

# PRECIOUS DENTAL ALLOYS

Gold standards  
for individual requirements



# The right solution ...

You believe that  
quality, safety and experience  
are most important when selecting  
a casting alloy?

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You prefer a combination of  
perfect handling and aesthetic  
veneering?

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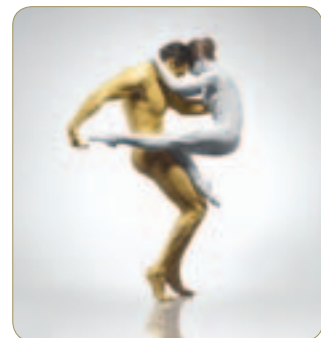
You expect  
an alloy that is capable of anything?

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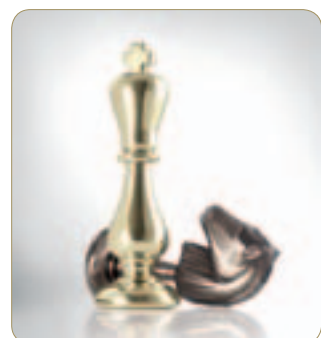
You are looking for  
a particularly well-tolerated solution  
for the demanding patient?

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You want to  
work economically without sacrificing  
the use of precious alloys?

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# ... for any task

## Degulor®

The casting classic.

In 1950, a high-gold precious alloy opened up new horizons in dental technology: Degulor. This material ushered in a new era for crowns, bridges and inlays in terms of processability, durability, safety and compatibility.

**With Degulor, both laboratories and dentists continue to set standards to this day.**

## Degudent®

The ceramic-bonding classic.

In 1964, the desire to provide aesthetic veneers gave rise to the introduction of the Degudent ceramic-bonding precious alloy. Ease of processing and clinical safety have made Degudent an established factor in prosthodontics for almost 50 years.

**Degudent is the standard in metal-ceramics for laboratories and dentists alike.**

## Degunorm®

The multi-talent.

Degunorm is the most popular high-gold precious alloy in Germany. It is also the most important supporting pillar of the GoldenGate System because of its rich golden hue, versatile indications, low number of different materials needed and vast body of clinical evidence.

**Degunorm – achieving more with less. This is what laboratories and dentists have trusted in for almost 20 years.**

## BiOclus®

The powerful bioalloy.

BiOclus represents a unique set of bioalloys that meet all the expectations of even the most demanding patient. Its optimized microstructure ensures high-strength during ceramic firing for optimum firing results.

**With BiOclus, dental laboratories and dentists meet the demand for better compatibility and a more natural appearance.**

## Econolloy®

The economical alloy.

Econolloy combines the processing benefits of a precious alloy with cost-optimized prosthetic options.

**Econolloy is an excellent material for use by laboratories and dentists in price-sensitive markets.**

# Degulor®



An idea  
that made all the difference.

**Degulor®**

quality and clinical  
safety for more than  
half a century.

In 1955, the Degulor M high-gold casting alloy was presented – a product classic that set standards which have held until this day. This alloy's high **quality** and **clinical evidence** are still unrivalled – more than 50 years after its introduction. Many users have appreciated Degulor M since their training days.



“Sets standard in terms of quality, clinical safety and long-term evidence.”

Martin Jakesch, MDT, Limberger Zahntechnik GmbH, Freiburg, Germany

## Your Degulor benefits

### For more than half a century

- ✓ The casting classic with a long history.

### The art of aesthetics

- ✓ Rich golden hue.

### Safety

- ✓ Clinically proven for more than 50 years.

### DeguDent gold standards

- ✓ ... that you can rely on.



Degulor M cast crown with attachments and milled sides.

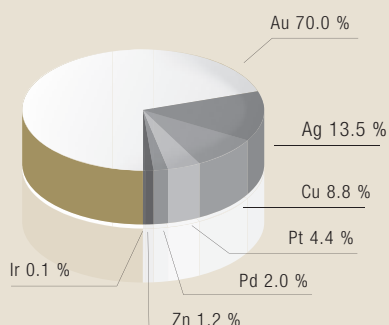


Degulor M cast crown.



Bio Degulor nT inlays.

### Composition in mass % Degulor M



### Degulor brand alloys

|       |                       | Multiple-surface fillings; onlays; partial and full crowns | Multiple-surface fillings; crowns; shorter bridges* | Multiple-surface fillings; crowns; milled restorations; bridges of any width | Cast-metal frameworks for dentures (major connectors) | Cast-metal frame-works for dentures | Super-structures |
|-------|-----------------------|------------------------------------------------------------|-----------------------------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------|------------------|
| Since |                       |                                                            |                                                     |                                                                              |                                                       |                                     |                  |
| 1950  | <b>Degulor C</b>      |                                                            | ✓                                                   |                                                                              |                                                       |                                     |                  |
| 1955  | <b>Degulor M</b>      |                                                            |                                                     | ✓                                                                            |                                                       | ✓                                   | ✓                |
| 1962  | <b>Degulor MO</b>     |                                                            |                                                     | ✓                                                                            |                                                       | ✓                                   | ✓                |
| 1977  | <b>Degulor NF IV</b>  |                                                            |                                                     | ✓                                                                            | ✓                                                     |                                     | ✓                |
| 2006  | <b>Bio Degulor M</b>  |                                                            |                                                     | ✓                                                                            |                                                       |                                     |                  |
| 2006  | <b>Bio Degulor nT</b> | ✓                                                          |                                                     |                                                                              |                                                       |                                     |                  |

\*assuming that the cross-section is adequate

# Degudent®

Degudent®



## Always seductively aesthetic.

**Degudent®**

The high-gold classic  
for metal-ceramics.

In 1964, the advent of special grain refiners made the development of the **first ceramic-bonding alloy** possible – Degudent. Its ease of processing and very special aesthetics have made Degudent the timeless classic in metal-ceramics.



“Degudent is easy to process and suitable for aesthetic veneers. For me, Degudent is the standard in metal-ceramic technology.”

*Detlef Erdmann, MDT, Primo-Dent Zahntechnik GmbH, Stuhr, Germany*

## Your Degudent benefits

### Simple and beautiful

- ✓ Perfect handling and aesthetics.

### Broad range of indications

- ✓ From crowns to superstructures.

### Safety

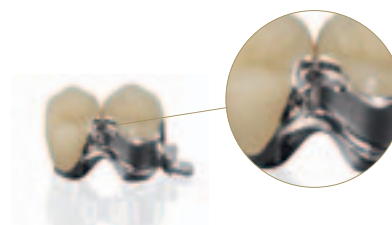
- ✓ Clinically proven for more than 40 years.

### DeguDent gold standards

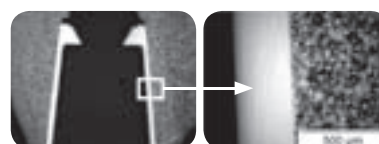
- ✓ Standards you can rely on.



*Eight-unit bridge made of Degudent Eco, veneered with Duceram love.*

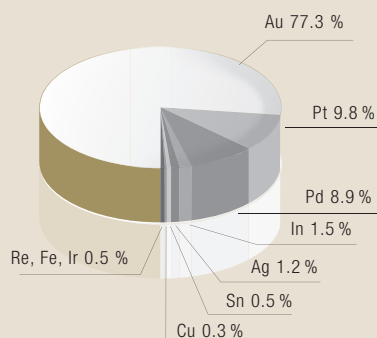


*Excellent milling and polishing results for immaculate surfaces. Here: Perfect cast-on to a Multisafe prosthetic component.*



*Perfect cast-on to a Permador element for screw-retained bars or implant-supported bridge frameworks. Metallographic section.*

### Composition in mass % Degudent U



### Degudent brand alloys

|       |                      | Multiple-surface fillings; crowns; milled restorations; bridges of any width | Cast-metal frameworks for dentures (major connectors) | Cast-metal frameworks for dentures | Superstructures |
|-------|----------------------|------------------------------------------------------------------------------|-------------------------------------------------------|------------------------------------|-----------------|
| Since |                      |                                                                              |                                                       |                                    |                 |
| 1967  | <b>Degudent U</b>    | ✓                                                                            |                                                       |                                    | ✓               |
| 1974  | <b>Degudent G</b>    | ✓                                                                            |                                                       |                                    |                 |
| 1977  | <b>Degudent H</b>    | ✓                                                                            |                                                       | ✓                                  | ✓               |
| 1982  | <b>Degudent U94</b>  | ✓                                                                            |                                                       |                                    | ✓               |
| 1995  | <b>Degudent LTG</b>  | ✓                                                                            | ✓                                                     |                                    | ✓               |
| 2004  | <b>Degudent Kiss</b> | ✓                                                                            |                                                       | ✓                                  | ✓               |
| 2010  | <b>Degudent Eco</b>  | ✓                                                                            |                                                       | ✓                                  | ✓               |



# Degunorm®



## Multi-talented in every respect.

**Degunorm®**

The multi-indication precious alloy.

1992 was the year the Degunorm success story began with the **GoldenGate System**. This multi-indication, high-gold precious alloy with the rich golden hue was designed to reduce the number and bulk of materials used. With the matching Duceragold Kiss ceramics and Degunorm prosthetic components and with numerous clinical studies in its support, Degunorm continues to be the most frequently used high-gold precious dental alloy in Germany – even today, almost 20 years after its introduction.

\* Source: GfK Health Care



**DeguDent**

GOLD STANDARDS





“An alloy capable of anything. For me, Degunorm is the proverbial multi-talent – every way you look at it.”

*Christian Brandt, MDT, Zahntechnik Jung, Wertheim, Germany*

## Your Degunorm benefits

### Multi-talent

- ✓ One alloy for every situation.

### Clinical safety

- ✓ Proven millions of times.

### Aesthetic veneers

- ✓ Rich golden hue.

### Core component in the GoldenGate System

- ✓ Perfectly harmonized system components.

### DeguDent gold standards

- ✓ Standards you can rely on.



4-unit Degunorm combination bridge.



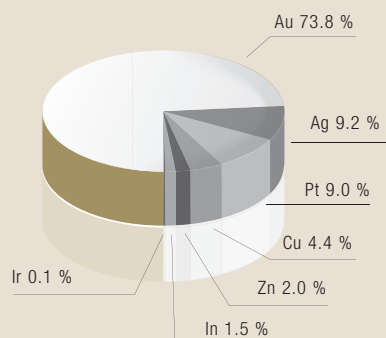
Ceramically veneered superstructure made of Degunorm supra.



An implant-supported bar made of Degunorm supra with a horizontally screw-retained tertiary structure.

Degunorm®

### Composition in mass % Degunorm



### Degunorm brand alloys

|                            | Multiple-surface fillings; crowns; milled restorations; bridges of any width | Cast-metal frameworks for dentures (major connectors) | Superstructures |
|----------------------------|------------------------------------------------------------------------------|-------------------------------------------------------|-----------------|
| Since                      |                                                                              |                                                       |                 |
| 1992 <b>Degunorm</b>       | ✓                                                                            | ✓                                                     | ✓               |
| 2001 <b>Degunorm eco</b>   | ✓                                                                            |                                                       |                 |
| 2001 <b>Degunorm logic</b> | ✓                                                                            |                                                       |                 |
| 2003 <b>Degunorm supra</b> | ✓                                                                            | ✓                                                     | ✓               |
| 2003 <b>Degunorm pur*</b>  | ✓                                                                            |                                                       |                 |

\* Up to 8 units

# BiOclus®



## Powerful and naturally beautiful.

### BiOclus®

Satisfies even the most demanding patient.

When BiOclus was developed, compatibility and ease of processing were the primary goals. Today, the BiOclus brand stands for alloys that do not contain copper, palladium or silver.

These high-gold precious metal alloys have microstructure that guarantees high strength during ceramic firing, making them the recommended material especially for long-span bridges. Their special composition makes them particularly suitable for demanding and sensitive patients.



**DeguDent**  
GOLD STANDARDS



“Excellent high-temperature stability and equally excellent biocompatibility – BiOclus is my number one favourite for the dentist’s most demanding patients.”

*Jan Mandel, MDT, Dentale Technik Mandel GmbH, Frankenthal, Germany*

## Your BiOclus benefits

### High-gold bioalloy

- ✓ For demanding and sensitive patients.

### Intense golden hue

- ✓ For aesthetic veneers.

### High strength

- ✓ Even for wide-span bridges.

### DeguDent gold standards

- ✓ Standards you can rely on.



*BiOclus Gold restoration.*

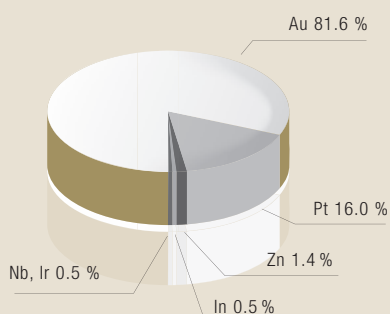


*9-unit BiOclus Kiss combination bridge.*



*BiOclus inlays.*

Composition in mass %  
**BiOclus Kiss**



BiOclus brand alloys

| Since                     | Multiple-surface fillings; onlays; partial and full crowns | Multiple-surface fillings; crowns; milled restorations; bridges of any width |
|---------------------------|------------------------------------------------------------|------------------------------------------------------------------------------|
| 1995 <b>BiOclus 4</b>     |                                                            | ✓                                                                            |
| 1996 <b>BiOclus inlay</b> | ✓                                                          |                                                                              |
| 1997 <b>BiOclus N</b>     |                                                            | ✓                                                                            |
| 2001 <b>BiOclus HT</b>    |                                                            | ✓                                                                            |
| 2005 <b>BiOclus Kiss</b>  |                                                            | ✓                                                                            |
| 2006 <b>BiOclus Gold</b>  |                                                            | ✓                                                                            |

# Econolloy®



**DeguDent**

GOLD STANDARDS

## Economical is better than cheap.

**Econolloy®**

The price/  
performance  
strategy.

Even the most convinced precious alloy user will still have to offer a **lower-cost alternative** in their services to meet every patient's needs. Econolloy consequently allows the possibility to benefit from the material properties of precious alloys without actually having to switch to non-precious metals.



“We use Econolloy to provide the benefits of precious alloys to patients on a budget.”

*Thomas Schmidt, MDT, Stroh & Scheuerpflug Zahntechnik GmbH, Ansbach, Germany*

## Your Econolloy benefits

### An alternative to non-precious alloys

- ✓ Competitive price, fast and pleasant processing.

### Particularly economical

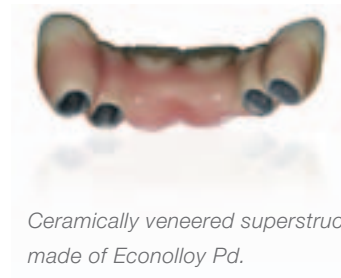
- ✓ Low material density.

### Broad range of indications

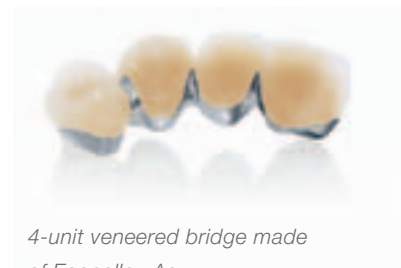
- ✓ Alloy types available for high-melting and low-melting ceramics.

### DeguDent gold standards

- ✓ Standards you can rely on.



*Ceramically veneered superstructure made of Econolloy Pd.*

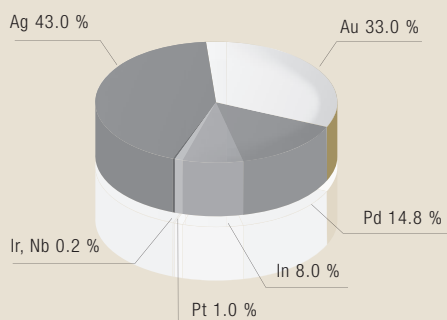


*4-unit veneered bridge made of Econolloy Ag.*



*10-unit veneered bridge made of Econolloy Au.*

Composition in mass %  
**Econolloy Au**



Econolloy brand alloys

|       |                      | Multiple-surface fillings; crowns; milled restorations; bridges of any width | Cast-metal frameworks for dentures (major connectors) | Superstructures |
|-------|----------------------|------------------------------------------------------------------------------|-------------------------------------------------------|-----------------|
| Since |                      |                                                                              |                                                       |                 |
| 2004  | <b>Econolloy</b>     | ✓                                                                            |                                                       |                 |
| 2006  | <b>Econolloy Ag</b>  | ✓                                                                            |                                                       |                 |
| 2006  | <b>Econolloy Pd</b>  | ✓                                                                            | ✓                                                     | ✓               |
| 2007  | <b>Econolloy Au*</b> | ✓                                                                            |                                                       |                 |

*\* only available in Germany and Austria.*

# Milestones.

From alloy specialist to system provider.

The roots of DeguDent go back to the year 1873, the year in which Degussa GmbH — Degussa is an acronym for Deutsche Gold- und Silber-Scheide-Anstalt (German Gold and Silver Metals Separating Works) – was founded, the predecessor of today's DeguDent GmbH. Only seven years later, the company, still in its early years, introduced the first precious dental alloys

Even in the inflation and depression years of the 1920s and 1930s, the company was able to adapt to the needs of the time, developing the reduced-gold alloys Duallor and the silver-palladium alloy Palliag M. As early as 1950, the Degulor casting alloy appeared on the market, followed, in 1964, by the first ceramic-bonding alloy, Degudent.

The Egyptians and Etruscans (1000–400 BCE) had already attempted to use golden wires to attach replacement teeth to the residual dentition.

In 1993, this was followed by another innovative milestone, the introduction of the GoldenGate System.

The multi-indication Degunorm alloy with the matching Duceragold ceramics and Degunorm-based prosthetic components achieved the desired reduction in the number of different materials in the patient's mouth. Today, Degunorm is the most popular high-gold precious alloy in Germany. Highly specific and well-planned improvements, driven strictly by the patient's needs, were made in the following years, resulting in products such as the BiOcclus range of bioalloys and the Econolloy reduced-gold alloys.

Today, 137 years after the company was founded, the DeguDent product portfolio covers all indications and leaves nothing still to be desired. One common theme has been characteristic of the company throughout its entire history: whether in development, production or services, the quality standards maintained by DeguDent were and are always the highest.

Every innovation stands on a foundation of more than 100 years of experience, guaranteeing comprehensive safety for dentists, dental technicians and patients alike. From its origins as an alloy specialist, DeguDent has become a competent prosthodontic system provider.

The enterprise now offers not only precious dental alloys but also a comprehensive and unified range of prosthetic components, electroplating technology tools, high-quality technical devices, custom CAD/CAM solutions, ceramics and top-notch consumables and denture teeth.



Degulor®

Degudent®

1950

1955

1960

1970

*An idea that made all the difference.*

**1950** Introduction of the Degulor casting alloy.

*Always seductively aesthetic*

**1964** introduction of the first ceramic-bonding precious alloy: Degudent.



# Gold.

Gold means value. A material with a bright future.



Precious alloys are universally applicable and continue to constitute the foundation of restorative dentistry. Unrivalled clinical experience throughout the decades has supported and continues to support this material. It may sound surprising that despite the approximately 1,000 alloys already on the market, new variants are being introduced all the time. In fact, however, this simply reflects the changing expectations in present-day dentistry, especially when looking at new concepts for biocompatibility, new indications or the need to offer a range of lower-price products.

Dentists and dental technicians alike appreciate the reliability and processing comfort of this ductile material, and patients appreciate that this type of restoration is clinically proven and has excellent survival rates.

**The program concept of combining precious alloys with ceramic veneering materials and appropriate jointing techniques will remain a standard technology, especially when designing and implementing highly complex superstructures.**

## Advantages of precious dental alloys

- ✓ More than 100 years of tradition and experience in Germany
- ✓ Comprehensive safety confirmed by clinical evidence
- ✓ Broad range of indications
- ✓ Perfect handling properties
- ✓ High life expectancy of the restorations
- ✓ Highly biocompatible, suitable for sensitive patients
- ✓ Uncomplicated ceramic veneering
- ✓ Optimum strength for implant-supported restorations
- ✓ Repair option

Degunorm®

BiOcclus®

Econolloy®

1980

1985

1990

1995

2000

2005

2010

*Multi-talented in every respect*

**1992** Introduction of the Degunorm multi-indication alloy.

*Powerful and naturally beautiful*

**1995** Introduction of the powerful BiOcclus bioalloy.

*Economical is better than cheap.*

**2004** Econolloy, the alternative to non-precious alloys.



# Fascination Prosthetics

10075/1012/Z  
Last revision: 12/2010

