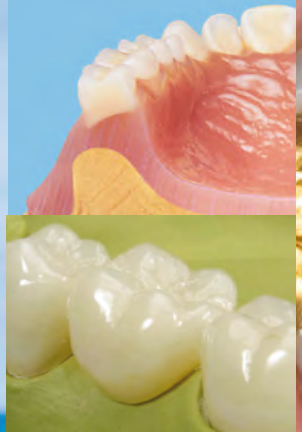
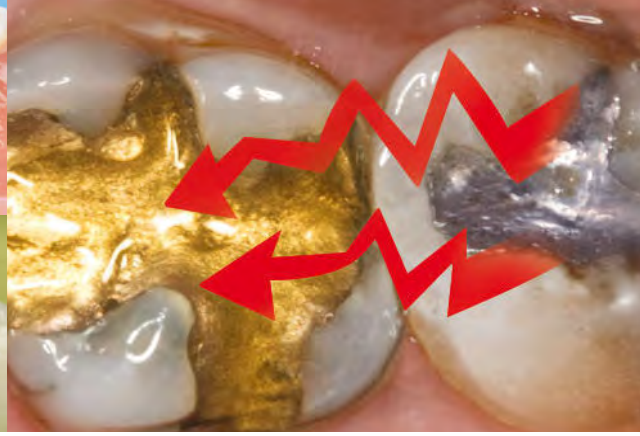
thermopress 400

One system for five thermoplastic plastics

Better quality of life with metal-free restorations

bredent

Better quality of life with metal-free restorations

More and more patients are requesting biocompatible restorations.

Awareness of this is constantly growing thanks to the countless reports on the common use of worrying chemical additives in foods and everyday products.

The problem with metals

Studies on the negative effects of metals in the mouth, such as the gold, cobalt-chrome, nickel-chrome alloys and amalgams (mercury alloys) in established use in restorative dentistry, have also become known to the public.

It has been proven that alloys can lead to undesired and allergic reactions in sensitive persons. These present as thermal effects, a metallic taste and galvanic pains ('shocks') which can generate up to 1000 millivolts. Above all, the use of different metals (alloy additions) in the mouth results in stronger current differences and reactions.

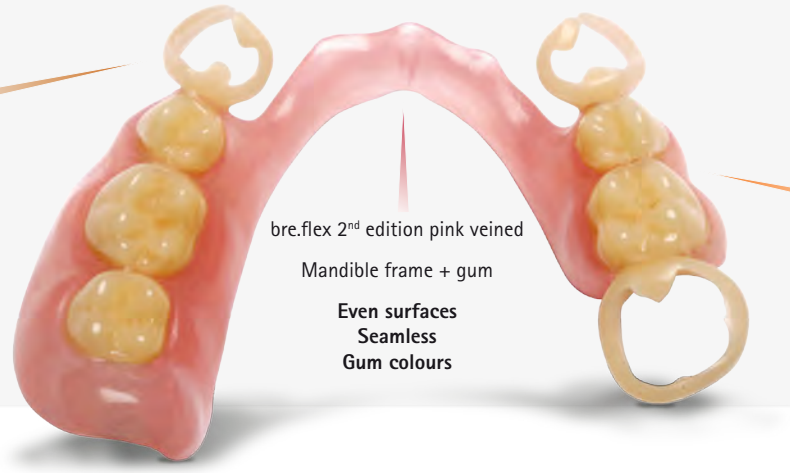
The sharp rise in allergies, intolerances and increasing symptoms of metal intolerances have finally led to a change in opinion with regard to the choice of dental materials for restorative dentistry.

Metal-free and biocompatible

The solution to this problem lies in the use of biocompatible materials such as ceramics in fixed restorations and hypo-allergenic polymers for removable restorations.

The benefits of the mostly amorphous, transparent materials whose natural colours, transparency and opalescence guarantee an optimal red-white look, so that the through-dyed tooth and gum-coloured stable restorations fit perfectly into the remaining teeth. Patients' feelings that they are 'like their own teeth' intensify into deep feelings of satisfaction.

The bredent group is constantly communicating with dentists and dental technicians, as well as medical faculties, who actively participate in developing materials and checking how they work. The results have been impressing patients for decades now.



Restorations for sensitive patients

For the thermopress 400 system, a total of five different thermoplastic plastics are available in different tooth and gum colours to meet the individual needs of patients. Thanks to this great variety of materials, many dental indications can be dealt with successfully.

You can offer your patients a removable, biocompatible restoration (implant-borne or not), which can be easily manufactured without using a variety of combinations of different materials, is easy to put in and take out and additionally ensures exceptional wear comfort.

The System

The Device

thermopress 400 stands for the machine-controlled, reproducible manufacturing of biocompatible, thermoplastic restorations while maintaining the excellent material properties and meeting the individual requirements of indications.

The materials

Polyan IC

Partial and total prosthetics, implant-borne restorations, splinting technique, simple orthodontics (Bionator).

Bio Dentaplast

Clasp dentures, splinting technique (snap-on) base plates, transversal frames. Secondary constructions: telescope, attachments.

bre.flex & bre.flex 2nd edition

Partial and total prosthetics, splinting technique, base plates, transversal frames (mouth guards for sport/bre.flex), clasp dentures, secondary constructions: bar, telescope, attachments (bre.flex 2nd edition).

bre.dentan HP

Long-term temporary arrangements for crowns and bridges.

Polyan IC

Polyan IC

Polymethyl methacrylate (PMMA/the reference: hard, rigid, impact-resistant)

- Pure thermoplastic (polyan) based on PMMA, modified polymethyl methacrylate
- Prosthesis and splint plastic suitable for allergy-sufferers with many years of market acceptance (>35 years)
- High level of purity and highly biocompatible, no mucosal irritations
- Residual monomer content < 1%
- Biocompatible
- Best fitting precision with top class suction effect
- Easy, safe + homogeneous material processing
- Absolute colour stability for years
- Highly cross-linked, smooth surface
- High breaking and bending strength
- Fast surface cleaning
- Personalisation of the red-white-look possible (crea.lign)
- High quality extension through rebasing – injection moulding procedure (retentive)
- Can also be repaired with autopolymerisation (chemical binding with uni.lign)
- poly.link IC adhesive agent for chemical binding of tooth to prosthetic base
- Implant-borne anchors can be injection-moulded without any problems, or processed subsequently using uni.lign!

Colours

trans-parent (clear) | pink 1 | pink 2 | pink 5 | pink 3 | pink 4 veined

Product range

REF	Colour	QTY
540PI005	transparent (clear)	1 x 500 g
540PI024	transparent (clear)	20 x 24 g
540PI030	transparent (clear)	20 x 30 g
540PI105	pink 1	1 x 500 g
540PI124	pink 1	20 x 24 g
540PI130	pink 1	20 x 30 g
540PI205	pink 2	1 x 500 g
540PI224	pink 2	20 x 24 g
540PI230	pink 2	20 x 30 g
540PI305	pink 3	1 x 500 g
540PI324	pink 3	20 x 24 g
540PI330	pink 3	20 x 30 g
540PI405	pink 4, veined	1 x 500 g
540PI424	pink 4, veined	20 x 24 g
540PI430	pink 4, veined	20 x 30 g
540PI505	pink 5	1 x 500 g
540PI524	pink 5	20 x 24 g
540PI530	pink 5	20 x 30 g

REF	QTY
540PISET	**Polyan IC introductory set** 2 x 24 g Polyan IC transparent (clear) 2 x 24 g Polyan IC pink 1 2 x 24 g Polyan IC pink 2 2 x 24 g Polyan IC pink 3 2 x 24 g Polyan IC pink 4, veined 2 x 30 g Polyan IC transparent (clear) 2 x 30 g Polyan IC pink 1 2 x 30 g Polyan IC pink 2 2 x 30 g Polyan IC pink 3 2 x 30 g Polyan IC pink 4, veined
14000902	**thermopress introductory set** 3 x 24 g Polyan IC transparent (clear) 5 x 30 g Polyan IC pink 1 2 x 20 g bre.flex pink 2 5 x 24 g bre.flex 2nd edition pink veined 2 x 16 g bre.dentan HP A (corresponds to Vita colour A2) 3 x 16 g Bio Dentaplast A2

Indication

Partial and total prosthetics, implant-borne restorations, splinting technique, simple orthodontics (Bionator).

Literature collection

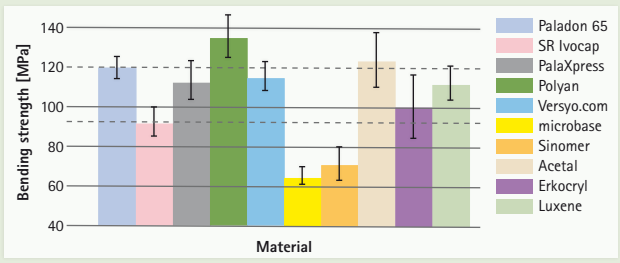
Sensitisation test
Maximisation test as per Magnusson and Klingman in accordance with ISO 10993-10; Project no: 010915-30/3, test plates Polyan IC Medical Device Services, Report no: 207050108
Result: no reactions of any type were determined.
21/06/2001

Review of modern prosthetic base plastics according to ISO 1567:1999 (Überprüfung moderner Prothesenbasiskunststoffe nach der ISO 1567:1999)
Dr Ernst Ulrich Rosenbauer, PhD awarded Nov. 2000; Cologne University, Prof. Niedermeier

Thermoplastic prostheses: injection moulding process in the cartridge system (Prothesen aus Thermoplast, Spritzgussverfahren im Kartuschensystem)
Dr Karl Wirz; Womrath; appeared in Dental-Labor June 1993

Various Prosthesis Manufacturing Processes, in Particular the Thermoplastic Method (Die verschiedenen Prothesenherstellungsverfahren unter besonderer Berücksichtigung der thermoplastischen Methode)
Prof. Marx, Mainz University; Special edition of 'Der Freie Zahnarzt' magazine; Issue 2/1983.

Materials-Mechanics Comparison of Hypo-allergenic



Bio Dentaplast

Polyoxymethylene (POM/Acetal, semi-flexible)

- Biocompatible
- Monomer-free
- Tooth colours
- Excellent wear comfort
- Stress-free contact material on the enamel of the antagonists
- Perfectly suited for use in temporary solutions in the healing phase and for removable, implant-borne restorations
- Unbeatable aesthetics
- Limited flexibility
- High crystallinity
- High fit accuracy and detail reproduction
- Optimal friction values (attachments/telescope)
- Thin restorations possible (> 0.3 mm snap-on technique)
- Quick and easy to process
- Rebasing possible under certain circumstances – injection moulding procedure (retentive)

Colours

Tooth shade Dentine A1	Tooth shade, Dentine A2	Tooth shade, Dentine A3	Tooth shade, Dentine B2	Tooth shade, Dentine B3

Product range

REF	Colour	QTY
540BA105	A1	1 x 500 g
540BA116	A1	20 x 16 g
540BA120	A1	20 x 20 g
540BA205	A2	1 x 500 g
540BA216	A2	20 x 16 g
540BA220	A2	20 x 20 g
540BA305	A3	1 x 500 g
540BA316	A3	20 x 16 g
540BA320	A3	20 x 20 g
540BB205	B2	1 x 500 g
540BB216	B2	20 x 16 g
540BB220	B2	20 x 20 g
540BB305	B3	1 x 500 g
540BB316	B3	20 x 16 g
540BB320	B3	20 x 20 g

Indication

Clasp dentures, splinting technique (snap-on) base plates, transversal frames. Secondary constructions: telescope, attachments.

The aesthetic splint in particular allows quick immediate treatment in the form of a necessary bite-raising procedure, treatment of faults (loss of a tooth, abrasion, chipping of the tooth substance, misalignments) incl. the provisional use of an implant-borne restoration or a telescopic travel prosthesis, manufactured in one monochrome piece.

This material allows you to deal with many dental indications easily and very quickly.

Literature collection

Thermoplastic Temporary Prostheses in Laboratory and Practice (Thermoplastische Provisorien in Labor und Praxis) International Dental Technology Magazine
Dr Jochen Mellinghoff ZTM Franz Kreutle updated 18/04/2012

bre.flex & bre.flex 2nd edition

Polyamide (PA/flexible bre.flex and semi-flexible bre.flex 2nd edition)

- Pure polyamide (PA)
- High level of purity and highly biocompatible
- No mucosal irritations
- 100% free from residual monomers
- Free from metal oxides
- Free from DBPO
- Biocompatible
- Perfectly suited for use in temporary solutions in the healing phase and for removable, implant-borne restorations (long-term solution)
- Easy for the patient to fit and remove the restoration (e.g: limited mouth function – lockjaw).
- Lightweight
- Very good flow properties, even in areas as slender as 0.5 mm
- Durable plastic, does not become brittle
- Almost unbreakable
- High quality extension through rebasing – injection moulding procedure (retentive)
- Good polishing properties
- Plaque-resistant, high shine surface
- Easy to clean

Colours: bre.flex

translucent | pink 1 | pink 2 | pink 3 | Tooth shade B

Colours: bre.flex 2nd edition

clear | pink 2 | pink veined

bre.flex 2nd edition exists in the colours clear, pink 2 and pink veined.

Product range

REF	Colour	QTY
5400F005	pink 1	1 x 500 g
5400F016	pink 1	20 x 16 g
5400F020	pink 1	20 x 20 g
5400F024	pink 1	20 x 24 g
5400F105	translucent	1 x 500 g
5400F116	translucent	20 x 16 g
5400F120	translucent	20 x 20 g
5400F124	translucent	20 x 24 g
5400F205	Tooth shade B	1 x 500 g
5400F216	Tooth shade B	20 x 16 g
5400F220	Tooth shade B	20 x 20 g
5400F224	Tooth shade B	20 x 24 g
5400F305	pink 3	1 x 500 g
5400F316	pink 3	20 x 16 g
5400F320	pink 3	20 x 20 g
5400F324	pink 3	20 x 24 g
5400F405	pink 2	1 x 500 g
5400F416	pink 2	20 x 16 g
5400F420	pink 2	20 x 20 g
5400f424	pink 2	20 x 24 g
2nd edition		
5400F505	pink 2	1 x 500 g
5400F516	pink 2	20 x 16 g
5400F524	pink 2	20 x 24 g
5400F605	pink veined	1 x 500 g
5400F616	pink veined	20 x 16 g
5400F624	pink veined	20 x 24 g
5400F805	clear	1 x 500 g
5400F816	clear	20 x 16 g
5400F824	clear	20 x 24 g

Indication

Partial and total prosthetics, splinting technique, base plates, transversal frames (mouth guards for sport/bre.flex), clasp dentures, secondary constructions: bar, telescope, attachments (bre.flex 2nd edition).

Literature collection

Sensitisation test
Maximisation test as per Magnusson and Klingman in accordance with ISO 10993-10; test plates 010915 – 30/2 bre.flex pink Result: no reactions of any type were determined (12/06/2001).

Cytoxicity Test, L929 Proliferation
according to DIN EN ISO 10993-5, -12, ISO 9363-1 LM SOP 4-06-01 test plates bre.flex pink (Flexiplast pink) Result: for the prosthesis material bre.flex (Flexiplast), there was no evidence of cytotoxic substances after 24 hours of continuous contact. The material shows no cytotoxic characteristics.

bre.dentan HP

Polymethyl methacrylate (PMMA/hard, rigid)

- Pure thermoplastic based on PMMA, modified polymethyl methacrylate
- No sensitizing setting catalysts
- Translucent colour effect
- High level of purity and highly biocompatible, no mucosal irritations
- Comfortable to wear
- Residual monomer content < 0.3%
- Biocompatible
- Perfect fit
- Easy, safe + homogeneous material processing
- Extremely high quality detail reproduction
- Absolute colour stability for years
- Highly cross-linked, smooth surface
- High breaking strength
- Plaque-resistant, high shine surface
- Fast surface cleaning
- Can also be personalised with composite (crea.lign)

Colours

Tooth shade A (A2)

Tooth shade B (A3/B2)

Tooth shade C (C2/D3)

Product range

REF	Colour	QTY
5400DA16	A	20 x 16 g
5400DB16	B	20 x 16 g
5400DC16	C	20 x 16 g

Indication

Crowns and bridges as long-term temporary devices.

Mill sets for thermoplastic plastics

Thermoplastic plastics

Heat-reduced processing for gentle processing of thermoplastic plastics is achieved using the compiled set. Deformations and structural damage to the framework are therefore prevented and the life span extended.

10-piece set
REF 330 0083 0

Total prosthetics

Quick and efficient – offered by this set with simultaneous smooth surfaces, which significantly reduces reworking.

Six-piece set
REF 330 0083 2

thermopress 400

One efficient injection moulding system for five biocompatible materials and infinite indications

Fifteen years of experience in working with thermoplastics in dental technology have been incorporated into the development and optimisation of the sophisticated injection moulding system thermopress 400 for a well-fitting, homogeneous and biocompatible restoration. The injection moulding device ensures a first class performance in terms of material processing thanks to even pressure and stable temperature control.

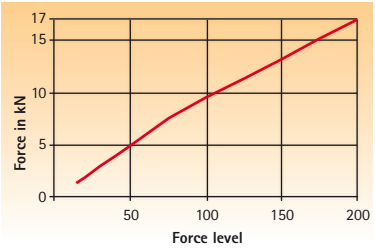
Process safety and health

thermopress 400 is a compact, freely programmable injection moulding device operated without the need for an external source of compressed air. The predefined, safe manufacturing process uses special flasks and cartridges pre-filled with granulate in order to prevent harmful influences. Contact allergies (eczemas) – known to be triggered by traditional manufacturing processes such as those used with chemoplastic substances – are therefore excluded. Contrary to chemoplastics (powder-liquid process or hot polymerisation), high-performance polymers have minimal or even no monomers.

Tolerability for the patient

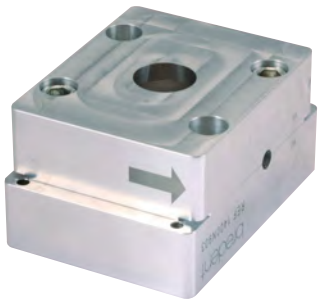
This restoration offers not only allergen-sensitive patients the high tolerability of a metal-free, biocompatible, aesthetic and stable restoration, but also a preventative solution for all other patients.

thermopress 400
strength development



thermopress 400
technical details

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



Polyan IC	**Bio Dentaplast**	**bre.flex**	**bre.flex 2nd edition**	**bre.dentan HP**
Implant-borne total prosthesis	Skeletonised clasp dentures	Removable clasp dentures	Telescopic partial prosthetics	Provisional bridges

- No additional equipment required (cost of compressed air supply, compressor, CO2 bottles saved)
- Device is easy to programme and operate (up to 30 programmes/variability)
- Pre-installed injection moulding settings for all bredent thermoplastics (time saving)
- High power transmission in the moulding process with no energy loss (no pressure loss, optimal injection moulding results)
- Even heating which is gentle on the thermoplastic material (no material degradation)
- Both heating chambers can be used simultaneously (in the same temperature range)
- Automatic cartridge ejection (easy to remove flask)
- Safety (error message display, secured closing mechanism)

thermopress 400 accessories

1 Devesting Frame and Stamp*	REF 140 0090 4
1 Set of Cartridge Pliers*	REF 140 0090 6
1 Flask Hook with Allen key*	REF 140 0091 2
1 Flask small* (L 122 mm, W 102 mm, H 72 mm)	REF 140 0N90 3
1 Flask large* (L 140 mm, W 102 mm, H 72 mm)	REF 140 0N90 5
1 Cleaning Brush REF 110 0040 2	
1 Thermopaste 400 – special paste for cartridges 50 g*	REF 540 0105 1
Expando-Rock Set 5 kg expansion plaster, 500 ml Expandosol	REF 570 0ERS 5

thermopress 400 accessory set

7-piece set	REF 110 0040 1

Only items marked with * are included in the accessory set

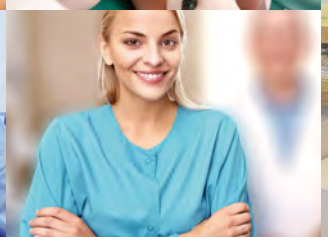
thermopress introductory set 1 REF 540 S000 1

1 x 24 g Polyan IC transparent
2 x 30 g Polyan IC pink 1
2 x 24 g Polyan IC pink 2
5 x 24 g bre.flex 2nd edition pink veined
5 x 16 g bre.dentan HP A (corresponds to Vita colour A2)
5 x 20 g Bio Dentaplast A3
250 ml Acrylic Sep (isolating plaster against plastic)
20 ml Spacer varnish, light-curing (plaster sealant)
50 g Thermopaste 400 – special lubricant

thermopress introductory set 2 REF 140 0090 2

3 x 24 g Polyan IC transparent
5 x 30 g Polyan IC pink 1
2 x 20 g bre.flex pink 2
5 x 24 g bre.flex 2nd edition pink veined
2 x 16 g bre.dentan HP A (corresponds to Vita colour A2)
3 x 16 g Bio Dentaplast A2




Thermoplastics expertise

'Health begins in the mouth' – a sound, healthy oral flora in combination with functional hypo-allergenic restorations is the best way to ensure physical health and vitality.

Training

If you would like to know more about this, join our module-based training course at our training centre in Senden, where you will learn all you need to know about processing and properties in a hands-on way. The instructors have many years of experience and are happy to help you get to know these innovative materials.

It is also possible to take corresponding courses with our system advisor on-site in your lab. These can be requested separately.

Information on the current course programme

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F: +49 (0) 73 09 / 8 72-4 44
www.bredent.com
@: info@bredent.com

Use this opportunity

to learn more about our complete packages (device + material + course) at very attractive prices from our sales representatives.

Quick return on investment

Thanks to the many indications it covers, the thermopress 400 system offers a very quick return on investment.

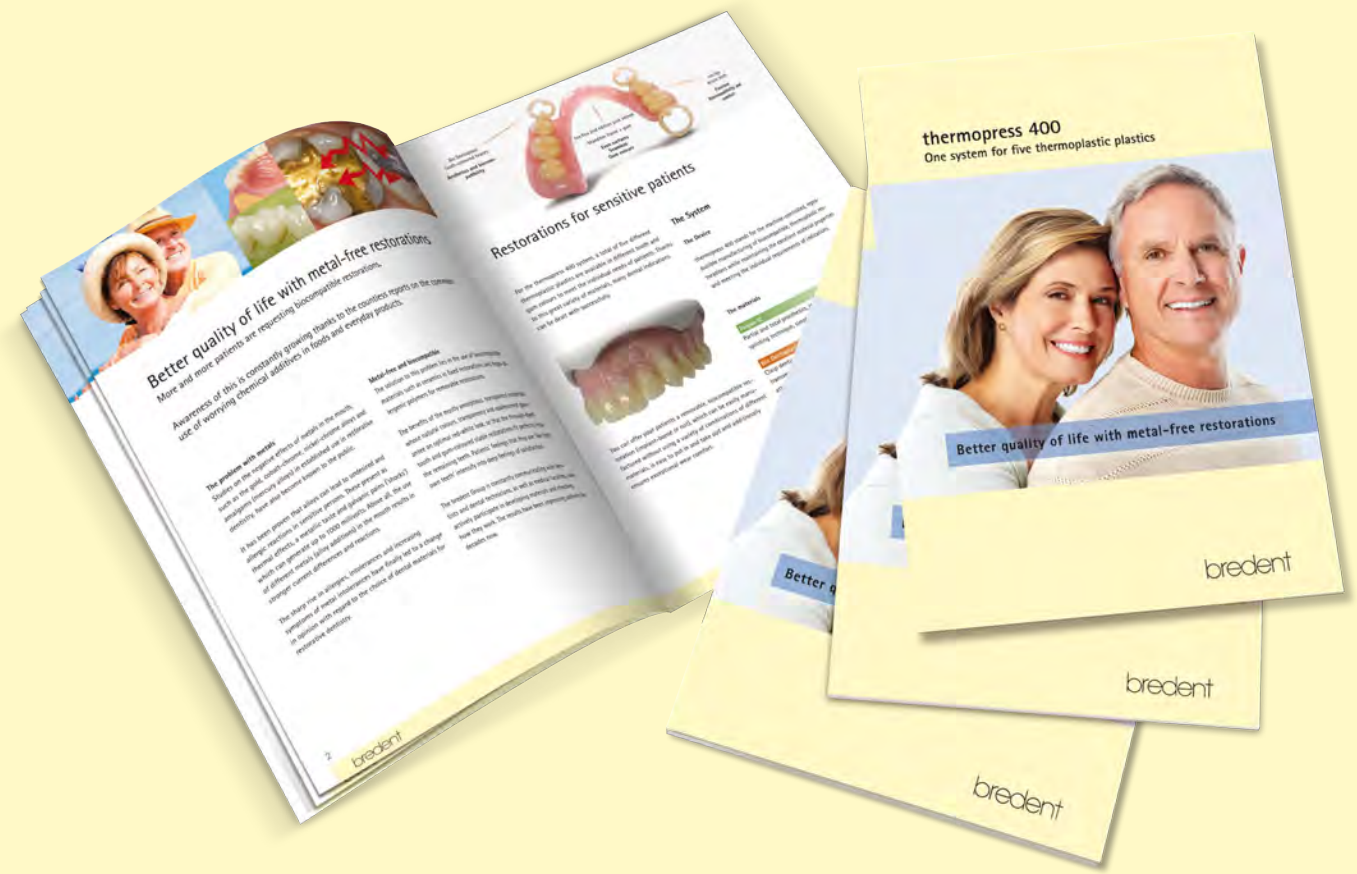
In the following table, you can see how the whole system pays for itself in less than one month with only one intervention per indication, based on average prices in Germany.

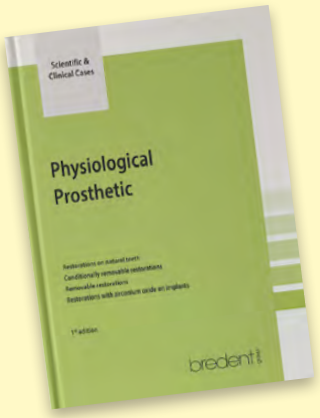
From the second month, it simply generates additional value for you!

Material	Indication	Number of interventions per month (20 days)	Amortisation after _ months
Polyan IC	Full prosthetics Partial prosthetics Transparent hard bite splint	1 1 1	0.8
Bio Dentaplast	clasp dentures Telescopic work Attachment work semi-flexible bite splints/aesthetic splint	1 1 1 1	
bre.flex	Total prosthetic clasp dentures Permanently soft, flexible bite splint	1 1 1	
bre.flex 2nd edition	Total prosthetic clasp dentures Semi-flexible bite splint Partial prosthesis with secondary telescope	1 1 1 1	
bre.dentan HP	Five plastic crowns Tooth-coloured hard bite splint	1 1	

thermopress 400

One system for five thermoplastic plastics





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Subject to corrections and changes 000626GB-20150417