

thermopress injection moulding system for metal-free dentures

The range of biocompatible materials available guarantees a wide and varied application range of the system.



bre.crystal

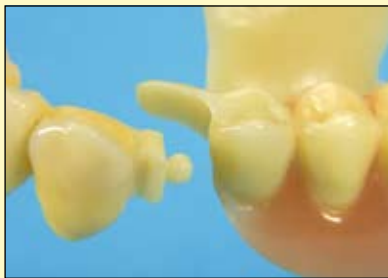
features long-term stability, provides a dense and hence smooth surface. This results in enhanced comfort of wearing of full dentures.

- no residual monomer – high biocompatibility
- limited water absorption – constant suction effect, lasting precision of fit
- available in the shades: crystal-clear, pink 1, pink 2, pink 3, pink stippled
- to be processed at 260° C

bre.dentan

is an industrially polymerized thermoplastic resin which increases the resistance to fracture and the biocompatibility of crowns and bridges.

- can be veneered with conventional C+B resins
- available in the three common dentine shades A, B, C
- to be processed at 260° C



Bio Dentaplast

Clasps and attachments which are normally made of metal can be produced using tooth-colored Bio Dentaplast. The aesthetic appearance of teeth at which retaining clasps have been attached is improved.

Additional indications are

- crowns and bridges
- telescopic and attachment work
- tooth-colored clasps
- shades A1, A2, A3, B2, B3 based on the VITA shade guide
- to be processed at 220° C

bre.flex

Unbreakable denture base material for partial dentures.

The indication range also includes splints and sports mouthguards.

- available in the shades: translucent, pink 1, pink 2, pink 3 and tooth shade B
- to be processed at 222° C



Bio XS

The high-melting Bio XS features dimensional and thermal stability and is stress-free to simplify the fabrication of precision-fit dentures.

- The extremely stable thermoplastic resin is perfectly suitable for the fabrication of metal-free veneers of crowns and bridges and for telescopic and attachment work.
- supplied in cream tinge
- to be processed at 380° C

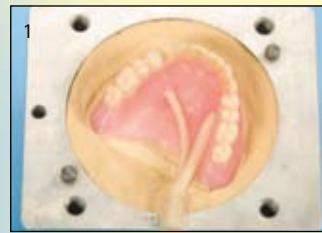
bre.crystal

Aesthetically appealing thermoplastic resin



	bre.crystal	Heat-/cold-curing resin
Shrinkage	0.6 %	5-7 %
Water absorption	0.35 %	2 %
Residual monomer	0.2 %	2-7 %

Wax model



The flexible acrylic sprue wax with the required diameter of 10 mm is waxed on to the premolars and thins out towards the palatal direction.



Dentasil tooth protection silicone (Order No. 520 0029 6) allows to achieve a high final hardness (Shore 65) so that the teeth are perfectly protected against the high press-in pressure.

bre.crystal (Thermoplastic resins - partial and full dentures)

color	Quantity	Order No.
crystal-clear	20 x 24 g	540 OP32 4
crystal-clear	20 x 30 g	540 OP33 0
crystal-clear	1 x 500 g	540 OP30 5
pink 1	20 x 24 g	540 OP12 4
pink 1	20 x 30 g	540 OP13 0
pink 1	1 x 500 g	540 OP10 5
pink 2	20 x 24 g	540 OP22 4
pink 2	20 x 30 g	540 OP23 0
pink 2	1 x 500 g	540 OP20 5
pink 3	20 x 24 g	540 OP42 4
pink 3	20 x 30 g	540 OP43 0
pink 3	1 x 500 g	540 OP40 5
pink veined	20 x 24 g	540 OP02 4
pink veined	20 x 30 g	540 OP03 0
pink veined	1 x 500 g	540 OP00 5

Aluminium cartridges empty

18 pieces
Order No. 540 KL01 8

Acrylic sprue wax

220 g
Order No. 430 0172 0

Bonding agent

Order No. 520 0029 2

Wipo-Dur

Repair material
pink, powder
500 g Order No. 540 ORP0 5
liquid
500 ml Order No. 540 ORF0 5

Investing



The wax model is invested into the flask using class III or IV stone and then boiled out.

Retentions



The roughened acrylic teeth with retentions are wetted with the Haft-connector (bonding agent) for 5 min. The circular retention produced using Vb2 ensures safe hold.

Polishing



The highly compressed bre.crystal denture can be processed and polished just like conventional acrylics.



Acrylic Sep Acrylic/plaster separating liquid

250 ml
Order No. 520 0029 1
750 ml
Order No. 520 0029 4



Plaster insulating agent

750 ml
Order No. 540 0013 5



Diamond point Veneering technique Vb 2

1 piece
Order No. 340 0083 0

Accessories:



Dentasil tooth protection silicon

2 x 50 ml
with 24 mixing
cannulas size 2, yellow
Order No. 520 0029 6

Mixing cannulas

size 2, yellow
12 pieces
Order No. 320 0045 1



Dosing device

Order No. 320 0044 0

bredent

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bre.dentan

Thermoplastic resin featuring high resistance to fracture for tooth-colored crowns, bridges and long-term temporary restorations – simple, fast and favorably-priced.



Outstanding material properties for accurate positioning and perfect fit. Ideally to prepare exact, high-quality temporary restorations.

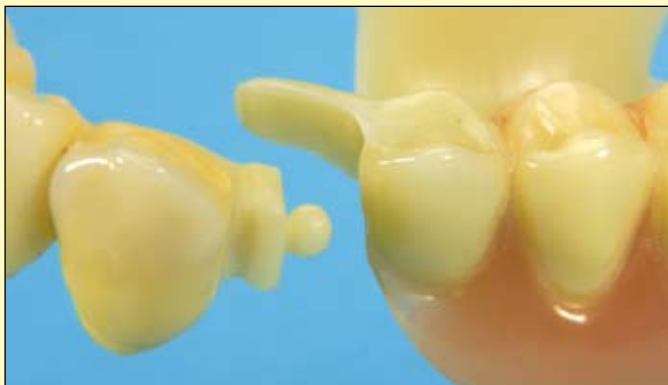


bre.dentan in 3 tooth shades
(crowns and bridges)

	Quantity	Order No.
bre.dentan A	20 x 16 g	540 ODA1 6
bre.dentan B	20 x 16 g	540 ODB1 6
bre.dentan C	20 x 16 g	540 ODC1 6

Bio Dentaplast

... offers a wide range of applications in the area of attachment and chrome cobalt work.



Reinforced pre-bent clasp pattern for resin injection moulding. No application of additional wax required, hence time is saved and correct cross-section design is ensured.

Bio Dentaplast
(tooth shade based on the Vita shade guide)

	Quantity	Order No.
A1	20 x 16 g	540 BA11 6
A1	20 x 20 g	540 BA12 0
A2	20 x 16 g	540 BA21 6
A2	20 x 20 g	540 BA22 0
A3	20 x 16 g	540 BA31 6
A3	20 x 20 g	540 BA32 0
A3	1 x 500 g	540 BA30 5
B2	20 x 16 g	540 BB21 6
B2	20 x 20 g	540 BB22 0
B2	1 x 500 g	540 BB20 5
B3	20 x 16 g	540 BB31 6
B3	20 x 20 g	540 BB32 0
B3	1 x 500 g	540 BB30 5

Expando-Rock-Set
5 kg expansion plaster
500 ml Expandosol
Order No. 570 OERS 5



Premolar clasps, bent for resin injection moulding
10 sheets with 10 clasps each left + right
Order No. 430 0748 5

Preparatory work



The master model is duplicated in the usual way.

Duplicate



The low shrinkage of Bio Dentaplast is compensated with expansion stone.

Model



The wax model must be thicker; at the largest diameter a minimum thickness of 1.5 mm is required. The retentions are reinforced using a 1.0 mm wax wire.

Investing



Bio Dentaplast is a readily flowing thermoplastic resin. Wax wires with a diameter of 3.5 - 4.0 mm are sufficient for the injection channels.

Separating



Brilliant surfaces can be achieved by sealing the plaster surface with the heatresistant UV Lack (varnish) (Order No. 540 0100 6).

Finishing



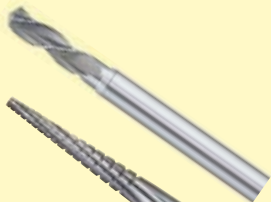
The materials (Expando-Rock, Insulating, Bio Dentaplast) that are matched with each other compensate expansion and shrinkage and allow the fabrication of precision-fit dentures.

bre.flex

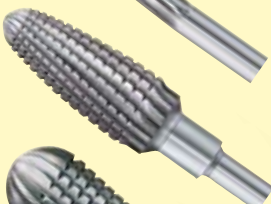
bre.flex is a flexible, highly compatible polyamide and has proved its suitability for dentures for allergics.



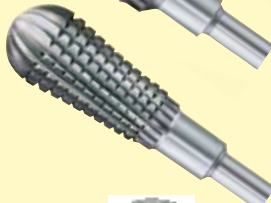
Silicone burs are perfectly suitable for processing bre.flex.



Diatit-Multidrill
1.5 Ø x 8 mm
Order No. 330 0073 0



Silicone bur
Order No. S 187 QG 23



Silicone bur
Order No. S 263 QG 60



Silicone bur
Order No. S 237 QG 65

Die varnish
Order No. 540 0100 6

Accessories:



Acrylic Sep
Acrylic/plaster
separating liquid
250 ml
Order No. 520 0029 1
750 ml
Order No. 520 0029 4



Dentasil tooth
protection silicon
2 x 50 ml
with 24 mixing
cannulas size 2, yellow
Order No. 520 0029 6

Mixing cannulas
size 2, yellow
12 pieces
Order No. 320 0045 1

Cartridges empty
18 pieces
Order No. 540 KL01 8



Dosing device
Order No. 320 0044 0

Duplicate



Use Expando-Rock to produce the model.

Wax model



The wax model has a layer thickness of only 0.5 - 0.8 mm.

Separating



Brilliant and homogeneous denture surfaces are achieved by sealing the plaster surface with die varnish (Order No. 540 0100 6).

Retention



To ensure safe hold of the acrylic teeth, a retention (1 mm) is drilled from the mesial to the distal direction. Diatit-Multidrill (Order No. 330 0073 0)

Investing



Use a class III stone for bases and counter parts.

Devesting



After cooling down for at least 20 min, bre.flex can be easily devested.

bre.flex

(splints and sports mouthguards, chrome cobalt and attachment work)

Color	Quantity	Order No.
translucent	20 x 24 g	540 OF12 4
translucent	20 x 20 g	540 OF12 0
translucent	20 x 16 g	540 OF11 6
translucent	1 x 500 g	540 OF10 5
tooth shade B	20 x 24 g	540 OF22 4
tooth shade B	20 x 20 g	540 OF22 0
tooth shade B	20 x 16 g	540 OF21 6
tooth shade B	1 x 500 g	540 OF20 5
pink 1	20 x 24 g	540 OF02 4
pink 1	20 x 20 g	540 OF02 0
pink 1	20 x 16 g	540 OF01 6
pink 1	1 x 500 g	540 OF00 5
pink 2	20 x 24 g	540 OF42 4
pink 2	20 x 20 g	540 OF42 0
pink 2	20 x 16 g	540 OF41 6
pink 2	1 x 500 g	540 OF40 5
pink 3	20 x 24 g	540 OF32 4
pink 3	20 x 20 g	540 OF32 0
pink 3	20 x 16 g	540 OF31 6
pink 3	1 x 500 g	540 OF30 5

Finishing



bre.flex is resistant to fracture. Perfectly suitable for the fabrication of flexible dentures.

Expando-Rock-Set
5 kg expansion plaster
500 ml Expandosol
Order No. 570 OERS 5

Bio XS

The thermoplastic resin developed by bredent is an extremely stable polymer, high-melting and biocompatible.

Perfect bonding of the veneering resin to the Bio XS framework is achieved by sandblasting (grain size 110 μ) at a pressure of approx. 2 bars. Retentions should be used.

Bio XS

cream	5 x 8 g	Order No. 540 XS00 8
cream	5 x 16 g	Order No. 540 XS01 6

Accessories:

Expando-Rock-Set	thermopaste 400
5 kg expansion plaster	Special paste
500 ml Expandosol	50 g
Order No. 570 OERS 5	Order No. 540 0105 1



1 Invested wax-up on the model made from Expando-Rock in the required expansion. This way a highly accurate design is achieved and the amount of reworking is reduced.



2 The advanced thermoplastic resin Bio XS allows the fabrication of very thin CoCr frameworks and avoids thermal interactions in the patient's mouth for enhanced well-being.



3 Telescopic upper framework prepared for a palate-free denture. Features dimensional and thermal stability and is stress-free. Consequently, the fabrication of biocompatible, accurate dentures are simplified considerably and patients receive previously unachieved comfort of wearing.

Crown and bridge frameworks, attachments and telescopes are produced in the injection moulding technique without any complex procedures.

The warm, cream tinge supports coloring even of very thin veneer frameworks.

Perfect aesthetic appearance is achieved also in cases of limited space.

Bio XS – material properties

- Readily flowing up to 0.3mm
- Flexural strength approx. 170 MPa and tensile strength approx. 100 MPa
- Resistance to cleaning agents – tested
- Resistance to discoloration caused by food or drinks – tested
- Sterilizable

Bio XS – tested biocompatibility and quality

- Biocompatibility tested according to ISO 10993
- Quality control according to ISO 9001

Bio XS – for metal-free restorations to satisfy highest demands

- Perfectly matched materials
- Precision-fit injection results
- No thermal irritation in the patient's mouth
- No metal taste
- Excellent comfort of wearing

thermopress 400

Injection moulding unit for thermal resins up to 400° C

No additional equipment such as CO₂ cylinder or compressed air required. This way costs and time are saved. The injection moulding result can be achieved more easily and safely since pressure drop is avoided.

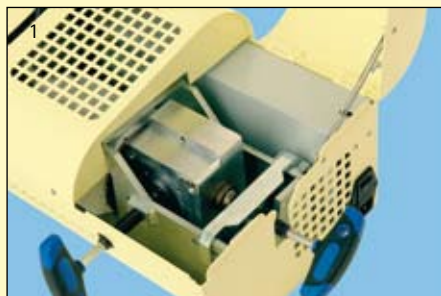
Added comfort thanks to simple programming and operating of the unit.

Time-saving function thanks to simultaneous operation of both heating chambers

The injection process can only be performed with the lid being closed; additional safety is provided. Convenient removal of the flask thanks to automatic cartridge ejection if the bracket is unlocked.



thermopress 400
1 unit with power cord
2 allen keys
1 cleaning brush
1 special tool
Order No. 110 0040 0



Guide and fastening mechanism holds the flask safely in the unit. As a consequence, transmission of power during the injection process is fully utilized - no energy is lost.



Heating is accelerated by high-performance thermocouples. The temperature of the resin is maintained on a constant level by two thermocouples.



Convenient and clear operation using the multi-functional display. Up to 30 different program variations can be selected.

Technical data - thermopress 400

Width	650 mm
Height	250 mm
Depth	300 mm
Weight	40 kg
Voltage	220 - 230 V
Power	0.5 - 1.6 kW max. 2.2 kW

Accessories thermopress 400:

1 press-out device and punch*
1 pair of cartridge pliers*
1 flask hook with hex*
1 flask, small* (l 122 cm, w 102 cm, h 72 cm)
1 flask, large (l 140 cm, w 102 cm, h 72 cm)
1 cleaning brush
1 thermopaste 400 special paste, 50 g*
Expando-Rock-Set
5 kg expansion plaster, 500 ml Expandosol

Order No. 140 0090 4
Order No. 140 0090 6
Order No. 140 0091 2
Order No. 140 0090 3
Order No. 140 0090 5
Order No. 110 0040 2
Order No. 540 0105 1
Order No. 570 0ERS 5

thermopress-Workshop
Order No. 950 0020 0

thermopress introductory assortment
5x30 g bre.crystal pink 1
3x24 g bre.crystal crystal-clear
5x24 g bre.flex pink 1
2x20 g bre.flex pink 2
2x16 g bre.dentan A
3x16 g Bio Dentaplast A2
Order No. 140 0090 2

thermopress 400 accessories assortment, 7 pieces
Order No. 110 0040 1

View above, accessories thermopress 400: articles marked with * are included in thermopress 400 accessories assortment!

breident

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Subject to changes