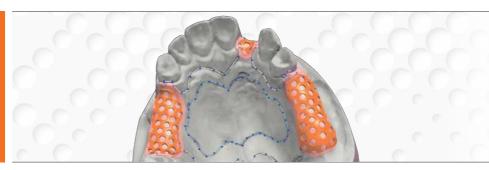




Cast partial dentures – the digital way.



remanium® for all manufacturing technologies.

Cast partial dentures can either be cast using the conventional method of duplication or be fabricated using the SLM process (Selective Laser Melting) directly with remanium®. The CAD/Cast process is also a suitable method. The framework is milled from a wax/acrylic blank or plotted for 3D print. Further steps include the conventional techniques of investing and casting.





Coordinated products and processes.

When it comes to cast partial dentures and their fabrication, Dentaurum has a great deal of know-how covering the whole spectrum, including viable alternatives for the future. Coordinating materials and finding effective processes for them has always been one of the company's strengths. One such development is the use of our remanium® powder for the SLM technology. Milling blanks made of wax/acrylic, specially developed for the CAD/Vest process, and modified investment materials offer possibilities which can redefine the fabrication of cast partial dentures.





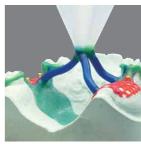
The successful system.

The expansion values of our investment materials are matched to our remanium® alloys. Important components such as the duplicating materials are incorporated into the system. A whole range of materials and machines completes this cast partial denture system.

Biocompatible dental restorations.

Alloys, investment materials, waxes and duplicating materials are produced in-house at Dentaurum in Ispringen under strict quality controls. The use of pure raw materials and the thorough examination of each and every batch guarantee the consistently high quality of our products.





Cast partial denture alloys

For optimum biocompatibility.

Cast partial denture investment materials

Universal qualities.

Duplicating gel

Impressive duplicating qualities.

Duplicating silicone

Fulfils the highest quality standards.

Cast partial denture – wax assortment

For all types of applications and in all thicknesses.

Cast partial denture – accessories

From soldering to duplicating moulds and investment systems to funnel formers.



Cast partial denture alloys: Biocompatible, resistant to corrosion, for universal use.

The superlative from Dentaurum.

Dentaurum has always been renowned for a comprehensive product range with all the materials necessary for fabricating cast partial denture frameworks. The remanium® cast partial denture alloys have a high degree of flexibility and set standards for maximum mechanical loading capacity. For this reason cast partial denture frameworks made of remanium® can be designed to be very thin and delicate.

All Dentaurum cast partial denture alloys provide:

- easy castability.
- prevention of overheating due to mirror effect on melt surface.
- high-gloss surfaces.
- wide range of indications.

Their special advantages:

- remanium® GM 800+ has the highest spring-hardness.
- easiest processing with the cast partial denture alloy remanium® GM 280

remanium® cast partial denture alloys at a glance.

	remanium® GM 800+	remanium® GM 380+	remanium® GM 900	remanium® GM 280
Characteristics	Extra spring-hard universal alloy with a high yield strength for all types of cast partial denture work, type 5.	Time-tested, spring-hard alloy for all types of cast partial denture work, type 5.	Extra spring-hard, modern alloy for all types of cast partial denture work. Excellent laser welding properties as it is carbon-free, type 5.	Spring hard alloy with reduced hardness for the cast partial denture technique.
Product advantages	high modulus of elasticity for delicate, yet stable frameworks high fracture resistance due to excellent mechanical properties mirror effect on melt surface high-luster surfaces after electrolytic polishing	mirror effect on melt surface easy preparation and polishing easily activated, high yield strength	harmoniously coordinated, high mechanical parameters easy preparation and polishing due to reduced surface hardness mirror effect indicates the appropriate moment for casting. Prevents overheating of the molten alloy, ensuring smooth clean castings. excellent laser welding properties as it is carbon-free	the low hardness enables easy finishing and polishing high elongation at rupture prevents clasp fractures mirror effect indicates the appropriate moment for casting. Prevents overheating of melt very good laser welding properties
Composition (% by mass)	Co Cr Mo W Si 58.3 32.0 6.5 1.5 1.0	Co Cr Mo 64.6 29.0 4.5	Co Cr Mo Si Ta 62.0 30.0 5.5 1.2 1.2	Co Cr W Si 61.0 28.0 8.0 1.5
Other < 1%	C, Mn, N	C, Mn, N, Si	N	Mn, N, Nb
Summary relev	ant characteristics			
Elasticity	extra spring hard	spring hard	extra spring hard	spring hard
Mirror effect	yes	yes	yes	yes
Finishing and polishing	++	++	++	+++
Laser welding	++	++	+++	+++
Soldering with CoCr solder	++ REF 102-306-00	++ REF 102-306-00	++ REF 102-306-00	++ REF 102-306-00
Mechanical pro	perties			
0.2 % yield strength R _{p 0.2}	720 MPa	640 MPa	700 MPa	600 MPa
Tensile strength $R_{\scriptscriptstyle m}$	960 MPa	900 MPa	910 MPa	845 MPa
Elongation A _s	4 %	6.5 %	5 %	11 %
Hardness	370 HV 10	360 HV 10	340 HV 10	280 HV 10
Modulus of elasticity E	230 GPa	220 GPa	210 GPa	190 GPa
Solidus temperature	1240 °C / 2264 °F	1300 °C / 2372 °F	1360 °C / 2480 °F	1320 °C / 2408 °F
Liquidus temperature	1410 °C / 2570 °F	1370 °C / 2498 °F	1410 °C / 2570 °F	1420 °C / 2588 °F
Density	8.2 g/cm ³	8.2 g/cm ³	8.2 g/cm ³	8.6 g/cm ³
Ordering infor	mation			
Availability	1.000 g REF 102-200-10	1.000 g REF 102-001-10	1.000 g REF 102-250-00	1.000 g REF 102-280-00

Optimum biocompatibility: Laboratory tests confirm the outstanding corrosion resistance, and tests conducted by independent institutes acknowledge the biological compatibility on the basis of cytotoxicity tests. Please inquire for our certifications. All cast partial denture alloys are free of beryllium, iron, nickel, indium, gallium and copper.

+++ = excellent ++ = very good



Cast partial denture investment materials: fast, flexible and with a perfect fit.

Flexibility in preheating.

Dentaurum investment materials cover the whole spectrum of the cast partial denture technique. They can be used for conventional preheating, quick preheating and speed preheating.

The perfect fit.

Whatever Dentaurum investment material you choose, you will always achieve excellent results.

Strict final checks.

Prior to filling into the proportioned aluminum foil bags, the quality of the investment material is examined on the basis of dental technical standards according to DIN and ISO.





rema® cast partial denture investment materials at a glance.

	rema® CAD/Vest	rema® dynamic S	rema® Exakt F	rema® Exakt
Characteristics	Special investment material for semi-digital CAD/Vest technology (3D printing and milling).	Universal, quick model casting investment material.	Fine and exact model casting investment material.	Classical, robust model casting investment material.
Product advantages	very smooth casting results easy devesting suitable for cast-partial dentures, crowns and bridges two or more cast-partial dentures can be invested at the same time flexibility in preheating stage, conventional and speed heating excellent fit	complete flexibility in the preheating stage - speed preheating - reduced quick preheating from 600 °C / 1112 °F - conventional preheating suitable for combination prosthetics - impressive fit even with complicated structures universally suitable in all duplicating procedures - compatible with duplicating materials silicone and gel excellent fit - knife edge stability and smoothness	improved development of the classic rema® Exakt	very uncomplicated to process good results even in extreme laboratory conditions reproducible precision - maintains the same high accuracy from casting to casting especially recommended for gel duplications - quick setting increases the quality with gel duplications universal processing - especially economical due to addition of water
Preheating	Speed preheatingConsistent preheating	Speed preheating Partial speed preheating Consistent preheating	Consistent preheating Preheating with holding time	Consistent preheatingPreheating with holding time
Duplicating gel		+++	+++	+++
Duplicating silicone		+++	+++	+
Mixing consistency	+++	++	+++	+
Model hardness		+++	++	++
Deflasking behavior	+++	++	+++	++
Ordering info	rmation			
Powder	REF 105-725-00 20 kg (80 x 250 g) REF 105-726-00 5 kg	REF 105-600-50 20 kg (112 x 180 g) REF 105-610-50 20 kg (40 x 500 g) REF 105-609-50 8 kg (16 x 500 g)	REF 105-020-50 20 kg (50 x 400 g) REF 105-021-50 20 kg (100 x 200 g) REF 105-008-50 8 kg (20 x 400 g)	REF 105-021-00 20 kg (100 x 200 g) REF 105-020-00 20 kg (50 x 400 g)
mixing liquid	REF 105-728-00 1 I (Standard)	REF 105-620-50 11 (Standard) REF 105-623-50 11 (Speed) REF 105-502-00 11 (Power Liquid)	REF 105-501-00 1 I (Standard) REF 105-502-00 1 I (Power Liquid)	REF 105-501-00 1 I (Standard) REF 105-502-00 1 I (Power Liquid)

Duplicating materials.

Flexible, accurate, economical.

Duplicating silicone - the highest precision.

The quick working time and high elasticity guarantee a high level of working comfort.

Duplicating gel – highly economical.

The high standard of quality means the material can be frequently reused and duplicate models made of investment material or plaster can be fabricated accurately.





Reversible agar duplicating materials at a glance.

	Dublitop®	Duplikat	Dubliform	Dubliplast®	DubliGel
Characteristics	Opaque, high-contrast top-quality duplicating gel with properties similar to silicone.	Proven, top-quality transparent precision duplicating gel. Suitable for phosphate and binder investments.	Time-tested quality duplicating gel.	Universal quality duplicating gel for plaster and investment materials.	Specialized duplicating gel for duplicate models in plaster.
Product advantages	highly crisp details optimal contrast due to the light-blue, opaque color exceptional tear resistance high edge strength during removal excellent fit optimum duplicating results excellent thermal stability long shelf-life ensures cost-effectiveness does not color plaster models suitable for microwaves	extreme volumetric stability low viscosity no pulling away from metal quick use by adding water ready to use after initial heating	volumetric stability precise duplicate impressions transparent elastic durable low viscosity	high elasticity and tear resistance models can be easily removed from the duplicating material	very clean duplication with all model plasters
Areas of use					
Cast partial dentures	х	х	х	х	-
Combination technique	х	х	-	-	-
Casting technique with acrylic	х	х	х	х	-
Suitable for duplicate plaster models	-	-	-	х	х
Suitable for cast partial denture investment material	х	х	х	х	-
Technical data					
Color	opaque, light blue	transparent, yellow	transparent, orange	transparent, violet	pink
Typical, repeated melting cycles (at optimal laboratory conditions)	25	20	15	15	12
Product characteris	tics				
Elasticity and tear resistance	extremely high	very high	high	high	high
Accuracy of reproduced details	very high	very high	high	high	high
Accuracy of fit	extremely high also for attachments	very high also for attachments	high	high	high
Suitable for microwaves	х	х	X* * please observe extra instructions.	х	х
Ordering informati	on				
Availability	REF 108-610-00 Container (5 kg)	REF 108-600-00 Container (6 kg) REF 108-605-00 Concentrate (3.7 kg)	REF 108-500-00 Container (6 kg) REF 108-550-00 Concentrate (2.9 kg)	REF 165-500-00 Container (5 kg) REF 165-550-00 Concentrate (2.7 kg)	REF 165-501-00 Container (5 kg)

Alloys



remanium® GM 800+

Extra spring-hard universal alloy with a high yield strength for all types of cast partial denture work.

Advantages

- fracture resistant due to excellent physical properties
- high modulus of elasticity allows delicate but still rigid constructions
- even less risk of clasp fractures due to increased yield strength
- the right moment for casting is shown when the melt has a mirror-like shine. No overheating of melt results in smooth and clean castings
- high-luster surface after electrolytic polishing
- · very good laser welding properties

Indication: cast partial denture and combination technique for rigid constructions with special high firmness Norm: DIN EN ISO 22674 (type 5)

Technical data

0.2% Yield strength R _{p0.2}	720 MPa
Tensile strength R _m	960 MPa
Hardness	370 HV 10
Elongation A ₅	4 %
Modulus of elasticity E	230 GPa
Density	8.2 g/cm ³
Solidus temperature	1240 °C / 2264 °F
Liquidus temperature	1410 °C / 2570 °F
Weight of casting ingot	6 g

REF 102-200-10	1000 g

€ 0483

Composition (percentage by mass)

Co	Cr	Mo	W	Si
58.3	32.0	6.5	1.5	1.0

Additional elements < 1 %: C, Mn, N











Alloys

remanium® GM 380+

Time-tested, spring-hard alloy for all types of cast partial denture work.

Advantages:

- further development of the time-tested remanium® GM 380
- the right moment for casting is shown when the melt has a mirror-like shine. No overheating of melt results in smooth and clean castings
- reduced surface hardness
- easy preparation and polishing
- the high elongation at break value promotes activation

Indication: cast partial denture and combination work technique for standard constructions with high firmness Norm: DIN EN ISO 22674 (type 5)

Technical data

icciliical aata	
0.2% Yield strength R _{p0.2}	640 MPa
Tensile strength R _m	900 MPa
Hardness	360 HV 10
Elongation A _s	6.5 %
Modulus of elasticity E	220 GPa
Density	8.2 g/cm³
Solidus temperature	1300 °C / 2372 °F
Liquidus temperature	1370 °C / 2498 °F
Weight of casting ingot	6 g

	REF 102-001-10	1000 g
--	----------------	--------

€ 0483

Composition (percentage by mass)

composition (percentage b	,a.s.,
Co	Cr	Мо
64.6	29.0	4.5

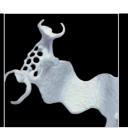
Additional elements < 1 %: C, Mn, N, Si













Alloys



remanium® GM 900

Extra spring-hard, modern alloy for all types of partial denture work. Excellent laser welding properties, as it is carbon free.

Advantages:

- harmoniously matched, high mechanical parameters
- easily trimmed and polished due to the reduced surface hardness
- the right moment for casting is shown when the melt has a mirror-like shine. No overheating of melt results in smooth and clean castings
- patented composition based on CoCrMoTa

Indication: cast partial denture and combination work technique for rigid constructions with special increased firmness

Norm: DIN EN ISO 22674 (type 5)

Tar	hnical	l data

iechnicai data	
0.2% Yield strength R _{p0.2}	700 MPa
Tensile strength R _m	910 MPa
Hardness	340 HV 10
Elongation A ₅	5 %
Modulus of elasticity E	210 GPa
Density	8.2 g/cm ³
Solidus temperature	1360 °C / 2480 °F
Liquidus temperature	1410 °C / 2570 °F
Weight of casting ingot	6 g

REF 102-250-00 1000 g

€ 0483

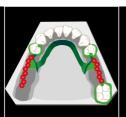
Composition (percentage by mass)

Co	Cr	Mo	Si	Та
62.0	30.0	5.5	1.2	1.2

Additional elements < 1 %: N











Alloys

remanium® GM 280

Spring hard alloy with reduced hardness for the cast partial denture technique.

Product advantages:

- the low hardness enables easy finishing and polishing
- high elongation at rupture prevents clasp fractures
- mirror effect indicates the appropriate moment for casting. Prevents overheating of melt
- very good laser welding properties **Indication:** cast partial dentures Norm: DIN EN ISO 22674 (type 5)

Technical data

0.2% Yield strength R _{p0.2}	600 MPa
Tensile strength R _m	845 MPa
Hardness	280 HV 10
Elongation A ₅	11 %
Modulus of elasticity E	190 GPa
Density	8.6 g/cm ³
Solidus temperature	1320 °C / 2408 °F
Liquidus temperature	1420 °C / 2588 °F
Weight of casting ingot	6 g

REF 102-280-00	1000 g

€ 0483

Composition (percentage by mass)

(p,				
Со	Cr	W	Si	
61.0	28.0	8.0	1.5	

Additional elements < 1 %: Mn, N, Nb













Titanium



Tritan

Titanium grade 1

Norm: DIN EN ISO 5832-2, DIN EN ISO 9693, DIN EN ISO 22674 (type 3)

min. 99.5 % titanium

Good casting properties in casting machines designed specifically for titanium.

Dentaurum provides, under the brandname Tritan, pure titanium in ingots of different sizes which can be used in the titanium casting machines.

Each ingot is marked with the name Tritan, the purity grade and batch number. Thus, Dentaurum ensures that only DIN Standard Tritan titanium of proper purity grade is used for dental castings.

Advantages:

- minimal oxygen content. Very good castability
- 5 different weight units ensure accurate dispensing
- maximum purity

Indication: crowns and bridges, implant supported supra-structures, cast partial dentures

Height ingot	Weight of casting ingot	REF	Quantity
11.8 mm	18 g	100-100-50	250 g
14.3 mm	22 g	100-101-50	500 g
14.3 mm	31 g	100-102-50	500 g
14.3 mm	36 g	100-103-50	500 g
15.8 mm	40 g	100-105-50	500 g

€ 0483

Technical data

0.2% Yield strength R _{p0.2}	310 MPa
Tensile strength R _m	400 MPa
Hardness	115 HV 10
Elongation A ₅	12 %
Modulus of elasticity E	110 GPa
Density	4.5 g/cm³
Melting point	1668 °C / 3034.4 °F
CTE 25-500 °C / 77-932 °E	9.6 x 10 ⁻⁶ K ⁻¹











Titanium

rematitan® M

Titanium grade 4

Norm: DIN EN ISO 5832-2, DIN EN ISO 22674 (type 5)

min. 99 % titanium

Dentaurum provides, under the brandname rematitan® M, pure titanium in ingots which can be used in the titanium casting machines. Each ingot is marked with the name rematitan® M, the purity grade and batch number. Thus, Dentaurum ensures that only DIN Standard rematitan® M titanium of proper purity grade is used for dental castings.

Advantages:

- higher figures in elongation, proof stress and elasticity
- maximum purity

Indication: implant supported supra-structures, cast partial dentures

Height ingot	Weight of casting ingot	REF	Quantity
14.3 mm	31 g	100-107-00	1000 g



Technical data

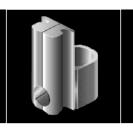
leciilicai uata	
0.2% Yield strength R _{p0.2}	600 MPa
Tensile strength R _m	680 MPa
Hardness	230 HV 10
Elongation A ₅	3 %
Modulus of elasticity E	120 GPa
Density	4.5 g/cm ³
Melting point	1668 °C / 3034.4 °F













Solders and welding wires



CoCrMo-Sold 1

- pure CoCrMo solder, nickel-free
- · corrosion-resistant, no discoloration
- · flows easily
- · without flux

Area of application:

- · all CoCr bonding alloys for presoldering
- all CoCr cast partial denture alloys

Recommended Flux: rema® Flux 1, REF 102-304-00

Norm: DIN EN ISO 9333

Solidus temperature 1110 °C / 2030 °F Liquidus temperature 1162 °C / 2123.6 °F

REF 102-306-00	3 g
((0400	

(€ 048

Composition (percentage by mass)

Со	Cr	Mo	Si	В
69.8	19.0	5.0	5.0	1.2

without flux



White gold solder

- in rods
- ready fluxed
- purity: ct 18.6
- cadmium free

Not permitted for intra-oral use.

7–1.1 mm

Working temperature 950 °C / 1742 °F

REF 380-600-50	1.6 g

Composition (percentage by mass) Au Ni Zn 77.0 16.0 6.0

with flux



Universal silver solder

- in rods
- ready fluxed
- cadmium free

Not permitted for intra-oral use.

ø 1–1.1 mm

Working temperature 700 °C / 1292 °F

REF 380-604-50	1.2 g
REF 380-604-60	10 x 1.2 g

Composition (percentage by mass)

Ag	Zn	Cu
59.0	24.0	16.0

with flux



Universal silver solder

- in coils
- without flux
- cadmium free

Not permitted for intra-oral use.

Working temperature 700 °C / 1292 °F

REF 380-704-50	10 g	
<u> </u>		

Composition (percentage by mass)

Ag	Zn	Cu
59.0	25.0	16.0

without flux

Solders and welding wires

rema® Flux 1

- flux for CoCrMo-Sold 1 and NiCr-Sold 1
- excellent wetting of alloys
- guarantees good flowability of the solder

REF 102-304-00	25 g
----------------	------



Dentaflux® flux

- universal flux
- for all alloys
- especially for connections between precious and non-precious alloys

REF 681-100-00	50 a



Heat protection

Protects metal, plastic and ceramic parts against heat damage during soldering.

REF 380-070-00 10	00 g
-------------------	------



CoCr welding wire

Various dimensions to be used as a filling soldering wire for all CoCr alloys.

Norm: DIN EN ISO 28319

ø	Length	REF	Quantity
0.25 mm / 10	2 m	528-215-10	1 piece
0.35 mm / 14	2 m	528-210-10	1 piece
0.50 mm / 20	2 m	528-200-10	1 piece



C€ 0483

Composition (percentage by mass)

Co	Cr	Mo
65.0	28.0	5.5

Additional elements < 1 %: Mn, N, Si





Investment materials



rema® CAD/Vest

Special investment material for semi-digital CAD/Vest technology (3D printing and milling).

Product advantages:

- very smooth casting results
- easy devesting
- · suitable for cast-partial dentures, crowns and bridges
- two or more cast-partial dentures can be invested at the same time
- flexibility in preheating stage, conventional and speed heating
- excellent fit

Norm: DIN EN ISO 15912

Type 1, 2 Class 2

Working time	6–8 min
Preheating	consistent preheating, speed preheating
Preheating temperature	850 °C / 1562 °F
Compression resistance	4 MPa
Color	white

REF 105-725-00	20 kg (80 x 250 g)
REF 105-726-00	5 kg





rema® CAD/Vest mixing liquid

Approx. 3000 ml mixing liquid are sufficient for 20 kg investment material.

REF 105-728-00	11



Investment materials

rema® dynamic S

Universal, quick model casting investment material.

Advantages:

- complete flexibility in the preheating stage
- speed preheating
- partial speed preheating from 600 °C / 1112 °F
- conventional preheating
- suitable for combination prosthetics
- impressive accuracy even with complicated structures
- universally suitable in all duplicating procedures
- compatible with duplicating materials silicone and gel
- · excellent accuracy

- knife-edge stability and smoothness

Norm: DIN EN ISO 15912

Type 2 Class 1, 2

Working time	3–4 min
Preheating	consistent preheating, partial speed preheating, speed preheating
Preheating temperature	900–950 °C / 1652–1742 °F
Compression resistance	12 MPa
Color	green

REF 105-600-50	20 kg (112 x 180 g)
REF 105-610-50	20 kg (40 x 500 g)
REF 105-609-50	8 kg (16 x 500 g)



rema® dynamic S mixing liquid

Approx. 3000 ml mixing liquid are sufficient for 20 kg investment material.

Caution: Mixing liquid is sensitive to frost! Please order prior to frost season.

REF 105-620-50

1 |



rema® dynamic S mixing liquid Speed

To be used for speed preheating. Approx. 3000 ml mixing liquid are sufficient for 20 kg investment material.

Caution: Mixing liquid is sensitive to frost! Please order prior to frost season.

REF 105-623-50



Investment materials



rema® Exakt F

Fine and exact model casting investment material.

Advantages:

- improved development of the classic rema® Exakt
- the well-proven recipe was optimized with a finer grain size
- · very easy, pleasant working
 - fine consistency
 - adequate working time
 - reduced dust
- · very high accuracy
- perfectly fitting castings in all areas
- especially easy devestment
 - very soft devestment and easy sandblasting

Norm: DIN EN ISO 15912

Type 2 Class 1

Working time	3–4 min
Preheating	consistent preheating, preheating with holding time
Preheating temperature	950–1000 °C / 1742–1832 °F
Compression resistance	10-14 MPa
Color	pink





rema® Exakt, rema® Exakt F mixing liquid

Approx. 3000 ml mixing liquid are sufficient for 20 kg investment material.

REF 105-501-00	11

Investment materials

rema® Exakt

Classic, robust, model casting investment material.

Advantages:

- very uncomplicated operation
- good results even in extreme laboratory conditions
- reproducible precision
 - maintains the same high accuracy from casting to casting
- especially recommended for gel duplications
 - quick setting increases the quality with gel duplications
- universal procedure

- especially economical when used with water

Norm: DIN EN ISO 15912

Type 2

Class 1

Working time	3–4 min
Preheating	consistent preheating, preheating with holding time
Preheating temperature	950-1000 °C / 1742-1832 °F
Compression resistance	12-15 MPa
Color	pink

REF 105-021-00	20 kg (100 x 200 g)
REF 105-020-00	20 kg (50 x 400 g)



rema® Exakt, rema® Exakt F mixing liquid

Approx. 3000 ml mixing liquid are sufficient

for 20 kg investment material.

REF 105-501-00	1.1
KET 1U3-3U1-UU	1 11



Investment materials



Special tooth-arch concentrate

For the one-piece casting technique. **Caution:** Mixing liquid is sensitive to frost!

Please order prior to frost season.

REF 105-621-00 2	50 ml
------------------	-------



Power Liquid mixing liquid, concentrate

For rema® Exakt, rema® Exakt F, rema® dynamic S, rema® blue, Castorit®-super C and Trivest.

- reduces transport costs
- expansion can be individually adjusted Approx. 2000 ml mixing liquid are sufficient for 20 kg investment material.
 Approx. 800 ml mixing liquid are sufficient

Approx. 800 ml mixing liquid are sufficient for 6 kg investment material.

REF 105-502-00	11

Investment materials

rematitan® Plus

Universal titanium investment for all areas.

Advantages:

- suitable for use both in cast partial denture work and the entire range of crown and bridge work
- expansion is controlled using 2 mixing liquids (cast partial dentures and crowns and bridges)
- prevents the reaction of mould material and molten titanium to a high degree
- use of pure refractory materials Norm: DIN EN ISO 15912

Type 1, 2 Class 1

Working time	3–4 min
Preheating	preheating with holding time
Preheating temperature	1000 °C / 1832 °F
Compression resistance	5–8 MPa
Color	white

REF 107-600-00	20 kg (80 x 250 g)
REF 107-610-00	8 kg (32 x 250 g)



rematitan® Plus mixing liquid for cast partial denture

Approx. 3200 ml mixing liquid are sufficient for 20 kg investment material.

Caution: Mixing liquid is sensitive to frost! Please order prior to frost season.

REE 107-601-00	



rematitan® Plus mixing liquid for crowns and bridges

Approx. 3200 ml mixing liquid are sufficient for 20 kg investment material.

Caution: Mixing liquid is sensitive to frost! Please order prior to frost season.

RFF 107-602-00	1.1



rematitan® cold model hardener

For hardening rematitan® Plus investment models.

- straightforward handling
- environment friendly product
- for hard, sharp-edged rematitan® Plus refractory models
- improved adhesion of wax profiles

REF 167-305-00	11



Fine investment materials



RK-DUR fine investment

By means of metal oxide in the RK-DUR fine investment, the liquid melt is stimulated to increase the grain formation in the solidification phase. Improves the mechanical properties of CoCrMo alloys.

- improved elongation at rupture, fracture strength, yield strength
- no vacuum investing needed for casting ring
- · durable, hard ceramic coating
- produces smooth casting surfaces
- easy application
- · easy devesting
- long shelf life

Color: blue

REF 104-400-50 150 g



RK 3 fine investment

For coating wax and plastic patterns when using phosphate-based investments, e. g. rema® Exakt.

Not suitable for ethyl silicate investments. Ready-to-use.

- no vacuum investing needed for casting ring
- · durable, hard ceramic coating
- produces smooth casting surfaces
- · easy to agitate
- · easy application
- easy devesting
- long shelf life

Color: blue

REF 104-501-50	150 g
----------------	-------

Duplicating materials

Dublitop®

Opaque, high-contrast duplicating gel with properties similar to silicone.

- · highly crisp details
 - optimal contrasts due to the light blue, opaque color
- exceptional tear resistance
 - high edge strength during removal
- excellent fit
 - optimum duplicating results
- excellent thermal stability
 - long shelf life ensures cost-effectiveness
- does not color plaster models
- biodegradable
- smooth surfaces
- · suitable for microwaves
- can be melted up to 25 times

Area of application:

- · cast partial dentures
- fixed/removable restorations
- acrylic pouring technique

Color: opaque, light blue







Duplicating materials



Dubliform

Time-tested quality duplicating gel.

- · volumetric stability
- precise duplicate impressions
- transparent
- elastic
- durable
- low viscositycan be melted up to 15 times

Area of application:

- · cast partial dentures
- acrylic pouring technique

Color: transparent, orange

REF 108-500-00	6 kg



Dubliform liquid concentrate

Time-tested quality duplicating gel.

- · easy processing by only mixing with water
- ready to use after first heat up
- mixing ratio: 1 | gel : 1 | water
- produces 5.4 kg ready-to-use duplicating gel

Area of application:

- cast partial dentures
- acrylic pouring technique Color: transparent, orange

REF 108-550-00	2.9 kg

Duplicating materials

Duplikat

Transparent precision duplicating gel. Suitable for phosphate-based and ethyl silicate investments.

- no shrinkage at metal primary parts
- outstanding fit
- · smooth metal surfaces
- long shelf life
- can be melted up to 20 times

Area of application:

- cast partial dentures
- fixed/removable restorations
- · acrylic pouring technique

Color: transparent, yellow

	REF 108-600-00	6 kg
--	----------------	------



Duplikat liquid concentrate

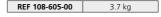
Transparent precision duplicating gel. Suitable for phosphate-based and ethyl silicate investments.

- extreme volumetric stability
- low viscosity
- no pulling away from metal
- quick use by adding water
- ready to use after initial heating
- mixing ratio: 1 | gel : 0.5 | water
- produces 5.2 kg ready-to-use duplicating gel

Area of application:

- cast partial dentures
- fixed/removable restorations
- acrylic pouring technique

Color: transparent, yellow





Duplicating materials



Dubliplast®

Universal quality duplicating gel for dental stone and investments.

- · high elasticity and tear resistance
- models can be easily removed from the duplicating material
- can be melted up to 15 times

Area of application:

- · cast partial dentures
- · acrylic pouring technique
- dental stone duplication

Color: transparent, violet

REF 165-500-00 5 kg



Dubliplast® liquid concentrate

Universal quality duplicating gel for dental stone and investments.

- easy processing by only mixing with water
- ready to use after first heat up
- mixing ratio: 1 | gel : 1 | water
- produces 5.2 kg ready-to-use duplicating gel

Area of application:

- · cast partial dentures
- · acrylic pouring technique
- · dental stone duplication

Color: transparent, violet

REF 165-550-00	2.7 kg



DubliGel

Specialized duplicating material for secondary model in dental stone.

• very clean duplication with all model dental stones

Area of application:

• dental stone duplication Color: pink

REF 165-501-00	5 kg

Duplicating materials

rema® Sil

Additional cross-linked pure silicone for a high standard of quality.

- pure silicone without fillers
- large quantity 950 ml and 1 kg
- long storage time
- low level of hardness
 - high degree of accuracy due to free investment expansion
- · extremely thin flowing consistency
 - bubble-free impression of detailed structures
- very quick setting time and fast elastic recovery
- great time saver

Component	Color	REF	Quantity	REF	Quantity
A (catalyst)	white	108-700-00	1 kg	108-710-00	5 kg
В	blue	108-701-00	1 kg	108-711-00	5 kg

Technical data	A (catalyst)	В	
Mixing ratio	1:1		
Viscosity	1400 ו	mPas	
Density	1060 g/l	1070 g/l	
Working time	4–5 min		
Setting time	12 min		
Shore hardness A	10-12		
Elastic memory	99.9 %		



ecosil +

Additional cross-linked two component silicone.

- good color contrast
 - green color prevents mixing errors
- · extremely thin flowing consistency
- highly accurate duplicate reproduction
- · long working time
- can be used to re-cast models many times
- medium Shore hardness A (19)
- use also with ring-free duplicating systems

_					
Component	Color	REF	Quantity	REF	Quantity
A (catalyst)	yellow	108-703-10	1 kg	108-705-10	5 kg
В	blue	108-704-10	1 kg	108-706-10	5 kg

Technical data	A (catalyst) B	
Mixing ratio	1:1	
Viscosity	2000 mPas	
Density	1160 g/l	
Working time	6-8 min	
Setting time	30 min	
Shore hardness A	18-20	
Elastic memory	99.9 %	



Duplicating materials - accessories



Tap For 5 kg canister.

REF 108-716-00 1 piece



Sprue former with retention

REF 127-311-00 1 piece



Sprue former

Made from plastic with slide tube for insertion in the duplicating material.

• reliable, firm retention





Casting sprue former titanium

Application for rematitan®/autocast casting machines. Material: Plastic

REF 090-027-00 5 pieces

Duplicating materials – accessories

Siliform duplicating flask

Plastic flask for silicone and reversible duplicating materials.

With the 3 flasks of different heights, various model sizes can be duplicated economically.

Color: clear

Size	Internal height of flask top	REF	Quantity
small	35 mm	127-315-00	1 piece
medium	43 mm	127-316-00	1 piece
large	51 mm	127-317-00	1 piece



rema® Form base, smooth

Fits all Dentaurum duplicating flasks and casting rings (small, medium, large).

REF 127-309-00	1 piece



Siliform-Set

Plastic flasks for silicone and reversible duplicating materials. With the 3 flasks of different heights, various model sizes can be duplicated economically.

Internal height of flask top:

small 35 mm

medium 43 mm

large 51 mm

Bases fit all top units.

REF 127-318-00	1 set	
	Contents:	

	Contents:
1 x Siliform duplicating flask, small	REF 127-315-00
1 x Siliform duplicating flask, medium	REF 127-316-00
1 x Siliform duplicating flask, large	REF 127-317-00
3 x rema® Form base, smooth	REF 127-309-00



Gumex N

Wax-based putty for covering undercut areas on stone models prior to duplication.

- soft, easy to adapt
- no discoloration
- easy removal from model after duplication
- multiple reuse
- good adaptation onto the model

Color: yellow

REF 168-015-50	650 a





Duplicating materials - accessories



Neo-Star flask

Duplicating flask for silicone – multifunctional for the cast partial denture technique. Suitable for all model sizes.

Function:

- saves duplicating silicone due to height adjustment
- plaster models are articulated using magnets
- the investment model may be replaced accurately into the articulator
- investment system

REF 165-810-00	1 set	
	Contents:	
1 x Flask bottom section	REF 165-850-00	
1 x Base form for gypsum	REF 165-851-00	
1 x Base form for investment ma	aterial REF 165-858-00	
1 x Covering plate	REF 165-852-00	
1 x Collar	REF 165-853-00	
1 x Top	REF 165-854-00	
1 x Magnet	REF 165-839-00	
1 x Tightening slide	REF 165-860-00	

Neo-Star individual flask components

















Designation	REF	Quantity
Flask bottom section, Inner ø 78 mm	165-850-00	1 piece
Base form for gypsum	165-851-00	1 piece
Base form for investment material	165-858-00	1 piece
Covering plate	165-852-00	1 piece
Collar	165-853-00	1 piece
Тор	165-854-00	1 piece
Magnet	165-839-00	1 piece
Tightening slide	165-860-00	1 piece

Duplicating materials – accessories

Septisol

Separating agent with dual function, alcohol-free.

• Plaster against silicone

Spray on plaster models prior to silicone duplication.

• Plaster against plaster

Spray on plaster model base before mounting in articulator.

REF 108-720-50	100 ml
REF 108-721-50	11



Lubrofilm®

Double function

- Silicone surface tension reducing agent
- Allows bubble-free pouring of investment into silicone mould.
- · Wax surface tension reducing agent

Reduces surface tension on wax and facilitates investing.

REF 112-050-00	100 ml
REF 112-051-00	11



Remadur

Solvent-free cold model hardener for investment models.

- solvent-free
- environmentally friendly
- · low viscosity
- no heating of the hardener







Cold model hardener

Cold model hardener containing solvent for investment models.

- no heating of the hardener
- low viscosity
- very hard models with a high edge strength Recommended working container: cleaned duplicating tube with cover.



REF 167-215-00	2.3 kg



Waxes

Preformed clasps

- excellent adaptability
- outstanding adhesion
- burn out residue-free

Color: green



Designation	Abreviation	REF	Quantity
Premolar clasps	PK	110-001-00	200 pieces
Molar clasps	МК	110-002-00	200 pieces
Bonyhard clasps	TK 1	110-003-00	200 pieces
Ring clasps, straight	RKG	110-013-00	200 pieces
Ring clasps, curved	RK	110-005-00	200 pieces





Waxes

Wax retention

- wide range of different shapes
- excellent adaptability
- outstanding adhesion
- burn out residue-free

Color: red

Designation	Abreviation	REF	Quantity
Grid, coarse	RN I	110-101-00	20 pieces
Grid, fine	RN II	110-102-00	20 pieces
Grid, round	RN III	110-103-00	20 pieces
Ridge retention	KR	110-006-00	80 pieces
Loop retention, small	PR I	110-011-00	24 pieces
Loop retention, large	PR II	110-012-00	24 pieces
Perforated retention for lower staggered, length 130 mm, width 7 mm	LR	111-216-00	25 pieces
Perforated retention for lower staggered, length 110 mm, width 9 mm	LRI	111-217-00	25 pieces
Perforated retention for lower straight, length 125 mm, width 6 mm	LR II	111-218-00	25 pieces







Waxes



Wax wire on roll

- for sprues
- two qualities of wax
- smooth surfaces
- · easy waxing due to fast solidification
- rigid and stress-free after application

ø	Soft quality REF (blue)	Standard quality REF (violet)	Quantity
2.0 mm	111-720-00		250 g
2.5 mm	111-825-00	111-425-00	250 g
3.0 mm	111-830-00	111-430-00	250 g
3.5 mm	111-835-00	111-435-00	250 g
4.0 mm	111-840-00	111-440-00	250 g
5.0 mm	111-850-00	111-450-00	250 g



Wax wire rod

- for retentions etc.
- easily adaptable

	Ø	Color	REF	Quantity
۱ [0.6 mm	blue	111-106-00	12 g
ا ۱	0.8 mm	blue	111-108-00	25 g
۱ (0.9 mm	green	111-109-00	25 g
. [1.0 mm	green	111-110-00	25 g
• [1.2 mm	green	111-112-00	37 g
ا ۱	1.5 mm	green	111-115-00	50 g
• [2.0 mm	blue	111-120-00	50 g



Preformed wax bar, half-round

- used for strengtheners
- easily adaptable

Ø	Color	REF	Quantity
1.5 x 0.75 mm	green	111-301-00	25 g
1.8 x 0.9 mm	green	111-303-00	50 g
2.0 x 1.0 mm	green	111-304-00	50 g
3.5 x 1.75 mm	green	111-306-00	65 g



Preformed wax bar, lingual bar

• easily adaptable

	Ø	Color	REF	Quantity
•	4.0 x 2.0 mm	green	111-314-00	65 g
	4.0 x 1.7 mm	green	111-308-00	65 g
•	4.3 x 2.3 mm	green	111-313-00	65 g

Waxes

Preformed wax bar, sprue strips

• easily adaptable

Width x Thickness	Color	REF	Quantity
8.0 x 1.8 mm	green	111-311-00	65 g



Preformed wax bar, finishing lines

• easily adaptable

Width x Thickness	Color	REF	Quantity
2.0 x 1.0 mm	blue	111-312-00	25 g



Preparation wax

adhesive

• Application: relinable saddles

• soft and transparent

Dimensions (L x W): 100 x 100 mm

Thickness	Color	REF	Quantity
0.3 mm	transparent	120-023-00	32 sheets
0.4 mm	transparent	120-024-00	32 sheets
0.5 mm	transparent	120-025-00	32 sheets
0.65 mm	transparent	120-026-00	32 sheets
0.75 mm	transparent	120-027-00	32 sheets



Relining wax

• Application: relinable saddles

• soft and transparent

Dimensions (L x W): 150 x 70 mm

Thickness	Color	REF	Quantity
0.4 mm	red	120-104-00	15 sheets
0.5 mm	red	120-105-00	15 sheets
0.6 mm	red	120-106-00	15 sheets
0.7 mm	red	120-107-00	15 sheets





Waxes



Wax sheet

Surface: plain

- · very adaptable quality
- excellent adaptation and adhesion behavior

Dimensions (L x W): 150 x 70 mm

Thickness	Color	REF	Quantity
0.2 mm	green	114-420-00	15 sheets
0.25 mm	green	114-425-00	15 sheets
0.3 mm	green	114-430-00	15 sheets
0.35 mm	green	114-435-00	15 sheets
0.4 mm	green	114-440-00	15 sheets
0.5 mm	green	114-450-00	15 sheets
0.6 mm	green	114-460-00	15 sheets
0.7 mm	green	114-470-00	15 sheets
0.8 mm	green	114-480-00	15 sheets
1.0 mm	green	114-500-00	15 sheets



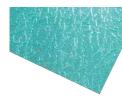
Wax sheet

Surface: fine veined

- the stronger vein and strippled design gives the upper denture a more natural surface structure
- · very adaptable quality
- excellent adaptation and adhesion behavior

Dimensions (L x W): 150 x 70 mm

Thickness	Color	REF	Quantity
0.35 mm	green	117-035-00	15 sheets
0.4 mm	green	117-040-00	15 sheets
0.45 mm	green	117-045-00	15 sheets
0.5 mm	green	117-050-00	15 sheets
0.6 mm	green	117-060-00	15 sheets



Wax sheet

Surface: medium veined

- the stronger vein and strippled design gives the upper denture a more natural surface structure
- very adaptable quality
- excellent adaptation and adhesion behavior

Dimensions (L x W): 150 x 70 mm

Thickness	Color	REF	Quantity
0.3 mm	green	117-130-00	15 sheets
0.35 mm	green	117-135-00	15 sheets
0.4 mm	green	117-140-00	15 sheets
0.45 mm	green	117-145-00	15 sheets
0.5 mm	green	117-150-00	15 sheets
0.6 mm	green	117-160-00	15 sheets

Waxes

Wax sheet

Surface: coarse veined

- the stronger vein and strippled design gives the upper denture a more natural surface structure
- · very adaptable quality
- excellent adaptation and adhesion behavior

Dimensions (L x W): 150 x 70 mm

Thickness	Color	REF	Quantity
0.35 mm	green	117-235-00	15 sheets
0.4 mm	green	117-240-00	15 sheets
0.45 mm	green	117-245-00	15 sheets
0.5 mm	green	117-250-00	15 sheets
0.6 mm	green	117-260-00	15 sheets



Wax sheet

Surface: coarse grained

- the stronger vein and strippled design gives the upper denture a more natural surface structure
- · very adaptable quality
- excellent adaptation and adhesion behavior

Dimensions (L x W): 150 x 70 mm

Thickness	Color	REF	Quantity
0.4 mm	green	118-040-00	15 sheets
0.45 mm	green	118-045-00	15 sheets
0.5 mm	green	118-050-00	15 sheets
0.6 mm	green	118-060-00	15 sheets



Joining wax

- for joining prefabricated components in cast partial denture work
- no tendency to smear due to similar hardness as the wax pattern

Melting point	Color	REF	Quantity
74 °C / 165.2 °F	violet	110-301-00	50 g







Blocking-out wax

- for blocking-out in cast partial denture work
- good sculpting properties
- high opacity
- outstanding temperature-resistance

Color	REF	Quantity
pink	110-310-00	50 g



Accessories



Marking pencil Wax pencil

Color: white

REF 043-700-00	6 pieces



Wax-Fix

Adhesive for wax- and plastic patterns.

• adheres 100 % to the model

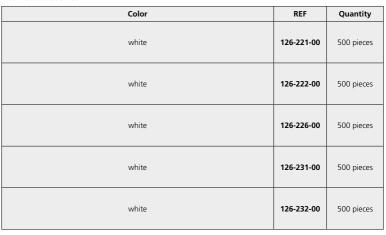
Application:

- surface of investment materials wet, dry or hardened
- plastic surfaces. Moving of adapted parts is possible

REF 110-210-00 50 ml

Plastic retentions

- · for direct application to waxing model
- burn out residue-free













Accessories

rema® Form casting ring

Quick investment system made from impact-resistant plastic.

Size	ø	Height	Color	REF	Quantity
small	71/96 mm	54.5 mm	green	127-306-00	1 piece
medium	80.5/96 mm	54.5 mm	red	127-307-00	1 piece
large	78/96 mm	70 mm	blue	127-308-00	1 piece



rema® Form base, smooth

Fits all Dentaurum duplicating flasks and casting rings (small, medium, large).

REF 127-309-00	1 piece



rema® Form base with cone

Fits all Dentaurum duplicating flasks and casting rings (small, medium, large).

REF 127-310-00 1 p	oiece
--------------------	-------



Sprue former with retention

REF 127-311-00	1 piece
----------------	---------



Sprue former

Made from plastic with slide tube for insertion in the duplicating material.

• reliable, firm retention

REF 127-312-00	1 pioco





Accessories



Lining paper

- corrugated paper
- continuous roll Width: 100 mm

REF 127-010-00	25 m
----------------	------



Sprue

Residue-free burn out plastic for casting from the top.

REF 110-201-00	100 pieces



Model and casting ring tongs

- angled jaws give more secure grip for refractory models and casting rings (Sizes 1/3/6)
- stainless

Length: 36.0 cm

REF 127-410-00	1 piece

Accessories

Rapidur®

Synthetic dental stone

- extra hard, low expansion
- · quick-setting

Application:

orthodontics, cast partial denture work, precious metal, acrylics, ceramics

Norm: DIN EN ISO 6873

Class 4

Setting expansion	max. 0.15 %
Working time	min. 3 min
Compression resistance	min. 35 MPa
Setting time	max. 30 min
Color	white





Mixing bowl

For plaster, impression and investment materials, easy to clean.

Capacity	REF	Quantity
400 ml	164-651-00	1 piece
600 ml	164-650-00	1 piece



Electropolishing solution

For CoCr castings.

- produces a brilliant surface finish
- deep acting, does not leave streaks

REF 128-301-00	11
REF 128-401-00	10



Measuring beaker universal

Measuring range in 1 ml steps. Capacity: 60 ml

RFF 105-995-00	1 niece

