

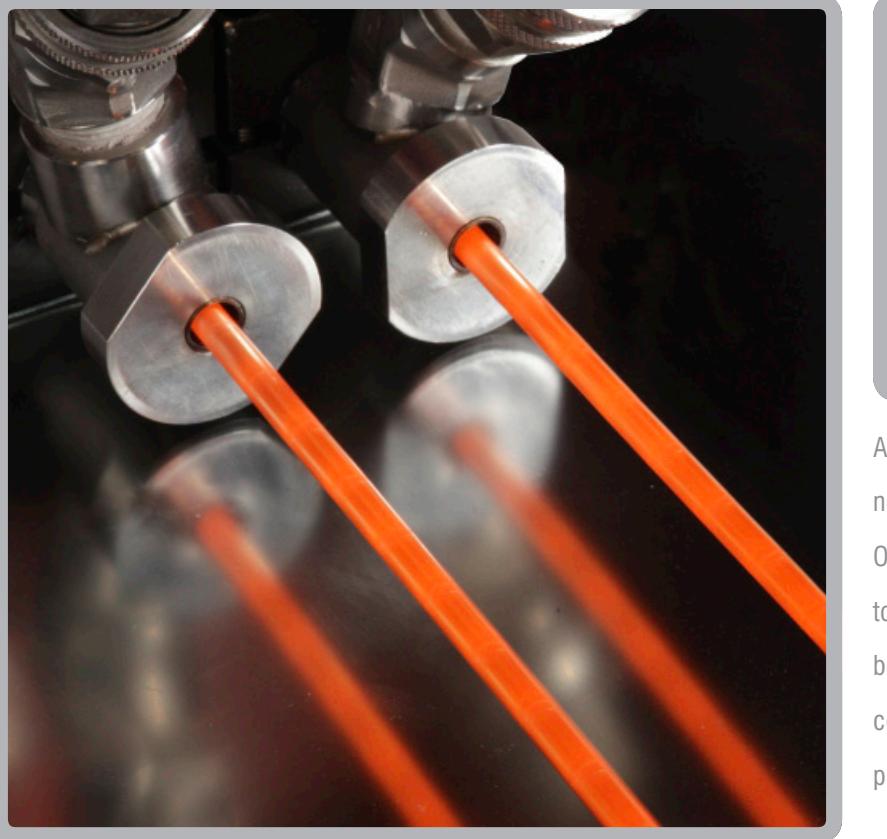


AalbaDent



Our New Look... Your Success

AalbaDent 



state-of-the-art continuous casting technology. You benefit because products produced from this process exhibit unparalleled homogeneity, precise alloy chemistry and lower residual gas content.

Dental professionals the world over have come to know and trust our casting alloys from our unique brands and ingot shapes. This tradition continues with a bold new look. Our nickel and cobalt casting alloys are now branded via an exclusive labeling process* which



geometric shape for nickel and cobalt based casting alloys. Our new cylindrical ingot shape and size is optimal for melting and casting. You benefit from quicker melting along with less surface area which yields reduced residual oxidation.

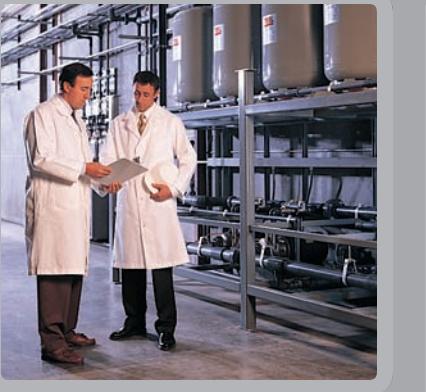
makes alloy identification clear and simple. Look for our trademarked alloys to insure your laboratory's quality and success.

We have closely studied the dynamics of laboratory casting in order to determine the ideal

*Patent Pending

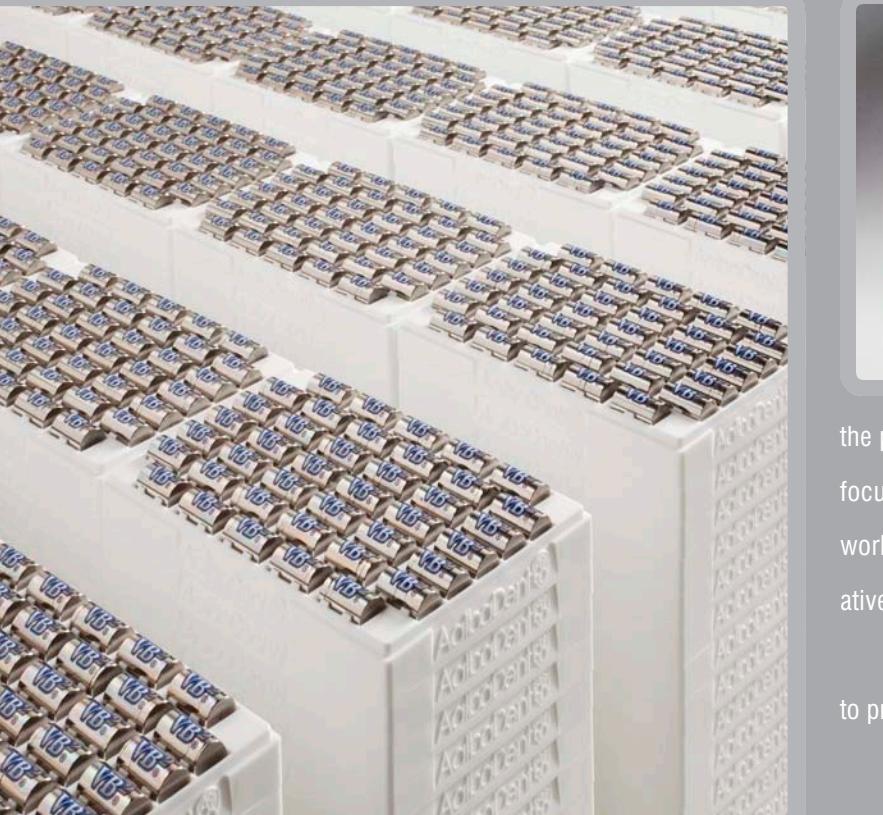
**Patent No. D635,364 S

Excellence & Reliability



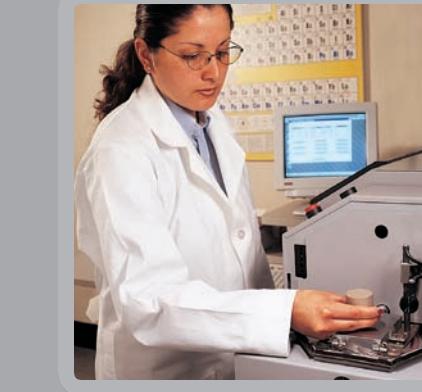
YOU BENEFIT

In 1968 Aalba Dent introduced VeraBond—the world's number one selling nickel-chromium alloy. Today, our alloys remain the benchmark for cast dental prosthetic devices. During



the past four decades, our solitary focus has been manufacturing the world's finest —base-metal restorative alloys and supplies.

From new product development, to precise casting and strict —quality



control—we craft every product knowing that ultimately, your customer's smile depends on it. Our drive to develop new alloys perfectly suited for specific —dental applications has led to breakthrough industry firsts,



including VeraBond, NPG, NPG+2, VeraSoft and Vera PDN.

Your practice will benefit from Aalba Dent's certified quality system which meets the rigorous standards of ISO Specification 9001 and ISO Specification 13485 for the manufacturing of medical devices.



Look for the Aalba Dent shield... the shield is your assurance of quality, precision and proven product safety.

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Safety Proven...Your Assurance



QUALITY CONTROL - CCQ

At Aalba Dent there is no step more important than Quality Control. Our stringent quality control process guarantees batch to batch consistency and allows Aalba Dent to deliver the consistency demanded by quality dental labs worldwide.

Aalba Dent is in perpetual search of the best ingredients. Our nickel, produced via the carbonyl process, has the lowest metallic impurity content of any commercial nickel. We select premium electro-

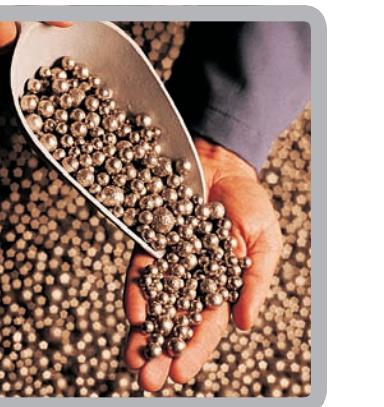
lytic cobalt, high purity chromium, and OFC high-purity copper. Once these exotic ingredients reach Aalba Dent, every element is checked to certify individual purity before entering the process to become Aalba Dent-approved dental alloys.

Products designated with the CCQ mark are certified by Aalba Dent as continuous cast products from our proprietary state-of-the-art continuous casting technology. Products produced from this process exhibit unparalleled homogeneity, precise alloy chemistry and lower gas content.



CE 0470

The European harmonized system for the assessment of conformity under the Medical Device Directive (MDD) requires all Class IIa medical devices marketed in the European Union to have CE marking. Under the Directive 93/42/ECC the notifying body



NIOM CERTIFIED

Scandinavian Institute of Dental Materials Aalba Dent's NIOM-Certified materials fulfill the requirements of specific international (ISO) standards, further guaranteeing your patient's safety and satisfaction. The research activities at NIOM are internation-

ally recognized, and the institute collaborates worldwide with research institutes in the field of dentistry, medicine and materials science.



FDA APPROVED

All Aalba Dent alloys and solders are registered and in accordance with the provisions of the Federal Food & Drug (FDA) Cosmetic Act. The act includes requirements for annual registration, listing of devices, good manufacturing practices and labeling.

All Aalba Dent restorative devices have been reviewed and registered for marketing clearance by the United States Food and Drug Administration under the requirements of the 1976 Medical Device Amendments Act.



VeraBond®

INNOVATION

(PFM:Ni-Cr-Mo)

#1 IN ITS CLASS

VeraBond is the world's number one nickel-chromium ceramic alloy.

Engineered to achieve dependable bond strength with today's modern porcelains, VeraBond's unique formulation is clinically proven and produces superior properties providing the attributes you need to create aesthetic restorations.

VeraBond possesses unsurpassed melting and casting fluidity for sharp, delicate margins and consistently reliable castings. The combined yield strength (121,500 psi) and a hardness rating of 410 Vickers



Packaging & Accessories

VeraBond
194 gram box (40 ingots)

Vera Solder
2 dwt (3.11 g) packet
2 gram packet

Vera Flux
1.5 oz jar (42.5 g)

produces tremendous resistance to clinical wear and deformation. Superior mechanical strength permits the design of thin wall copings and thin interproximal connections; greater strength without bulk.

A superior bond between VeraBond and porcelain leaves no dark margin

APPLICATIONS

Porcelain fused to metal (PFM), single units, long-span multiple unit bridgework, maryland bridge, metal sub-structure for polymer resins (acrylic & composites), full cast crowns, implant superstructures.

PORCELAIN COMPATIBILITY

VeraBond performs best with traditional medium grain porcelains: Ceramco, Excelco, Spectrum, Noritake, Synspar, Shofu-Crystar, as well as other commercially available medium-grain porcelains.



continue to fit, bake after bake.

With three decades of clinical service, VeraBond has been proven to offer patients durability, comfort and safety.



Verabond

	Tensile Strength psi (MPa)	Yield Strength psi (MPa)	Modulus of Elasticity psi (MPa) X10 ⁶	Elongation Percent	Vickers Hardness	Density g/cm ³	Color	Coefficient of Expansion (@500) X10 ⁶	Melting Range °F (°C)	Composition
Verabond	196,000 (1,352)	121,000 (838)	30.4 (0.21)	18	410	7.9	White	14.0	2,480-2,534 (1,360-1,390)	Co 63.5% Cr 27.0% Mo 5.5% Fe, Ni, Si, Mn

VeraBond® II

(PFM:Ni-Cr-Nb)

ORIGINAL FORMULA

The original VeraBond II formulation... now CE 0510 marked! VeraBond II is a premium high strength, nickel-chromium alloy developed with your ceramic creations in mind. VeraBond II provides a coefficient of thermal expansion designed to match Ceramco II™ and other medium-grain porcelains. Its melting range provides added thermal stability during porcelain bonding and



Packaging & Accessories

VeraBond II
203 gram box (40 ingots)

Vera Solder
2 dwt (3.11 g) packet
2 gram packet

Vera Flux
1.5 oz jar (42.5 g)

PORCELAIN COMPATIBILITY

VeraBond II performs best with traditional medium grain porcelains: Ceramco, Excelco, Spectrum, Noritake, Synspar, Shofu-Crystar, as well as other commercially available



VeraBond II's yield strength is over three times greater than industry standards.

Like VeraBond 2V, VeraBond II offers unique formulation benefits provided by niobium for a reliable porcelain bond and increased fluidity.



VeraBond II will exceed your previous performance expectations of non-beryllium formulations.

VeraBond II is corrosion resistant and bio-compatible. The forma-



tion of a tenacious, micro-thin passive layer provides corrosion protection. You'll prescribe VeraBond II with confidence.



Verabond II

	Tensile Strength psi (MPa)	Yield Strength psi (MPa)	Elongation Percent	Vickers Hardness	Density g/cm³	Color	Coefficient of Expansion (@500°C) X10⁶	Melting Range °F (°C)	Composition
Verabond II	119,000 (821)	111,000 (766)	4	440	8.1	White	26.1 (0.18)	2,480-2,534 (1,360-1,390)	Co 63.5% Cr 27.0% Mo 5.5% Fe, Ni, Si, Mn

VeraBond® V

(PFM:Ni-Cr-Mo)



APPLICATIONS

Porcelain fused to metal (PFM), single units, long-span bridgework, maryland bridge, metal sub-structure for polymer resins (acrylic & composites), full cast crowns, implant superstructures.

PORCELAIN COMPATIBILITY

VeraBond V performs best with traditional fine-grain porcelains: Vita, Ivoclar-Classic, Shofu-Vintage, Shofu-Halo, Biobond, Duceram, Will-Ceram, Finesse, as well as other commercially available fine-grain porcelains.

Packaging & Accessories

VeraBond V
204 gram box (40 ingots)

Vera Solder
2 dwt (3.11 g) packet
2 gram packet

Vera Flux
1.5 oz jar (42.5 g)

V IS FOR VITAM

VeraBond V is a premium, high strength, nickel-chromium alloy with a coefficient of thermal expansion engineered to match Vita™ and other European-type fine grain porcelains. Its unique formulation provides superior properties: excellent porcelain bond and increased porcelain-to-metal retention. VeraBond V exhibits oxidation control



Verabond V

	Tensile Strength psi (MPa)	Yield Strength psi (MPa)	Elongation Percent	Vickers Hardness	Density g/cm³	Color	Coefficient of Expansion (@500°C) X10 ⁶	Melting Range °F (°C)	Composition
Verabond V	120,000 (828)	83,500 (576)	10	380	8.1	White	13.8	2,124-2,282 (1,162-1,250)	Ni 74.8% Cr 12.7% Mo 9.0% Al, Be, Co



of thin wall copings and thin interproximal connections. You can create frameworks and crowns with greater strength and less bulk.

With over three decades of clinical service, VeraBond V has been proven to offer patients durability, comfort and safety.

VeraBond® 2V

(PFM:Ni-Cr-Nb)

SPECIALIZED FOR VITA™

VeraBond 2V is a premium, high strength, nickel-chromium alloy formulated for Vita™ and other European, fine-grain porcelains. VeraBond 2V raises the industry standard and will exceed your performance expectations of non-beryllium formulations.

VeraBond 2V delivers handling and fabrication characteristics not previously found in other non-beryllium



APPLICATIONS

Porcelain fused to metal (PFM), single units, long-span multiple unit bridgework, maryland bridge, metal sub-structure for polymer resins (acrylic & composites), full cast crowns, implant superstructures.

PORCELAIN COMPATIBILITY

VeraBond 2V performs best with traditional fine grain porcelains: Vita, Ivoclar-Classic, Shofu-Vintage, Shofu-Halo, Biobond, Duceram, Will-Ceram, Finesse, as well as other com

Packaging & Accessories

VeraBond 2V
208 gram box (40 ingots)

Vera Solder
2 dwt (3.11 g) packet
2 gram packet

Vera Flux
1.5 oz jar (42.5 g)

alloys. Its special properties are the result of two intelligent additions. First, a bio-compatible 4% niobium provides oxidation control—creating a tenacious yet light oxide. This oxide remains constant even after repeated oven firings. Niobium allows excellent



thermal or clinical distortion. High yield strength and great elongation make VeraBond 2V a winner. VeraBond 2V mechanical properties exceed industry standards by a factor of three!

Low specific gravity, excellent castability and high yield strength permit the design of light weight, thin wall copings and fine interproximal abutments.



CE
0470

NIOM
certified

Certified
CCQ
Continuous Cast Quality®

Verabond 2V	Tensile Strength psi (MPa)	Yield Strength psi (MPa)	Elongation Percent	Vickers Hardness	Density g/cm³	Color	Coefficient of Expansion (@500°C) X10 ⁶	Melting Range °F (°C)	Composition
	148,000 (1,021)	108,000 (754)	18	373	8.2	White	13.7	2,354-2,435 (1,290-1,335)	Ni 78.5% Cr 12.8% Mo 9.0% Nb, Al, Si



Continuum™ C

(PFM:Ni-Cr-Mo)

Packaging & Accessories

Continuum C
200 gram box (40 ingots)

Vera Solder
2 dwt (3.11 g) packet
2 gram packet

Vera Flux
1.5 oz jar (42.5 g)



PORCELAIN'S PERFECT MATCH

Continuum... the next generation of ceramic casting alloys; providing technicians perfect castings, lighter oxides and improved bond strength.

Continuum delivers a perfected 14.3 coefficient of thermal expansion, a balanced titanium addition, and higher



chromium (15%)
for improved
corrosion
resistance.

Possible, due to Alba Dent's proprietary continuous casting technology yielding essentially gas free alloys, unparalleled homogeneity, and precise alloy chemistry.

Continuum's 14.3 coefficient is optimized for major porcelain brands such as Ceramco, Noritake, Shofu-Crystar, as well as other commercial

medium-grain porcelains. Degassing Continuum is not required, saving technicians valuable time.

Continuum's titanium (Ti) acts as an oxygen scavenger, reaching out and chemically bonding with the feldspar (SiO₂) and kaolin (K₂O) found in all dental porcelains; enhancing bond strength. Titanium also yields improved anti-greening properties for more esthetic restorations.

When only the best will do... use Continuum. Look for our Certified CCQ alloys as your assurance of unparalleled homogeneity, precise chemistry and lowered gas content.



APPLICATIONS

Porcelain fused to metal (PFM), single units, long-span multiple unit bridgework, maryland bridge, metal substructure for polymer resins (acrylic & composites), full cast crowns, implant superstructures.

PORCELAIN COMPATIBILITY

Continuum performs best with traditional medium grain porcelains: Ceramco III, Ceramco II, Noritake, Excelsior, Spectrum, Shofu-Crystar, as well as other commercially available medium-grain porcelains.

	Tensile Strength psi (MPa)	Yield Strength psi (MPa)	Modulus of Elasticity psi (MPa) X10 ⁶	Elongation Percent	Vickers Hardness	Density g/cm ³	Coefficient of Expansion (@500°C) X10 ⁶	Melting Range °F (°C)	Composition
Continuum C	152,200 (1,091)	99,350 (685)	29.0 (0.20)	19	323	8.0	White	14.3	Ni 76.9% Cr 15.0% Mo 4.7% Al, Be, Ti



Continum™ V

DURABILITY (PFM:Ni-Cr-Mo)

Packaging & Accessories

Continum V
200 gram box (40 ingots)

Vera Solder
2 dwt (3.11 g) packet
2 gram packet

Vera Flux
1.5 oz jar (42.5 g)



APPLICATIONS

Porcelain fused to metal (PFM), single units, long-span multiple unit bridgework, maryland bridge, metal substructure for polymer resins (acrylic & composites), full cast crowns, implant superstructures.



PORCELAIN COMPATIBILITY

ContinumV performs best with modern fine-grain porcelains: Vita, Ivoclar-Classic, Shofu-Vintage, Shofu-Halo, Biobond, Duceram Plus, Finesse, Will-Ceram, as well as other commercially available fine-grain porcelains.

VITA'S PERFECT MATCH

Continum V... designed to work best with today's modern fine-grain porcelains.

Continum V provides a perfect 13.8 coefficient of thermal expansion, a balanced titanium addition, and high chromium (16%) for improved corrosion resistance.

Continum V's 13.8 coefficient is optimized for major porcelain brands such as Vita, Ivoclar, as well as other modern fine-grain porcelains. Continum V is produced with our proprietary continuous casting technology yielding essentially gas free alloys, unparalleled homogeneity, and precise chemistry. Degassing Continum V is not required, saving production time.

Its unique titanium enriched formulation enhances porcelain bond, increases porcelain-to-metal retention, and improves oxidation control for a light resilient oxide. Continum V's titanium (Ti) acts as an oxygen scavenger, chemically bonding with feldspar (SiO_2) and kaolin (K_2O) found in all porcelains. Titanium also provides anti-greening properties for more esthetic restorations.

Use only the best... Continum V. Look for our Certified CCQ alloys as your assurance of unparalleled homogeneity, precise chemistry and lowered gas content.



Continum V	Tensile Strength psi (MPa)	Yield Strength psi (MPa)	Modulus of Elasticity psi ($MPa \times 10^5$)	Elongation Percent	Vickers Hardness	Density g/cm³	Color	Coefficient of Expansion (@500°C) $\times 10^{-6}$	Melting Range °F (°C)	Composition
	150,200 (1,036)	100,800 (695)	29.0 (0.20)	15	323	8.0	White	13.8	2,110-2,403 (1,154-1,317)	Ni 71.9% Cr 16.0% Mo 9.0% Al, Be, Ti



Comandium™

(PFM:Ni-Cr-Mo)



Packaging & Accessories

Comandium C
195 gram box (40 ingots)
200 gram box (non-brand ingots)
1,000 gram box (non-brand ingots)

Vera Solder
2 dwt (3.11 g) packet
2 gram packet

Vera Flux
1.5 oz jar (42.5 g)

APPLICATIONS

Porcelain fused to metal (PFM), single units, long-span multiple unit bridgework, maryland bridge, metal substructure for polymer resins (acrylic & composites), full cast crowns, implant superstructures.



PORCELAIN COMPATIBILITY

Comandium performs best with traditional medium grain porcelains: Ceramco III, Ceramco II, Noritake, Excelsior, Spectrum, Shofu-Crystar, as well as other commercially available medium-grain porcelains.



INNOVATE WITHOUT COMPROMISE

The all new Comandium... part of the next generation of ceramic casting alloys, providing technicians with economy not compromise.

Comandium benefits from Aalba Dent's proprietary continuous casting



technology; such as Ceramco, Noritake, Shofu-Crystar, as well as other medium-grain porcelains. Degassing Comandium is not required, saving technicians valuable time.

unparalleled homogeneity, and precise alloy chemistry. Technicians will find more perfect castings, lighter oxides and improved bond strength.

With it's small efficient ingot design (4.90g), Comandium melts fast, minimizing gas and oxide formation.

Comandium's 14.3 coefficient is optimized for major porcelain brands

common to all porcelains. Titanium also improves anti-greening effects for more esthetic restorations.

Don't compromise, use Comandium. Look for our Certified CCQ Alloys.



	Tensile Strength psi (MPa)	Yield Strength psi (MPa)	Modulus of Elasticity psi (MPa) X10 ⁶	Elongation Percent	Vickers Hardness	Density g/cm ³	Coefficient of Expansion (@500°C) X10 ⁶	Melting Range °F (°C)	Composition
Comandium C	189,000 (1,303)	127,600 (880)	29.0 (0.20)	11	352	8.0	White	14.3 2,129-2,363 (1,165-1,295)	Ni 78.0% Cr 13.0% Mo 4.7% Al, Be, Ti

Comandium™ II

(PFM:Ni-Cr-Nb)



APPLICATIONS

Porcelain fused to metal (PFM), single units, long-span multiple unit bridgework, metal substructure for polymer resins (acrylic & composites), full cast crowns, implant superstructures.

PORCELAIN COMPATIBILITY

Comandium II performs best with traditional medium grain porcelains: Ceramco III, Ceramco II, Noritake, Excelsior, Spectrum, Shofu-Crystar, as well as other commercially available medium-grain porcelains.

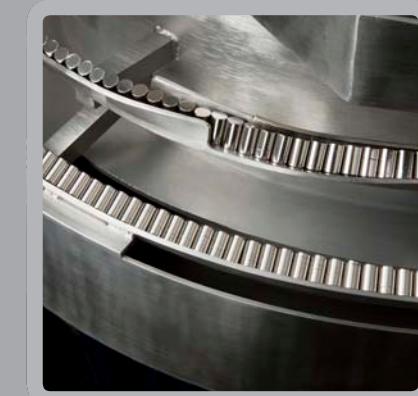


NON-BERYLLIUM FORMULATION

The all new Comandium II... a non-beryllium ceramic casting alloy, providing economy and safety.

Comandium II benefits from Aalba Dent's proprietary continuous casting technology; yielding essentially gas free alloys, unparalleled homogeneity, and precise alloy chemistry.

Comandium II's 14.3 coefficient is optimized for major porcelain brands such as Ceramco, Noritake,



Shofu-Crystar, as well as other medium-grain porcelains. At 14.3, Comandium II's coefficient falls within these major porcelain's ideal sweet-spot; after firing, porcelain remains in favorable compression, not over stressed.

With its small efficient ingot design (4.90g), Comandium II melts fast, minimizing gas and oxide formation. Porcelain bond strength is enhanced with Comandium II's titanium (Ti)

and columbium (Cb) additions, chemically bonding with the feldspar (SiO₂) and kaolin (K₂O) common to all porcelains. Titanium also improves anti-greening effects for more esthetic restorations.

Use Comandium II with confidence. Look for our Certified CCQ alloys as your assurance of unparalleled homogeneity.

Packaging & Accessories

Comandium II
203 gram box (40 ingots)
200 gram box (non-brand ingots)
1,000 gram box (non-brand ingots)

Vera Solder
2 dwt (3.11 g) packet
2 gram packet

Vera Flux
1.5 oz jar (42.5 g)



Comandium II	Tensile Strength psi (MPa)	Yield Strength psi (MPa)	Modulus of Elasticity psi (MPa) X10 ⁶	Elongation Percent	Vickers Hardness	Density g/cm ³	Coefficient of Expansion (@500°C) X10 ⁶	Melting Range °F (°C)	Composition
	153,600 (1,059)	116,435 (803)	29.0 (0.20)	3	375	8.0	White	14.3	2,147-2,357 (1,175-1,292)



PFM ACCESSORIES

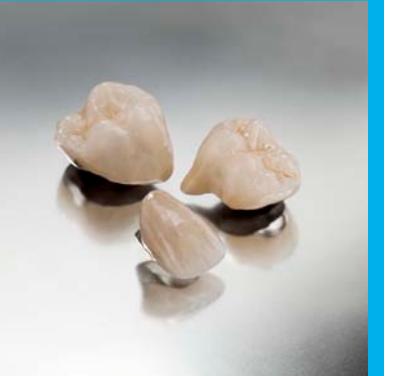


VERA SOLDER

Premium high fusing solder for
nickel based, ceramic non-precious
casting alloys.

VERA FLUX

Boron-Enhanced paste flux.



The logo consists of the text "NIOM" in a large, bold, black sans-serif font, with "certified" in a smaller, regular black sans-serif font directly below it, all contained within a thin black rectangular border.



MECHANICAL *PFM Mechanical Properties*

	Tensile Strength psi (MPa)	Yield Strength psi (MPa)	Modulus of Elasticity psi (MPa) X10 ⁶	Elongation Percent	Vickers Hardness	Density g/cm ³	Color	Coefficient of Thermal Expansion X10 ⁶ (@ 500 °C)	Melting Range °F (°C)	Composition	Ceramic Restorations PFM	Crown & Bridge FMC	Partial Denture Framework	Single Units & Multi Unit Bridgework	Posts & Cores	Inlays & Onlays	Sub-Structure for Polymer Crown & Bridge Resins	Implant Super Structures	Maryland Bridge	ISO Classification Properties	Registrations & Certifications
VeraBond	196,000 (1,352)	121,000 (838)	30.4 (0.21)	18	410	7.9	White	14.0	2,120-2,327 (1,160-1,275)	Ni 77.9% Cr 12.6% Mo 5.0% Al, Be, Co	■	■	■	■	■	■	■	■	Type 5	FDA, CCq	
VeraBond II	119,000 (821)	111,000 (766)		4	440	8.1	White	14.1	2,192-2,399 (1,200-1,315)	Ni 75.5% Cr 11.5% Mo 3.5% Nb, Al, Si	■	■	■	■	■	■	■	■	Type 5	FDA, CE, CCq	
VeraBond V	120,000 (828)	83,500 (576)		10	380	8.1	White	13.8	2,124-2,282 (1,162-1,250)	Ni 74.8% Cr 12.7% Mo 9.0% Al, Be, Co	■	■	■	■	■	■	■	■	Type 5	FDA, CCq	
VeraBond 2V	148,000 (1,021)	108,000 (754)		18	373	8.2	White	13.7	2,354-2,435 (1,290-1,335)	Ni 78.5% Cr 12.8% Mo 9.0% Nb, Al, Si	■	■	■	■	■	■	■	■	Type 5	FDA, CE, NIOM, CCq	
Continuum C	158,200 (1,091)	99,350 (685)	29.0 (0.20)	19	323	8.0	White	14.0	2,132-2,521 (1,167-1,383)	Ni 76.9% Cr 15.0% Mo 4.7% Al, Be, Ti	■	■	■	■	■	■	■	■	Type 5	FDA, DE, NIOM, CCq	
Continuum V	150,200 (1,036)	100,800 (695)	29.0 (0.200)	15	323	8.0	White	13.8	2,110-2,403 (1,154-1,317)	Ni 71.9% Cr 16.0% Mo 9.0% Al, Be, Ti	■	■	■	■	■	■	■	■	Type 5	FDA, CE, CCq	
Comandium C	189,000 (1,303)	127,600 (880)	29.0 (0.20)	11	352	8.0	White	14.3	2,129-2,363 (1,165-1,295)	Ni 78.0% Cr 13.0% Mo 4.7% Al, Be, Ti	■	■	■	■	■	■	■	■	Type 5	FDA, CCq	
Comandium II	153,600 (1,059)	116,435 (803)	29.0 (0.20)	3	375	8.0	White	14.3	2,147-2,357 (1,175-1,292)	Ni 76.0% Cr 12.0% Mo 3.95% Al, Si, Ti	■	■	■	■	■	■	■	■	Type 5	FDA, CCq	



CE 047 O Class IIa medical device in
compliance with Directive 93/42/ECC



License No. 296734; United States of America Department of Health and Human Services Food & Drug Administration (FDA)



Aalba Dent products designated with our CCQ mark are Certified by Aalba Dent as continuous cast products from our proprietary state-of-the-art continuous casting technology. Products produced from this process exhibit unparalleled homogeneity, precise alloy chemistry and lower gas content.

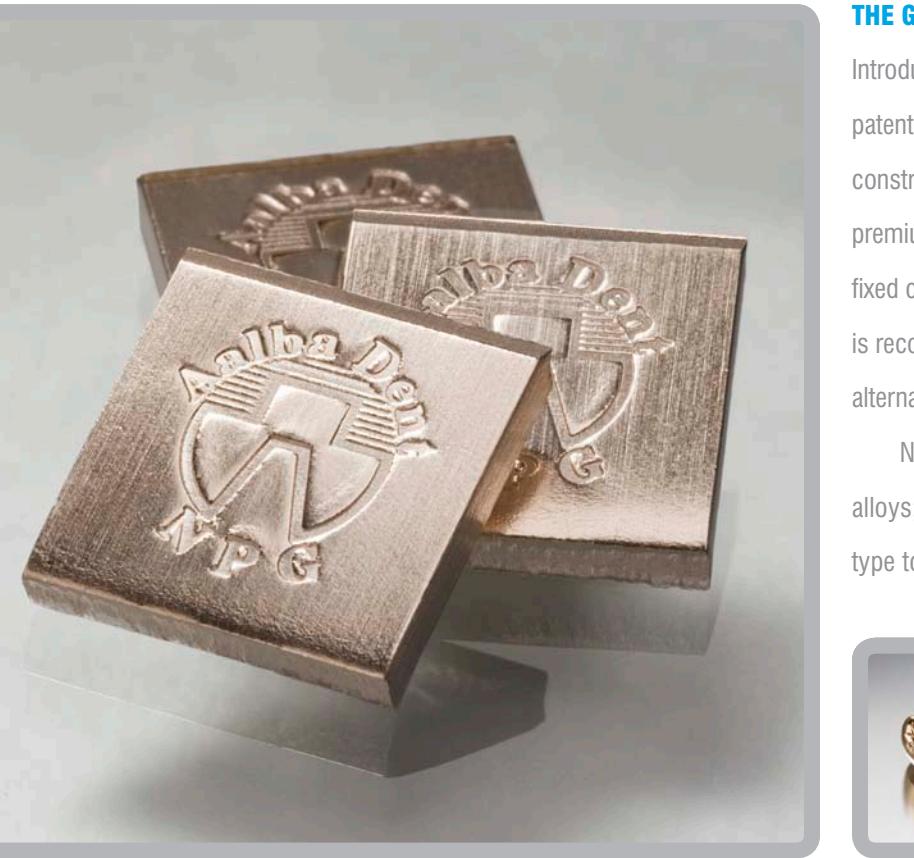
AalbaDent, Inc. is a registered, medical device manufacturer in compliance with applicable Good Manufacturing Practices Regulations, Federal/State laws, local environmental laws and regulations. Facility license No. 61179; State of California: Department of Health Services: Food & Drug Branch.

Packaging & Accessories

NPG
1 t.oz box
2 t.oz box
50 gram box
100 gram box
250 gram box
1,000 gram box

Aalba Gold Solder
1 dwt (1.55g) packet

Albral Casting Flux
2.0 oz jar



APPLICATIONS

Non-ceramic fixed appliances, full cast crowns (FMC), single units, onlays, short-span multiple unit bridgework, metal sub-structure for veneer crowns using polymer resins (acrylic & composites), posts and cores.

PORCELAIN COMPATIBILITY

VeraBond 2V performs best with traditional fine grain porcelains: Vita, Ivoclar-Classic, Shofu-Vintage, Shofu-Halo, Biobond, Duceram, Will-Ceram, Finesse, as well as other com

THE GOLD ALTERNATIVE

Introduced in 1987, NPG is the first patented, yellow-gold colored alloy for construction of Type III restorations. A premium, non-precious casting alloy for fixed crowns, bridges and onlays, NPG is recognized worldwide as the gold alternative—and has been for 20 years.

NPG and NPG+2 are unique alloys; the only formulations of their type to be Accepted by the American

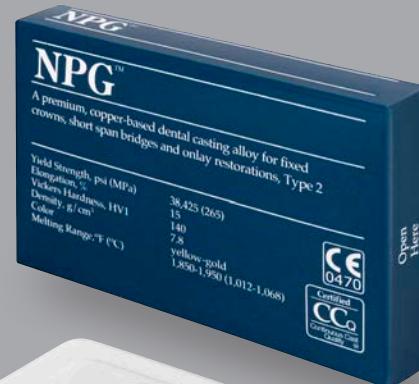


Dental Association's Council on Dental Materials, since 1989 and 1998 respectively. NPG offers the appearance and handling characteristics of

precious Type III yellow-gold alloys, but at a fraction of the cost. Your laboratory will benefit from smooth and accurate NPG castings, providing reliable quality and fit. NPG is simple to finish, and soldering is trouble-free with our specially formulated Aalba

Gold Solder and Aalba Flux.

The bio-compatibility of NPG has been established through extensive



	Tensile Strength psi (MPa)	Yield Strength psi (MPa)	Elongation Percent	Vickers Hardness	Density g/cm³	Color	Melting Range °F (°C)	Composition
NPG	81,200 (560)	38,425 (265)	15	140	7.8	Yellow-Gold	1,850-1,950 (1,012-1,068)	Cu 80.7% Al 7.3% Ni 4.3% Fe, Zn, Mn



NPG™ +2

(C&B:Cu-Al-Au)



Packaging & Accessories

NPG+2
1 t.oz box
2 t.oz box
50 gram box
100 gram box
250 gram box

Aalba Gold Solder
1 dwt (1.55g) packet

Albral Casting Flux
2.0 oz jar

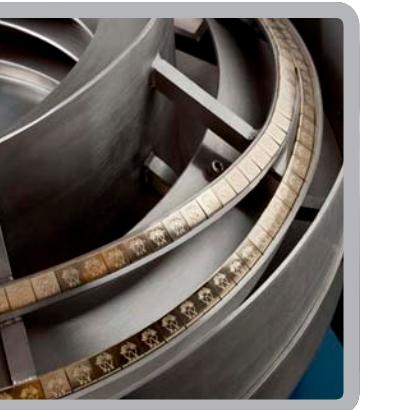


APPLICATIONS

Non-ceramic fixed appliances, full cast crowns (FMC), single units, onlays, short-span multiple unit bridgework, metal sub-structure for veneer crowns using polymer resins (acrylic & composites), posts and cores.

2% GOLD

NPG+2—a premium, base metal Type III casting alloy with 2% gold for fixed crowns, bridges and onlays. NPG+2 provides 25% greater yield strength than the original gold alternative, NPG. This inclusion of gold in NPG+2 translates into a higher resistance to



masticatory forces, making NPG+2 an excellent metal sub-structure for any polymer based crown and bridge resin and all other non-ceramic crown and bridge applications.

Comparative evaluations of NPG+2 and NPG in sodium chloride static immersion tests indicate the gold addition in

NPG+2 produces improved corrosion resistance. Both alloys achieve clinically acceptable corrosion protection by virtue of a firmly adhering passive oxide layer. NPG+2 is a safe and bio-compatible alloy you can prescribe with confidence. Its formulation benefits from NPG's twenty years of proven clinical service. Bio-compatibility has been established by extensive in-vitro corrosion and biological studies, while

clinical evaluations have confirmed the efficacy of NPG+2.

Accepted by the American Dental Association, NPG+2 provides your patients with reliability, durability, value and safety.

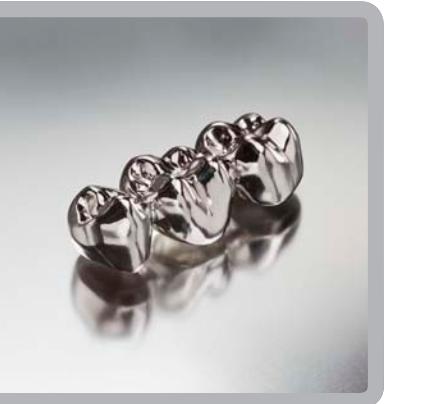


NPG+2

Tensile Strength psi (MPa)	Yield Strength psi (MPa)	Elongation Percent	Vickers Hardness	Density g/cm³	Color	Melting Range °F (°C)	Composition
79,000 (546)	41,500 (286)	16	143	7.8	Yellow-Gold	1,850-1,950 (1,012-1,068)	Cu 78.7% Al 7.8% Au 2% Ni, Fe, Zn, Mn

VeraSoft™

(C&B:Ni-Cr)



Packaging & Accessories

VeraSoft
193 gram box (40 ingots)

Vera Solder
2 dwt (3.11 g) packet
2 gram packet

Vera Flux
1.5 oz jar (42.5 g)

APPLICATIONS

Non-ceramic fixed appliances, full cast crowns (FMC), single units, onlays, multiple unit bridgework, metal sub-structure for veneer crowns using polymer resins (acrylic & composites), posts and cores.

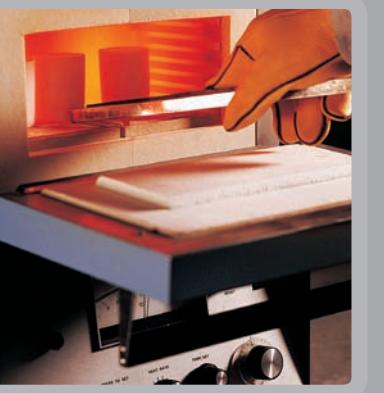
LAB & PATIENT FRIENDLY

VeraSoft is a premium, Type III, nickel-chromium alloy for cast metal crown and bridge restorations in non-ceramic applications. Years of clinical service have proven VeraSoft to be durable, effective, and clinically acceptable for all your non-ceramic

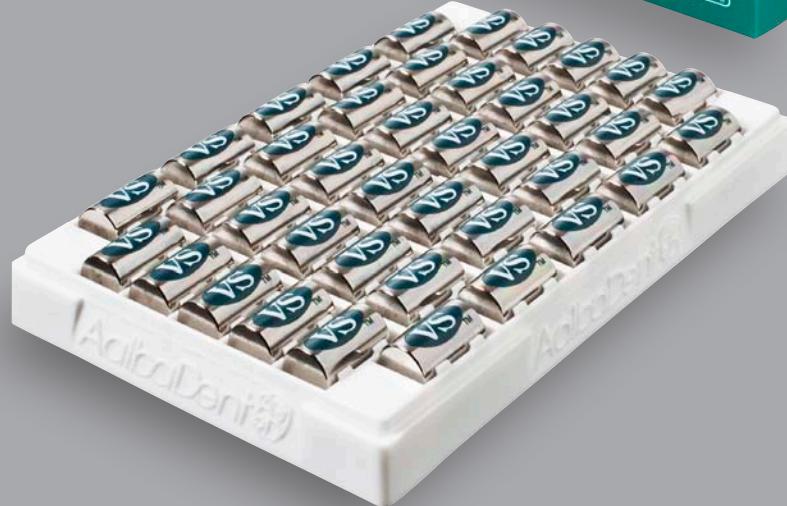
fixed prosthetic restorations.

With lower hardness value and high elongation, VeraSoft allows simple fabrication and time-saving adjustments in your practice. You will benefit from VeraSoft's lowered melting range, great castability, easy soldering, and brilliant polishing characteristics.

Unlike precious metals, VeraSoft has a low thermal conductivity to protect your patients against intense temperature sensitivity.



inappropriate for a non-ceramic application, save time and money with VeraSoft.



	Tensile Strength psi (MPa)	Yield Strength psi (MPa)	Elongation Percent	Vickers Hardness	Density g/cm³	Color	Melting Range °F (°C)	Composition
VeraSoft	77,100 (532)	54,700 (377)	14	236	7.7	Yellow-Gold	1,994-2,228 (1,090-1,220)	Ni 53.9% Mn 19.5% Cr 14.5% Cu, Al, Si

VeraSoft™ ES



APPLICATIONS

Non-ceramic fixed appliances, full cast crowns (FMC), single units, onlays, multiple unit bridgework, metal substructure for veneer crowns using polymer resins (acrylic & composites), post and cores.

PRECISION

(C&B:Ni-Cr)

EXTRA SOFT FORMULATION

The new VeraSoft ES alloy ... where "ES" equals "Extra Soft".

With true type 3 properties, VeraSoft ES provides durable, effective, and clinically acceptable restorations for your patients. VeraSoft ES is CE marked and clinically approved (FDA) for all your cast metal crown and bridge restorations in non-ceramic applications.

VeraSoft ES provides a low hardness value (185 Vickers) and very high elongation (24%), far exceeding



that of other base-metal alloys. This yields excellent burnishability, allowing simple fabrication and time-saving adjustments in the laboratory or chair-side with the patient. VeraSoft ES polishes to a brilliant luster and unlike

precious metals, VeraSoft ES has a low thermal conductivity to protect your patients against temperature sensitivity.

When torch casting VeraSoft ES, oxygen and fuel are required. VeraSoft ES shot particles are very solid, facilitating good induction casting

practice will benefit economically from VeraSoft ES's low cost and its easy handling characteristics. Save time and money with VeraSoft ES.



Tensile Strength psi (MPa)	Yield Strength psi (MPa)	Elongation Percent	Vickers Hardness	Density g/cm³	Color	Melting Range °F (°C)	Composition
88,160 (608)	43,210 (298)	24	185	8.5	White	2,075-2,458 (1,135-1,348)	Ni 76.5% Mn 11.5% Cr 5.0% Sn, Si



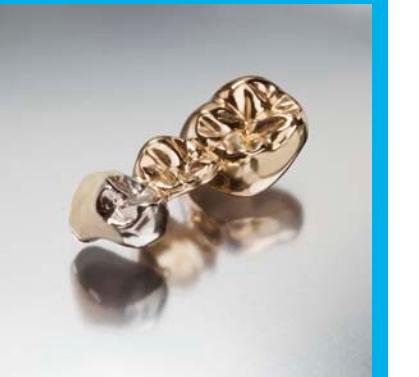
VeraSoft ES

C&B ACCESSORIES



ALRAL CASTING FLUX

A powdered casting flux for use with NPG and NPG+2 alloys. Arbral Flux increases alloy fluidity, reduces oxide formation and reduces inclusions.



AALBA GOLD SOLDER

Premium 585 low fusing yellow-gold solder for NPG, NPG+2 and gold-based crown and bridge alloys.

AALBA FLUX

Premium fluoride paste flux.



NIOM
certified



CE 047 O Class IIa medical device in compliance with Directive 93/42/ECC

MECHANICAL C&B Mechanical Properties

	Tensile Strength psi (MPa)	Yield Strength psi (MPa)	Elongation Percent	Vickers Hardness HV1	Density g/cm³	Color	Melting Range °F (°C)	Composition	Ceramic Restorations PFM	Crown & Bridge FMC	Partial Denture Framework	Single Units & Multi Unit Bridgework	Onlays, Posts & Cores	Sub-Structure for Polymer Crown & Bridge Resins	Implant Super Structures	Maryland Bridge	ISO Classification of Properties	Registrations & Certifications
NPG	81,200 (560)	38,425 (265)	15	140	7.8	Yellow-Gold	1,850-1,950 (1,012-1,068)	Cu 80.7% Al 7.8% Ni 4.3% Fe, Zn, Mn									Type 2	FDA, CE, CCQ
NPG+2	79,000 (546)	41,500 (286)	16	143	7.8	Yellow-Gold	1,850-1,950 (1,012-1,068)	Cu 78.7% Al 7.8% Au 2% Ni, Fe, Zn, Mn									Type 3	FDA, CE, CCQ
VeraSoft	77,100 (532)	54,700 (377)	14	236	7.7	White	1,994-2,228 (1,090-1,220)	Ni 53.6% Mn 19.5% Cr 14.5% Cu, Al, Si									Type 4	FDA, CE, CCQ
VeraSoft ES	88,160 (608)	43,210 (298)	24	185	8.5	White	2,075-2,458 (1,135-1,348)	Ni 76.5% Cu 11.5% Cr 5.0% Sn, Si									Type 3	FDA, CE, CCQ

PROPERTIES



License No. 296734; United States of America Department of Health and Human Services Food & Drug Administration (FDA)



Alba Dent products designated with our CCQ mark are Certified by Alba Dent as continuous cast products from our proprietary state-of-the-art continuous casting technology. Products produced from this process exhibit unparalleled homogeneity, precise alloy chemistry and lower gas content.

AlbaDent, Inc. is a registered, medical device manufacturer in compliance with applicable Good Manufacturing Practices Regulations, Federal/State laws, local environmental laws and regulations. Facility license No. 61179; State of California: Department of Health Services: Food & Drug Branch.

Vera PDI™



APPLICATIONS

Removable partial denture frameworks, clasps, saddles, secondary parts for combined dentures, implant superstructures, sub-structure for polymer resins (acrylic & composites) such as non-ceramic fixed crowns and long-span multiple unit bridgework subject to very high stress.

Packaging & Accessories

Vera PDI
207 gram box (40 ingots)

Vera PD Solder
2 dwt (3.11 g) packet
2 gram packet

Vera PD Flux
1.5 oz jar (42.5 g)

TWO GREAT CHOICES

Like Vera PDN, our Vera PDI and Vera PDS are premium, high strength, cobalt-chromium alloys for casting partial dentures.

Their formulation has been proven clinically safe over decades of service. Non-tarnishing, corrosion-resistant to oral fluids, and displaying excellent clinical efficacy, Vera PDI and Vera PDS are a powerful pair of options. Their mechanical properties exceed industry standards, allowing you to design slender cross-sectional areas while exhibiting strength and



elasticity. Eliminate your worries of clasp failure under constantly changing masticatory pressures.

Vera PDI and Vera PDS are produced via electromagnetic thermal

processing which delivers precise homogenization of all alloying constituents. Products are verified for precise chemical quality by means of Optical Emission Spectroscopy (OES). The Vera PDS alloy is cast-off in a proprietary shotting process, while Vera PDI is formed in our inert high-purity zirconium molding process. Vera PDI, PDS, and all new PDN alloys share the same formulation, but each offers a unique presentation. Vera PDI is available in the

classic pyramid ingot, while Vera PDS is furnished in economical shot form. Both alloys are available in "hard" and "regular" formulations; the classic "hard" formulation provides maximum resistance to deformation, while the "regular" formulation allows extra forgiveness when multiple adjustments are required.

Vera PDI and Vera PDS are excellent for torch casting or your high-frequency induction casting



machine. Both products permit simple and trouble-free processing. Your patients will appreciate their stability, durability and comfort.

	Tensile Strength psi (MPa)	Yield Strength psi (MPa)	Modulus of Elasticity psi (MPs) X10 ⁶	Elongation Percent	Vickers Hardness	Density g/cm ³	Color	Melting Range °F (°C)	Composition
Vera PDI (Hard)	109,500 (755)	98,000 (675)	26.1 (0.18)	6	359	8.7	White	2,480-2,534 (1,360-1,390)	Co 63.5% Cr 27.0% Mo 5.5% Fe, Ni, Si, Mn
Vera PDI (Regular)	109,500 (755)	86,500 (597)	26.1 (0.18)	7	354	8.7	White	2,507-2,552 (1,375-1,400)	Co 63.5% Cr 27.0% Mo 5.5% Fe, Ni, Si, Mn



Vera PDN™

PRECISION CASTING

Introducing Vera PDN—our newest premium, high strength, cobalt-chromium alloy for cast partial dentures.

Produced with state-of-the-art continuous casting technology, Vera PDN delivers unparalleled homogeneity and precise alloy chemistry. Its formulation has been proven safe and acceptable over decades of clinical service. Vera PDN is excellent for torch casting or your high-frequency induction casting machine. Its cylindrical ingot design permits quick melting and reduces oxidation.



Packaging & Accessories

Vera PDN
200 gram box
1,000 gram box

Vera PD Solder
2 dwt (3.11 g) packet
2 gram packet

Vera PD Flux
1.5 oz jar (42.5 g)

APPLICATIONS

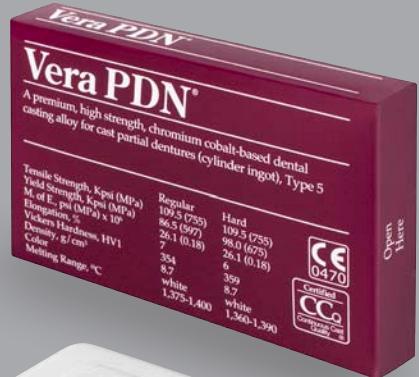
Removable partial denture frameworks, clasps, saddles, implant superstructures, sub-structure for polymer resins (acrylic & composites) such as non-ceramic fixed crowns and long-span multiple unit bridgework subject to very high stress.

(Partial Denture:Co-Cr-Mo)

Vera PDN delivers precision castings, free of inclusions and featuring adjustable spring hardness, fracture resistant elasticity, and a brilliant luster. Masticatory forces are no match for Vera PDN's mechanical properties. Modulus of elasticity and yield strength values prevent clinical fatigue and permanent deformation of primary structure or clasp components. Vera PDN has a balanced formulation of cobalt, chromium and molybdenum which produces a passive and tenacious protective oxide layer. This makes Vera PDN highly resistant to corrosion.

Available in both "hard" and "regular" formulations, you can choose the Vera PDN that's right for you. The classic "hard" formulation is recognized as the industry standard and offers maximum resistance to deformation. Our "regular" formulation offers an extra touch of forgiveness when multiple adjustments may be needed. Your

patients will appreciate Vera PDN's comfort, wearability and lasting beauty. Vera PDN provides value and economy without compromise.



CE
0470

NIOM
certified

Certified
CCQ
Continuous Cast
Quality®

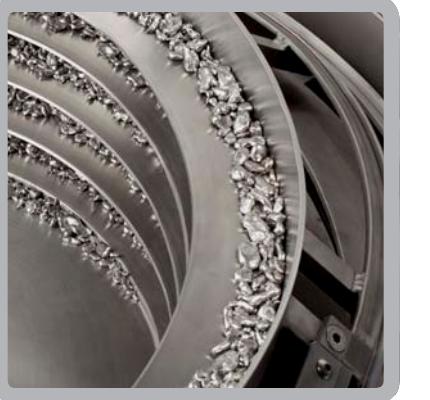
	Tensile Strength psi (MPa)	Yield Strength psi (MPa)	Modulus of Elasticity psi (MPa) X10 ³	Elongation Percent	Vickers Hardness	Density g/cm ³	Color	Melting Range °F (°C)	Composition
Vera PDN (Hard)	109,500 (755)	98,000 (675)	26.1 (0.18)	6	359	8.7	White	2,480-2,534 (1,360-1,390)	Co 63.5% Cr 27.0% Mo 5.5% Fe, Ni, Si, Mn
Vera PDN (Regular)	109,500 (755)	86,500 (597)	26.1 (0.18)	7	354	8.7	White	2,507-2,552 (1,375-1,400)	Co 63.5% Cr 27.0% Mo 5.5% Fe, Ni, Si, Mn



Vera PDS™

PRECISION

(Partial Denture:Co-Cr-Mo)



Packaging & Accessories

Vera PDS
200 gram box
1,000 gram box

Vera PD Solder
2 dwt (3.11 g) packet
2 gram packet

Vera PD Flux
1.5 oz jar (42.5 g)



APPLICATIONS

Removable partial denture frameworks, clasps, saddles, secondary parts for combined dentures, implant superstructures, sub-structure for polymer resins (acrylic & composites) such as non-ceramic fixed crowns and long-span multiple unit bridgework subject to very high stress.

TWO GREAT CHOICES

Like Vera PDN, our Vera PDI and Vera PDS are premium, high strength, cobalt-chromium alloys for casting partial dentures.

Their formulation has been proven clinically safe over decades of service.

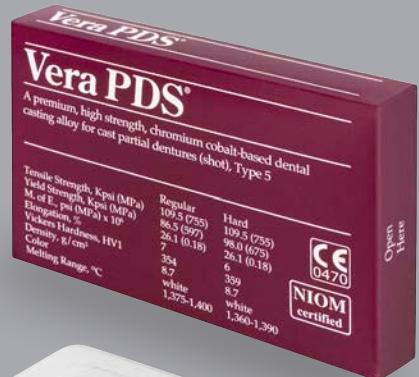
Non-tarnishing, corrosion-



sectional areas while exhibiting strength and elasticity. Eliminate your worries of clasp failure under constantly changing masticatory pressures.

Vera PDI and Vera PDS are produced via electromagnetic thermal processing which delivers precise homogenization of all alloying constituents. Products are verified for precise chemical quality by means of Optical Emission Spectroscopy (OES). The Vera PDS alloy is cast-off in a proprietary

	Tensile Strength psi (MPa)	Yield Strength psi (MPa)	Modulus of Elasticity psi (MPs) X10 ⁶	Elongation Percent	Vickers Hardness	Density g/cm ³	Color	Melting Range °F (°C)	Composition
Vera PDS (Hard)	109,500 (755)	98,000 (675)	26.1 (0.18)	6	359	8.7	White	2,480-2,534 (1,360-1,390)	Co 63.5% Cr 27.0% Mo 5.5% Fe, Ni, Si, Mn
Vera PDS (Regular)	109,500 (755)	86,500 (597)	26.1 (0.18)	7	354	8.7	White	2,507-2,552 (1,375-1,400)	Co 63.5% Cr 27.0% Mo 5.5% Fe, Ni, Si, Mn



SEARCH & HENNS SERVICE INC.
www.henns.com

PARTIAL DENTURE ACCESSORIES



VERA PD SOLDER

Premium high fusing solder for cobalt-based cast partial denture frameworks.



VERA PD FLUX

Premium boron-enhanced dry flux.



NIOM
certified



M E C H A N I C A L Partial Denture Mechanical Properties

	Tensile Strength psi (MPa)	Yield Strength psi (MPa)	Modulus of Elasticity psi (MPa) X10 ⁶	Elongation Percent	Vickers Hardness HV1	Density g/cm ³	Color	Melting Range °F (°C)	Composition	Ceramic Restorations PFM	Crown & Bridge FMC	Partial Denture Framework	Single Units & Multi Unit Bridgework	Onlays, Posts & Cores	Sub-Structure for Polymer Crown & Bridge Resins	Implant Super Structures	Maryland Bridge	ISO Classification of Properties	Registrations & Certifications
Vera PDI (hard)	109,500 (755)	98,000 (675)	26.1 (0.18)	6	359	8.7	White	2,480-2,534 (1,360-1,390)	Co 63.5% Cr 27.0% Mo 5.5% Fe, Ni, Si, Mn									Type 5	FDA, CE, NIOM, CCq
Vera PDI (regular)	109,500 (755)	86,500 (597)	26.1 (0.18)	7	354	8.7	White	2,507-2,552 (1,375-1,400)	Co 63.5% Cr 27.0% Mo 5.5% Fe, Ni, Si, Mn									Type 5	FDA, CE, NIOM, CCq
Vera PDN (hard)	109,500 (755)	98,000 (675)	26.1 (0.18)	6	359	8.7	White	2,480-2,534 (1,360-1,390)	Co 63.5% Cr 27.0% Mo 5.5% Fe, Ni, Si, Mn									Type 5	FDA, CE, NIOM, CCq
Vera PDN (regular)	109,500 (755)	86,500 (597)	26.1 (0.18)	7	354	8.7	White	2,507-2,552 (1,375-1,400)	Co 63.5% Cr 27.0% Mo 5.5% Fe, Ni, Si, Mn									Type 5	FDA, CE, NIOM, CCq
Vera PDS (hard)	109,500 (755)	98,000 (675)	26.1 (0.18)	6	359	8.7	White	2,480-2,534 (1,360-1,390)	Co 63.5% Cr 27.0% Mo 5.5% Fe, Ni, Si, Mn									Type 5	FDA, CE, NIOM
Vera PDS (regular)	109,500 (755)	86,500 (597)	26.1 (0.18)	7	354	8.7	White	2,507-2,552 (1,375-1,400)	Co 63.5% Cr 27.0% Mo 5.5% Fe, Ni, Si, Mn									Type 5	FDA, CE, NIOM



0470

CE 047 O Class IIa medical device in
compliance with Directive 93/42/ECC



License No. 296734; United
States of America Department of
Health and Human Services Food
& Drug Administration (FDA)



AlbaDent products designated with our CCQ mark are Certified by Alba Dent
as continuous cast products from our proprietary state-of-the-art continuous
casting technology. Products produced from this process exhibit unparalleled
homogeneity, precise alloy chemistry and lower gas content.

AlbaDent, Inc. is a registered, medical device manufacturer in compliance
with applicable Good Manufacturing Practices Regulations, Federal/State
laws, local environmental laws and regulations. Facility license No. 61179;
State of California: Department of Health Services: Food & Drug Branch.

QUALITY

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