

# Complementary Vitallium System Products

## Duplicating Material

Polyflex® is a reversible hydrocolloid material to be used for duplicating any model in stone or phosphate investments and can also be used with ethyl-silicate investments.

Perflex® is a chemically balanced, durable duplicating material designed to work with V.R. investment to provide accurate refractory models. It is recommended to use Protective Coat on the Perflex mold in order to assure a smooth surface on the refractory model.



All Purpose Protective Coat assures a smooth surface on the refractory model when applied to the Perflex mold. Additionally, it is used as a paint-on coating for Dentsply Sirona partial denture patterns prior to investing.

## A Comprehensive Pattern Assortment

Dentsply Sirona Flexseal® Patterns are preformed to exacting sizes with uniform dimensions and maintain the high standards of form and function required of Vitallium partial denture alloy castings. The patterns are tacky and made from a material that displays excellent memory. They are available in a comprehensive assortment of size and design allowing for fast, accurate wax-ups of Vitallium restorations.



Vitallium® Trademark is licensed to Dentsply Sirona by Howmedica Osteonics Corporation.  
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## The Ultimate Partial Denture System

Vitallium is the partial denture system of choice when it comes to high quality partial denture frameworks. Finish your framework with Lucitone® denture base acrylic and Dentsply Sirona teeth for the ultimate aesthetic outcome.



## Portrait® IPN®

For the patient who demands the best, Portrait IPN teeth deliver the premium combination of aesthetics, time-tested material and mould selection. Each tooth blends three different layers of IPN material creating five distinct aesthetic zones. The result is a life-like tooth with superior durability.

## Genios®

For the patient that requires a distinctive European characterization, Genios denture teeth are a highly aesthetic, 3-part denture tooth design that leverages the superior highly individualized denture.

## TruExpression®

For the patient seeking the next step in improved denture appearance and functional durability, TruExpression denture teeth offer a harmony of "True-to-Life" shade blending and deluxe anatomy choices with the durability of MXL material.

## Lucitone® HIPA (High Impact Pour Acrylic)

The first pour acrylic to exceed the ISO standard for improved impact resistance. It is 200% stronger than other pour acrylics, and it has excellent fit-to-model and color stability.

## Lucitone 199®

With over 40 years of clinical success, Lucitone 199 is the premium choice for both full and partial dentures. It is the industry standard for premium high-impact denture base resins. Trusted and reliable, with superior impact resistance, balanced translucency and excellent vein simulation.

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## Vitallium® Partial Denture System

## A very rich history.....

The Vitallium success story started in 1932, when Reiner Erdle, a German dental technician, composed a miracle partial denture alloy after years of research, which was patented under the name Vitallium®.

The production of dental restorations is still its primary use. However, over the years, there have been a number of other specialized applications based on the unique features and qualities of this extraordinary alloy. Not only has it been used as a very biocompatible material for the production of implants to replace elbow and hip joints, but the first American Jet engines also took off with rotor blades made from Vitallium.

## ... and still the industry standard

More than eighty years of experience, in a wide range of applications, proves the reliability of this material and makes Vitallium the industry standard. Dentist and dental laboratories alike know and trust the Vitallium line of products. Vitallium continues to be the industry leader by which all others compare themselves!

## Vitallium® 2000 and Vitallium® 2000 Plus Alloys

Vitallium 2000 is a premium partial denture system featuring two alloy formulations: Vitallium 2000 and Vitallium 2000 Plus with advanced physical properties for improved handling characteristics.



- **Superior Strength** - The high fracture resistance of Vitallium 2000 alloys enables dental laboratories to fabricate lighter, more refined partials for improved aesthetics and greater patient comfort.
- **Predictability and Precise Fit** - Vitallium 2000 alloys have a higher elongation value than the original Vitallium alloy, resulting in a partial framework that permits predictable adjustments with unprecedented fracture resistance. Quite simply, Vitallium 2000 alloys adjust like gold with no fear of deformation for a precise fit.
- **High Surface Luster** - Vitallium alloys maintain a high luster and resist plaque. This ensures that patients can easily and effectively clean their partial dentures.
- **Biocompatibility** - Vitallium alloys are nickel and beryllium-free.

## Vitallium® Alloys

### Yield Strength:

The ability to resist permanent deformation.

Vitallium 2000 Plus	98,600 PSI	680 MPa
Vitallium 2000	87,000 PSI	600 MPa
Vitallium	89,350 PSI	616 MPa

### Tensile Strength:

Fracture resistance.

Vitallium 2000 Plus	139,200 PSI	960 MPa
Vitallium 2000	124,000 PSI	855 MPa
Vitallium	124,000 PSI	855 MPa

### Elongation:

Adjustability.

Vitallium 2000 Plus	10%
Vitallium 2000	6%
Vitallium	4.5%

### Vickers Hardness:

Lower numbers indicate less abrasion on opposing dentition.

Vitallium 2000 Plus	395
Vitallium 2000	410
Vitallium	428

Data on File.

## Matched Alloy and Investment for Optimal Results

Vitallium alloys and investments are the first to be "matched". What does that mean?

This means that the two materials work together during processing to expand and contract in unison, to avoid distortion during the heating, casting and cooling process. This facilitates a precise fit of the Vitallium partial.



The Vitallium 2000 Investment System is designed for Vitallium 2000 alloys. The investment is a high-grade ethyl-silicate product formulated to provide consistent and uniform expansion for producing accurate fitting cast partial frameworks.

Vitallium 2000 RS Investment System is a rapid set ethyl-silicate investment formulated to match the high quality of Vitallium 2000 and Vitallium 2000 Plus partial denture alloys. Its quicker setting time of 20 - 30 minutes allows the dental laboratory to produce more cases per day.

V.R. Investment is a high-grade ethyl-silicate investment of specific particle size formulated to provide consistent, uniform expansion to promote the accurate fit of Vitallium alloy partial dentures.

Oxyplus™ is an oxyphosphate investment which can be used with a concentrated expansion liquid to obtain precision fit. Burnout can be in either a gas or electric furnace.