Software Upgrade from GlassBuddy® Basic to GlassBuddy® Plus

▶ Measuring Device Merlin Laser



For analysing glazed units · laser diode with sophisticated measuring electronics · low energy consumption · for coated glass, bullet-proof glass, multi-layered insulating glass, etc.

i Laser class: non-hazardous laser class 2/3a · Material precision-made plastic housing · Warranty 12 months

Art. No.	Scale · Instruction manual
BO 5164700	German · German
BO 5164701	English · English
BO 5164702	English · Spanish
BO 5164703	English · Italian
BO 5164704	French · French
BO 5164705	German · Dutch

▶ Glass Thickness Gauge



Measures glass thicknesses from 2 to 25 mm as well as the space between panes (up to 24 mm) of insulated glass units · also suitable for already installed windows · works on the basis of reflection in the glass pane

i Material Plastic

Art. No.	Description
BO 5164900	Glass Thickness Gauge
BO 5164901	Private label version with customer logo, one colour
BO 5164902	Private label version with customer logo, two colours

▶ Measuring Device for Determining the Tin Side



The innovative TinCheck® measuring device identifies the tin bath side of float glass quickly, easily and reliably. By using the latest technologies, Bohle has succeeded in eliminating the significant disadvantages of conventional measuring devices such as light sensitivity or short service lives of lamps. The application of electronic components from the new LED generation enables our TinCheck® to indicate the correct result in the alphanumeric display even with the first measurement. Simply press the handy device against the glass pane and push the start button. The display shows your results immediately which remain on the display for a while.

Art. No.	Description
BO 5164615	TinCheck®

▶ Measuring Device Bohle GlassCheck



GlassCheck is used for measuring the overall glass thickness of already installed glass panes and insulated glass. The device is suitable for measuring glass thicknesses of up to 120 mm. The device also features an integrated glass thickness gauge which offers the possibility of determining the thickness of single glass panes (from 2 – 25 mm).

Please note:

For quantities of 100 or more, available with your personal logo.

i Length 315 mm · Width 270 mm

Art. No.	Description
BO 5164801	Glass Check

▶ Tin Side Detector



For certain applications in glass processing it is necessary to know which side of the glass has been in contact with the tin during float glass production. This is easily achieved with the Bohle tin side detector · especially suitable for use with glass fusing · operated by 4 standard „AA“ batteries · includes batteries and instruction manual

Art. No.	Description
BO 5164612	Detector
BO 5164611	Spare bulb for detector

▶ Merlin TGI for thermally toughened glass



In leather pouch with battery charger · equipped with rechargeable battery · in no time it shows you whether the glass is toughened or not · also works with insulated glass units

i Material Plastic · Warranty 12 months

Art. No.	Description
BO 5164601	Merlin TGI

▶ Low-E Coating Detector



For detecting and determining the location of low-E coatings on single panes or double glazed units (4-10 mm glass thickness of individual panes). When checking double glazed units, measurements must be taken from both sides in order to determine the exact position of the coating.

Art. No.	Description
BO 6164805	Glass Coating Detector

04 | Hand Tools

▶ Putty Knife Swedish design



Swedish design · with front slanting, highly polished, continuous blade · brown polished wooden handle · Made in Germany

Art. No.	Blade length · Width
BO 5162100	110 mm · 26 mm

▶ Putty Knife



With blunt, curved, highly polished, continuous blade · brown polished wooden handle · Made in Germany

Art. No.	Blade length · Width
BO 5162600	95 mm · 18 mm
BO 5162628	95 mm · 28 mm

▶ Putty Knife Economy



Spear point · highly polished, non-continuous blade · brown polished wooden handle · Made in Germany

Art. No.	Blade length · Width
BO 5162200	90 mm · 26 mm

▶ Putty Knife Swiss design



Swiss design · with front slanting, highly polished, non-continuous blade · brown polished wooden handle · Made in Germany

Art. No.	Blade length · Width
BO 5162500	87 mm · 18 mm

▶ Putty Knife Premium "DON CARLOS" with Rib



Spear point, continuous blade · light-coloured wooden handle · Made in Germany

Art. No.	Blade length · Width
BO 5162300	110 mm · 28 mm

▶ Glazier's Knife Premium



High-quality glazier knife · stainless steel · with plastic handle · heavy duty · Made in USA

Art. No.	Blade length · Width
BO 5165501	85 mm · 60 mm

▶ Hacking Knife Economy with plastic handle

With plastic handle · Made in Germany



Art. No.	Blade length · Width
BO 5164000	95 mm · 30 mm

▶ Lead Knife Premium

High-quality lead knife · Black wooden handle with lead inlay · Made in Germany



Art. No.	Blade length
BO 5102200	100 mm

▶ Lead Knife Crescent shape "DON CARLOS"

Crescent shape · light-coloured wooden handle · Made in Germany



Art. No.	Blade length
BO 5102501	100 mm

▶ Glazing Shovel Economy Wood

Made of wood without knots · Made in Germany



i Width 70 mm · Length 280 mm

Art. No.	Description
BO 5165000	Glazing Shovel

▶ Glazing Shovel Premium Plastic

Made of shock-proof plastic · solid · blue · easy-grip handle · especially sturdy · Made in Germany



i Width 74 mm · Length 280 mm

Art. No.	Description
BO 5165301	Glazing Shovel

05

Protective Clothing

Gloves

Your health and safety are at stake. That is why Bohle's range of protective wear has been carefully selected. Obtain excellent quality at very good prices.

▶ PowerGrab KEVLAR® KEV



KEVLAR® cut resistant gloves · 20% more KEVLAR® fibre · blue Latex coating at the palms, providing excellent grip · breathable material on back of hand · tested per DIN EN 388 CAT II · also available with extended wrist protection · Important: According to manufacturer specifications, the cut resistance of this product has been changed from 5 to 4.

i Cut resistance level: 4

Art. No.	Size · Description
BO 5017500	11 / XXL
BO 5017501	10 / XL
BO 5017502	9 / L
BO 5017503	8 / M
BO 5017504	11 / XXL · with wrist protection
BO 5017505	10 / XL · with wrist protection
BO 5017506	9 / L · with wrist protection
BO 5017507	8 / M · with wrist protection

▶ Wrist Protector Sleeves



Chrome split leather · perforated · with Velcro fastening · borders leather reinforced

i Cut resistance level: 2

Art. No.	Size · Width
BO 5207704	One size · 145 mm
BO 5207724	One size · 200 mm

▶ Work Gloves, ActivGrip Advance



Fine-knit seamless nylon glove with extremely good grip due to open-pore MicroFinish® nitrile coating · very good mechanical properties and oil resistance thanks to high quality nitrile coating · for universal use · tested per DIN EN 388 CAT II

i Cut resistance level: 1

Art. No.	Size
BO 5017525	8 / M
BO 5017526	9 / L
BO 5017527	10 / XL
BO 5017528	11 / XXL

▶ PowerGrab Work Gloves



Seamless cotton/polyester fabric · palm and fingertips with blue latex coating · good protection against mechanical risks · for universal use · tested per DIN EN 388 CAT II

i Cut resistance level: 1

Art. No.	Size
BO 5017516	11 / XXL
BO 5017517	10 / XL
BO 5017518	9 / L
BO 5017519	8 / M

▶ Protective Kid Leather Gloves



Meet the German accident-prevention regulations VBG 1, safety sheet for protective gloves DIN 4841 · gauntlet made of split leather (at least 15 cm long) and open at the side · fingertips open, perforated on back of hand · thumb, index finger and palm reinforced with kid leather · with Velcro fastening

i Length 35 cm

Art. No.	Description
BO 5007503	Protective Kid Leather Gloves

▶ Hand Protection Laps



Made of natural rubber · napped on one side · for carrying glass safely and securely

Art. No.	Length · Width · Thickness · Description
BO 5007700	170 mm · 130 mm · 2 mm · with thumb hole
BO 5007702	220 mm · 150 mm · 2 mm · with slit
BO 5007703	1400 mm · 130 mm · 2 mm

▶ Wrist Protector Sleeves



Chrome split leather · both sides piped · with inner snap-around bands

i Length 150 mm · Cut resistance level: 2

Art. No.	Size
BO 5207707	One size

▶ Wrist Protector Sleeves



KEVLAR® wrist protector sleeves made of knitted material · with thumb hole for good hold · especially good fit and good air circulation · one size

i Total length approx. 300 mm · Cut resistance level: 3

Art. No.	Size
BO 5007509	One size

Glazing Accessories

▶ Scratch-A-Way



Removes surface scratches from flat as well as curved glass, both convex and concave · only little water needed · no distortions in the glass · saves money, since window panes do not need to be removed or transported · includes: Scratch-A-Way, electric model in carrying case · 4 polishing discs · 1 sponge · 1 felt-tip marker · 1 magnifying glass · instruction manual

i Output 150 W · Speed 5000 - 9500 rpm · Polishing disc 45 mm Ø · Insulation / safety according to EN50144 / HD 400.1 + HD 400.2 · Weight 1,5 kg

Art. No.	Description
BO 5300900	electrical
BO 5300902	pneumatic
BO 5300911	Polishing wheel

▶ Cork Protector Pads with Adhesive Foam



Available in dimensions of 16.2 x 17.5 mm, punched on rolls of 10,000 or loose in boxes of 6,000 (punched foam-on-foam).

Art. No.	Thickness · Sales unit
BO 5105150	3 mm · roll 10.000 items
BO 5105160	4 mm · roll 10.000 items

▶ Chip Brush Fluppi



Glass splinters and other contamination on the cutting table carry the risk not only of scratching the next glass pane, but also of causing injuries. "Fluppi" chip brush is the world's smallest vacuum cleaner and operates without electricity. Simply move the roller brush along the table surface and the splinters are collected in a plastic container. The

chip brush works according to the same principle as a large carpet roller brush. After use it can be disassembled quickly and easily for emptying the container. The chip brush is an indispensable helper for an optimum work space - also suitable for cleaning crumbs and for use on carpets, car mats and much more.

Art. No.	Description
TG 070	Chip Brush

▶ Cork Protector Pads Premium self-adhesive



Punched on rolls with paper cover

i Packaging unit 10.000 items

Art. No.	Thickness · Length · Width
BO 5105170	2 mm · 18 mm · 18 mm
BO 5105180	3 mm · 18 mm · 18 mm
BO 5105190	4 mm · 18 mm · 18 mm

▶ Abrasive Diamond Hand Pad



Smooths and grinds glass edges, ceramic, granite etc. · can be used wet or dry · excellent, long-lasting abrasive capacity · firm grinding area

i Length 100 mm · Width 57 mm · Height 30 mm

Art. No.	Grit · Colour
BO 5007512	120 · black
BO 5007522	220 · red
BO 5007540	400 · yellow

06 | Handling with Vacuum Technology

Pump-Activated Suction Lifters

Equipped with one suction pad only, pump-activated suction lifters enable the manual transport of different materials with a load capacity of up to 120 kg. The vacuum is generated by engaging the pump tappet. The vacuum level can be increased at all times, also while the load is attached. Moreover, due to its position the pump tappet offers the possibility of visually monitoring the vacuum. Almost all Bohle Veribor® suction lifters have been granted the TÜV Certificate (German Technical Inspection Agency) as they all take measures against an unintended vacuum loss.

▶ Veribor® blue line Pump-Activated Suction Lifter made of Plastic, in Carrying Case

Pump-activated suction-lifter made of plastic. The new Bohle pump-activated suction lifter is designed totally with ergonomics in mind. An entirely newly-designed handle with non-slip coating and larger gripping space offers maximum comfort. The rounded pump tappet enables quick and convenient operation and its red ring enables permanent visual monitoring of the vacuum. The suction lifter is suitable for all materials with flat, airtight surfaces. The high quality of the suction lifter has been confirmed by TÜV (German Technical Inspection Agency) by granting it the GS sign.

i Suction pad ø 210 mm · Number of suction pads 1 · suitable for Glass · suitable for Plastic · suitable for Metal · suitable for Coated wood · suitable for Marble / Stoneware · with vacuum gauge · with TÜV Certificate · with CE sign



Art. No.	Load capacity · Lifting direction · Description
BO 601BL	120 kg · parallel
BO 601.01	Spare suction pad
SP 6600.01K	Spare tappet
SP 6850K	Spare handle with bracket

▶ Veribor® Pump-Activated Suction Lifter, Made of Aluminium, in Carrying Case



Pump-activated suction lifter made of sturdy aluminium with high load capacity for handling large objects. Handle with non-slip coating. The rounded pump tappet enables quick and easy operation and the red ring on the pump tappet enables permanent visual monitoring of the vacuum. The suction lifter is suitable for all materials with flat, airtight surfaces. The high quality of the suction lifter has been confirmed by TÜV (German Technical Inspection Agency) by granting it the GS sign.

❶ Suction pad ø 210 mm · Number of suction pads 1 · suitable for Glass · suitable for Plastic · suitable for Metal · suitable for Coated wood · suitable for Marble / Stoneware · with vacuum gauge · with TÜV Certificate · with CE sign

Art. No.	Load capacity · Lifting direction · Description
BO 601	120 kg · parallel
BO 601.01	Spare suction pad
SP 6836.01	Spare handle with bracket
SP 6600.01	Spare tappet

Lever-Activated Suction Lifters

Due to their special construction, the lever-activated suction lifters are particularly suited for use in adverse ambient conditions, e.g. dust and humidity. Engaging the lever, the vacuum is generated by enlarging the hollow space between the surface of the load and the suction pad. Depending on the intended use, Bohle Veribor® lever-activated suction lifters are available with 1-3 suction pads and a load capacity of up to 100 kg.

Veribor® blue line

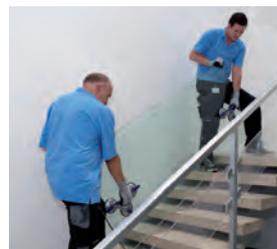
Suction lifter from the Veribor® blue line series: Here Bohle has combined a sturdy aluminium body with an ergonomic plastic handle. This suction lifter offers the advantage of very safe and convenient handling together with greatest stability. Award-winning design. Made in Germany. Many Veribor® blue line suction lifters are also available with vacuum gauge.

▶ Veribor® blue line 3-Cup Suction Lifter, Aluminium



Universal suction lifter from the Veribor® series for carrying and lifting different loads. The blue line series stands out due to its combination of modern, high-performance materials and the high stability of aluminium together with an ergonomic, user-friendly plastic handle. Suitable for all materials with flat, airtight surfaces. The suction lifter must be pressed firmly, with the rubber pad relaxed, onto the respective surface. When you activate the lever, you will clearly notice the resistance caused by generating the vacuum.

❶ Suction pad ø 120 mm · Number of suction pads 3 · suitable for Glass · suitable for Plastic · suitable for Metal · suitable for Coated wood · suitable for Marble / Stoneware · with CE sign



Art. No.	Load capacity · Lifting direction · Description
BO 603.0BL	100 kg · parallel
BO 614.0BL	Spare suction pad for BO 603.0BL / BO 602.0BL / BO 602.4BL

▶ Veribor® blue line 2-Cup Suction Lifter, Aluminium, with Vacuum Indicator



This well-known Veribor® aluminium suction lifter from the blue line series is available with vacuum indicator as an additional option. Lever activated suction lifter equipped with a visual vacuum indicator according to GS test criteria (patent no. EP2302235), confirmed by the TÜV (German Technical Inspection Agency) by granting the GS sign. This suction lifter can also be equipped with an additional sealing lip for slightly curved or textured surfaces (see BO 602.44BL).



❶ Suction pad ø 120 mm · Number of suction pads 2 · suitable for Glass · suitable for Plastic · suitable for Metal · suitable for Coated wood · suitable for Marble / Stoneware · with vacuum gauge · with TÜV Certificate · with CE sign

Art. No.	Load capacity · Lifting direction · Description
BO 602.40BL	60 kg · parallel
BO 602.44BL	45 kg · vertical · rubber pad with additional sealing lip
BO 614.40BL	Spare suction pad for BO 602.40BL

▶ Veribor® blue line 2-Cup Suction Lifter, Aluminium, Transverse Handle



Suction lifter with lever and transverse handle for carrying and lifting different loads. The blue line series stands out due to its combination of modern, high-performance materials and the high stability of aluminium together with an ergonomic, user-friendly plastic handle. Suitable for all materials with flat and airtight surfaces. Optionally also available with an additional sealing lip for slightly curved or textured surfaces (BO 602.02BL). In addition, also optional spare rubber pads are available, supplied together with lever, spring, bolt and washer.



❶ Suction pad ø 120 mm · Number of suction pads 2 · suitable for Glass · suitable for Plastic · suitable for Metal · suitable for Coated wood · suitable for Marble / Stoneware · with CE sign

Art. No.	Load capacity · Lifting direction · Description
BO 602.0BL	70 kg · parallel
BO 602.02BL	50 kg · vertical · rubber pad with additional sealing lip
BO 614.0BL	Spare suction pad for BO 603.0BL / BO 602.0BL / BO 602.4BL
BO 614.02BL	Spare suction pad for BO 602.02BL / BO 602.42BL

▶ Veribor® blue line 2-Cup Suction Lifter, Aluminium, Handle Lengthwise



Suction lifter with lever and lengthwise handle for carrying and lifting different loads. Suitable for all materials with flat and airtight surfaces.

❶ Suction pad ø 120 mm · Number of suction pads 2 · suitable for Glass · suitable for Plastic · suitable for Metal · suitable for Coated wood · suitable for Marble / Stoneware · with CE sign



Art. No.	Load capacity · Lifting direction · Description
BO 602.4BL	60 kg · parallel
BO 614.0BL	Spare suction pad for BO 603.0BL / BO 602.0BL / BO 602.4BL

▶ Veribor® blue line 1-Cup Suction Lifter, Aluminium



Suction lifter with folding lever for lifting different loads. The suction lifter can be equipped with an additional, optional sealing lip which is suitable for slightly curved or textured surfaces. In addition, spare rubber pads are also available if required, supplied together with lever, spring, bolt and washer.

i Suction pad ø 120 mm · Number of suction pads 1 · suitable for Glass · suitable for Plastic · suitable for Metal · suitable for Coated wood · suitable for Marble / Stoneware · with CE sign



Art. No.	Load capacity · Lifting direction · Description
BO 600.0BL	30 kg · vertical
BO 600.02BL	25 kg · vertical · rubber pad with additional sealing lip
BO 610.0BL	Spare suction pad for BO 600.0BL
BO 610.02BL	Spare suction pad for BO 600.02BL

Veribor® Plastic Suction Lifters

Veribor® plastic suction lifters: Due to the wide range of different models, you are sure to find the right device for your individual project. Some plastic suction lifters are also available with vacuum gauge.

▶ Veribor® blue line 2-Cup Suction Lifter, Plastic, with Vacuum Indicator



The new Veribor® plastic suction lifter offers superb carrying comfort with its significantly larger gripping area. Like the pump-activated suction lifters, this device now offers continuous visual monitoring of the vacuum. This lever-activated suction lifter is equipped with a visual vacuum indicator according to GS test criteria (patent no. EP2302235) which has been confirmed by TÜV (German Technical Inspection Agency) by granting the GS sign. In addition, a totally newly designed rubber disc offers an extended holding performance. This rubber pad also enables short-term handling of sandblasted glass.

i Suction pad ø 120 mm · Number of suction pads 2 · with vacuum gauge · suitable for Glass · suitable for Plastic · suitable for Metal · suitable for Coated wood · suitable for Marble / Stoneware · with TÜV Certificate · with CE sign

Art. No.	Load capacity · Lifting direction · Description
BO 602.10BL	50 kg · parallel
BO 614.10BL	Spare suction pad for BO 602.10BL

▶ Veribor® Suction Lifter, 2 Plastic Swivel Heads



This suction lifter is indispensable for lifting and handling curved surfaces. Thanks to its swivel suction heads, the lifter is ideally suitable for windscreens, for example. If a greater flexibility of the swivel heads is required, we recommend BO 602.22 with double swivel head.

i Suction pad ø 120 mm · Number of suction pads 2 · suitable for curved materials · suitable for Glass · suitable for Plastic · suitable for Metal · with CE sign



Art. No.	Load capacity · Lifting direction · Description
BO 602.2A	50 kg · parallel
BO 602.22A	35 kg with elongated hole · parallel · double swivel heads
BO 614.0A	Spare suction pad

▶ Veribor® Suction Lifter, 2-Cup, Plastic



The well-known and proven Veribor® plastic suction lifter has been completely redesigned and now offers improved carrying comfort due to an extended gripping area. In addition, the suction lifter is equipped with a newly designed rubber pad which securely stays in position during transport. This suction lifter is suitable for all materials with flat, airtight surfaces. It is also available with stainless steel components as an option (BO 602.11A) · The new handle, coated with slip resistant rubber, prevents the hand from slipping while working with the suction lifter.

i Suction pad ø 120 mm · Number of suction pads 2 · suitable for Glass · suitable for Plastic · suitable for Metal · suitable for Coated wood · suitable for Marble / Stoneware · with CE sign



Art. No.	Load capacity · Lifting direction · Description
BO 602.1A	60 kg · parallel
BO 602.11A	50 kg · parallel · stainless
BO 614.0A	Spare suction pad

Veribor® Aluminium Suction Lifters

Aluminium suction lifter: In response to numerous customer requests, we have added this classic among the suction lifters back into our portfolio. This suction lifter with its all-aluminium body remains for many synonymous with Veribor®. Sturdiness and long service life make this suction lifter a reliable helper for almost all circumstances.

▶ Veribor® 3-Cup Suction Lifter Aluminium



Sturdy aluminium suction lifter with 3 pads for lifting and carrying different loads. Suitable for all materials with flat and airtight surfaces. The suction lifter must be pressed firmly, with its suction pad relaxed, onto the corresponding surface. When you activate the lever, you will clearly notice the resistance caused by generating the vacuum.

i Suction pad ø 120 mm · Number of suction pads 3 · suitable for Glass · suitable for Plastic · suitable for Metal · suitable for Coated wood · suitable for Marble / Stoneware · with CE sign



Art. No.	Load capacity · Lifting direction · Description
BO 603.0	100 kg · parallel
BO 614.0	Spare suction pad

▶ Veribor® 2-Cup Suction Lifter Aluminium



Sturdy 2-cup lever-activated suction lifter for lifting and carrying different loads. Suitable for all materials with flat and airtight surfaces. Optional spare rubber pads are also available, supplied together with lever, spring, bolt and washer.

i Suction pad ø 120 mm · Number of suction pads 2 · suitable for Glass · suitable for Plastic · suitable for Metal · suitable for Coated wood · suitable for Marble / Stoneware · with CE sign



Art. No.	Load capacity · Lifting direction · Description
BO 602.4	60 kg · parallel
BO 614.0	Spare suction pad

▶ Veribor® 1-Cup Suction Lifter, Aluminium for one-hand operation



This 1-cup suction lifter made of diecast aluminium allows efficient working. The vacuum is generated by engaging the bow handle.

i Suction pad ø 120 mm · Number of suction pads 1 · suitable for Glass · suitable for Plastic · suitable for Metal · suitable for Coated wood · suitable for Marble / Stoneware · with CE sign · Load capacity · Lifting direction

Art. No.	Load capacity · Lifting direction · Description
BO 600.0	30 kg · vertical
BO 610.0	Suction pad for BO 600.0 / BO 600.1

Positioning and Fixation Devices

Apart from handling objects, the vacuum technology is particularly suitable for fixation auxiliary positioning and fixation devices on surfaces. Bohle offers a great variety of products based on vacuum technology. Within the portfolio of positioning and fixation devices, Bohle mainly focuses on lever-activated suction lifters as, due to their construction, they are particularly vacuum tight on absolutely airtight surfaces such as flat glass and are thus able to absorb very high levels of force over longer periods of time. Depending on the characteristics of the surface and the required fixation duration, the suction lifters can be combined with different rubber pads from the Bohle modular system.

▶ Verifix® Suction Unit



Universal suction holder for quickly fixing all kinds of objects such as measuring devices, displays, etc. · suitable for all materials with flat and airtight surfaces · also suitable for constructing special holding devices

i Number of suction pads 1 · suitable for Glass · suitable for Plastic · suitable for Metal · suitable for Coated wood · suitable for Marble / Stoneware

Art. No.	Diameter · Bore hole · Description
BO 633.11	55 mm · 2 x M5 · Verifix® Suction Unit
BO 633.13	55 mm · 2 x M5 · rubber pad with release nubs
BO 650.11	36,5 mm · 2 x 3,2 mm Ø · rubber pad with release nubs

▶ Veribor® Suction Holder Made of Aluminium



This universal Veribor® suction holder is suitable for the many diverse applications. The special, softer rubber pad enables a longer fixation duration. Suitable for all materials with flat and airtight surfaces.

i Number of suction pads 1 · Suction pad ø 120 mm · suitable for Glass · suitable for Plastic · suitable for Metal · suitable for Coated wood · suitable for Marble / Stoneware

Art. No.	Connecting bore hole · Description
BO 600.20	6.5 mm Ø
BO 600.20R	6.5 mm Ø · stainless
BO 600.20S	6.5 mm Ø · with sealing lip for materials with textured surfaces
BO 600.20V	6.5 mm Ø · with integrated vacuum gauge
BO 600.2G1	M10 thread x 1
BO 600.2G2	M8 thread

▶ "Carry Clamp" Carrying Device



As a new feature, the Bohle Carry Clamp is now equipped with a rubber coating with diamond-shape texture. This coating helps prevent wet materials from slipping. The transported goods are held safely with two clamps - the heavier the load, the stronger the clamping mechanism.

i Opening range up to 40 mm · Load capacity per pair 160 kg · suitable for Glass · suitable for Plastic · suitable for Metal · suitable for Coated wood · suitable for Marble / Stoneware

Art. No.	Description
BO 5000200	Carry Clamp "Tragkuli"
BO 5000222	Spare plate for Carry Clamp

▶ Glass Carrying Device Tragboy



Suitable for transporting sheet materials · the load is held firmly between two non-slip, rubber-lined clamps · the heavier the load, the greater the clamping pressure

i Opening range up to 25 mm · Load capacity per pair 80 kg · suitable for Glass · suitable for Plastic · suitable for Metal · suitable for Coated wood · suitable for Marble / Stoneware

Art. No.	Description · Length · Width
BO 5000101	Glass Carrying Device Tragboy
BO 5000108	Spare rubber lining · 200 mm · 80 mm

07 | Adhesives

The selection of the correct adhesive depends on the combination of materials, the ambient conditions and the required load capacity. Apart from low viscosity adhesives with good capillary action, medium viscosity, impact resistant or elastic adhesives are also available. Features such as moisture resistance and a protection against yellowing form part of the latest state of the art products. As a basic principle, the applied adhesive layer should be of a sufficient thickness to ensure the maximum strength and load capacity of the bond. Bohle offers all medium viscosity UV adhesives also with "spacers". "Spacers" are a specific filling material which is added to the adhesive and guarantees that the minimum thickness of the adhesive layer is reached without causing visual impairments of the bond. In addition, when using the Verifix® fixation aids, Bohle also offers appropriate thickness gauges for adjusting the desired layer thickness.

UV Curing Adhesives

With specially developed properties, UV curing adhesives are suitable for durable, stable bonds for many different materials such as glass/glass or glass/metal. For this purpose, Bohle has developed a large range of UV adhesives and is known today as one of the technology leaders in glass bonding.

▶ UV Adhesive Verifix® MV 760



Due to its outstanding properties, the UVA curing adhesive Verifix® MV 760 is extremely versatile and therefore ideal for glass/metal and glass/glass bonds. Verifix® MV 760 is mainly used for constructions that are subject to high static or dynamic forces. Its high elongation at break compensates for the expansion of different bonded materials without loss of adhesion.

Shelf life in original packaging: 18 months from the date of manufacture

i Viscosity: medium 1500 mPas · Shear strength: 25 MPa · Bonding gap: 0.08 - 0.5 mm · Max. allowable continuous temperature: 70°C · Temperature range: -40 - +120°C · Colour: crystal clear · Capillary characteristics: none · Compensation of tension: limited · Impact resistant: yes · Suitable for use with activator: no · Vibration absorbing: yes · Moisture resistance: yes · UVA curing: yes · Light curing: no · Construction: open and closed

Art. No.	Contents
BO MV7601K	1000 g
BO MV76025	250 g
BO MV76010	100 g
BO MV76002	20 g

▶ UV Adhesive Verifix® MV 760 with Spacers



The spacers added to the Verifix® MV 760 adhesive guarantee that the required minimum adhesive layer thickness is reached. This makes sure that, when bonding very heavy glass parts, sufficient adhesive is distributed between the bonding parts. Depending on the bonding process, this method has also proven useful when bonding metal in order

to maintain the minimum adhesive layer thickness. The spacers do not interfere with the technical properties of the adhesive. Please read the supplied processing guidelines carefully. If you have any questions, our application technicians will be happy to assist you.

i Viscosity: medium 1500 mPas · Shear strength: 25 MPa · Bonding gap: 0.08 - 0.5 mm · Max. allowable continuous temperature: 70°C · Temperature range: -40 - +120°C · Colour: crystal clear · Capillary characteristics: none · Compensation of tension: limited · Impact resistant: yes · Suitable for use with activator: no · Vibration absorbing: yes · Moisture resistance: yes · UVA curing: yes · Light curing: no · Construction: open and closed

Art. No.	Contents · Description
BO MV7601KS	1000 g · with spacers
BO MV76025S	250 g · with spacers

▶ UV Adhesive Verifix® MV 760VIS



The UVA and light curing adhesive Verifix® MV 760VIS is suitable for universal applications due to its adhesive properties. It is therefore ideal for glass/metal and glass/glass bonds. This adhesive is mainly used for glass constructions subject to high static or dynamic forces. Important: Due to its composition, Verifix® MV 760 VIS is particularly appropriate

for bonding laminated safety glass/laminated safety glass and laminated safety glass/metal. · Shelf life in original packaging: 18 months from the date of manufacture

i Viscosity: medium 1500 mPas · Shear strength: 25 MPa · Bonding gap: 0.08 - 0.5 mm · Max. allowable continuous temperature: 70°C · Temperature range: -40 - +120°C · Colour: crystal clear · Capillary characteristics: none · Compensation of tension: limited · Impact resistant: yes · Suitable for use with activator: no · Vibration absorbing: yes · Moisture resistance: yes · UVA curing: yes · Light curing: yes · Construction: open and closed

Art. No.	Contents
BO MV76V1K	1000 g
BO MV76V25	250 g
BO MV76V10	100 g

▶ UV Adhesive Verifix® LV 740



Due to its excellent capillary action, this UVA curing adhesive is exceptionally suitable for glass/glass and tempered glass/tempered glass bonds. This adhesive is used when looks are extremely important, e.g. in the construction of display cabinets, glass furniture, etc. The main areas of application are objects or glass constructions subject to static as well

as dynamic forces. Reduced clean-up time means that production cycles can be done quickly and efficiently. · Shelf life in original packaging: 18 months from the date of manufacture

i Viscosity: low 80 mPas · Shear strength: 17 MPa · Bonding gap: 0.04 - 0.2 mm · Max. allowable continuous temperature: 70°C · Temperature range: -40 - +120°C · Colour: crystal clear · Capillary characteristics: very good · Compensation of tension: limited · Impact resistant: no · Suitable for use with activator: no · Vibration absorbing: limited · Moisture resistance: yes · UVA curing: yes · Light curing: no · Construction: open and closed

Art. No.	Contents
BO LV7401K	1000 g
BO LV74025	250 g
BO LV74010	100 g
BO LV74002	20 g

▶ UV Adhesive Verifix® MV 760VIS with Spacers



The spacers added to the Verifix® MV 760VIS adhesive guarantee that the required minimum adhesive layer thickness is reached. This makes sure that, when bonding very heavy glass parts, sufficient adhesive is distributed between the bonding parts. Depending on the bonding process, this method has also proven useful when bonding metal in order

to maintain the minimum adhesive layer thickness. The spacers do not interfere with the technical properties of the adhesive. Please read the supplied processing guidelines carefully. If you have any questions, our application technicians will be happy to assist you. Important: Due to its composition, Verifix® MV 760 VIS is particularly appropriate for bonding laminated safety glass/laminated safety glass and laminated safety glass/metal.

i Viscosity: medium 1500 mPas · Shear strength: 25 MPa · Bonding gap: 0.08 - 0.5 mm · Max. allowable continuous temperature: 70°C · Temperature range: -40 - +120°C · Colour: crystal clear · Capillary characteristics: none · Compensation of tension: limited · Impact resistant: yes · Suitable for use with activator: no · Vibration absorbing: yes · Moisture resistance: yes · UVA curing: yes · Light curing: yes · Construction: open and closed

Art. No.	Contents
BO MV76V25S	250 g

▶ UV Adhesive Verifix® LV 740VIS



Due to its excellent capillary action, this UVA and light curing adhesive is ideal for bonding glass to glass, tempered to tempered glass, laminated safety to laminated safety glass and all float/tempered/laminated safety glass combinations. This adhesive is used when looks are extremely important, e.g. in the construction of display cabinets,

glass furniture, etc. The main areas of application are objects or glass constructions subject to static as well as dynamic forces. Reduced clean-up time means that production cycles can be done quickly and efficiently. Please note: Its special composition makes Verifix® LV 740VIS particularly suitable for laminated safety to laminated safety glass bonds. · Shelf life in original packaging: 18 months from the date of manufacture

i Viscosity: low 80 mPas · Shear strength: 17 MPa · Bonding gap: 0.04 - 0.2 mm · Max. allowable continuous temperature: 70°C · Temperature range: -40 - +120°C · Colour: crystal clear · Capillary characteristics: very good · Compensation of tension: limited · Impact resistant: no · Suitable for use with activator: no · Vibration absorbing: limited · Moisture resistance: yes · UVA curing: yes · Light curing: yes · Construction: open and closed

Art. No.	Contents
BO LV74V1K	1000 g
BO LV74V25	250 g
BO LV74V10	100 g

▶ UV Adhesive Verifix® B 665-0



This UVA curing adhesive displays very good capillary properties. It is particularly suitable for bonding glass to glass. The adhesive's low viscosity makes time-consuming reworking unnecessary, so that it can be applied rapidly and economically. Please note: The Bohle Verifix® B-665-0 UV adhesive is not suitable for tempered glass! · Shelf life in original

packaging: 12 months from the date of manufacture

i Viscosity: low 80 mPas · Shear strength: 23 MPa · Bonding gap: 0.04 - 0.2 mm · Max. allowable continuous temperature: 50°C · Temperature range: -40 - +120°C · Colour: crystal clear · Capillary characteristics: very good · Compensation of tension: no · Impact resistant: no · Suitable for use with activator: no · Vibration absorbing: no · Moisture resistance: no · UVA curing: yes · Light curing: no · Construction: open and closed

Art. No.	Contents
BO 5209324	1000 g
BO 5209321	250 g
BO 5209300	100 g
BO 5209327	20 g

▶ UV Adhesive Verifix® B 682-T with Spacers



The spacers added to the Verifix® B 682-T adhesive guarantee that the required minimum adhesive layer thickness is reached. This makes sure that, when bonding very heavy glass parts, sufficient adhesive is distributed between the bonding parts. Depending on the bonding process, this method has also proven useful when bonding metal in order

to maintain the minimum adhesive layer thickness. The spacers do not interfere with the technical properties of the adhesive. Please read the supplied processing guidelines carefully. If you have any questions, our application technicians will be happy to assist you.

i Viscosity: medium 900 mPas · Shear strength: 26 MPa · Bonding gap: 0.09 - 0.5 mm · Max. allowable continuous temperature: 50°C · Temperature range: -40 - +140°C · Colour: transparent · Capillary characteristics: none · Compensation of tension: limited · Impact resistant: yes · Suitable for use with activator: yes · Vibration absorbing: yes · Moisture resistance: no · UVA curing: yes · Light curing: no · Construction: open and closed

Art. No.	Contents · Description
BO 5209396S	1000 g · with spacers
BO 5209395S	250 g · with spacers

▶ UV Adhesive Verifix® B 682-T



Due to its very high final strength, this UVA curing adhesive is particularly suitable for statically and dynamically demanding bonds. Glass/metal bonds work particularly well with this adhesive. When the Bohle UV activator LF (BO 5209365 / BO 5209367) is used, the Verifix® B 682-T adhesive is able to cure without

UV light (e.g. for coloured glass, laminated safety glass/metal bonds, etc.). When using the activator, the yellowing of the bond cannot be ruled out. · Shelf life in original packaging: 12 months from the date of manufacture

i Viscosity: medium 900 mPas · Shear strength: 26 MPa · Bonding gap: 0.09 - 0.5 mm · Max. allowable continuous temperature: 50°C · Temperature range: -40 - +140°C · Colour: transparent · Capillary characteristics: none · Compensation of tension: limited · Impact resistant: yes · Suitable for use with activator: yes · Vibration absorbing: yes · Moisture resistance: no · UVA curing: yes · Light curing: no · Construction: open and closed

Art. No.	Contents
BO 5209396	1000 g
BO 5209395	250 g
BO 5209394	100 g
BO 5209393	20 g

▶ Activator LF



This activator allows the curing of Verifix® B 682-T UV adhesive where it is not possible under normal circumstances using UVA radiation, e.g. with coloured glass, screen printed glass, laminated safety glass, metal/metal bonds, etc. When activator is used, slight yellowing of the bond can occur. · Using an additional UV lamp is not required. · Shelf life: 6 months

Art. No.	Contents
BO 5209365	9 ml
BO 5209367	50 ml

▶ Metal Primer



For improved adhesion on aluminium, chrome or nickel-plated surfaces · for bonding with acrylate adhesives · Shelf life in original packaging: 12 months from the date of manufacture

Art. No.	Contents
BO 5209488	100 g
BO 5209489	1000 g

▶ UV Adhesive Verifix® B 678-0 Lamifix



Due to its elasticity, this UVA and light curing adhesive is ideal for bonding many different material combinations. It excels due to its high vibration absorption within the bonding joint. Especially interesting, however, is its suitability for bonding laminated safety glass. Lamifix adhesive is ideal for bonding laminated safety glass to laminated or ordinary glass within a

closed system. · Shelf life in original packaging: 12 months from the date of manufacture

i Viscosity: medium 600 mPas · Shear strength: 9 MPa · Bonding gap: 0.06 - 0.3 mm · Max. allowable continuous temperature: 50°C · Temperature range: -40 - +100°C · Colour: crystal clear · Compensation of tension: very good · Impact resistant: no · Suitable for use with activator: no · Vibration absorbing: high · Moisture resistance: yes · UVA curing: yes · Light curing: yes · Construction: closed · Viscoelastic properties: elastic

Art. No.	Contents
BO 5209362	1000 g
BO 5209360	85 g

▶ UV Adhesive Verifix® B 678-0 Lamifix Spacers



The spacers added to the Verifix® B 678-0 adhesive guarantee that the required minimum adhesive layer thickness is reached. This makes sure that, when bonding very heavy glass parts, sufficient adhesive is distributed between the bonding parts. Depending on the bonding process, this method has also proven

useful for surface bonding in order to maintain the minimum adhesive layer thickness. The spacers do not interfere with the technical properties of the adhesive. Please read the supplied processing guidelines carefully. If you have any questions, our application technicians will be happy to assist you.

i Viscosity: medium 600 mPas · Shear strength: 9 MPa · Bonding gap: 0.06 - 0.3 mm · Max. allowable continuous temperature: 50°C · Temperature range: -40 - +100°C · Colour: crystal clear · Compensation of tension: very good · Impact resistant: no · Suitable for use with activator: no · Vibration absorbing: high · Moisture resistance: yes · UVA curing: yes · Light curing: yes · Construction: closed · Viscoelastic properties: elastic

Art. No.	Contents · Description
BO 5209362S	1000 g · with spacers

▶ UV Adhesive Verifix® B 690-0



Due to its exceptional elasticity, this UVA curing adhesive is ideal for bonding different material combinations and surfaces of up to 1 m². · Shelf life in original packaging: 12 months from the date of manufacture

i Viscosity: medium 600 mPas · Shear strength: 9 MPa · Bonding gap: 0.06 - 0.3 mm · Max. allowable continuous temperature: 50°C · Temperature range: -40 - +100°C · Colour: crystal clear · Compensation of tension: very good · Impact resistant: no · Suitable for use with activator: no · Vibration absorbing: high · Moisture resistance: yes · UVA curing: yes · Light curing: no · Construction: closed · Viscoelastic properties: elastic

Art. No.	Contents
BO 5209372	1000 g
BO 5209370	85 g

▶ UV Adhesive Verifix® B 690-0 with Spacers



The spacers added to the Verifix® B 690-0 adhesive guarantee that the required minimum adhesive layer thickness is reached. This makes sure that, when bonding very heavy glass parts, sufficient adhesive is distributed between the bonding parts. Depending on the bonding process, this method has also proven

useful for surface bonding in order to maintain the minimum adhesive layer thickness. The spacers do not interfere with the technical properties of the adhesive. Please read the supplied processing guidelines carefully. If you have any questions, our application technicians will be happy to assist you.

i Viscosity: medium 600 mPas · Shear strength: 9 MPa · Bonding gap: 0.06 - 0.3 mm · Max. allowable continuous temperature: 50°C · Temperature range: -40 - +100°C · Colour: crystal clear · Compensation of tension: very good · Impact resistant: no · Suitable for use with activator: no · Vibration absorbing: high · Moisture resistance: yes · UVA curing: yes · Light curing: no · Construction: closed · Viscoelastic properties: elastic

Art. No.	Contents · Description
BO 5209372S	1000 g · with spacers

▶ UV Adhesive Verifix® 420VIS



This medium-viscosity, UVA and light curing adhesive was especially developed for bonding thermoplastics. It facilitates strong, flexible and crystal clear bonds together with short curing times. The adhesive is also suitable for bonding plastic to glass or metal. A reduced cleaning effort offers the possibility of quick and efficient production cycles.

① Viscosity: medium 300 mPas · Shear strength: 6 MPa · Bonding gap: 0.07 - 0.2 mm · Max. allowable continuous temperature: 50°C · Temperature range: -55 - +120°C · Colour: crystal clear · Capillary characteristics: limited · Compensation of tension: very good · Impact resistant: no · Suitable for use with activator: no · Vibration absorbing: yes · Moisture resistance: no · UVA curing: yes · Light curing: yes · Construction: closed

Art. No.	Contents
BO 420V11K	1000 g
BO 420V125	250 g
BO 420V110	100 g

▶ UV Adhesive Set



① Packaging unit 5 bottles · Contents each 20 g · Colour: red - green - yellow - blue - black

Art. No.	Description
BO 5209331	UV Adhesive Set

Silicone Adhesives

The term „glass bonding“ is usually used when working with UV curing adhesives. However, the following product range proves that other adhesives also have many applications when bonding glass.

▶ 2 K Silicone Verifix®



Bohle has developed the Verifix® two-component silicone adhesive especially for bonding glass surfaces. The product is ideal for use on mouth-blown and flashed glass, rolled stained glass or fusing glass, and of course for perfectly transparent, bubble-free float glass bonds. Supporting panes such as door panels, all-glass doors or partitions

can also be bonded on their entire surfaces. Single smaller objects can be bonded to a larger surface. The bothersome weighing of compound components is no longer required as the product can be mixed in a 1:1 ratio - only a single measuring cup is needed. In addition, the mixed silicone does not require vacuum degassing. Larger sizes on request. Suitable for exterior applications, waterproof, UV-stable, yellowing resistant, permanently elastic.

Art. No.	Contents
BO 5500510	1 kg
BO 5500513	5 kg
BO 5500516	50 kg



Properties of Adhesives at a Glance

Specifications	MV 760	MV 760VIS	LV 740	LV 740VIS
Viscosity:	medium 1500 mPas	medium 1500 mPas	low 80 mPas	low 80 mPas
Shear strength:	25 MPa	25 MPa	17 MPa	17 MPa
Bonding gap:	0.08 - 0.5 mm	0.08 - 0.5 mm	0.04 - 0.2 mm	0.04 - 0.2 mm
Max. allowable continuous temperature:	70°C	70°C	70°C	70°C
Temperature range:	-40 - +120°C	-40 - +120°C	-40 - +120°C	-40 - +120°C
Colour:	crystal clear	crystal clear	crystal clear	crystal clear
Capillary characteristics:	none	none	very good	very good
Compensation of tension:	limited	limited	limited	limited
Impact resistant:	yes	yes	no	no
Suitable for use with activator:	no	no	no	no
Vibration absorbing:	yes	yes	limited	limited
Moisture resistance:	yes	yes	yes	yes
UVA curing:	yes	yes	yes	yes
Light curing:	no	yes	no	yes
Construction:	open and closed	open and closed	open and closed	open and closed
Yellowing resistant:	yes	yes	yes	yes
Viscoelastic properties:	impact resistant	impact resistant	limited elasticity	limited elasticity

Specifications	B 665-0	B 682-T	B 678-0	B 690-0
Viscosity:	low 80 mPas	medium 900 mPas	medium 600 mPas	medium 600 mPas
Shear strength:	23 MPa	26 MPa	9 MPa	9 MPa
Bonding gap:	0.04 - 0.2 mm	0.09 - 0.5 mm	0.06 - 0.3 mm	0.06 - 0.3 mm
Max. allowable continuous temperature:	50°C	50°C	50°C	50°C
Temperature range:	-40 - +120°C	-40 - +140°C	-40 - +100°C	-40 - +100°C
Colour:	crystal clear	transparent	crystal clear	crystal clear
Capillary characteristics:	very good	none	limited	limited
Compensation of tension:	no	limited	very good	very good
Impact resistant:	no	yes	no	no
Suitable for use with activator:	no	yes	no	no
Vibration absorbing:	no	yes	high	high
Moisture resistance:	no	no	yes	yes
UVA curing:	yes	yes	yes	yes
Light curing:	no	no	yes	no
Construction:	open and closed	open and closed	closed	closed
Yellowing resistant:	no	no	yes	yes
Viscoelastic properties:	brittle	impact resistant	elastic	elastic

Specifications	420VIS
Viscosity:	medium 300 mPas
Shear strength:	6 MPa
Bonding gap:	0.07 - 0.2 mm
Max. allowable continuous temperature:	50°C
Temperature range:	-55 - +120°C
Colour:	crystal clear
Capillary characteristics:	limited
Compensation of tension:	very good
Impact resistant:	no
Suitable for use with activator:	no
Vibration absorbing:	yes
Moisture resistance:	no
UVA curing:	yes
Light curing:	yes
Construction:	closed
Yellowing resistant:	yes
Viscoelastic properties:	elastic

Temperature resistance

The temperature resistance refers to the maximum allowable continuous temperature at which the cured adhesive is not irreversibly damaged. With increasing temperatures, however, the maximum strength steadily decreases.

Tensile/Shear strength

When recommended minimum and maximum layer thicknesses are taken into consideration, the tensile/shear strengths listed in the table can be achieved.



Possible Bonds

Specifications	MV 760	MV 760VIS	LV 740	LV 740VIS
Glass/glass	yes	yes	yes	yes
Glass/metal	yes	yes	no	no
Tempered glass/tempered glass	yes	yes	yes	yes
Glass/stone	limited	limited	no	no
Glass/wood	limited	limited	no	no
Laminated safety glass/glass	limited	yes	limited	yes
Laminated safety glass/laminated safety glass	no	yes	no	yes
Laminated safety glass/stone	no	limited	no	no
Laminated safety glass/wood	no	limited	no	no
Laminated safety glass/metal	no	yes	no	no
Laminated safety glass/tempered glass	limited	yes	limited	yes
Glass/plastic	limited	limited	no	no
Laminated safety glass/plastic	no	limited	no	no
Plastic/plastic	no	no	no	no
Plastic/metal	no	no	no	no
Plastic/tempered glass	no	limited	no	no

Specifications	B 665-0	B 682-T	B 678-0	B 690-0
Glass/glass	yes	yes	yes	yes
Glass/metal	no	yes	limited	limited
Tempered glass/tempered glass	no	yes	yes	yes
Glass/stone	no	limited	limited	limited
Glass/wood	no	limited	limited	limited
Laminated safety glass/glass	limited	limited	yes	limited
Laminated safety glass/laminated safety glass	no	no	yes	no
Laminated safety glass/stone	no	no	limited	no
Laminated safety glass/wood	no	no	limited	no
Laminated safety glass/metal	no	no	limited	no
Laminated safety glass/tempered glass	no	limited	yes	limited
Glass/plastic	no	limited	limited	no
Laminated safety glass/plastic	no	no	limited	no
Plastic/plastic	no	no	no	no
Plastic/metal	no	no	no	no
Plastic/tempered glass	no	no	limited	no

Specifications	420VIS
Glass/glass	no
Glass/metal	no
Tempered glass/tempered glass	no
Glass/stone	no
Glass/wood	no
Laminated safety glass/glass	no
Laminated safety glass/laminated safety glass	no
Laminated safety glass/stone	no
Laminated safety glass/wood	no
Laminated safety glass/metal	no
Laminated safety glass/tempered glass	no
Glass/plastic	yes
Laminated safety glass/plastic	yes
Plastic/plastic	yes
Plastic/metal	yes
Plastic/tempered glass	yes
Description	suitable for bonding PMMA/PC/PET/ABS



1. Material selection (suitability of the adhesive):

The material selection and the subsequent selection of the appropriate adhesive (see point 3) results in different mechanical strength properties of the bond. For technical data of our Verifix® bonding portfolio, please see the preceding pages. All specifications relate to transparent, UVA light translucent float glasses. Transparent float glass, mirrors (on the visible side), tempered glass and plate wired glass can be bonded without any difficulty. Special types of glass can lead to reduced mechanical strength properties or cannot be bonded. All types of structured glass are problematic, such as ornamental glass or wired glass. The UVA light translucency depends, among other things, on glass thickness and colour intensity. Important: Glass with a high UV absorption rate, such as laminated safety glass and coloured glass, cannot be bonded with standard UV adhesives. The following highly photosensitive Bohle Verifix® adhesives are suitable for this purpose: MV 760VIS, LV 740VIS or Lamifix 678 and 682-T with activator. Please note: The indicated strength values can be reached within the corresponding layer thicknesses mentioned above. Excessive, too thin or irregular adhesive layer thicknesses have an adverse effect on bonding strength. Extensive tests have shown that stainless steel is especially suitable for bonding glass to metal.

2. Pre-treatment of bonding surfaces

2.1 Cleaning

- The surfaces to be bonded must be completely clean and free of dust and grease (free of separating agents). Use a cleaning agent that is suitable for UV bonding (free from surfactants or separating agents).
- Standard glass or household cleaners are not suitable in most cases.
- Recommendation: Bohle special cleaner for glass bonding, art. no. BO 5107910.

2.2 Removing residual moisture

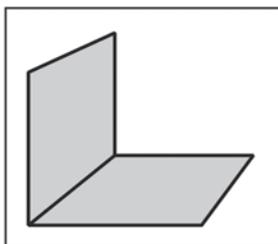
- The adhesive and the parts to be bonded must be at room temperature. In order to achieve a durably stable bond, it is essential to briefly warm the glass and fittings before bonding. In this way residual moisture (condensate) can be completely removed.
- Use hot-air unit or hairdryer. Failure to observe these instructions can lead to decreased stability of the bond which may not be noticed immediately, and thus result in decreasing long-term stability.

2.3 Pyrosil® surface pre-treatment

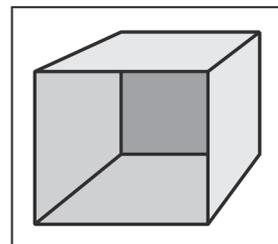
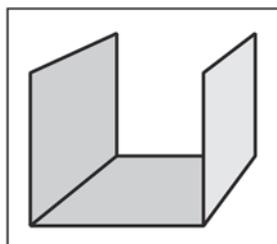
Durable adhesion can be achieved by an additional pre-treatment of problematic bonding surfaces with the Pyrosil® technology protecting the bond from moisture infiltration. This is particularly important for high load-bearing bonds, exterior applications or for use in humid environments.

3. Adhesive selection

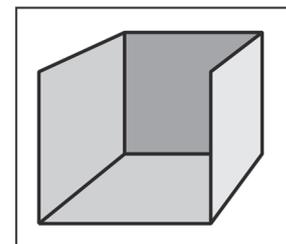
Different Bohle Verifix® UVA and light curing adhesives are available for testing, depending on the requirements of the bond, its desired load capacity and intended use. Special observations: Glass/metal bonds: The medium-viscosity UV adhesives Verifix® B-682-T or Verifix® MV 760 are ideal for dynamic bonds. Glass/glass bonds: When planning and constructing all-glass objects, the construction type should always be "closed" (i.e. self-stabilising, see fig.) for achieving maximum stability. Elastic adhesives, such as B-678-0 and B-690-0, are particularly appropriate for "closed" constructions and for surface bonding of glass/glass and glass/metal constructions. If an "open" construction is explicitly desired for design reasons or if this is the only feasible construction type, only the following adhesives must be used: Verifix® LV 740, Verifix® LV 740VIS, Verifix® B-665-0, Verifix® MV 760VIS, Verifix® MV 760 or Verifix® B-682-T.



open construction



closed construction





4. Fixing aids

It is essential to secure bonded objects against vibrations and slipping in order to guarantee the complete curing of the UV adhesive. The Verifix® product portfolio includes suitable fixing aids which facilitate securing the bonded object in position. Our sales representative will be happy to talk to you about further details.

5. Bonding/application of the adhesive

- Before applying the adhesive, check the objects to be bonded for accuracy of fit. This can best be done by mounting the whole construction by way of a trial (use fixing aids).
- If more than 5 minutes have passed after heating the bonding joints, they must be heated again before applying the adhesive.
- If possible, the adhesive should be applied in a horizontal position; applying it in a vertical position might lead to problems.
- If too much adhesive is used, removing the excess material is time-consuming.
- If the adhesive layer is too thick or too thin, the stability of the bond will be affected!
- Suitable dosing aids facilitate the exact and cost-efficient application of the adhesive.

5.1 Applying the adhesive BEFORE constructing the whole object

Medium-viscosity adhesive (Verifix® MV 760, MV 760VIS, B-678, B-690 and B-682-T) is applied before assembling the construction. For surface bonding (B690-0 and B 678-0), the adhesive is always applied before joining the parts.

- When bonding horizontally, a perfect bond without air bubbles is achieved by carefully and evenly lowering the object.
- For edge bonding, the net weight of the bonding parts is sufficient for spreading the adhesive over the entire bonding surface.

5.2 Applying the adhesive AFTER assembling the construction

- Low viscosity adhesive (Verifix® LV 740, Verifix® LV 740VIS and Verifix® B-665-0) enters the bonding joint by capillary action. That is why the parts to be bonded can be assembled in their final position before applying the adhesive.
- For multiple-part objects, make sure the adhesive is applied on the bonding joints one by one (not all at once).
- Before curing the bond, bonding parts should be lifted briefly and lowered again (open and close the bonding joint) in order to guarantee the optimum distribution of the adhesive.

6. Curing (light exposure) - General Information:

Use suitable UV lamp for curing: The lamp must not be smaller/shorter than the bonding joint in order to avoid tensions in the joint due to irregular light exposure.

- During light exposure (curing) position the lamp as closely as possible to the bonding joint.
- Under no circumstances must the object be moved or exposed to vibrations (use fixing aid).
- All Bohle UVA hand lamps are equipped with special filter screens to avoid injuries to eyes and skin, etc.
- For your own safety, appropriate equipment must be worn when working with UV lamps. Please be aware of the manufacturer's instructions. (The use of appropriate safety equipment is recommended when working with UV lamps.)

Curing is done in 2 steps:

1. During pre-curing, processing strength is achieved (approx. 30% of final strength). Then excess adhesive outside the bonding joints can be easily removed.
 - Pre-curing can take between 10 seconds and approx. 2 minutes, depending on the type of lamp. After pre-curing, remove eventual fixing aids and clean objects from possible excess adhesive using Bohle special cleaner, a glass scraper or steel wool, fineness no. 00.
2. Final curing: Depending on the type of lamp, this can take between 60 seconds and approx. 5 minutes.
 - Excessive light exposure has neither negative nor positive effects on the stability of the bond.
 - After final curing and an additional resting time of 24 hours, the bond has reached its full functionality and load capacity.

7. Test Bonds

If you are not sure about the ideal bonding requirements, always conduct a bonding test:

- Bond the object according to the instructions above.
- Afterwards load the object beyond the intended load capacity, e.g. impacts, tilting or jerky movements, use tools if necessary (e.g. pliers, etc.)
- Load until deformation/break in order to determine the load limit.
- If you have problems or questions concerning certain bonding options, our Bohle experts are happy to assist you any time!

Disclaimer

The preceding information as well as any technical recommendation given in writing, verbally or based on tests is provided to the best of our knowledge. However, these are non-binding recommendations only and do not affect your responsibility to determine the correctness of given recommendations and the suitability of the product for your particular processes and purposes. The application, use or processing of our products as well as the production of products based on our technical recommendations are beyond our control and therefore fall exclusively within your area of responsibility. Sales of our products are subject to our most updated General Sales and Delivery Conditions.

08

Glass Bonding Kits

Glass Bonding Kits

The Bohle Verifix® Glass Bonding Kits offer complete basic equipment for the fixing and bonding of small to medium-sized glass parts. From beginner to professional kits: Bohle quality tools are included, and, of course, also the suitable UVA lamp. Clearly arranged and well protected in a sturdy carrying case, all the essentials that you need, like a curing lamp, fixation aids, and accessories, are always right at hand. Also ideal for portable use.

Professional Kit Verifix®



Professional kit for UV bonding. Ideally suited for the construction of display cabinets and glass furniture.

Art. No.	Version
BO 5500372	Standard version
BO 5500374	110V export version

This set comprises the following items:

BO 5141000	Glass Scraper, metal	1 pc.
BO 5141001E	Spare Blades, reinforced back	1 box
BO 5141605	Steel Wool, fineness 00	1 pc.
BO 5209305	Application Needle 0.41 mm ø - blue	1 pc.
BO 5209306	Application Needle 0.58 mm ø - pink	1 pc.
BO 5209307	Application Needle 0.84 mm ø - green	2 pcs.
BO 5209308	Application Needle 1.37 mm ø - amber	2 pcs.
BO 5209320	Needle Adaptor	2 pcs.
BO 5209470	UVA Star "Light", 230 volts	1 pc.
BO 639.0	Verifix® Pro Angle Suction Holder	1 pc.
BO 636.0	Verifix® Clamping Device for 3 - 10 mm glass	1 pc.
BO 636.1	Verifix® Clamping Device for 6- 19 mm glass	1 pc.
BO 637.1	Verifix® Eccentric Suction Stopper	4 pcs.
BO 638.0	Verifix® Pump-activated Angle Suction Holder	2 pcs.
BO 5007510	Dermatril Disposable Gloves	1 box
BO 5007613	Protective Glasses	1 pc.

Beginner Kit for UV Bonding



For those who only need to bond glass occasionally or who want to try this technology at low cost - packed in a practical plastic case

Art. No.	Description
BO 5500373	Beginner Kit for UV Bonding

This set comprises the following items:

BO 5209450	UVA Hand Lamp H9	1 pc.
BO 5209308	Application Needle 1.37 mm ø - amber	1 pc.
BO 5209320	Needle Adaptor	1 pc.
BO 5141000	Glass Scraper, metal	1 pc.
BO 5141001E	Spare Blades, reinforced back	1 box
BO 5141605	Steel Wool, fineness 00	1 pc.
BO 5007613	Protective Glasses	1 pc.
BO 5007510	Dermatril Disposable Gloves	1 box

Professional UV Bonding Kit



Professional UV bonding kit - ideal for quick and efficient bonding of glass to metal or for bonding small glass objects

Art. No.	Description
BO 5500371	Professional UV Bonding Kit

This set comprises the following items:

BO 5209404	UV Hand Lamp, 230 Volt	1 pc.
BO 5209320	Needle Adaptor	1 pc.
BO 5209307	Application Needle 0.84 mm ø - green	2 pcs.
BO 5209308	Application Needle 1.37 mm ø - amber	2 pcs.
BO 5141605	Steel Wool, fineness 00	1 pc.
BO 5141000	Glass Scraper, metal	1 pc.
BO 5141001E	Spare Blades, reinforced back	1 box
BO 5007510	Dermatril Disposable Gloves	1 box

09 | Curing

Bohle offers a comprehensive portfolio of UVA lamps for curing UV adhesives. Always select your lamp according to the bonding size/surface in order to achieve a uniform exposure of the bonding surfaces. In this way, extreme tensions within the bonding joint are avoided which might lead to the failure of the bond. The lamps are especially suitable for metal bonds and short bonding distances. For longer bonding distances, tube lamps of an appropriate size should be used to minimise tensions. All Bohle UVA lamps are equipped with special filter screens. The lamps must only be run with intact filters in order to avoid injuries to skin and eyes.

UVA Tube Lamps

The product portfolio includes tube lamps of different lengths. In this way, almost all glass/glass bonds can be cured tension-free. Light bulbs and protective tubes can easily be exchanged in most models if necessary, so that the lamps can be used for many years.

▶ Verifix® UVA-Star 500, 1110, 1410



The new series of Verifix® UVA-Star tube lamps combines the latest technology with a new design. The „T8“ tubes excel thanks to their elevated UVA performance and at the same time save electricity. The high quality electronic ballast is now integrated into the lamp housing, which makes these UVA lamps even more convenient to handle. All lengths are available with either 120 or 230 Volts. As before, the protective tube or the bulb can be exchanged quickly and easily. The new Verifix® UVA-Star tube lamps reach their full capacity after a short warm-up time of 180 sec. They are white light lamps with wave lengths between 315 - 400 nm, they are also suitable for curing UVA and light curing acrylate adhesives. The Verifix® UVA-Star tube lamps are particularly suited for the tension free curing of longer bonding edges in glass/glass bonding. Bonding edges which are longer than 1410 mm can also be cured tension free by combining several tube lamps.

Art. No.	Version
BO 5500380	Verifix® UVA-Star 500, 230 volts, 18 watts, working length 500 mm
BO 5500381	Verifix® UVA-Star 500, 120 volts, 18 watts, working length 500 mm
BO 5500382	Spare lamp for Verifix® UVA-Star 500
BO 5500383	Acrylic protective tube for Verifix® UVA-Star 500
BO 5500385	Verifix® UVA-Star 1110, 230 volts, 36 watts, working length 1110 mm
BO 5500386	Verifix® UVA-Star 1110, 120 volts, 36 watts, working length 1110 mm
BO 5500387	Spare lamp for Verifix® UVA-Star 1110
BO 5500388	Acrylic protective tube for Verifix® UVA-Star 1110
BO 5500390	Verifix® UVA-Star 1410, 230 volts, 58 watts, working length 1410 mm
BO 5500391	Verifix® UVA-Star 1410, 120 volts, 58 watts, working length 1410 mm
BO 5500392	Spare lamp for Verifix® UVA-Star 1410
BO 5500393	Acrylic protective tube for Verifix® UVA-Star 1410
BO 5500399	End Cap

UV LED Lamps

▶ UV-LED Lamp Twin LED Verifix®



The new "Twin LED" UV-LED lamp is suitable for bonds with a diameter of approx. 120 mm. The lamp achieves an even distribution of light intensity over the entire surface, which enables tension-free bonds.

i Dimensions 125 x 40 x 70 mm · Weight approx. 600 g · Wavelength 365 nm, 395 nm · Battery life approx. 2 hours when LED is permanently operated · Mains voltage 100 - 240 V, 50 - 60 Hz

Art. No.	Description
BO 5500355	Verifix® "Twin LED" UV-LED Lamp
SP BT5559	Spare battery

UVA Lamps

UV hand lamps are especially suitable for bonding metal parts to glass as well as for small glass objects with short bonding distances, also for industrial or serial applications. The lamps excel due to their very short curing times.

▶ UVA Hand Lamp UVAHAND 250



For use with short bonding distances · short curing times · UVA wave length 315 - 400 nm · integrated time meter · spacers as protection against overheating · integrated cooling fan · special filter screen

Art. No.	Version · For · Description
BO 5209404	230 Volt, 250 Watt · white light
BO 5209415	230 Volt, 250 Watt · black light
BO 5209416	110 Volt, 60 Hz · white light
BO 5209406	BO 5209404 · Spare H1 filter screen with frame · white light
BO 5209407	BO 5209404 · Spare fluorescent tube 250 F
BO 5209408	BO 5209404 + BO 5209415 · Spare filter screen with frame · black light
BO 5209414	BO 5209404 + BO 5500310 · Thermal fuse
BO 5209412	BO 5209404 · Spare casing · left or right side, w. 2 keys

▶ UVA Hand Lamp



For curing UVA and light curing adhesives · with filter screen · ideal for bonding metal parts and smaller surfaces

i Version 230 volts · 100 watts

Art. No.	Version
BO 5500310	UVA Hand Lamp
BO 5500311	Spare fluorescent tube UV 150 F
BO 5500312	Spare H1 filter screen

10 | Cleaning

Final Cleaning & General Cleaning Tasks

These high quality Bohle glass cleaners are ideally suited for removing coarse dirt from the glass surface, for cleaning glass on a daily basis or for final cleaning after bonding.

▶ Bohle Special Cleaner



Ideal for preliminary cleaning prior to glass bonding or sealing. The Bohle Special Cleaner cleans and degreases glass, metal, ceramic and rubber. The special composition of the cleaner ensures very thorough cleaning.
 · Particularly suitable for use with UV adhesives

Art. No.	Contents · incl.
BO 5107910	Atomiser, refillable 0,25 litre · Spray Head
BO 5107911	Refill 1 litre

▶ Bohle Premium Glass Cleaner



Ideal for windows, mirrors, windscreens and other glass surfaces
 · prevents fresh smudging · no streaking · in spray bottles without propellants · biologically degradable · with the purchase of one carton (=12 bottles), 3 spray heads are included

Please note:
 Not suitable for pre-cleaning before UV bonding!
 Only for cleaning after bonding! Improved formula with new design

Art. No.	Contents
BO 5107805	Bottle 1 litre

▶ Bohle Citrus Glass Cleaner



The perfect ad for your business: the Bohle glass cleaner in a customised bottle with your company-branded label! · Please note: · Send your company logo (together with an image) in print resolution (TIFF or EPS, 300 dpi) to privatelabel@bohle.de. · Please also include the corresponding address and text to be printed on the label, and specify your in-house font

(including typeface if necessary). · Please be aware when using an image that it will be surrounded by a 3 mm rim. · Please be aware that the text cannot be displayed in a font size smaller than 7 pt. · You will receive a pdf file for sign off and, upon request, the original label.

i Contents 500 ml · incl. Spray Head · Fragrance fresh citrus · Packaging unit 40 bottles · Streaking none · Consumption very economic · Cleaning power extraordinary · Feature: prevents fresh smudging · Minimum order quantity 120 bottles · Label size width 65 mm, height 90 mm

Art. No.	Description
BO 5107808	Citrus Glass Cleaner Your Company-Branded Label

▶ Glass Cleaner Bohle Professional



Can be used for glass, smooth plastic surfaces, mirrors, car windows, tiles · for workshop and home, showcases and display windows · sparkling surfaces without streaking · environmentally sound propellant · Ideal for cleaning glass parts after fusing · For quantities of 672 cans or more, available with your own label!

Please note:
 Not suitable for pre-cleaning before UV bonding!
 Only for cleaning after bonding!

Art. No.	Description
BO 5107900	Spray Can 660 ml

Paper Towels Economy



Paper Towels · white · 2-ply · suitable dispenser BO 5141616

i Quantity 420 sheets, 22 x 38 cm each (width x length)

Art. No.	Description
BO 5141617	Paper Towels

Paper Towels Economy



Paper Towels · 2-ply · suitable dispenser BO 5141616

i Quantity 1000 sheets, 24 x 38 cm (width x length) · Weight 2 x 18 g/m² · Packaging unit 2 items

Art. No.	Colour
BO 5141620	white
BO 5141621	blue

Paper Towels Premium



Paper Towels · 4-ply · white · suitable dispenser BO 5141616

i Weight 4 x 17 g/m² · Quantity 1000 sheets, 38 x 38 cm (width x length)

Art. No.	Description
BO 5141625	Paper Towels

Steel Wool



Top quality · long-fibred · tough · good grip · excellent polishing and grinding ability · highly elastic and uniform · easily divisible strands

Art. No.	Description · fineness
BO 5141634	Cardboard roll of 100 g · 0
BO 5141635	Cardboard roll of 200 g · 0
BO 5141605	Cardboard roll of 100 g · 00
BO 5141601	Cardboard roll of 200 g · 00
BO 5141631	Cardboard roll of 100 g · 000
BO 5141632	Cardboard roll of 200 g · 000

Special Knife with Blade



For removing already cured adhesive residues · also ideal for separating lead profiles and for cutting resist or other films · the narrow blade allows easy access to gaps · with blade protector · For cutting films and weeding

Art. No.	Description
BO 5142000	Special Knife with Blade

Simplex Knife



Made of aluminium · extra sharp, pointed blade · for screw-on blades · with aluminium handle and protective cover or aluminium handle with plastic coating and protective cover

Art. No.	Handle
BO 3001900	Aluminium handle with protective cover
BO 3001901	Aluminium handle with plastic coating and protective cover

Glass Scraper Premium



Metal · with blade protection · plastic handle · exchangeable blades · for loosening hardened adhesive residues from glass surfaces · also for hard-to-reach corners · Made in Germany

i Blade width 40 mm

Art. No.	Description
BO 5141000	Glass Scraper

Spare Blades Premium



High quality branded spare blades with reinforced back · Precision grinding for long service life · Each blade wrapped separately in order to protect ground edges · Suitable, among others, for glass scrapers BO 5141000, BO 5141700, BO 3002007

i Width 40 mm

Art. No.	Description · Sales unit
BO 5141001	Personna Spare Blades · 100 items

Protective Glasses Premium



UV protective glasses according to EN 170 · grey viewing glasses, scratch-resistant and anti-fog (special anti-fog coating) · adjustable arms · supplied with holding strap

Art. No.	Description
BO 5007613	Protective Glasses

Window Washer Economy



Ideal as low-cost give-away for your customers! · Plastic wiper for shower cubicles with soft rubber lip for streak free cleaning of glass surfaces. Includes hook.

i Width 23 cm · Sales unit 25 items

Art. No.	Description
BO 5107811	Window Washer Economy

Mini Glass Scraper



For easily removing excess adhesive, labels and other residues · Made of durable plastic · with exchangeable blade

i Width 40 mm

Art. No.	Description
BO 3002007	Mini Glass Scraper

Dermatril Disposable Gloves



Offering greater mechanical resistance than conventional disposable latex gloves · dispensing box

i Chemical protection class cat. III · Performance level according to EN 374 with AQL 0.65 3



Art. No.	Size · Contents
BO 5007516	11 · 100 items
BO 5007510	10 · 100 items
BO 5007519	9 · 100 items
BO 5007520	8 · 100 items

Knife with Trapezoidal Blades



This trapezoidal blade knife is an indispensable tool on any construction site. Thanks to its smart folding mechanism the knife can be reduced to a small format and stored in the trouser pocket · with blade magazine

i Length 100 mm

Art. No.	Description
BO 3003000	Knife with Trapezoidal Blades
BO 3003001	Spare Blades

11

Positioning and Fixing

During the curing process, the adhesive polymerises and forms a polymer chain. If bonding parts are fixed insufficiently, the chain might be damaged. This can lead to a loss of strength and the long-term stability of the bond is at risk. The Bohle Verifix® fixation aids protect the bonding parts from vibration or slipping and thus guarantee the best possible bonding results.

The New Generation of Angle Suction Holders

The demands on glass bonds, glass furniture or glass adhesives are constantly increasing. That is why the demands on fixation aids, used to construct high quality glass objects, are also subject to permanent change. In the following section you will find the first products of a new generation of suction holders and fixation aids which live up to the new demands. They offer plenty of advantages, such as process stability, high quality and the exact adjustment of the bonding gap, which are indispensable for achieving top quality bonds and a safe bonding process.

▶ Angle Suction Holder Verifix® Pro 90°



The Verifix® Pro angle suction holder is a high quality product topping the list of positioning and fixing devices for glass bonding. Especially in the case of UV bonds, as is common in glass furniture or showcase construction, Verifix® Pro offers superior protection against vibration and slipping - both for corner and T-joints. · Exact adjustment of the bonding gap (= thickness of adhesive layer) · extremely sturdy

i Height 176 mm · Depth 160 mm · Suction pad 110 mm Ø

Art. No.	Description
BO 639.0	Verifix® Pro Angle Suction Holder 90°

▶ Angle Suction Holder Verifix® Pro 45°



The Verifix® Pro 45° angle suction holder from the Verifix® product range excels due to its high precision and easy handling, and offers superior protection against vibration and slipping when doing repetitive UV bonding work. The specific positioning arm is a unique feature of this device. It facilitates quick and precise positioning of the angle suction holder on any 45° mitre edge, independent from the glass thickness. At last, glass panes with 45° mitre edges can be positioned quickly and precisely towards each other with the Verifix® mitre stop BO 639.4 or the glass bonding table with mitre stop BO 5591300. Complicated and laborious adjustment of the glass is no longer necessary. · Exact adjustment of the bonding gap (= thickness of adhesive layer) · extremely sturdy

i Height 176 mm · Depth 160 mm · Suction pad 110 mm Ø

Art. No.	Description
BO 639.2	Verifix® Pro Angle Suction Holder 45°

Rigid Fixation Devices

A special range of diverse holding devices and aids for systematic glass bonding. Useful for many applications - for example, for positioning when edge bonding.

▶ Angle Suction Holder Verifix® 90°



Holding and positioning device made of 2 suction pads with special sealing lip · can be fine adjusted to each other · with aluminium guides

i 2 suction pads 120 mm Ø · Adjustment range height / depth +/- 12 mm · Bracket length 400 mm · Bracket width 280 mm

Art. No.	Description
BO 630.3	Angle Suction Holder Verifix® 90°
BO 614.03	Spare suction pad

▶ Angle Suction Holder Verifix® 90°



Holding and positioning device made of 2 suction pads with special sealing lip · can be fine adjusted to each other · with aluminium guides

i 2 suction pads 120 mm Ø · Adjustment range height / depth +/- 12 mm · Bracket length 200 mm · Bracket width 127 mm

Art. No.	Description
BO 630.2	Verifix® Angle Suction Holder 90°
BO 614.03	Spare suction pad
SP 6313	Bracket

▶ Pump-activated Angle Suction Holder Set



Verifix® pump-activated angle suction holder set in carrying case · as these positioning aids are mostly used in pairs, they are supplied as a set in a robust case ensuring that your valuable tools are well protected · the angle suction holders are also available separately. · A loss of vacuum is indicated by a red warning ring. The vacuum can be restored by simply pressing the hand pump.

Art. No.	Description
BO 638.9	Verifix® Pump-activated Angle Suction Holder Set

▶ Angle Suction Holder Verifix® 90°



For positioning and holding small glass parts · optimised sturdy version!

i 2 suction pads · Suction pad 55 mm Ø · Length 75 mm · Width 76 mm · Height 75 mm

Art. No.	Description
BO 633.10	Angle Suction Holder Verifix® 90°

▶ Combination Suction/Magnet Holder



With one suction unit and one magnetic unit (heavy-duty, high-performance magnet) · 1 counter plate BO 634.02 is included · always store the magnet with the counter plate attached

i 1 suction pad 55 mm Ø · Glass thickness max. 8 mm · Length 70 mm · Width 55 mm · Height 65 mm

Art. No.	Description
BO 633.3	Verifix® Combination Suction/Magnet Holder 90°
BO 634.02	Verifix® Counter Plate for Verifix® Magnetic Cube

▶ Angle Suction Holder Verifix® 90° adjustable



For positioning and holding small glass parts · optimised sturdy version!

i 2 suction pads · Adjustment range height / depth ± 3 mm · Length 94.8 mm · Width 76 mm · Height 94.9 mm

Art. No.	Description
BO 633.10L	Verifix® Angle Suction Holder, adjustable

Verifix® Adjustable Angle Suction Holders

This flexible system was developed to hold parts at angles other than 90° easily and safely.

▶ Verifix® Angle Suction Holder



Positioning aid with special sealing lip · suction pads can be fine adjusted to each other · sturdy plastic arms are 194 mm long and are connected to each other by a fixable joint

- ① 2 suction pads 120 mm Ø · Adjustment range 45 - 300° · Adjustment range height / depth +/- 12 mm

Art. No.	Description
BO 631.1	Verifix® Angle Suction Holder, infinitely adjustable
BO 614.03	Spare suction pad

▶ Verifix® Angle Suction Holder



Very robust model with twin suction unit and suction pads with special sealing lip · suction pads can be fine adjusted to each other · the sturdy plastic arms are 194 mm long and are connected to each other by a fixable joint

- ① 4 suction pads 120 mm Ø · Adjustment range 45 - 300° · Adjustment range height / depth +/- 12 mm

Adjustment range height / depth +/- 12 mm

Art. No.	Description
BO 631.2	Verifix® Angle Suction Holder, infinitely adjustable
BO 614.03	Spare suction pad

Verifix® Eccentric Suction Stoppers

Verifix® eccentric suction stoppers are ideal for many tasks for shop and interior decoration. Application possibilities are almost unlimited. The eccentric suction stoppers are indispensable, especially when it comes to bonding shelves into showcases or positioning shelves.

▶ Eccentric Suction Stopper Verifix®



Eccentrically arranged, flat plastic disc · integrated suction pad · suitable for use when bonding floors or shelves in display cabinets · can be used individually or in pairs as precisely adjustable straight edge holder

- ① Height 20 mm · Adjustment range 6 mm

Art. No.	Inside · Outside · Description
BO 637.1	55 mm Ø · 70 mm Ø
BO 637.5	Spare Suction Pad

Verifix® Clamping Device

These rotating holding devices can be used in a wide range of applications. They are optimally suited to build display cabinets, fish tanks or other glass cubes and are therefore indispensable when constructing glass furniture.

▶ Verifix® Clamping Device 3 - 10 mm



Two forked endpieces which rotate 360° with connecting profile and plastic pressure screws for locking into place · particularly suitable for special aquarium construction

- ① Glass thickness 3 - 10 mm

Art. No.	Glass thickness
BO 636.0	3 - 10 mm

▶ Verifix® Clamping Device 6 - 19 mm



Two forked endpieces which rotate 360° with connecting profile and plastic pressure screws for locking into place · particularly suitable for special aquarium construction · for thicker glass sheets

- ① Glass thickness 6 - 19 mm

Art. No.	Glass thickness
BO 636.1	6 - 19 mm

12 | Mirror Fixation

SafecliX® - SafemaX® - SafefiX® have been developed for vertical mounting of mirrors per DIN EN 1036. Our sets are supplied with all necessary mounting hardware in neutral packaging. After mounting they are hidden from sight behind the mirror and allow the mirror to be detached at any time. All metal mounting plates in our mirror fixing kits are coated with the specially developed Xtramount® mirror adhesive tape and are therefore suitable for humid rooms as well as outdoor applications, as long as they are not directly exposed to rain and they stay within the allowable temperature range for Xtramount®. SafecliX® - SafemaX® - SafefiX® offer you many different ways to mount your mirrors securely. If you need special mirror mounting sets for your particular application, or if you wish an own brand label version of SafecliX® - SafemaX® - SafefiX®, please do not hesitate to contact us.

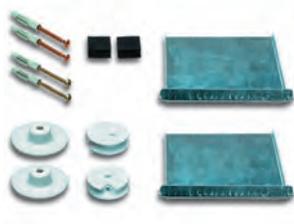
Recommendation when mounting the plates:

Clean the back of the mirror with a silicone-free glass cleaner such as Bohle Special Glass Cleaner BO 5107910. The mirror must be clean, dry and grease-free, room temperature should be above 18°C and the temperature of metal plate and mirror should be roughly the same. After removing the protective film from the self-adhesive plates, press the plates firmly, evenly and directly onto the back of the mirror by applying approx. 200N (20 kg) pressure for approx. 5 seconds. The distance to the top edge and side edges of the mirror should be approx. 10 cm. After 30 minutes resting time, press on the plates firmly once again, then the mirror can be mounted immediately. Please note: Mirror safety backing films, etc. must always be applied around the attached plates.

SafecliX® Press Button Fixing Sets

The mirrors are suspended with mirror mounting plates and eccentric discs and are protected against unhinging by press buttons. To compensate for uneven walls, we recommend our Euroclick Type 3 shims.

SafecliX® 08



Press button set, for mirrors up to 0.8 m² · resting time only 30 minutes · suitable for humid environments and suitable to a limited extent for exterior applications · suitable for mirrors according to DIN EN 1036 · shelf life of 12 months from the date of delivery note

i Mirror surface max. 0.8 m² · Mirror glass thickness 6 mm

Art. No.	Description
BO 5208210	SafecliX® 08

SafecliX® 16



Press button set, for mirrors up to 1.6 m² · resting time only 30 minutes · suitable for humid environments and suitable to a limited extent for exterior applications · suitable for mirrors according to DIN EN 1036 · shelf life of 12 months from the date of delivery note

i Mirror surface max. 1.6 m² · Mirror glass thickness 6 mm

Art. No.	Description
BO 5208211	SafecliX® 16

▶ SafecliX® 26



Press button set, for mirrors up to 2.6 m² · resting time only 30 minutes · suitable for humid environments and suitable to a limited extent for exterior applications · suitable for mirrors according to DIN EN 1036 · shelf life of 12 months from the date of delivery note

i Mirror surface max. 2,6 m² ·
Mirror glass thickness 6 mm

Art. No.	Description
BO 5208212	SafecliX® 26

▶ Combined Set Mirror Mounting SafecliX®



Press button set for mirror fixing · in an economic combined box · resting time only 30 minutes · suitable for humid environments and suitable to a limited extent for exterior applications · suitable for mirrors according to DIN EN 1036 · shelf life of 12 months from the date of delivery note

i Please note: Considerable savings when buying this combined set box.

Art. No.	Description
BO 5208215	SafecliX® Mirror Mounting Combined Set

SafemaX® Magnetic Fixation Sets

With SafemaX® 08 and 16 the mirror is suspended with mounting plates and eccentric discs and protected against unHINGING by safety magnets. With SafemaX® 10-SK the mirror is suspended with metal plates and powerful safety magnets. The sets are especially suitable for mirrored walls with several mirrors, because slight corrections in all directions can easily be made even after mounting. To compensate for uneven walls, we recommend our Euroclick Type 3 shims.

▶ SafemaX® 08



Magnetic set, for mirrors up to 0.8 m² · resting time only 30 minutes · suitable for humid environments and suitable to a limited extent for exterior applications · suitable for mirrors according to DIN EN 1036 · shelf life of 12 months from the date of delivery note

i Mirror surface max. 0.8 m² ·
Mirror glass thickness 6 mm

Art. No.	Description
BO 5208228	SafemaX® 08

▶ SafemaX® 16

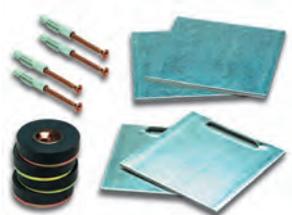


Magnetic set, for mirrors up to 1.6 m² · resting time only 30 minutes · suitable for humid environments and suitable to a limited extent for exterior applications · suitable for mirrors according to DIN EN 1036 · shelf life of 12 months from the date of delivery note

i Mirror surface max. 1.6 m² ·
Mirror glass thickness 6 mm

Art. No.	Description
BO 5208230	SafemaX® 16

▶ SafemaX® 10-SK



Magnetic set, for mirrors up to 1.0 m² · resting time only 30 minutes · suitable for humid environments and suitable to a limited extent for exterior applications · suitable for mirrors according to DIN EN 1036 · shelf life of 12 months from the date of delivery note

i Mirror surface max. 1.0 m² ·
Mirror glass thickness 6 mm

Art. No.	Description
BO 5208240	SafemaX® 10-SK

SafefiX® Mirror Mounting Sets

Easy and economic suspension with mounting plates and eccentric discs if no anti-jump mechanism is required. To compensate for uneven walls, we recommend our Euroclick Type 3 shims.

▶ SafefiX® 04



Mounting kit for mirrors up to 0.4 m² · resting time only 30 minutes · suitable for humid environments and suitable to a limited extent for exterior applications · suitable for mirrors according to DIN EN 1036 · shelf life of 12 months from the date of delivery note

i Mirror surface max. 0.4 m² · Mirror glass thickness 6 mm

Art. No.	Description
BO 5208219	SafefiX® 04

▶ SafefiX® 08



Mounting kit for mirrors up to 0.8 m² · resting time only 30 minutes · suitable for humid environments and suitable to a limited extent for exterior applications · suitable for mirrors according to DIN EN 1036 · shelf life of 12 months from the date of delivery note

i Mirror surface max. 0.8 m² · Mirror glass thickness 6 mm

Art. No.	Description
BO 5208220	SafefiX® 08

Mirror Fixation Accessories

All self-adhesive metal plates have been tested for use on the rear side of a mirror according to DIN EN 1036. The plates must not be used on mirror safety backing films or other films. Adhesion reduces on glass surfaces. They have to be tested on a case-by-case basis before use.

Further Information on the load capacity of the plates:

Indicated load capacities of the metal plates apply per plate, when the mirror glass has a max. thickness of 6 mm and when used with our mirror fixation supplies. The load capacity of the plates used with magnets is calculated on the basis of at least 4 plates per m² of mirror, whereby the plates used at the top of the mirror must be ridged (ridge must face upwards). Always press on the plates over their entire surface. Only in this way is the max. load capacity achieved.

▶ Metal Plate with One Eyelet



The self-adhesive plates are backed with Xtramount® mirror adhesive tape · suitable for humid environments and suitable to a limited extent for exterior applications · suitable for mirrors according to DIN EN 1036 · shelf life of 12 months from the date of delivery note

i Finish galvanised · Sales unit 10 items

Art. No.	Size · Version · Load capacity*/ plate
BO 5208627	70 x 70 mm · uncoated
BO 5208626	70 x 70 mm · self-adhesive · 3 kg
BO 5208615	100 x 100 mm · uncoated
BO 5208606	100 x 100 mm · self-adhesive · 6 kg
BO 5208616	200 x 100 mm · uncoated
BO 5208607	200 x 100 mm · self-adhesive · 12 kg

▶ Metal Plate with Two Eyelets



The self-adhesive plates are backed with Xtramount® mirror adhesive tape · suitable for humid environments and suitable to a limited extent for exterior applications · suitable for mirrors according to DIN EN 1036 · shelf life of 12 months from the date of delivery note

i Finish galvanised · Sales unit 10 items

Art. No.	Size · Version · Load capacity*/ plate
BO 5208617	100 x 100 mm · uncoated
BO 5208610	100 x 100 mm · self-adhesive · 6 kg
BO 5208618	200 x 100 mm · uncoated
BO 5208619	200 x 100 mm · self-adhesive · 12 kg

▶ Metal Plate with Three Eyelets



The self-adhesive plates are backed with Xtramount® mirror adhesive tape · suitable for humid environments and suitable to a limited extent for exterior applications · suitable for mirrors according to DIN EN 1036 · shelf life of 12 months from the date of delivery note

i Finish galvanised · Sales unit 10 items

Art. No.	Size · Version · Load capacity*/ plate
BO 5208629	180 x 180 x 1 mm · self-adhesive · 18 kg

▶ Concealed Mirror Hanging Device Vitofix Plus



Self-adhesive · with Velcro fastening · for safe and flexible mirror mounting

i Mirror surface up to 1.6 m² · Mirror glass thickness up to 6 mm · Sales unit 1 pair

Art. No.	Description
BO 5208931	Concealed Mirror Hanging Device

▶ Concealed Mirror Hanging Device Vitofix Plus



Self-adhesive · for safe and flexible mirror mounting

i Mirror surface up to 0.8 m² · Mirror glass thickness up to 6 mm · Sales unit 1 pair

Art. No.	Description
BO 5208932	Concealed Mirror Hanging Device

▶ Metal Plate lipped



The self-adhesive plates are backed with Xtramount® mirror adhesive tape · suitable for humid environments and suitable to a limited extent for exterior applications · suitable for mirrors according to DIN EN 1036 · shelf life of 12 months from the date of delivery note

i Finish galvanised · Sales unit 10 items · Material thickness 0.8 mm

Art. No.	Size · Version · Load capacity*/ plate
BO 5208620	100 x 100 mm · uncoated
BO 5208612	100 x 100 mm · self-adhesive · 6 kg
BO 5208621	200 x 100 mm · uncoated
BO 5208613	200 x 100 mm · self-adhesive · 12 kg

▶ Metal Plate smooth



Tested for use with our mirror magnet BO 5208601 · The self-adhesive plates are backed with Xtramount® mirror adhesive tape · suitable for humid environments and suitable to a limited extent for exterior applications · suitable for mirrors according to DIN EN 1036 · shelf life of 12 months from the date of delivery note

i Plate thickness 2 mm · Finish galvanised · Sales unit 10 items

Art. No.	Size · Version · Load capacity*/ plate
BO 5208605	70 x 70 mm · uncoated
BO 5208609	70 x 70 mm · self-adhesive · 3 kg
BO 5208622	100 x 100 mm · uncoated
BO 5208623	100 x 100 mm · self-adhesive · 4 kg

▶ Metal Plate with Ridge



Tested for use with our mirror magnet BO 5208601 · The self-adhesive plates are backed with Xtramount® mirror adhesive tape · suitable for humid environments and suitable to a limited extent for exterior applications · suitable for mirrors according to DIN EN 1036 · shelf life of 12 months from the date of delivery note

i Plate thickness 2 mm · Finish galvanised · Sales unit 10 items

Art. No.	Size · Version · Load capacity*/ plate
BO 5208604	70 x 70 mm · uncoated
BO 5208608	70 x 70 mm · self-adhesive · 3 kg
BO 5208624	100 x 100 mm · uncoated
BO 5208625	100 x 100 mm · self-adhesive · 4 kg

▶ Protective Adhesive Tape



For making sure mirrors are non-splintering in case of breakage · the tape is adhered to the mirror back and holds the mirror pieces together in case the glass should break · conforms to all safety regulations of workplace directives and to the specifications according to DIN EN 12600

i Roll length 25 m

Art. No.	Roll width
BO 5207873	300 mm
BO 5207874	500 mm

▶ Mirror Magnet



The shear strength is calculated and tested for vertical mounting of mirrors with our metal plates of 2 mm thickness (see also „Note on the load capacity of the plates“).

i Diameter 45 mm · Height 12.3 mm · Bore hole eccentric \varnothing 5 mm · Shear strength 4 kg · Adhesive strength 10 kg · Sales unit 10 items

Art. No.	Description
BO 5208601	Mirror Magnet

▶ Eccentric Discs with Scale



Eccentric discs are supplied with adjustment scale. The necessary height adjustment (+/- 4 mm = 8 mm) can immediately be read from the front of the disc. · With 5 mm \varnothing countersunk hole and lateral pinhole for easy adjustment. Made of high quality, impact resistant plastic.

i Diameter 37 mm · Height 12 mm · Sales unit 10 items

Art. No.	Description
BO 5208602	Eccentric Discs with Scale

▶ Press Button



For fixing and securing of mirrors, whilst providing anti-jump and unhinging protection · self-adhesive · pull-off force of press button approx. 1.8 kg \pm 0.3 kg

i Diameter 50 mm · Height 13 mm · Sales unit 10 items

Art. No.	Description
BO 5208611	Press Button

▶ Mounting Plate



With elongated hole for height adjustment up to approx. 20 mm and two additional fixing holes

i Material galvanised sheet steel · Sales unit 10 items

Art. No.	Description
BO 5208614	Mounting Plate

▶ Spacers



Self-adhesive coating on one side · prevents deflection of large mirrors

i Size 20 x 20 x 13 mm · Material high strength rigid foam · Sales unit 1 item

Art. No.	Description
BO 5208600	Spacers

▶ Spacers

Self-adhesive



i \varnothing 20.6 mm · Height 13.2 mm · Packaging unit 100 items

Art. No.	Description
BO 5208603	Spacers

Mirror Adhesive Tapes and Mirror Adhesives

Apart from the proven mirror fixation sets, mirror adhesive tapes or silicone adhesives are also often used, especially when it comes to flush mirror mounting. Here you will also find the high quality Xtramount® mirror adhesive tape which has already been used for mounting the metal plates.

▶ Mirror Adhesive Tape Xtramount®



Xtramount® is a double-sided mirror adhesive tape made of closed-cell polyethylene foam (density 100 kg/m³), coated on both sides with a solvent-based, pure acrylate adhesive and protected on one side by blue silicone paper. Xtramount® was specially developed for vertical mounting of mirrors per DIN EN 1036, but can also be used for many

other materials such as metal plates, some plastics, glass or ceramic. Xtramount® offers you the following benefits: - Excellent resistance to humidity - Good initial tack - UV resistant - Suitable for outdoor use to a limited extent - Temperature resistant from -30° C to +100° C - Shelf life: 12 months - Excellent resistance to water, plasticisers, oils and solvents

Art. No.	Width · Thickness · Length
BO 5207760	15 mm · 0.8 mm · 5 m
BO 5207770	19 mm · 0.8 mm · 5 m
BO 5207775	19 mm · 1.6 mm · 5 m
BO 5207780	25 mm · 0.8 mm · 5 m
BO 5207785	25 mm · 1.6 mm · 5 m
BO 5207761	15 mm · 0.8 mm · 50 m
BO 5207771	19 mm · 0.8 mm · 50 m
BO 5207781	25 mm · 0.8 mm · 50 m
BO 5207776	19 mm · 1.6 mm · 25 m
BO 5207786	25 mm · 1.6 mm · 25 m
BO 5207756	70 mm · 0.8 mm · 10 m
BO 5207757	70 mm · 0.8 mm · 50 m
BO 5207758	100 mm · 0.8 mm · 10 m
BO 5207759	100 mm · 0.8 mm · 50 m

Mounting Instructions for Xtramount®

The back of the mirror and the concealed mirror rails must be clean, dry and grease-free. The Xtramount® tape must be applied to the concealed mirror rails without trapping air bubbles and then pressed on firmly. Next, the protective film of the Xtramount® is removed and the concealed mirror rail must be directly pressed onto the back of the mirror firmly (approx. 200N / 20 kg) and evenly, again taking care to avoid bubbles. The maximum load capacity of Xtramount® is achieved 10 hours after having been taped to the mirror. Suitable for mirrors per DIN EN 1036.

13

Automatic Glass Cutting

Silberschnitt® cutting wheels are available in a variety of different dimensions, cutting angles and grinds. Here you find a range of the most commonly used types. All wheels are made of high quality carbide metals, are accurately manufactured with high precision machinery and convince by excellent cutting results and long service life.

Silberschnitt
ACTIVE

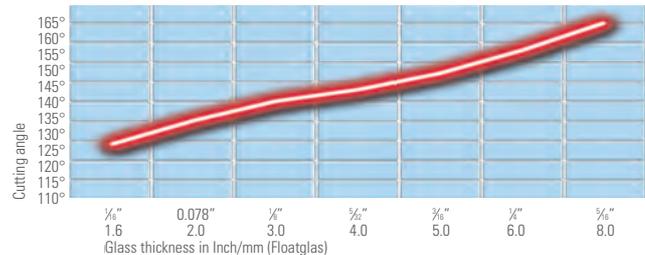
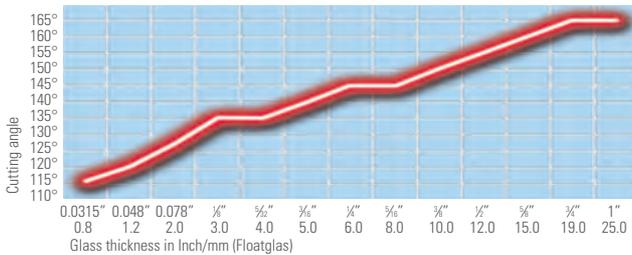
- For automatic cutting of shapes as well as laminated glass
- For open cuts in glass thicknesses of 2 to 6 mm in the automotive field
- For standard cutting with an angle from 145° and up
- For coated glass such as low-E

Silberschnitt
BASIC

- For automatic cutting of float glass 2 to 8 mm thick

Silberschnitt
CONTACT PLUS

- For thin glass where high edge quality is required
- For display glass as well as LCD, TFT and PDP



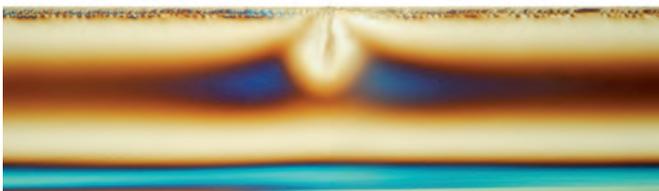
Wheel choice

The smaller, the better. As a rule, wheels with the smallest possible diameter should be used because, in conjunction with the cutting speed, they allow the cutting pressure to be reduced.

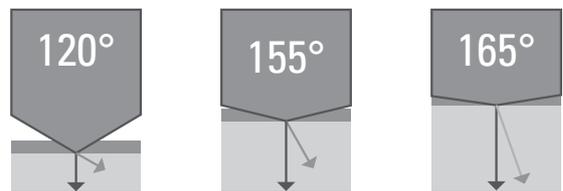
The cutting angle must be determined according to the glass thickness. The cutting geometry results in a force which creates tension in the glass. The more obtuse the cutting angle is, the greater the build-up of tension.

Customised solutions on the spot

In addition to standard solutions, Bohle will manufacture all Silberschnitt® wheels in increments of 1° (from 75° to 165°) on request. The Bohle professionals will also be happy to assist you on site to find solutions for your applications. Whether you need cutting wheels, wheel holders, complete solutions or other products for automatic glass cutting: by working closely with the customer we can find optimum solutions. Call us. We will be glad to help you.



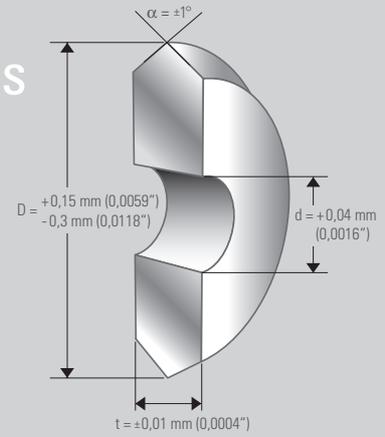
Polarisation filtered photo of a glass edge:
Snap-shot taken directly after cutting



Cutting angle and build-up of tension in the glass

Silberschnitt® Carbide Cutting Wheels

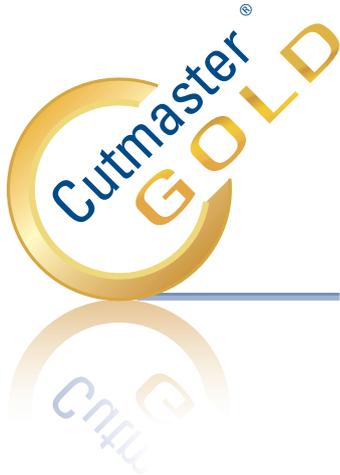
In order to help you make the right choice from the large number of possible combinations, we have summarised the glass cutting wheels for the most frequent applications in the table below and they are readily available from stock.



Type	06		66			05			12			02			
Outer diameter of wheels in mm (")	2.5 (0.0984")		3 (0.1181")			3 (0.1181")			4.1 (0.1614")			5 (0.1969")			
Wheel thickness in mm (")	0.65 (0.0256")		0.65 (0.0256")			1 (0.0394")			1.08 (0.0425")			1 (0.0394")			
Drill hole in mm (")	0.8 (0.0315")		0.8 (0.0315")			1.3 (0.0512")			1.42 (0.0559")			1.3 (0.0512")			
Packaging unit	10 / 100 pcs.		10 / 100 pcs.			10 / 100 pcs.			10 / 100 pcs.			10 / 100 pcs.			
Order no. / cutting angle	06B000	06C000	66A000	66B000	66C000	05A000	05B000	05C000	12A000	12B000	12C000	02A000	02B000	02C000	02A000L
77°															
90°															
116°													02B116	02C116	
118°														02C118	
120°										12B120	12C120		02B120	02C120	
127°										12B127	12C127	02A127	02B127	02C127	
135°	06B135					05A135	05B135		12A135	12B135		02A135	02B135		02A135L
140°	06B140					05A140	05B140		12A140	12B140		02A140	02B140		
145°	06B145					05A145	05B145		12A145	12B145		02A145	02B145		02A145L
148°									12A148						
150°	06B150					05A150	05B150		12A150	12B150		02A150	02B150		02A150L
152°									12A152						
153°									12A153						
154°									12A154						
155°									12A155	12B155		02A155	02B155		02A155L
156°															
158°									12A158						
159°									12A159						
160°									12A160	12B160		02A160			02A160L
165°									12A165	12B165		02A165			02A165L
For wheel holder	432.6		432.6			432.3			422.0, 432.0/432.1, 422.0A, 432.4			432.3/414.000, type 416, type 419, 432.3			
Axles	496.080		496.080			496.130			Depending on type of wheel holder			Depending on type of wheel holder			



02...L			03			07			63		64		23			33	
5 (0.1969")			5.6 (0.2205")			6 (0.2362")			6 (0.2362")				5.6 (0.22")			6.2 (0.2441")	
1 (0.0394")			1.08 (0.0425")			1.14 (0.0449")			3 (0.1181")				1.08 (0.0425")			1.08 (0.0425")	
1.3 (0.0512")			1.42 (0.0559")			1.55 (0.0610")			1.6 (0.0630")				1.62 (0.063")			1.42 (0.0567")	
Thickness tolerance +0.01 mm (+0.0004"), 10 / 100 pcs.			10 / 100 pcs.			10 / 100 pcs.			10 pcs.				10 / 100 pcs.			100 pcs.	
	02B000L	02C000L	03A000	03B000	03C000	07A000	07B000	07C000	63A000	64A000	23B000	23B000H	23A000	23A000H	33A000	33A000H	
		02C118L															
				03B120	03C120		07B120										
	02B127L			03B127	03C127		07B127				23B127	23B127H					
	02B135L		03A135	03B135		07A135	07B135						23A135	23A135H	33A135		
			03A140	03B140		07A140	07B140										
			03A145	03B145		07A145	07B145		63A145				23A145	23A145H	33A145		
			03A150	03B150		07A150	07B150		63A150	64A150							
			03A152														
			03A153														
			03A154														
			03A155	03B155		07A155	07B155		63A155	63A155					33A155		
			03A156														
			03A158														
			03A160						63A160								
			03A165						63A165								
439.1, 439.2			422.0, 432.0/432.1, 422.0A, 432.4			417.000, 418.000			422.1				422.2			432.0, 432.1, 432.4, 422.0, 422.1, 439.16, 439.122	
496.439/496.130			Depending on type of wheel holder						496.160		496.300		496.160			496.138F, 496.139F, 496.422, 496.140F	



Cutmaster® Gold carbide cutting wheels with 10-fold service life

The innovative Cutmaster® Gold carbide cutting wheels achieve what the glass processing industry has long been waiting for: the balance between cost reduction and quality improvement at the same time. Cutmaster® Gold, the newest member of the Silberschnitt® family of products, reduces costs due to its very long service life. Especially when cutting laminated safety glass as well as edge cutting at float glass facilities, service lives can be achieved which are at least ten times as long as that of standard cutting wheels.

At float glass facilities Cutmaster® Gold achieves over 250 km of cutting performance, which until now was only possible with higher priced wheels made of polycrystalline diamond (PCD). Furthermore, significant savings can be attained in maintenance: As a result of the long service lives, cutting wheels and wheel holders don't need to be exchanged as frequently as usual. Moreover, the adjustment of cutting pressure which is needed when wheels are exchanged is required less often.

The quality improvement of the cutting result is achieved by the special material configuration of the wheel coating. Contrary to standard carbide cutting wheels, the cutting quality remains at the same high level over the entire operating time. Especially when cutting laminated glass, this excellent quality significantly reduces the danger of glass breakage. To ensure the ultimate cutting performance and service life, Cutmaster® Gold wheels are used only in metal inserts/metal holder.

To ensure the ultimate cutting performance and service life, Cutmaster® Gold wheels are used only in metal inserts/metal holder. Standard glass cutting machines manufactured by Bavelloni, Benteler, Bottero, Bystronic, Grenzebach, Hegla, Intermac, Lisec, Macotec and Rohmer + Stimpfig can therefore easily be equipped with Cutmaster® Gold.



Type	02	12	03	
D in mm (")	5.0 (0.1969")	4.1 (0.1614")	5.6 (0.1614")	
t in mm (")	1.0 (0.0394")	1.08 (0.0425")	1.08 (0.0425")	
d in mm (")	1.3 (0.0512")	1.42 (0.0559")	1.42 (0.0559")	
Packing unit	1 / 100 pcs.	1 / 100 pcs.	1 / 100 pcs.	
110°			12C110G	03C110G
118°			12C118G	
120°			12C120G	
125°			12C125G	03C125G
130°		12A130G	03A130G	03C130G
135°	02A135GL	12A135G	03A135G	03B135G 03C135G
145°	02A145GL	12A145G	03A145G	03B145G 03C145G
148°		12A148G	03A148G	03C148G
150°		12A150G	03A150G	03C150G
152°		12A152G	03A152G	
153°		12A153G	03A153G	03C153G
154°		12A154G	03A154G	
155°	02A155GL	12A155G	03A155G	03C155G
158°		12A158G	03A158G	03C158G

Silberschnitt® Cutmaster® Platinum*



The perfect solution for cutting

The innovative cutting wheels of the Cutmaster®Platinum series have been developed by Bohle to produce especially high quality cutting edges. The different types of wheels are suitable to cut glass from a thickness of 0.1 mm.

Due to their special micro-structured cutting edge, these wheels achieve excellent cutting results with minimal cutting pressure, especially when cutting high quality glass types such as sensoric and solar glass, optical filters and quartz glass.

In extensive tests, excellent results have also been achieved with borosilicate glass in various thicknesses. Furthermore, float glass as well as glass tubes can be precisely cut with the Cutmaster®Platinum.

In addition to the universal application fields, the Cutmaster®Platinum wheels are also suitable for dry cutting, thereby avoiding any contamination from cutting fluids and the resulting time-consuming cleaning.

Cutmaster®Platinum can be used in all common float lines – easily mounted and exchanged with the quick exchange system of Bohle. For standard requirements, carbide wheels are available – an even longer service life is achieved with wheels made of PCD.

What effects does the micro-structure have?

The micro-structure allows tensions to be transmitted into the glass with minimal cutting pressure, resulting in a very easy break of the glass.

Due to the structure of the cutting edge, the cutting wheel penetrates as notches into the glass compared to standard wheels which score the glass using their whole circumference. As a result, micro-openings of the fissure are produced precisely in the cutting direction. Accompanying cracks and damages deviating from the score line are effectively avoided and edge damages reduced to a minimum.

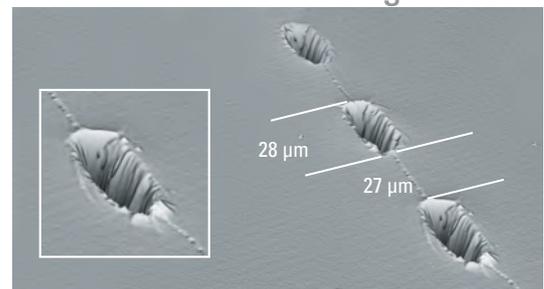
All cutting wheels of the Cutmaster® Platinum series are imprinted with the cutting angle, thus avoiding confusion when they are used.



01 Cutmaster® Platinum



02 Surface after cutting



Sample applications

Float glass

Slitting cutting of float glass from 0.1 to 19 mm;
Shape cutting of float glass from 0.1 to 2 mm

Special glass

Medical glass; optical glass; solar glass / photovoltaic glass
Slitting cutting of borosilicate glass up to 25 mm, slitting cutting of glass ceramic (Ceran, NeoCeran, Robax), slitting cutting of leaded glass up to 30 mm.

Thin glass

Shape cutting of 0.1 to 2.0 mm glass · slitting cutting of 0.05 to 3 mm glass

Cutmaster® Platinum carbide cutting wheels**

Art. No.	Dimensions in mm (inch)	Slots
06B000P*	∅ 2.5 x 0.80 x ∅ 0.65 mm	157
66B000P*	∅ 3.0 x 0.80 x ∅ 0.65 mm	188
12A000P*	∅ 4.1 x 1.08 x ∅ 1.42 mm	257
02A000P*	∅ 5.0 x 1.00 x ∅ 1.30 mm	314
03A000P*	∅ 5.6 x 1.08 x ∅ 1.42 mm	351

Cutmaster® Platinum PCD cutting wheels

Art. No.	Dimensions in mm (inch)	Slots
82D000P *	∅ 2.0 x 0.65 x ∅ 0.80 mm	125 - 300
81D000P *	∅ 2.5 x 0.65 x ∅ 0.80 mm	157 - 375
85D000P*	∅ 3.0 x 0.65 x ∅ 0.80 mm	188
87D000P *	∅ 4.1 x 1.08 x ∅ 1.40 mm	257
83D000P*	∅ 5.0 x 1.08 x ∅ 1.51 mm	314
88D000P *	∅ 5.6 x 1.08 x ∅ 1.40 mm	351

All other wheels in the Bohle range can be produced on request with the special Cutmaster® Platinum micro-structure and with any cutting angle desired.

» Advantages of Cutmaster® Platinum at a glance «

- *Excellent edge quality*
- *Minimal cutting pressure*
- *Minimal splintering*
- *Longer service life*
- *Dry cutting*
- *Improved edge stability*

14 | Silberschnitt® Wheel Holders



	432.	432.	432.	432.10	432.20	432.30	432.60
Material	steel	steel	steel	steel	steel	steel	steel
Axle	incl.	incl.	for 496.138F	incl.	incl.	incl.	incl.
Wheel type	incl. 03	incl. 12	for 12/03	incl. 03A	incl. 12A	incl. 05A	incl. 66A
Wheel ø	5.6 mm	4.1 mm	for 4.1 / 5.6 mm	5.6 mm	4.1 mm	3 mm	3 mm
	with inscription	with inscription	with inscription	without inscription	without inscription	without inscription	without inscription
			without wheels	Suitable for automotive applications. When ordering, please indicate the wheel angle and grind.			
127°	432.1271	432.1272	432.127				
134°	432.1341	432.1342	432.134				
135°	432.1351	432.1352	432.135				
140°	432.1401	432.1402	432.140				
145°	432.1451	432.1452	432.145				
148°	432.1481	432.1482	432.148				
150°	432.1501	432.1502	432.150				
152°	432.1521	432.1522	432.152				
153°	432.1531	432.1532	432.153				
154°	432.1541	432.1542	432.154				
155°	432.1551	432.1552	432.155				
156°	432.1561	432.1562	432.156				
158°	432.1581	432.1582	432.158				
160°	432.1601	432.1602	432.160				
163°	432.1631	432.1632	432.163				
165°	432.1651	432.1652	432.165				



For:	432.0	432.3	432.1	432.6	432.M
Axle	496.138F / 496.139F	496.130	496.138F / 496.139F	496.080	496.138F / 496.139F
Wheel type	12/03	05/02L	12/03	06/66	12/03
Wheel ø	4.1 / 5.6 mm	3 / 5 mm	4.1 / 5.6 mm	2.5 / 3 mm	4.1 / 5.6 mm
	without angle inscription	without angle inscription	with hole for ball pressure piece	without angle inscription	without angle inscription

Suitable for the following glass processing machines:
Armatec, Bando, Bavelloni, Benteler, Billco, Bystronic, GED, Grenzbach, Hegla, Intermac, Laser, Liseac,
MacoTec, Perfect Technology, Pfister, Rohmer+Stimpfig - Wheel and axle not included.



	422.0	422.1	422.2	439.1	439.2	439.16	439.16V	439.122
Material	steel	steel	steel	steel	steel	steel	steel	steel
Axle	496.422	496.160	496.160	496.439	496.439	496.140F	496.140F	496.140F
Wheel type	12/03	63	23	02L	02L	12/03	12/03	12/03
Wheel ø	4.1 / 5.6 mm	6 mm	5.6 mm	5 mm	5 mm	4.1 / 5.6 mm	4.1 / 5.6 mm	4.1 / 5.6 mm
				L = 11.5	L = 16.5		tempered	

Suitable for the following glass processing machines:

Bottero	Bottero	Bottero	Lisec	Lisec	Bottero	Bottero	Bottero
Bystronic	Bystronic	Bystronic					
Grenzebach	Grenzebach	Grenzebach					
Benteler	Benteler	Benteler					

Wheel and axle not included.



	416			417			414	419
Material	plastic			plastic			steel	steel
Version	coloured			coloured				
Wheel ø	5 mm			6 mm			5.6 / 5.0 mm	5.0 mm
	wheel 02			wheel 07			13 / 02	02
	10 / 100			10 / 100			10	10
Order No.	416A000	416B000	416C000	417A000	417B000	417C000	414.000	419.000
Special angle								
118°			416C118	light blue	417B118	light blue		
120°		416B120		light blue	417B120	light blue		
127°		416B127		yellow	417B127	yellow		
135°	416A135	416B135		white	417A135	417B135	white	419.2
140°	416A140	416B140		blue		417B140	white	
145°	416A145	416B145		black	417A145	417B145	black	419.1
150°	416A150	416B150		brown		417B150	red	
155°	416A155	416B155		red	417A155	417B155	red	
156°								
160°	416A160			dark green				
165°	416A165			light green				

15 | Complete Solutions



Bohle has been developing and producing complete solutions for cutting machines for many years. This includes not only cutting wheels and axles, but also wheel holders and complete pillar posts. The range of pillar posts manufactured to customers' specific wishes is being continuously expanded.

Silberschnitt® pillar posts are available in different versions: for straight cuts with a limited swivel range and for shaped cuts with a swivel range of up to 360°. You can choose whether the cutting wheel should stop in the last cutting position or be centred back to the 0° position after the cutting process. Silberschnitt® pillar posts trail by 2 mm. On request, we can manufacture pillar posts with larger trailing distances.

With complete solutions from Bohle you can be sure that all the components - from the cutting wheel, through to the axle and wheel holder, right up to the pillar posts - are perfectly matched.



BO 432.0



BO 422.0

All available complete solutions can be found in the „Automatic Glass Cutting“ catalogue, available on request!

Suitable pillar posts must be chosen according to the wheel holders used.

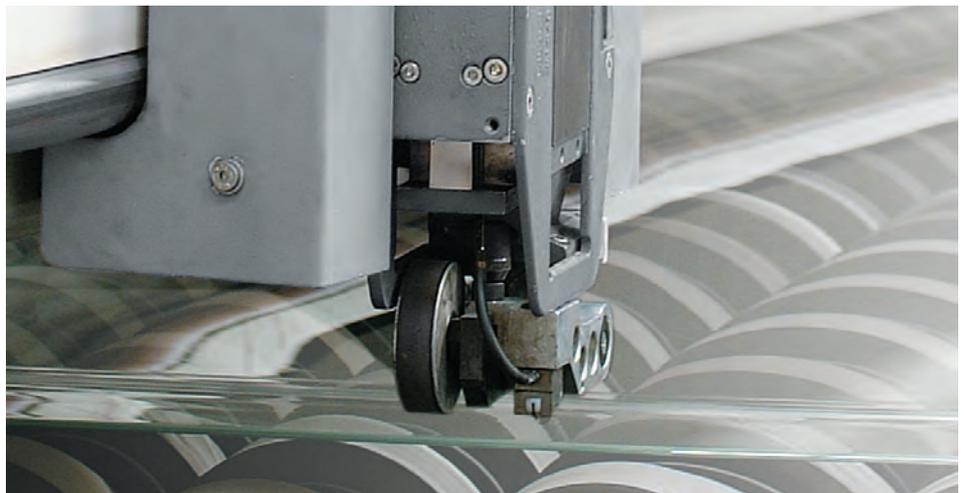
Different pillar posts must be used according to the manufacturer of the cutting machines.



BO 436.200



BO 439.1015





436.223
Bystronic
ø 29 mm, H = 35 mm
with set screw



436.220
limited swivel
Grenzebach, Bottero,
ø 19 mm, L = 33.5 mm



439.2031
Grenzebach
Outer ø 15.8 mm, H = 35.0 mm
trailing 4.0 mm



439.1015
Grenzebach,
ø 7 mm, 14 x 18 x 40.5 mm



436.3015
Grenzebach, Bottero
limited swivel, ø 15.6 mm,
H = 6 mm, L = 34.2 mm

Modern synthetic cutting fluids are definitely preferred over traditional cutting fluids like petroleum or kerosene. The greatest advantages:
good lubricating effect, an audibly softer break and considerably improved edge quality. Furthermore, the modern cutting fluids bind the glass dust and significantly reduce the amount of glass splintering and dust.

Silberschnitt® cutting fluids are watersoluble, environmentally safe and available for a wide range of applications.



Additional articles for Bystronic cutting machines



BO 436.BYA
ø 29 mm · Height 35 mm



BO 438.160B
Bearing unit for 436.BYA · supplied complete with axle 438.060B and ball bearing · ø 16 mm total length 31.5 mm



BO 438.060B
Axle · hardened · for 436.BY and other articles · ø 6/ø 8 mm · total length 31.5 mm

INTERMAC *Additional articles for Intermac cutting machines*



BO 436.G
Taper reception for 432.0 · for Intermac-Genius · ø 29.5 mm · height 30.0 mm



BO 436.G2
Taper reception for wheel type 416 · for Intermac-Genius · ø 29.5 mm · height 30.0 mm



BO 436.G4
Taper reception for 08A160 · for Intermac-Genius · ø 29.5 mm · height 30.0 mm

16 | Cutting Fluids for Automatic Cutting

Cutting Fluids for Automatic Cutting

Just like with hand glass cutters, the use of the appropriate cutting fluid is indispensable when cutting automatically. For this purpose, Bohle offers a special cutting fluid which is used and recommended by many machine manufacturers.

▶ Silberschnitt® Cutting Fluid



For manual glass cutting · low surface tension allows easy penetration into the cut · ensures a soft break · glass particles are bound · consistently unhindered run of wheel

i Glass thickness up to 12 mm · Viscosity: approx. 5 mPas

Art. No.	Contents · Description
BO 026	1 litre · for manual cutting

▶ Cutting Fluid ACECUT 4153



Applications: Automotive glass, general cutting, shape cutting

i Glass thickness 1.6 - 6 mm · Viscosity: approx. 35 mPas · Description washable

Art. No.	Contents
BO 5002802	30 litre

▶ Cutting Fluid ACECUT 5503



Especially suitable for coated glass · evaporates after use without leaving residue · small glass particles are bound · low surface tension · for mirrors, patterned and float glass as well as painted or printed glass · can be used for float glass production of up to 10 mm · temperature range 30° - 50° C

i Viscosity: approx. 2 mPas

Art. No.	Contents · Description
BO 5002805	30 litre · evaporating

▶ Cutting Fluid ACECUT 6000



Applications: automotive glass, shape cutting with high requirements · washable

i Temperature range 40° - 90° · Viscosity: approx. 65 mPas

Art. No.	Contents · Description
BO 5002806	30 litre · washable

▶ Cutting Fluid ACECUT 5929



Especially suitable for coated glass · evaporates after use without leaving residue · small glass particles are bound · low surface tension · can be used for float glass production of 4 - 19 mm · temperature range 40° - 60° C

i Viscosity: approx. 2 mPas

Art. No.	Contents · Description
BO 5002807	30 litre · evaporating

▶ Cutting Fluid ACECUT 5250



Water-soluble · evaporates after use without leaving residue · Applications: insulated glass, mirror glass, general cutting up to 10 mm, cutting laminated glass, film with knife

i Temperature range 30° - 50° · Viscosity: approx. 2 mPas

Art. No.	Contents · Description
BO 5002804	30 litre · evaporating

Accessories

▶ Pressure Measuring Device



With the Bohle pressure measuring device (for loads up to 500 N), the cutting pressure which is exerted onto the cutting wheel by the cylinder of the cutting head can now be accurately determined.

i Cutting pressure up to 500 N

Art. No.

BO 5164850

▶ Mounting Aid for Carbide Wheels

The practical mounting aid makes wheel exchange easy



Art. No.

Diameter

BO 440

1.30 mm

BO 441

0.80 mm

▶ Tin Pin



i Size of slot 1.14 mm

Art. No.

BO 438.114

▶ Magnifying Glass

Magnifying glass, 60x magnification, with LED



Art. No.

BO 4402.0

17 | Glass Drilling

Mobile Machinery for Glass Drilling

Mobile machinery is used for reworking tasks on site or in the workshop. High performance small machines and accessories can be found on the following pages.

Pico Drill 100 Drilling Machine



This robust, portable precision drilling machine for diamond core drills is produced by Bohle. It is very well suited for use on-site as well as in the workshop. The machine is placed directly on top of the glass, a rubber ring prevents it from slipping. Integrated suction holders provide for even safer fixing on the glass and form part of the standard machine equipment. Coolant is supplied directly into the hollow drill through the adjustable supply valve. Lowering the drills is done by a very precise and smooth mechanism that also has a depth stopper. The machine comes with an integrated PRCD safety switch and can be plugged directly to a Schuko plug. The Pico Drill 100 L model includes a point laser which greatly facilitates the positioning of the machine on the glass.

i Technical Data: · Electrical connection 1.15 KW, 230 V, 50 - 60 Hz, 1NPE · Drill diameters max. 75 mm · Drill depth max. 20 mm · Weight 12.5 kg

Art. No.	Description
BO 79.200	Pico Drill 100, 230 V / 50-60 Hz
BO 79.201	Pico Drill 100, 110 V / 50-60 Hz
BO 79.200L	Pico Drill 100 L with point laser, 230 V / 50-60 Hz
BO 79.201L	Pico Drill 100 L, 110 V / 50-60 Hz with point laser
BO 79.210	Laser for Pico Drill 79.200, 79.201, 79.200L and 79.201L
SP 79.B0875	Main engine EFB 151 B LT for Pico Drill

Pico Drill 100 T Tabletop Drilling Machine



Portable tabletop glass drilling machine with stainless steel coolant collecting tray and insert rings · suitable for table BO 79.270 · see Pico Drill 100 for technical data · Manufactured by Bohle in Germany

i Reach 430 mm · Width 490 mm · Height 590 mm · Depth 830 mm

Art. No.	Description
BO 79.250	Pico Drill 100 T Tabletop Drilling Machine, 230 V / 50-60 Hz
BO 79.270	Supplemental table with stoppers for Pico Drill 100 T · W 1350 x D 890 x H 960 mm

Cross Laser



For Pico Drill BO 79.250 and BO 79.260 · complete kit with 2 line lasers and supports, for precise drilling

Art. No.	Description
BO 79.215	Cross laser for Pico Drill 79.250 and 79.260

Pico Drill with Table



Professional starter machine with table W 1350 x D 890 mm, adjustable stoppers for precise positioning, including drilling templates as glass support.

i Working height 960 mm

Art. No.	Description
BO 79.260	Pico Drill 100 T with table W 1350 x D 890 mm, working height 960 mm, 230 V / 50-60 Hz

Diamond Core Drills

Diamond Core Drills, Standard Quality



For normal use · drill base made of steel · covered with protective lacquer · diamond coating from sintered material · drill has to be sharpened before first use

i Outer thread (Continental) R 1/2"

Art. No.	Diameter · Length · Description · Width · Height
BO 5000403	3 mm · 75 mm
BO 5000404	4 mm · 75 mm
BO 5000405	5 mm · 75 mm
BO 5000255	5,5 mm · 75 mm
BO 5000406	6 mm · 75 mm
BO 5000407	7 mm · 75 mm
BO 5000408	8 mm · 75 mm
BO 5000409	9 mm · 75 mm
BO 5000410	10 mm · 75 mm
BO 5000411	11 mm · 75 mm
BO 5000412	12 mm · 75 mm
BO 5000412L	12 mm · 95 mm
BO 5000413	13 mm · 75 mm
BO 5000414	14 mm · 75 mm
BO 5000415	15 mm · 75 mm
BO 5000416	16 mm · 75 mm
BO 5000417	17 mm · 75 mm
BO 5000418	18 mm · 75 mm
BO 5000419	19 mm · 75 mm
BO 5000420	20 mm · 75 mm
BO 5000420L	20 mm · 95 mm
BO 5000421	21 mm · 75 mm
BO 5000422	22 mm · 75 mm
BO 5000423	23 mm · 75 mm
BO 5000424	24 mm · 75 mm
BO 5000425	25 mm · 75 mm
BO 5000426	26 mm · 75 mm
BO 5000427	27 mm · 75 mm

Art. No.	Diameter · Length · Description · Width · Height
BO 5000428	28 mm · 75 mm
BO 5000428L	28 mm · 95 mm
BO 5000429	29 mm · 75 mm
BO 5000430	30 mm · 75 mm
BO 5000432	32 mm · 75 mm
BO 5000433	33 mm · 75 mm
BO 5000434	34 mm · 75 mm
BO 5000435	35 mm · 75 mm
BO 5000436	36 mm · 75 mm
BO 5000438	38 mm · 75 mm
BO 5000440	40 mm · 75 mm
BO 5000442	42 mm · 75 mm
BO 5000443	43 mm · 75 mm
BO 5000445	45 mm · 75 mm
BO 5000450	50 mm · 75 mm
BO 5000452	52 mm · 75 mm
BO 5000455	55 mm · 75 mm
BO 5000460	60 mm · 75 mm
BO 5000461	61 mm · 75 mm
BO 5000465	65 mm · 75 mm
BO 5000468	68 mm · 75 mm
BO 5000470	70 mm · 75 mm
BO 5000475	75 mm · 75 mm
BO 5000480	80 mm · 75 mm
BO 5000490	90 mm · 75 mm
BO 50004100	100 mm · 75 mm
BO 5000499	Sharpening Stone · 90 mm · 70 mm · 20 mm
BO 5000499L	Sharpening Stone · 180 mm · 70 mm · 20 mm
BO 5000499B	Sharpening Stone · 200 mm · 50 mm · 25 mm

18 | Ceramic and Tile Drilling Technology

▶ Wet Drilling Machine Aqua Drill Power+



With its 18 Volt lithium battery and 60 Nm torque, the new Aqua Drill Power+ is one of the most powerful cordless wet drilling machines currently on the market - a versatile machine for drilling the hardest ceramic and stone tiles and for impact drilling in masonry. The combination of the FESTOOL cordless impact drilling machine and the innovative

Bohle water feed chuck enables safe drilling without risk of breaking the material. Due to the sturdy 4-speed metal gearbox speeds of up to 3800 rpm are possible. In the range of diamond drilling tools, the machine therefore features a self-sharpening effect starting from a diameter of 4 mm. Thanks to the switchable axial run-out, permanently changing between different drilling machines is no longer necessary when drilling masonry. The quick exchange of tool heads, water feed chuck, drill chuck and bit holder is done in a few seconds without tools with FastFix.

i Drill diameter 4-70 mm · Universal drill connection 1/2"

Art. No.	Description
BO 79.303	Aqua Drill Power+
SP 79.BG119	Water Feed Chuck
BO 79.B1852	Spare battery 18V / 4.2 Ah
BO 79.B1263	Rechargeable battery 18V for BO 79.300
BO 79.311	Charging device DE 9130 for BO 79.300

▶ Drilling Aid for Pin Drill



With vacuum suction holder and adjustable drill plate

i Drill diameters 6, 8, 10, 12 mm

Art. No.	Description
BO 79.351	

▶ Water Feed Chuck



With MK2 morse taper · for diamond hollow drills with 1/2" thread · fits drill stands

i Spanner 32 mm

Art. No.	Description
BO 79.12	

▶ Drilling Aid Template with Suction Holders



Precise drilling with little mess - the drilling dust is flushed with the coolant · a special sealing lip on the suction holder enables secure fixing even on relatively rough surfaces · special exchangeable drill bushings for 6, 8, 10 and 12 mm diameters · includes storage case

Art. No.	Description
BO 79.350	Drilling Aid Template with Suction Holders
SP 79.BG100	Drill bushing ø 6 mm
SP 79.BG101	Drill bushing ø 8 mm
SP 79.BG102	Drill bushing ø 10 mm
SP 79.BG103	Drill bushing ø 12 mm

▶ Drilling Aid - Adjustable



With vacuum suction holder and adjustable universal drill guide

i Diameter adjustable 20 - 70 mm

Art. No.	Description
BO 79.352	Drilling Aid - adjustable
BO 79.353	Professional Drilling Aid with Suction Holder for BO 79.303
SP 79.BG118	Drill bushing ø 5 mm for BO 79.353
BO 79.354	Drilling Aid for Pin Drill

▶ Pressurised Spray Water Tank 12 l



Independent water supply · integrated pressure gauge · plug-in coupling for direct connection to Aqua Drill (BO 79.300, BO 79.302 + BO 79.303) · length of connecting hose 3 m

i Safety valve 4 bar

Art. No.	Description
BO 79.370	Pressurised Spray Water Tank 12 l
SP 79.B1262	Spare Pump for Pressurised Spray Water Tank
SP 79.BG098	Gardena Adaptor Nipple for 79.370
SP 79.B1261	Manometer 6 bar for 79.350

19 | Process Water Treatment Systems

Sedimentor Technology

Bohle Sedimentors work in two steps: Coarse glass dust is continuously separated from the coolant during circulation as a result of an optimal tank design with special features (effective sedimentation). Then fine particles are separated out in batch processes. In an automated cycle aided by optimised flocculant, the system binds even the finest glass particles, thus producing practically clear process water.

Sedimentor

Using machine coolant for a long time is not only better for the environment but also for your wallet. The coolant cleaning systems from Bohle can help you do that. Thus the costly cleaning of the machine purifying system is greatly reduced. Further advantages of clean coolant: longer service life of tools and significantly improved processing quality of the glass.

Your benefits

- ✓ Less cleaning effort required for machine and water tank
- ✓ Reduced fresh water costs
- ✓ Reduced waste water costs
- ✓ Environmental protection
- ✓ Improved quality of grinding and polishing
- ✓ Longer service life of tools
- ✓ Cost reduction of subsequent processes (e. g. washing)
- ✓ Compact system for one or more machines
- ✓ Low maintenance costs
- ✓ Automatic operation
- ✓ Also compatible with coolants
- ✓ Low operating expenses (costs for sedimentation granules, energy)

Accessories

Optimised sedimentation granules · Pumps for waste water · Collecting systems for waste water



Sedimentor 2.4

Specifications	Sedimentor 2.4	Sedimentor 1.0	Sedimentor 0.3
Flow rate	280 l/min	150 l/min	50 l/min
Cleaning performance	approx. 7.2 kg/h	approx. 3.6 kg/h	approx. 1.0 kg/h
Filling quantity	2100 litres	1000 litres	320 litres
Optimised sedimentation granules	Powder	Powder	Powder
Electrical connection	2 kW, 400 V, 50 Hz, 3 NPE	2 kW, 400 V, 50 Hz, 3 NPE	2 kW, 400 V, 50 Hz, 3 NPE
Filter bag	300 litres	300 litres	70 litres
Art. No.	BO SEDI24	BO SEDI10	BO 85.30

20 | Glass Washing Machines

Verti-Clean Glass Washing Machines

▶ Verti-Clean

The powerful systems of the Verti-Clean series are ideal for cleaning flat glass after processing. The open construction also allows panes to be washed that are higher than the machine itself.

Features

- Space-saving vertical construction
- Motor-driven inlet and outlet with shut-off
- 2 - 4 brushes
- Thermostat-controlled warm water preparation
- Automatic hot-air blower in sound-insulated casing for clean, dry panes
- Exit side with illuminated inspection station for reliable quality control of glass

▼ Accessories

Entry and exit extensions · Damper for hot air · Brushes for Low-E · Washing compound for glass washing machines



Further models on request.

Specifications	Verti-Clean 13.2	Verti-Clean 15.4	Verti-Clean 16.4	Verti-Clean 16.4-20
Washing height	1300 mm	1500 mm	1600 mm	1600 mm
Number of brushes	2	4	4	4
Glass thickness	3-12 mm	3-12 mm	3-12 mm	3-20 mm
Total length	4850 mm	5100 mm	5100 mm	5100 mm
Total height	2050 mm	2150 mm	2250 mm	2250 mm
Art. No.	BO 84.132	BO 84.154	BO 84.164	BO 84.164-2

21 | Sandblasting Systems

SBM Sandblasting Systems

▶ Sandblasting System SBM 1500 / SBM 2500P

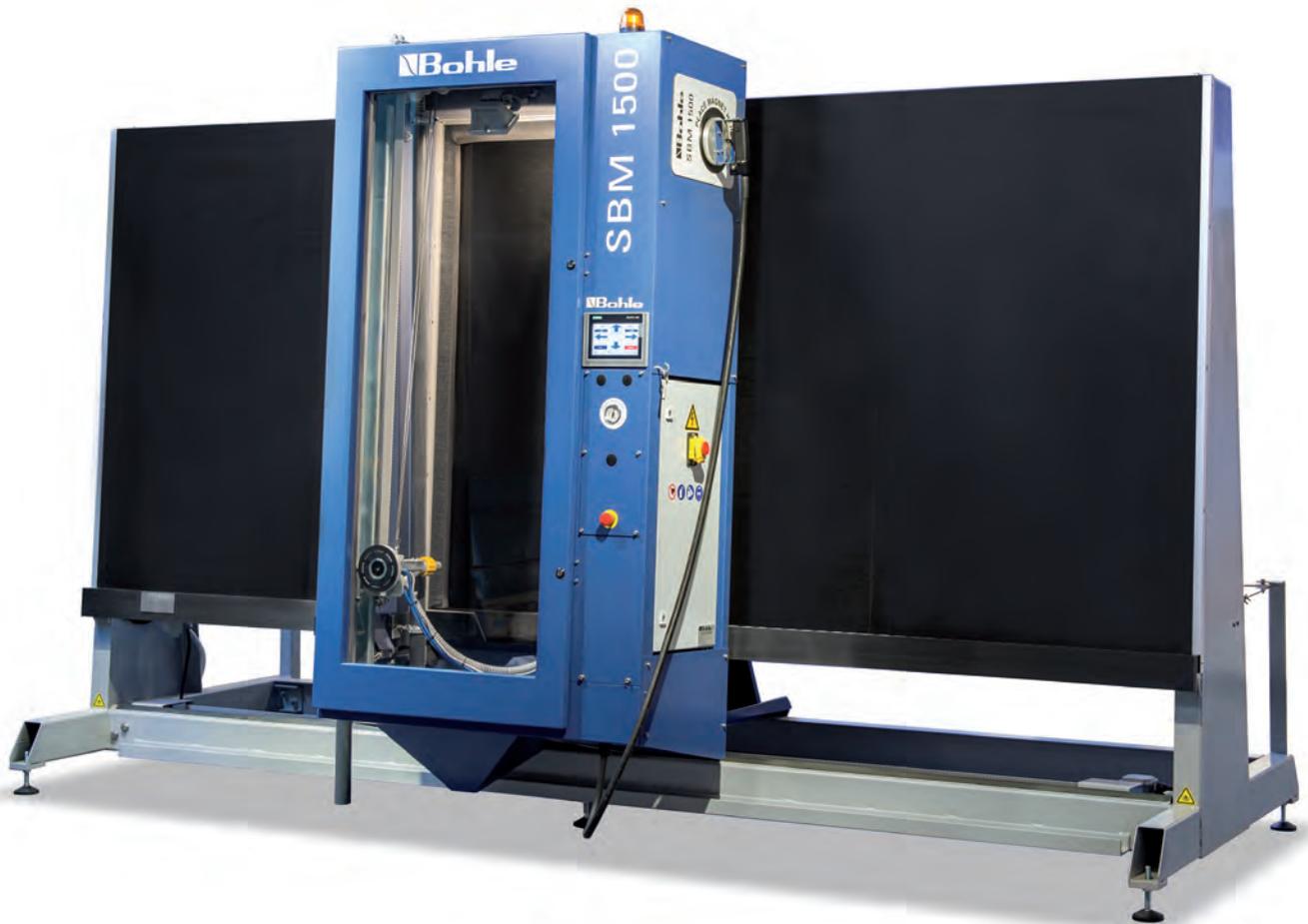
The SBM sandblasting cabinet, manufactured by Bohle, allows fully automatic sandblasting of designs or surfaces as well as very easy manual spot and surface blasting. In contrast to other systems, the glass remains stationary and the cabinet moves across the glass. This saves space because the glass requires no entry or exit. Furthermore, by keeping the glass stationary, you eliminate the risk of scratching the reverse side.

Features

- Manufactured by Bohle in Germany
- Virtually dust-free sandblasting
- Easy operation with touch screen
- Automatic blasting, 200 programmes can be stored
- Air cushion supported, manual sandblasting (SBM 1500)
- Consistent quality of abrasive
- Modern, space-saving design: As the cabinet moves across the glass, entry and exit areas are no longer necessary. This is why the space requirements of the machine are much smaller compared to the surface which can be blasted.
- No expensive packaging material: No packaging costs.
- No time-consuming installation - plug and play: The machine is supplied readily assembled including abrasive agent. Only the transport locks have to be removed, electricity and compressed air must be connected and the machine feet aligned.
- No additional training required: If you already have sandblasting experience you may not need additional training. The software is self-explanatory and a detailed instruction manual is supplied. Sample programs are already saved to the device.
- Low compressed air costs: Very good blasting results can be achieved with low pressures starting from 2 bar.
- Low costs for sandblasting resist tape: Sandblasting with low pressure allows the use of very thin and economic blasting films.
- Low costs for abrasive: Sandblasting with low pressure is not only beneficial to the machine but also reduces the abrasive wear.
- Low emission levels: Compared to other machines, the SBM is very quiet and generates very little dust.
- Templates: For repetitive designs and logos starting from lot size 3, sandblasting templates made of sheet steel offer a high saving potential compared to the use of sandblasting films.
- Rational working procedures: While the machine is still working, the next job can be prepared and the next objects loaded.

▼ Accessories

Sandblasting agent · High grade corundum, white, 120 µm, iron-free
· Set of magnets for use with metal templates · Additional suction holders on the blasting surface for working with several panes at a time · Version with shading programme available · additional blasting fields



Specifications	SBM 1500 Sandblasting System	SBM 1500P Sandblasting System · Shading Programme	Sandblasting Systems SBM2500P · Shading Programme
Number of drives	2	2	2
Speed of x-axis	infinitely adjustable 6 m/min	infinitely adjustable 6 m/min	infinitely adjustable 6 m/min
Speed of y-axis	infinitely adjustable 24 m/min	infinitely adjustable 24 m/min	infinitely adjustable 24 m/min
Glass thickness	3 - 40 mm	3 - 40 mm	3 - 40 mm
Max. glass height	2000 mm	2000 mm	optionally: 3200 mm 2600 mm
Pane length	unlimited mm	unlimited mm	unlimited mm
Max. blasting surface	2900 x 1500 mm	2900 x 1500 mm	4000 x 2550 mm
Blasting pressure	infinitely adjustable 5.5 bar	infinitely adjustable 5.5 bar	infinitely adjustable 5.5 bar
Blasting performance	8 m ² /h	8 m ² /h	16 m ² /h
Electrical connection	2 kW, 400 V, 50 Hz, 3 NPE	2 kW, 400 V, 50 Hz, 3 NPE	2 kW, 400 V, 50 Hz, 3 NPE
Dimensions	4100 x 1850 x 2500 mm	4100 x 1850 x 2500 mm	5100 x 2060 x 3420 mm
Working temperature	10 - 40°C	10 - 40°C	10 - 40°C
Art. No.	BO SBM1500	BO SBM1500P	BO SBM2500P

22 | Grinding Machines

Cross Belt Grinding Machines

Bohle twin belt grinding machines are used for efficient arriissing of glass panes. These machines are available in diverse dry and wet grinding models and are especially suitable for multi-shift, high production use in industrial glass processing.

▶ “Twin Belt” for Dry Grinding

Bohle twin belt grinding machines for dry grinding are, among other things, ideally suited for processing glasses with a protective film or water-sensitive coating. Certified filtering systems keep glass surfaces clean after grinding. In this way scratches are avoided.

Features

- Manufactured by Bohle in Germany
- Manual machine for dry grinding
- High quality grinding for sensitive glass like Low-E
- Optimum cooling by special air guides
- Powerful filter technology ensures that workplace conforms to standards
- Especially high productivity when diamond belts are used
- Optional air cushion table for easy handling and scratch prevention



Specifications	Twin Belt KSA 15T	Twin Belt Compact KSA-C 15T
Type	for straight edges and shapes	for straight edges
Belt length	100 x 1830 mm	100 x 1160 mm
Belt speed	15 m/s	15 m/s
Electrical connection	6 kW, 400 V, 50 Hz, 3 NPE	5 kW, 400 V, 50 Hz, 3 NPE
Dimensions	1100 x 1050 x 1800 mm	700 x 660 x 1600 mm
Glass thickness	3 - 20 mm	3 - 12 (20) mm
Art. No.	BO 80.12-T	BO 80.13-T

▶ “Twin Belt” for Wet Grinding

Twin belt grinding machines for the use of diamond belts and other high performance belts in industry in particular, as well as for use in workshops. Top model with two belt speeds · high efficiency and improved grinding results · ideal for straight edges and shape cuts · two modes of operation : Grinding at the „hard belt“ for straight edges, grinding at the „soft belt“ to grind shaped glass panes · heavy-duty construction · low vibration run to obtain optimum grinding results · infinitely adjustable belt tension by pneumatic control within easy reach · attachment of a coolant circulation system possible · easy exchange of belts due to the large side door · easy setting of glass thickness and arris

Features

- Manufactured by Bohle in Germany
- Manual machine for wet grinding
- High performance for perfect edge quality
- Adjustable glass thickness and depth of arris
- Especially high productivity when diamond belts are used



Specifications	Twin Belt KSA 15/30	Twin Belt compact KSA-C 15/30
Belt type	hard and soft	hard
Belt length	100 x 1830 mm	100 x 1160 mm
Belt speed	15 / 30 m/s	15 / 30 m/s
Electrical connection	4 kW, 400 V, 50 Hz, 3 NPE	4 kW, 400 V, 50 Hz, 3 NPE
Dimensions	1100 x 1050 x 1800 mm	700 x 660 x 1600 mm
Glass thickness	3 - 20 mm	3 - 20 mm
Art. No.	BO 80.12-P	BO 80.13-P

Belt Grinding Machines

The right application for all requirements: Bohle glass belt grinding machines are available as Master Belt and Versalux. All models can be optionally equipped with comprehensive accessories. At Bohle, top quality workmanship to ensure a longer service life is a matter of course: screws, sheet metal and roller axes which are exposed to water are made of stainless steel; the machine housing is galvanised and lacquered. Smooth running is achieved by rubber-coated rolls.

▶ Glass Belt Grinding Machine Master Belt

The Bohle glass belt grinding machines are available with castor roller table and different belt speeds. · All models can be optionally equipped with comprehensive accessories.

Features

- Manufactured by Bohle in Germany
- Large contact roller (Ø 200 mm) for minimal hollow grinding
- All machine parts subject to humidity made of stainless steel
- Castor roller working table, 1200 x 600 mm
- Grinding and arissing unit with handwheel and special stopper for precise arrises
- Including height adjustment for grinding and arissing unit
- Socket for coolant circulation system and thermal motor protection
- On/off switch with emergency stop function and undervoltage release
- Lateral speed adjustment system within the operator's reach
- Articulated cooling hose for direct cooling of the grinding area
- Connection of coolant circulation system is possible
- Fixing points for comprehensive accessories available

▼ Accessories

Table extensions and pull-outs
· Coolant collecting trays and circulation systems · Grinding tables for small panes · Stopper rollers for grinding circular panes



Master Belt with accessories

Specifications	Master Belt 11	Master Belt 11/22
Belt length	100 x 1830 mm	100 x 1830 mm
Electrical connection	1.1 KW, 400 V, 50 Hz, 3 NPE	1.4/1.8 kW, 400 V, 50 Hz, 3 NPE
Working height	1050 mm	1050 mm
Contact roller	200 mm Ø	200 mm Ø
Belt speed	11 m/s	2-speed 11/22 m/s
Dimensions	1200 x 1130 x 1720 mm	1200 x 1130 x 1720 mm
Art. No.	BO 80.3-1N	BO 80.5N

Features

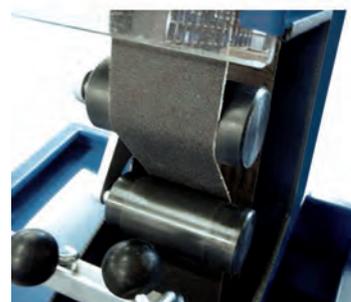
- Manual machine with one belt speed
- For basic grinding
- Integrated coolant circulation system
- Simple belt exchange system for grinding and arissing
- Accommodates all standard silicon carbide abrasive belts (100 x 2690 mm)



Belt position „straight grinding“



Belt position „lower edge grinding“



Belt position „upper edge grinding“

Specifications	Versalux MkV
Electrical connection	2 Kw, 230 V, 50 Hz, 1 NPE
Belt speed	7.5 m/s
Dimensions	900 x 500 x 1700 mm
Art. No.	BO 6300601

23 | Drilling Machines

Automatic Drilling Machines

▶ Super Drill

Automatic glass drilling machines are considered standard equipment for every glass processor. These machines prove themselves daily, particularly for universal processing of glass panes of diverse sizes. The Bohle automatic glass drilling machines distinguish themselves by their easy adjustability, programmable setting parameters and spacious work area.

Features

- Manufactured by Bohle in Germany
- Double-sided horizontal drilling machine
- Contact-free digital measuring systems for drilling depth
- Easy digital adjustment of the drilling depth via the control panel
- Easy zero setting of the drill by push-button
- Infinitely adjustable advancing of both spindles
- Drill diameters from 3 to 100 mm



Super Drill Eco with accessories

Specifications	Super Drill Eco
Dimensions	800 x 1660 x 1850 mm
Electrical connection	2 x 1.1 kW, 400 V, 50 Hz, 3 NPE
Glass thickness	(one-sided up to 40 mm) 3 - 20 mm
Art. No.	BO 79.9-2D

▶ Profi Drill

The manual operation of both spindles of the Profi Drill series of double-sided horizontal glass drilling machines is done from above. This allows quick and precise drilling.

Features

- Manufactured by Bohle in Germany
- Double-sided horizontal drilling machine
- Electronic speed control via frequency converter
- Long reach of 1000 mm
- Sturdy construction - also suitable for countersinking
- Professional drill heads with precise, smooth-running drill spindles
- Easy operation and maintenance
- All parts made of stainless steel, galvanised or lacquered twice



Profi Drill 2/1000-S

Specifications	Profi Drill 2/1000-S
Electrical connection	2 kW, 400 V, 50 Hz, 3 NPE
Dimensions	760 x 1530 x 1650 mm
Speed	infinitely adjustable 300 - 3500 rpm
Glass thickness	(one-sided up to 40 mm) 3 - 20 mm
Drill diameters	3 - 80 mm
Art. No.	BO 79.3-S

24 | Handling Devices

Lifting Devices and Transporting Pliers

▶ Glass Transporting Pliers

Sturdy transporting pliers for handling all kinds of sheet material. This device excels due to its particularly simple and safe handling. With a hoisting tool, simply lift the glass transporting pliers above the object to be transported. When placed onto the plate, a mechanism is set in motion which ensures a safe grip simply by the upwards motion of the transporting pliers. When putting the load down after transport, the pliers are automatically released by the reverse mechanism.



▼ Features

For handling of various sheet materials · Easy and secure handling · Up to 1000 kg load capacity

Art. No.	Load capacity · Material thickness
BO GTP500	500 kg · 3 - 19 mm
BO GTP1000	1000 kg · 4 - 24 mm
BO GTP1030	1000 kg · 10 - 30 mm
BO GTP1050	1000 kg · 30 - 50 mm

▶ Manual Lifting Device



The manual lifting device can do without an electric pump and is therefore very versatile in use. A dual circuit vacuum system, reserve tanks, vacuum display and an additional visual vacuum indicator ensure high levels of safety. The manual lifting device stands out due to its very compact construction and low weight.

i Load capacity max. 180 kg · Weight approx. 20 kg · Dimensions 910 mm x 510 mm x 100 mm · Turns optionally by 360° · Tilttable optionally by 90°

Art. No.

BO B18DM4

Transport and Mounting Aids

The tendency towards increasingly larger glass constructions in architecture and the growing use of 2-gap insulating glass pose new challenges for glass processors and assemblers: Elements which could previously be moved by two people have now become so heavy that they can hardly be transported manually on site or within company premises any longer. With the Liftmaster B1 Bohle has developed an innovative handling and mounting aid which enables transporting objects of up to 180 kg such as glass panes, window elements or metal and stone sheets easily and safely - by only one person.

Innovative Handling Aid

▶ Liftmaster B1 Lifting System with Dual Circuit Vacuum Lifter

Features

- Easy and secure handling of structural components of up to 180 kg
- Stable construction
- Mast can be rotated and tilted
- Easy assembly of structural components
- Ideal for transport within company premises and on construction sites
- Can be disassembled easily, fits in almost any multi-purpose vehicle
- Very compact and manoeuvrable
- Fits through standard doors
- Handle is height adjustable
- Includes vacuum lifter: can be rotated by 360° · can be removed very easily and used separately together with a crane · has a dual circuit vacuum system with 4 suction pads · is very flat and compact · is equipped with a vacuum indicator for monitoring the vacuum · the vacuum is generated via a hand pump, therefore ready for use at all times (no previous charging of batteries required) · weight: 20 kg



Specifications	Liftmaster B1
Length	1.2 m
Width	0.8 m (with extended axles to widen track 1.1 m)
Height	1.95 m
Art. No.	BO 88.01

Wood's Powr-Grip® Vacuum Lifters

Wood's Powr-Grip® vacuum lifters are available in several different series and versions with optional features as well as additional practical accessories. In this section you will find just a few examples from our comprehensive product range. Please ask for detailed information about further products, optional equipment and special designs. Data sheets for individual vacuum lifters are also available. We would be happy to send you a quote tailored to your specific requirements.

▶ Wood's Powr-Grip® Vacuum Lifter

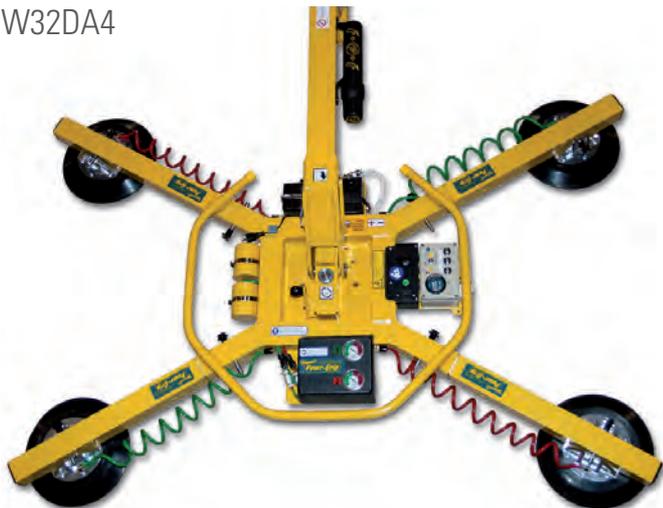
Features

- Adapts to diverse transport and installation requirements
- Compact, robust construction
- For use at construction sites or workshops
- Excellent gripping power and maximum security with dual circuit vacuum system
- Independent of power supply
- If desired, also available in plastic box for transport and storage

W32DA4S



W32DA4



W32DA4



W63DA8N



General Terms and Conditions for Export Orders

1. Scope

The present General Terms and Conditions shall apply to all products and services distributed by Bohle AG, including application-oriented advice and consulting. However, extended and partly deviant sales conditions, overriding the present General Terms and Conditions, shall apply for selling and installing machinery. For all other cases, solely the present General Terms and Conditions shall apply. Bohle AG shall not accept any adverse or deviant conditions of the customer without explicit written consent. The present General Terms and Conditions shall apply even if services are delivered without reservation in the knowledge of conflicting conditions of the customer or conditions of the customer that deviate from this General Terms and Conditions. The present Conditions are only applicable for companies, legal entities of public law and special funds under public law in terms of § 310 BGB (German Civil Code). They shall be valid in the respective current version for all future business transactions with the customer.

2. Contract, Reservation of Changes, Minimum Order Value, Quotation Documents, etc.

2.1 All information and specification in catalogues, flyers or other documents are non-binding. Contracts between Bohle AG and their customers are accepted via order confirmations sent by Bohle in written or electronic form, by email or fax. The order confirmation is decisive for the content of the contract. If Bohle delivers services without prior order confirmation, the contract shall be deemed effective upon the beginning of the service or delivery of the ordered goods.
2.2 If the ordered goods are no longer available or have been replaced, Bohle AG reserves the right to deliver deviant products of the same or improved quality.
2.3 The minimum order value for export orders is € 500. For orders of a value between € 500 and € 1.000 a processing charge of € 100 will be added. Spare parts and services are exempt of minimum order value.
2.4 Bohle AG retains all property rights, copyrights and other protected rights to submitted quotations, cost estimates as well as drawings, figures, calculations, flyers, catalogues, models and other documents made available. The above mentioned documents shall not be made available to third parties without explicit written consent. This applies in particular to confidential documents.

3. Prices, Terms of Payment

3.1 If not indicated otherwise in the order confirmation, all prices are quoted "ex works" in Haan, plus VAT. Shipping and freight charges, insurance, taxes, packaging costs and possible installation costs are not included.
3.2 Changes to catalogue prices are reserved. The respective list prices at the time of the order are binding. Modified prices shall be considered accepted if the customer does not object immediately after receiving the order confirmation.
3.3 The purchase price is payable either in advance (wire transfer) or by irrevocable, confirmed letter of credit issued to our indicated bank, unless indicated otherwise in the order confirmation. All bank charges outside Germany are for the account of the customer. Bohle AG covers all bank charges inside Germany. If the customer is overdue in making the payment, Bohle AG is entitled to demand default interest pursuant to § 288 BGB. Bohle AG reserve the right to prove and assert greater damages caused by such default.
3.4 The customer shall only be entitled to withhold or offset payments, if counterclaims are having the force of law or are undisputed.
3.5 Bohle AG reserve the right to supply their goods only on pre-payment or by cash on delivery.

4. Delivery, Delivery Time

4.1 All deliveries shall be made "ex works" in Haan according to Incoterms 2010.
4.2 Partial deliveries are permissible if not all ordered goods are available and in so far as the customer can be reasonably expected to accept such partial deliveries.
4.3 Delivery dates and times are only binding if they are explicitly confirmed in writing as binding between Bohle AG and the customer.
4.4 Agreed delivery periods are extended by a reasonable period of time - also within primary delay - in the event of unforeseeable impediments that are beyond the control of Bohle AG, regardless of whether the impediments are suffered by Bohle AG or their suppliers. In this case, both parties shall be entitled to terminate the contract.
4.5 Decisive for the observance of the delivery date is the day when the (partial) delivery is made available for collection or shipment or the day when the goods are handed over to the forwarding agent.

5. Transfer of Risk, Shipment

5.1 All deliveries shall be affected at the expense and the risk of the customer, without prejudice to whether the shipment of the goods to the customer has been organised by Bohle AG. This is also applicable if shipping charges are omitted. The transfer of risk shall take place once the goods have been handed over to the forwarding agent or, in the event of collection, to the person responsible.
5.2 If the customer delays in accepting the service or infringes other cooperation duties, the risk of accidental loss or deterioration of the goods will pass to the customer at the moment in which his delay in acceptance commences.
5.3 The selection of the mode of despatch, packing and shipment shall be reserved to Bohle AG. The customer cannot derive any claims from the selection made by Bohle AG.

6. Packaging

In compliance with the packaging ordinance, all packaging materials are to be disposed of in a recyclable and environmentally friendly way. If the customer himself carries out the disposal, Bohle AG cannot be held liable for the resulting costs. If the customer sends back the packaging material to Bohle AG for disposal, the despatch shall be done at the customer's expenses; any packaging material reaching Bohle AG with the postage unpaid, shall be refused.

7. Return of goods

7.1 Goods ordered incorrectly or in excess can be returned by the customer only after acceptance by Bohle and as long as the goods have not been used, are in their original packing and in good and resalable condition. The return of goods will be charged with 15% of the net invoice amount, minimum € 10.00.
7.2 The return consignment cannot be accepted without a return reference number.

8. Warranty

8.1 If Bohle AG can be held responsible for defects in the purchased goods, Bohle AG reserves the right to choose between remedy of defects and replacement delivery. In the event of remedy of defects, Bohle AG will bear any and all resulting costs and expenses, especially transportation, travelling, work and material expenses, to the extent that these expenses are not increased because the goods have been transported to a place other than the place of fulfillment.
8.2 Should Bohle AG not be willing or not be able to remedy the defect or make a replacement delivery, the customer is entitled to withdraw from the contract or demand an appropriate reduction. This is also applicable if remedial action is delayed beyond reasonable periods on grounds for which Bohle AG can be held responsible.
8.3 Claims for material defects are subject to a limitation period of 12 months beginning with the transfer of risk.
8.4 The customer's warranty rights are subject to the customer's due compliance with inspection and notification stipulations in accordance with § 377 HGB (German Commercial Code).
8.5 Any and all illustrations, indications and descriptions in illustrations, flyers, catalogues and adver-

tisements are approximate in nature and cannot be regarded as quality description. Such indications are only binding if they have been expressly agreed to define the quality of the goods.

8.6 All technical data, especially information on dimensions, have been thoroughly compiled. They comply with the current state of the art at the time of publication. Changes might result from necessary technical amendments. Liability for damages caused by wrong dimensions is expressly denied. Production-related deviations in measures, contents, weights and colours are permissible within the scope of normal industry tolerances. All published and distributed technical data, explanations and instructions concerning conditions of use and installation, are to be observed by the customer.

9. Advice

If application-oriented advice by Bohle staff is required, this advice always complies with the current state of development. The advice will be given by qualified Bohle staff or authorised Bohle partners observing the principles of proper execution of work. The selection of the appointed employees and service partners is reserved to Bohle AG.

A guarantee of successful performance is not given - unless agreed otherwise in writing - as the successful performance depends on different factors which are not verifiable through application-oriented advice. The advice does not exempt the customer from testing the suitability of the product for the intended purpose and processes.

10. Liability

10.1 Bohle AG shall be liable:

a) for damages caused intentionally or by gross negligence by their legal representatives or agents,
b) according to the German Product Liability Act

c) for injury to life, physical injury or damage to health which Bohle AG, their legal representatives are to be held responsible for.

10.2 Bohle AG is liable in case of minor negligence if they, their legal representatives violate an important contractual obligation (cardinal obligation), fulfilment of which is essential for due implementation of the contract and which the contractual partner can reasonably expect to rely on. Otherwise there is no liability in case of minor negligence.

10.3 In the event of property damage and financial loss, the liability of Bohle AG for minor negligence is limited to the typical, foreseeable damage. Liability is excluded for any other remote consequential damages.

11. Retention of Ownership

11.1 Bohle AG retain ownership of the delivered goods until complete fulfilment of all obligations resulting from the business relationship with the customer.

11.2 The customer is entitled to sell goods subject to retention of title within the course of ordinary business; however, the customer hereby assigns to us in advance any claim to the amount of the invoice total (including value added tax) of our claim which the customer may have against his clients or third parties; irrespective of whether the goods subject to retention of title were resold without or after processing. The customer shall remain entitled to collect this claim even after assignment. The authorisation of Bohle AG to collect the debts themselves, shall remain unaffected. However, they undertake not to collect the claims as long as the customer meets his payment obligations, is not in default of payment, no insolvency proceedings are instituted over his assets or payments are suspended. In this case, the customer shall be obliged to disclose to Bohle AG the receivables assigned and their debtors, give all information required for collection, surrender associated documentation and notify the debtors (third parties) about the assignment.

11.3 The customer is entitled to process the reserved goods. The authorisation ends with the definite suspension of payments or if insolvency proceedings are instituted over the customer's assets. Any processing or transformation of the goods is always done for Bohle AG. If the reserved goods are processed with other objects, Bohle AG shall be entitled to co-ownership of the new object in a ratio equal to the value of the deliverables to the other goods that were processed at the time of processing. For the object arising from such processing the same applies as for the goods delivered subject to retention of title. If the goods supplied under reservation of title are inseparably combined or mixed with other goods not belonging to Bohle AG, then Bohle AG shall acquire co-ownership of the new item created in the ratio of the value of the goods, delivered subject to retention of title, to the value of the other goods combined or mixed at the time of mixing. If mixing is performed in such a manner that the item of the customer is to be regarded as the principal item, then it is deemed agreed that the customer transfers to Bohle AG a proportional co-ownership. The customer shall hold the sole or joint ownership for Bohle AG.

11.4 If the customer defaults in payment or fails to fulfil his obligations under the retention of ownership, Bohle AG may set a reasonable extension of time for performance or subsequent performance. In the event of this period expiring without result, Bohle AG shall be entitled to withdraw from the contract and to take back the delivered goods. For this purpose, the customer shall send an accurate statement of all goods that have been delivered to him subject to retention of ownership, separate the goods and hand them over to Bohle AG. After a warning with a reasonable time limit, the goods may be sold for the best possible price on the open market, setting off the price charged to the purchaser.

11.5 The customer is obliged to treat the purchased item with care; he is especially obliged to insure it sufficiently at his own expense against fire, water and theft damages to the replacement value. Should maintenance and inspection work be necessary, the customer must perform such work in good time and at his own expense. Seizure or other third party interventions are to be notified immediately in writing.

11.6 Upon request, Bohle AG shall release the delivered goods subject to retention of ownership and items or claims that have replaced them, in so far as the realisable value of the securities exceeds the obligations to be secured by more than 20%; Bohle AG shall be responsible for the selection of securities to be released.

12. Data Protection

The customer acknowledges that, in compliance with §§ 27 ff. Federal German Data Protection Act (BDSG), personal data obtained from the contractual relationship are stored by Bohle AG for the purpose of data processing. No data will be passed on to third parties.

13. Place of Performance, Court of Jurisdiction, Applicable Law

13.1 At the option of Bohle AG, the place of performance shall either be the competent court of jurisdiction for the Bohle headquarters or the customer's headquarters, in so far as the customer is a merchant, an entity of public law or special funds of public law.

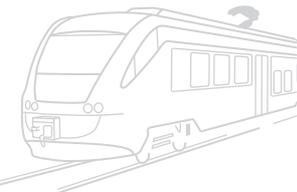
13.2 The place of performance for delivery shall be the place where the goods are stored for the purpose of being despatched or handed over to the customer. The place of performance for paying the purchase price and for fulfilling all other contractual obligations shall be Haan.

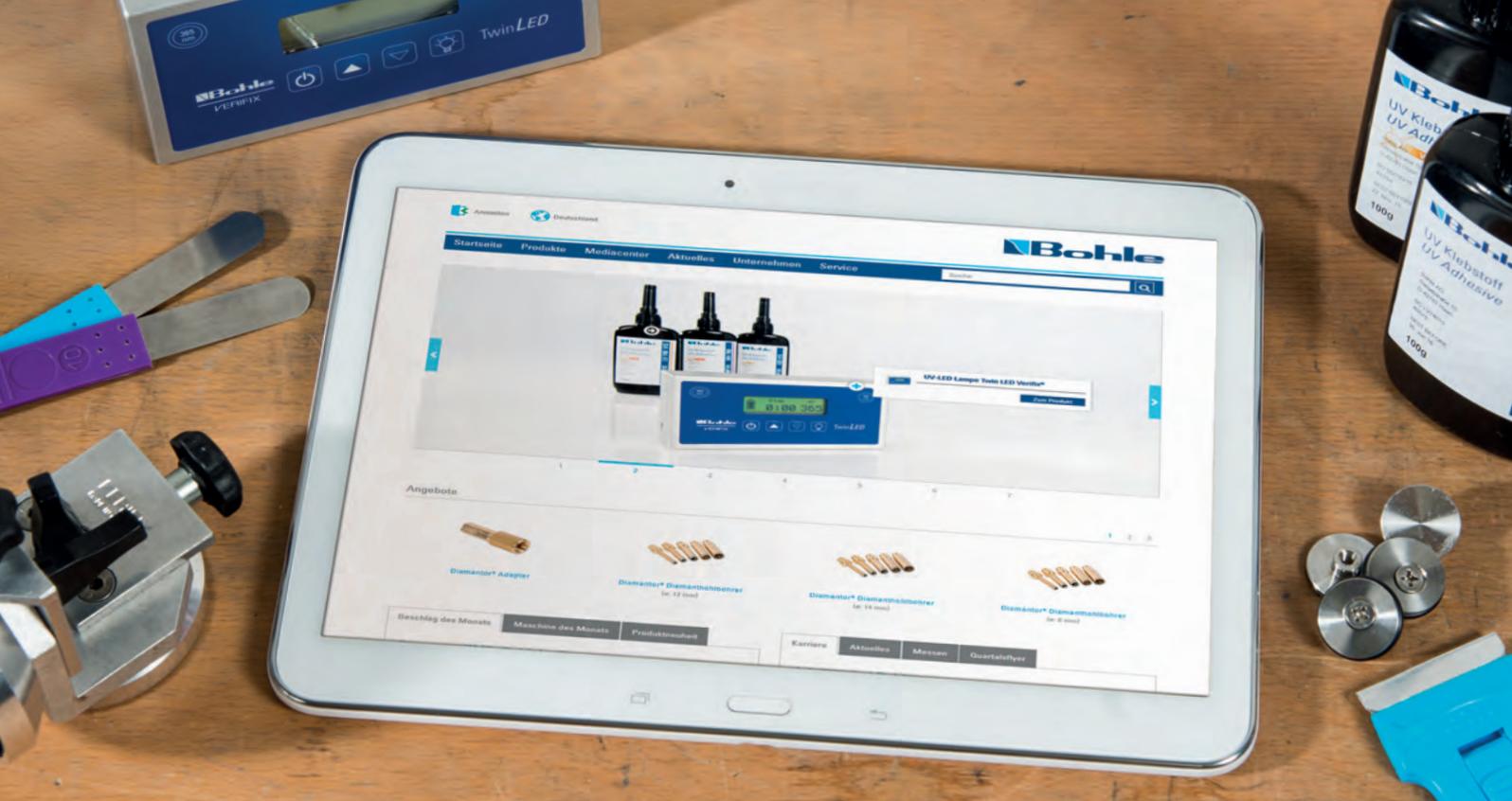
13.3 For all legal relationships and disputes between the contractual parties arising from this contract, the law of the Federal Republic of Germany shall apply exclusively, excluding the UN Sales Convention.

Last update: 24.01.2014

Important procedures in case of transport damage:

- Do not change packing or contents.
- Do not use the products.
- Inform the forwarder of the damage.
- The table below explains the important steps.
- Inform Bohle directly of the damage.
- Before accepting the delivery, make sure the number of cartons/packages is correct.
- Later claims regarding missing products can only be accepted in exceptional cases.

Transport by:	Packaging damaged:	Packaging fine but contents damaged:	What we need from you:
Parcel Service 	<p>Refuse the package altogether or, when accepting the package, make a note on the delivery slip of the parcel service and inform the corresponding depot immediately.</p>	<p>Inform the corresponding parcel service immediately after having received the goods as otherwise there is no insurance coverage.</p>	<p>The package number and number of delivery note. Without these, an acknowledgement of the damage is not possible.</p>
Postal Service 	<p>Request a written confirmation from the post man or refuse the package.</p>	<p>Inform the corresponding post office and request their visit and confirmation of the facts. Present original package within 24 hours.</p>	<p>A damage confirmation from the post office. Without it, a regulation of the damage is not possible.</p>
Train 	<p>Refuse the delivery or unpack in presence of a member of the carrier's business and request a confirmation of the facts from the goods department.</p>	<p>Inform the corresponding goods department and request their visit and confirmation of the facts. Damages must be claimed within one week.</p>	<p>An official confirmation of facts and the original consignment note with endorsement on the back. Without these, an acknowledgement of the damage is not possible.</p>
Forwarder 	<p>Refuse delivery or, when accepting, make a corresponding comment on the delivery note of the forwarder and inform the forwarder immediately.</p>	<p>Inform the forwarder immediately after receipt of the delivery as otherwise there is no insurance coverage.</p>	<p>Copy of the receipt slip with indication of damage.</p>

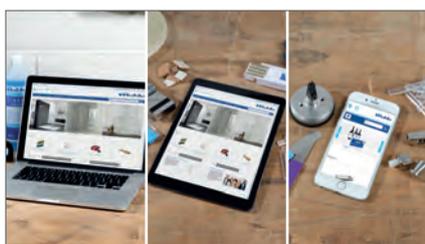


The Bohle Online Shop

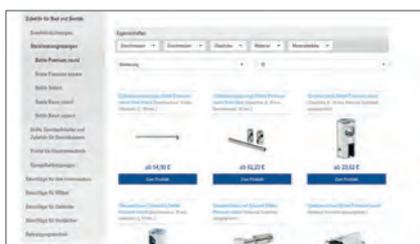
The Bohle Online Shop offers you our latest product range around the clock in a clearly structured and informative way.

Look forward to a clearer layout, excellent performance and improved functionality: The brand new Online Shop will be launched in 2015.

www.bohle-group.com



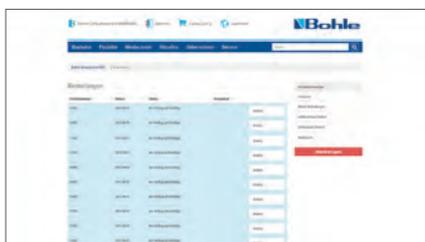
Optimised for all digital devices.



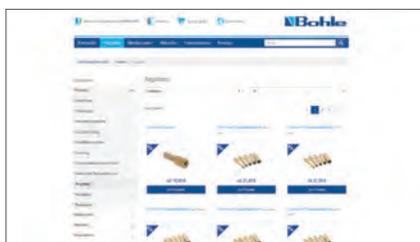
Clearly structured product presentation with filter function.



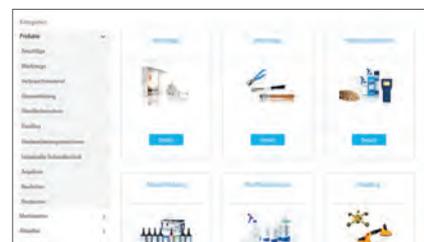
Convenient search function.



Secure customer area with online and offline order history.



New offers and deals.



24/7 the latest product portfolio.

How to contact Bohle

Bohle AG

Bohle Online Shop

www.bohle-group.com

If you don't have a contact person yet, dial

Phone	+49 2129 5568-0 for our reception
Fax	+49 2129 5568-201
E-Mail	export@bohle.de
Collecting goods	D - 42781 Haan · Siemensstraße 1
Postal address	D - 42755 Haan · Postfach 101163

Office hours

Monday to Thursday	8.00 am - 4.30 pm
Friday	8.00 am - 2.00 pm

Collecting goods

Monday to Thursday	8.00 am - 3.00 pm
Friday	8.00 am - 12.00 am



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