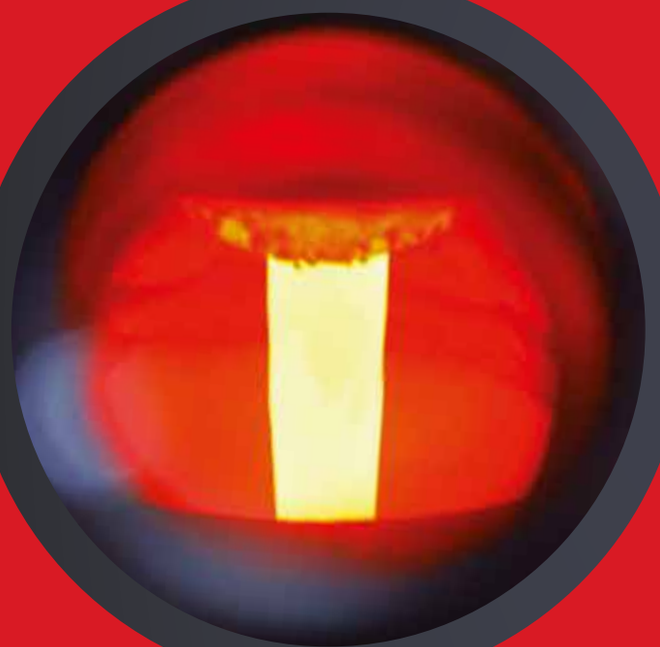


PRESTIGE INVESTMENT POWDERS

"PERFECTION IN JEWELRY CASTING TECHNOLOGY"

PRESTIGE INVESTMENT POWDERS

OUR COMPANY

Certus – Investment Powder Technologies Co., Ltd., established in Istanbul, Turkey, began operations in 2009 and is a company dedicated to the research, development, production and marketing of superior quality investment mold materials and support products used in casting ferrous and non-ferrous metals via the "Lost Wax Process".

The founding of Certus began with the vision of two men, Mr. Chris Urgupluoglu and Mr. Anthony Gugliotta, two long time industry professionals with backgrounds in materials research, formulating and production that spans more than 60 years. The company was formed due to a chance meeting of the two men who were introduced during a visit to the United States by Chris to visit a key raw material supplier.

After meeting and finding out that each man had similar views on life, morals, business ethics and quality, a friendship developed that would soon lead to the establishment of a company that ultimately would become an industry leader within an unusually short time. Within five years from start-up, Certus is now considered a leader in the industry and one of the few that can provide expert technical assistance for their customers. Products produced by Certus provide the investment casting industry with a wide range of investment powders and support products from which to choose. As the most modern producer of investment powder, Certus has quickly become a model for all other producers to follow.

According to the founders, one of the greatest successes at Certus has come from their "PRESTIGE" line of "user friendly", premium casting Investments. Engineered to outperform all the old, outdated premium investment powders developed in America back in the 1960's, and still being sold today, the "PRESTIGE" line of premium casting investments incorporates all the latest developments in ceramic raw material and formulating technology. To ensure the quality and consistency of their products, Certus utilizes only the purest raw material sources available in the world. Because of the high purity and sizing of the refractory grains used, defects still obtained with other competitive brands have now been eliminated, thus far "Surpassing the Industry Standard" for investment.

Operating a "State of the Art" R&D & Quality Control laboratory and production facility, premium products produced by Certus are currently distributed in more than 60 countries around the globe through a distribution network of companies that also carry a full line of machines, equipment and supplies. Each distributor is highly trained in the use of PRESTIGE investments and are able to answer any questions related to our products.

To further ensure the highest batch to batch consistency for investment powder in the industry, Certus first and foremost has a "ZERO DEFECTS" policy. To achieve this policy, all "PRESTIGE brand investments go through a "three phase" quality control and assurance procedure. The Certus program includes testing of all incoming raw materials for particle size distribution, chemistry and purity. Secondly, each batch tested to meet rigid specification for working time, set time, consistency of mixed investment slurry throughout the process, thermal expansion, green strength and finally fired strength after burnout.

The final and most important step in the three phase quality control system is for three samples of each batch produced by Certus to be field tested by three separate, independent casting companies.

As a further benefit to the customer, PRESTIGE investment formulas for gold and silver are produced with proprietary "BLAST AWAY" technology recently developed by Certus to reduce costs for the user during cleanup of the tree before finishing. This new formulating innovation allows for the cast investment to undergo a physical change after casting that will make the fired investment to "BLAST AWAY" far more easily during initial water quench for a more complete removal of the investment from the cast tree, thus saving time and valuable resources in tree and flask clean-up.

This technology not only allows for more investment to be removed from flasks packed tightly with patterns, but also allows the removal of more residual investment still trapped inside blind holes and delicate areas of the design. Using PRESTIGE brand investments with "Blast Away" technology can reduce up to 50% in the time required for flask and tree clean-up over all other leading brands.

"PRESTIGE" Premium Jewelry Casting Investments
"PERFECTION IN JEWELRY CASTING TECHNOLOGY"

PRESTIGE

ORO

FOR CASTING PALLADIUM, YELLOW AND WHITE GOLD UP TO 22 CARAT

Prestige ORO™ is an ultra-premium gypsum bonded investment developed and perfected for the casting of gold up to 22K. To achieve the smoothest casting surface possible, "ORO" incorporates specially graded refractory ingredients along with proprietary control additives to make it the most user-friendly investments currently on the market today.

FEATURES

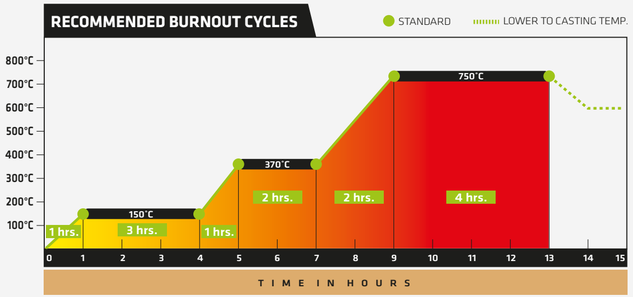
- Highest purity, white gypsum mined from the world's best known deposits
- Uses only a special premium grade cristobalite from America.
- High purity refractory grains, sized to achieve the smoothest casting surfaces possible
- Mixes to a rich, creamy, easy pour consistency
- Reduces surface tension on wax to supply bubble free castings
- Easy removal during water quench
- Controlled expansion properties that are compatible with all injection waxes and commonly used plastic pattern materials.
- Reliable consistency from batch to batch
- Eliminates surface defects obtained using other brands
- Reduces time in finishing. Saves time & money



Independent tests performed by some of the world's best known casting companies, find Prestige "ORO" to be a far superior investment for casting gold.
"PERFECTION IN JEWELRY CASTING TECHNOLOGY"

Oro comes in 22.5Kg. Plastic lined Poly Sacks, ergonomic 22.5Kg. plastic drums and also in 45Kg. heavy duty reusable plastic drums for safe containment of used investment.

RECOMMENDED BURNOUT CYCLES



INSTRUCTIONS FOR MIXING

Powder: Water Ratio (38% - 40%)	Powder (Kg.)	Water (cc.)	Powder (Lb.)	Water (cc.)
Automatic Vac. Mixing	1	380	1	172
Conventional Mixing	1	400	1	181.6
Water Temperature °C	21-24	21-24	21-24	21-24

- Increasing the powder amount 1% will decrease the total working time for approximately 30 seconds

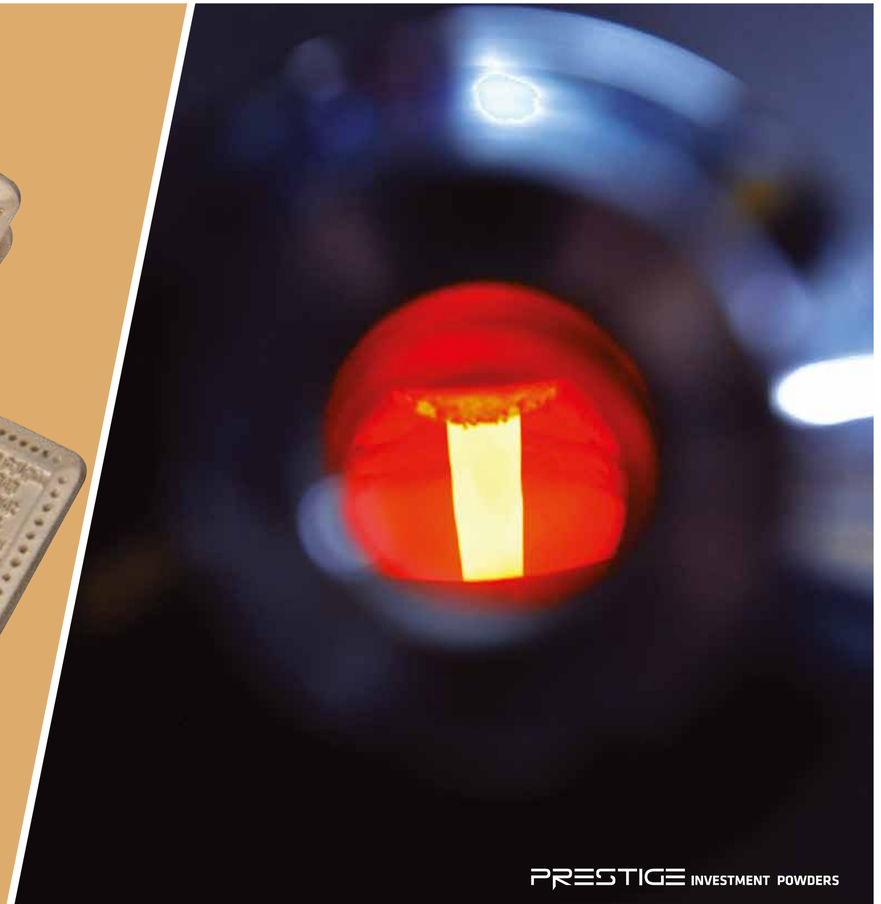
Automatic Vac. Mixing Mach.	Minutes
Accurately Weigh Powder / Water	-----
Add Powder to Water	-----
Mixing & Vacuuming	5
Pour into Flask	2
Vacuum Invested Flask	1
Total Working Time	8

- Allow to sit undistributed for 90-120 minutes before burnout

Conventional Mixing Mach.	Minutes
Accurately Weigh Powder Water	-----
Add Powder to Water & Mix	4
Vacuum the Bowl	1
Pour into Flask	1
Vacuum Invested Flask	2
Total Working Time	8

- Allow to sit undistributed for 90-120 minutes before burnout





PRESTIGE
INVESTMENT POWDERS

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PRESTIGE

UNICAST

FOR CASTING YELLOW AND WHITE GOLD UP TO 18 CARAT

UNICAST™ is a premium quality gypsum bonded investment in the Prestige line of investments designed for users that prefer one investment for multiple casting applications. UNICAST™ is a perfect choice for casting gold up to 18k and superior for producing the most complex designs in sterling, fine silver & bronze.

FEATURES

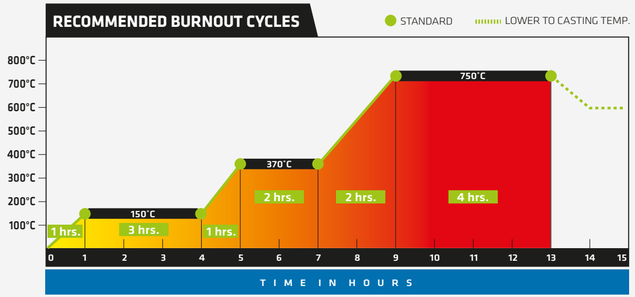
- Easy to use. Mixes a thin, creamy, easy to pour consistency
- Universal formula for a variety of casting applications
- Controlled expansion properties that are compatible with all commonly used injection waxes
- Variable water to powder ratio allows for a variety of mixing equipment and techniques to be used
- Eliminates water marks from forming on casting surface
- Removes easily during water quench
- Eliminates defects still obtained with other brands when less than prefect mixing techniques are observed
- Highly consistent from batch to batch



Independent tests performed by some of the world's best known casting companies prove Prestige "UNICAST" to be a truly superior investment for multiple casting applications.
"PERFECTION IN JEWELRY CASTING TECHNOLOGY"

Unicast comes in 22.5Kg. Plastic lined Poly Sacks, ergonomic 22.5Kg. Plastic Drums, or 45Kg. Heavy Duty reusable Plastic Drums for safe containment of used investment.

RECOMMENDED BURNOUT CYCLES



INSTRUCTIONS FOR MIXING

Powder: Water Ratio (38% - 40%)	Powder (Kg.)	Water (cc.)	Powder (Lb.)	Water (cc.)
Automatic Vac. Mixing	1	380	1	172
Conventional Mixing	1	400	1	181.6
Water Temperature °C	21-24	21-24	21-24	21-24

- Increasing the powder amount 1% will decrease the total working time for approximately 30 seconds

Automatic Vac. Mixing Mach.	Minutes
Accurately Weigh Powder / Water	-----
Add Powder to Water	-----
Mixing & Vacuuming	5
Pour into Flask	2
Vacuum Invested Flask	1
Total Working Time	8

- Allow to sit undistributed for 90-120 minutes before burnout

Conventional Mixing Mach.	Minutes
Accurately Weigh Powder Water	-----
Add Powder to Water & Mix	4
Vacuum the Bowl	1
Pour into Flask	1
Vacuum Invested Flask	2
Total Working Time	8

- Allow to sit undistributed for 90-120 minutes before burnout

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PRESTIGE

SIGMA

FOR CASTING SILVER BRASS, AND BRONZE

Prestige SIGMA™ is a high value, low cost gypsum bonded investment powder developed by Certus to provide the user and industry with an investment powder engineered specially to eliminate costly surface defects associated with casting the most difficult designs and shapes cast in silver and bronze.

FEATURES

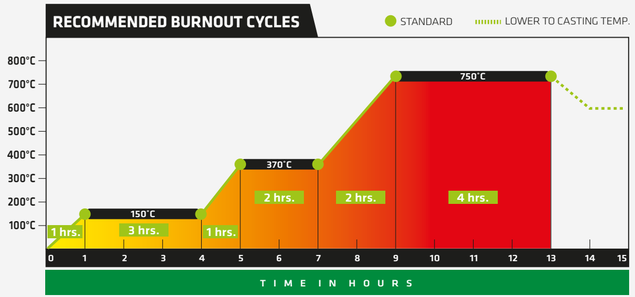
- Uses the highest purity raw materials available
- Variable water to powder ratio, 38 – 40/100 for thick to thin designs
- User friendly formula, easy to mix and use
- Superior thermal shock resistance to temperature. Highly resistant to flashing and cracking
- Special proprietary control additives easily remove air from the investment slurry and pattern surface to provide super smooth, bubble free castings time after time
- Provides extra smooth, dense, flash free castings
- Easy removal during water quench.
- Better casting results, even when less than perfect mixing techniques are observed
- ZERO defects policy. All batches test cast in silver to ensure perfect quality before shipping



Independent tests performed by some of the world's best known casting companies, Prestige "SIGMA" has proven to be a truly superior investment for casting silver.
"PERFECTION IN JEWELRY CASTING TECHNOLOGY"

Sigma comes packaged in 22.5Kg. Plastic lined Poly Sacks, Ergonomic 22.5Kg. Plastic Drums and 45Kg. Heavy duty reusable Plastic Drums for safe containment of used investment.

RECOMMENDED BURNOUT CYCLES



INSTRUCTIONS FOR MIXING

Powder: Water Ratio (38% - 40%)	Powder (Kg.)	Water (cc.)	Powder (Lb.)	Water (cc.)
Automatic Vac. Mixing	1	380	1	172
Conventional Mixing	1	400	1	181.6
Water Temperature °C	21-24	21-24	21-24	21-24

- Increasing the powder amount 1% will decrease the total working time for approximately 30 seconds

Automatic Vac. Mixing Mach.	Minutes
Accurately Weigh Powder / Water	-----
Add Powder to Water	-----
Mixing & Vacuuming	5
Pour into Flask	2
Vacuum Invested Flask	1
Total Working Time	8

- Allow to sit undistributed for 90-120 minutes before burnout

Conventional Mixing Mach.	Minutes
Accurately Weigh Powder Water	-----
Add Powder to Water & Mix	4
Vacuum the Bowl	1
Pour into Flask	1
Vacuum Invested Flask	2
Total Working Time	8

- Allow to sit undistributed for 90-120 minutes before burnout





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PRESTIGE

ROYAL CAST

FOR CASTING BRASS AND BRONZE

Prestige ROYAL-CAST™ is another breakthrough by Certus to provide the industry with a low cost, high quality gypsum bonded investment developed specially for the casting of low & high production Brass & Bronze jewelry castings. To ensure the highest quality and batch to batch consistency, Royal Cast incorporates high purity, specially graded refractory minerals along with proprietary control additives that when used as directed, eliminates watermarks and air bubbles from forming on the cast surface, thus providing the user with sharper, smoother detailed castings that require far less time in finishing over all other leading brands.

FEATURES

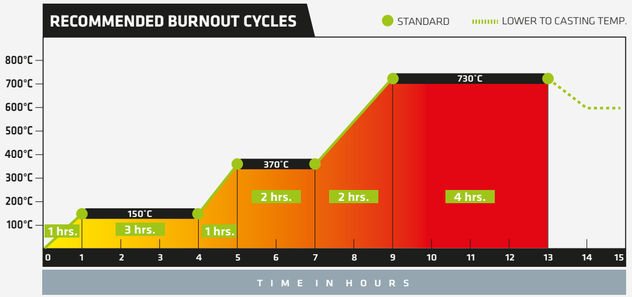
- Easy to use – Mixes a thin, creamy, easy to pour consistency
- High purity – Uses only the world's finest raw materials from America & Europe
- Control – Incorporates special, proprietary wetting and antifoaming agents for smooth, sharp, detailed castings
- Variable w/p ratios – Can be used for thick to thin designs using 38%-40% water to powder ratio
- Superior mold strength – High green and fired strength for stronger molds, great for both low and high volume shops
- High Heat resistance – Resistant to thermal shock during burnout
- Sharper reproduction of detail – Investment particles sized to capture the finest of details in brass & bronze



Independent tests performed by some of the world's best known casting companies show that Prestige "ROYAL CAST" has proven to be a truly superior investment for casting brass & bronze.
"PERFECTION IN JEWELRY CASTING TECHNOLOGY"

Royal Cast comes in 22.5Kg. Poly Sacks with plastic liner

RECOMMENDED BURNOUT CYCLES



INSTRUCTIONS FOR MIXING

Powder: Water Ratio (38% - 40%)	Powder (Kg.)	Water (cc.)	Powder (Lb.)	Water (cc.)
Automatic Vac. Mixing	1	380	1	172
Conventional Mixing	1	400	1	181.6
Water Temperature °C	21-24	21-24	21-24	21-24

- Increasing the powder amount 1% will decrease the total working time for approximately 30 seconds

Automatic Vac. Mixing Mach.	Minutes
Accurately Weigh Powder / Water	-----
Add Powder to Water	-----
Mixing & Vacuuming	5
Pour into Flask	2
Vacuum Invested Flask	1
Total Working Time	8

- Allow to sit undistributed for 90-120 minutes before burnout

Conventional Mixing Mach.	Minutes
Accurately Weigh Powder Water	-----
Add Powder to Water & Mix	4
Vacuum the Bowl	1
Pour into Flask	1
Vacuum Invested Flask	2
Total Working Time	8

- Allow to sit undistributed for 90-120 minutes before burnout

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PRESTIGE

SPARKLE

FOR CASTING STONE IN PLACE

Prestige SPARKLE™ is a special application, gypsum bonded investment developed by Certus for casting "Stone in Place" (wax setting). Pre-blended with special, technical grade anti oxidizing ingredients, SPARKLE™ forms a reliable, protective barrier (heat shield) that protects diamonds, semi-precious stones and cubic zirconia from clouding, or burning during the burnout and casting process. Expertly engineered using highly effective, environmentally friendly control additives.

FEATURES

- Pre-blended premium investment formula for casting "Stone in Place" (Wax setting)
- Provides a protective barrier for diamonds. precious and semi precious stones cast in place up to a temperature of 630˚C
- Superior mold strength provides clean, flash free castings from top to bottom of tree
- Smooth, creamy, easy flow formula provides bubble free castings using normal working times
- For gold up to 22K sterling and fine silver, brass, bronze
- Easier removal and clean up of castings

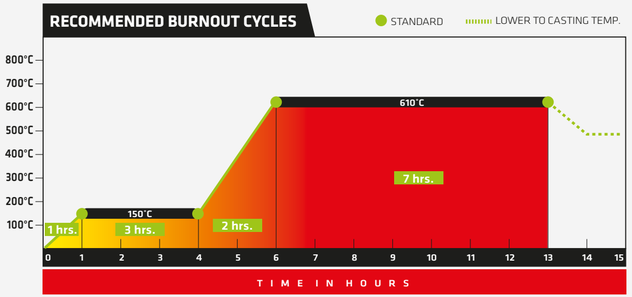
"SPARKLE" is compatible with all commonly used jewelry wax pattern materials and when used as directed, provides the user with smooth, dense, flash free castings that eliminates casting defects still obtained using other competitive brands.



Independent tests performed by some of the world's best known casting companies, show that Prestige "SPARKLE" has proven to be a truly superior investment for casting "Stone in Place". ***"PERFECTION IN JEWELRY CASTING TECHNOLOGY"***

Sparkle comes in 22.5Kg. plastic lined Poly Sacks, or 22.5Kg and 45Kg. Heavy Duty reusable Plastic Drums for safe containment of used investment.

RECOMMENDED BURNOUT CYCLES



INSTRUCTIONS FOR MIXING

Powder: Water Ratio (38% - 40%)	Powder (Kg.)	Water (cc.)	Powder (Lb.)	Water (cc.)
Automatic Vac. Mixing	1	380	1	172
Conventional Mixing	1	400	1	181.6
Water Temperature ˚C	21-24	21-24	21-24	21-24

- Increasing the powder amount 1% will decrease the total working time for approximately 30 seconds.

Automatic Vac. Mixing Mach.	Minutes
Accurately Weigh Powder / Water	-----
Add Powder to Water	-----
Mixing & Vacuuming	5
Pour into Flask	2
Vacuum Invested Flask	1
Total Working Time	8

- Allow to sit undistributed for 90-120 minutes before burnout

Conventional Mixing Mach.	Minutes
Accurately Weigh Powder Water	-----
Add Powder to Water & Mix	4
Vacuum the Bowl	1
Pour into Flask	1
Vacuum Invested Flask	2
Total Working Time	8

- Allow to sit undistributed for 90-120 minutes before burnout





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PRESTIGE

OPTIMA

FOR CASTING RESIN & PLASTIC PATTERNS

Prestige "OPTIMA"™ is a significant breakthrough by Certus to develop a new generation, high strength, high expanding gypsum bonded investment better suited for casting from 3-D resin prints. Due to its superior temperature resistance, "Optima" is also the perfect choice for casting white gold and consistently provides superior casting surfaces when a variety of today's pattern materials are used including:

1. Standard injection waxes
2. Carving waxes
3. Resin patterns (SLA)
4. Wax based polymers
5. Hybrid wax / plastic patterns

FEATURES

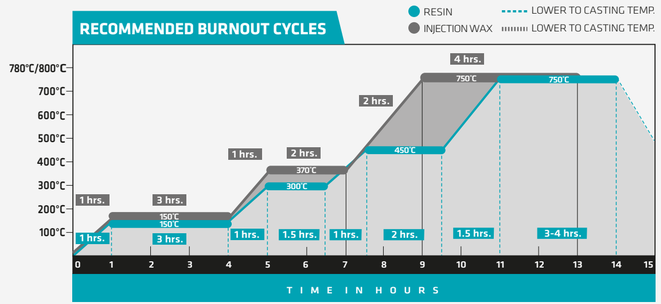
- Extra user friendly formula, easy to use
- Mixes to a creamy, pourable slurry
- Incorporates environmentally friendly control additives
- Lower rise under vacuum
- Superior temperature resistance in burn-out
- Reduces porosity and times in finishing
- Captures sharp, delicate details and provides casting surfaces unmatched by any other brand



Used by quality conscious casters worldwide, Prestige "OPTIMA" has proven to be a truly superior gypsum bonded investment for white gold and the casting from resin prints.
"PERFECTION IN JEWELRY CASTING TECHNOLOGY"

Optima comes in 22.5Kg. plastic lined Poly Sacks, Ergonomic 22.5Kg. plastic drums package or 45Kg. heavy duty reusable plastic drums for containment of used investment

RECOMMENDED BURNOUT CYCLES



- Flip ask upwards while ramping down to casting temperature.

INSTRUCTIONS FOR MIXING

Powder: Water Ratio (38% - 40%)	Powder (Kg.)	Water (cc.)	Powder (Lb.)	Water (cc.)
Automatic Vac. Mixing	1	380	1	172
Conventional Mixing	1	400	1	181.6
Water Temperature °C	21-24	21-24	21-24	21-24

- Increasing the powder amount 1% will decrease the total working time for approximately 30 seconds.

Automatic Vac. Mixing Mach.	Minutes
Accurately Weigh Powder / Water	-----
Add Powder to Water	-----
Mixing & Vacuuming	5
Pour into Flask	2
Vacuum Invested Flask	1
Total Working Time	8

- Allow to sit undistributed for 90-120 minutes before burnout

Conventional Mixing Mach.	Minutes
Accurately Weigh Powder Water	-----
Add Powder to Water & Mix	4
Vacuum the Bowl	1
Pour into Flask	1
Vacuum Invested Flask	2
Total Working Time	8

- Allow to sit undistributed for 90-120 minutes before burnout

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PRESTIGE

FERRO-VEST V.H.T. FOR CASTING PLATINUM AND STAINLESS STEEL

FERRO-VEST V.H.T. is a superior two-part, high temperature investment developed to give premium results casting platinum, palladium & stainless steel and metals that melt in excess of 1500°C. – 2732F. Ferro-Vest V.H.T. investment powder supplies superior, consistent results and unlike other two-part high temperature investments on the market, comes complete with special proprietary additives that eliminate air bubbles and will provide a far smoother cast surface that requires less finishing than with other brands.

FEATURES

- Mixes to a consistent, easy to pour slurry
- Special additives to eliminate air bubbles on the cast surface
- Lower rise under vacuum
- Provides a super smooth cast surface that far requires less finishing
- Easier to remove than phosphate water mix and other two-part investments
- Saves the user time & money
- Online binder / water calculator available for accurate mixing calculations

BINDER PREPARATION

Ferro-vest V.H.T. binder is concentrated and must be diluted before use.
Warning: Always take the necessary safety precautions and wear protective glasses and gloves as the binder is acidic.



The binder is diluted at the ratio of 1 part binder to 19 parts distilled water by volume. To prepare, carefully **add the binder concentrate to the water.**

If measuring the binder by weight, use the chart below:

Ferro Vest V.H.T. comes packaged in 22.5Kg. Poly Sacks or in ergonomic, 22.5Kg, or. plastic drums. The heavy duty plastic drums are great for containing used investment. Ferro-Vest V.H.T. powder comes complete with enough binder concentrate to process the entire quantity of powder.

For 6 in x 3.5 in Flasks Volume or Weight

Number of flasks	Weight of Powder gms	Volume of Water cc	Volume of Liquid centrate cc	Weight of Liquid concentrate gms
-	1000 gms	285 cc	15 cc	22 gms
1	1500	428	23	33
2	3000	855	45	65
3	4500	1283	68	98
4	6000	1710	90	130
5	7500	2138	113	163
6	9000	2565	135	196

8 X 3.5 inch Flasks Volume or Weight

Number of flasks	Weight of Powder gms	Volume of Water cc	Volume of Liquid centrate cc	Weight of Liquid concentrate gms
-	1000 gms	285 cc	15 cc	22 gms
1	1650	470	25	36
2	3300	940	50	73
3	5000	1425	75	110
4	6600	1881	99	144
5	8250	1351	124	180
6	9900	2821	149	216

PREPARING THE FLASK

To absorb excess binder used for mixing, cut a piece of non-asbestos, cellulose paper 1" (2.54 cm.) less than the height of the flask used. Roll the paper to form a cylinder and inset into the flask leaving an equal amount of open space at the top and bottom. Add masking tape, or rubber removable extension to the top of the flask to contain the investment during vacuuming.

PREPARING THE SPRUE BASE

To prepare the sprue base, two methods may be used. For flask sizes 3" X 3" (7.62 X 7.62cm.), or less, a non-asbestos, cellulose paper 1/16" (1.588mm.) thick and 4" (10.16cm.) in width is best used (Non-asbestos, cellulose paper is available through casting supply companies, or companies supplying cellulose paper). For larger diameter flasks and heights, a standard rubber base modified with holes cut out around the circumference of the sprue button can be used.

a. For flask sizes 3" X 3" (7.62 X 7.62cm.), or less, use a special thickness of non-asbestos, cellulose paper for the base with a 0.75" (1.905cm.) hole cut in the center for wax drainage during burnout. Next, using a sticky wax, center and attach a pre-made wax button over the center hole in paper base. Attach the sprue rod to the top center of the wax button. **Note:** As an alternative, use a thickness of 3 automatic drip type coffee filters and cut out a 0.75" (1.905cm.) hole in the center. Next center the flask around the tree, pull up the sides of the filters and secure to the flask with strong rubber bands. (Although coffee filters work quite well, any good, thick permeable paper may be used for the base).

b. For large flasks, a rubber sprue base may be used which has been modified with holes cut out around the diameter of the center button to allow for the excess binder moisture to be wicked away during the curing process. Place a piece of cotton cloth with a hole cut out large enough to fit around the rubber button. **Note:** As an alternative, you can remove the rubber cone and instead use a pre-made wax button attached to the cloth that will also create a seal when the flask is placed. Last, center the flask around the tree and press it firmly into the cloth and base. When using either method, use tape or a rubber collar extension around the top of the flask to contain the investment while vacuuming.

Note: (Although coffee filters work quite well, any good permeable, or cellulose paper may be used for the base).

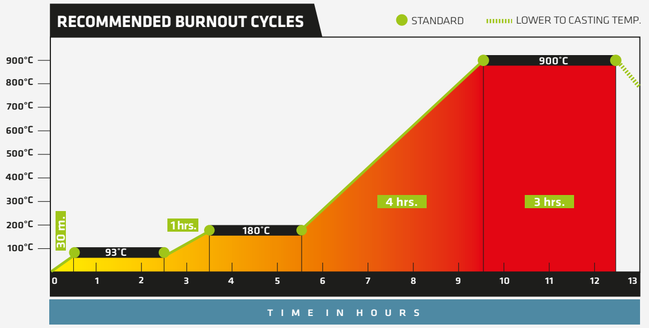
MIXING THE INVESTMENT

- The diluted binder to powder ratio range used for mixing is 28 to 30 parts binder solution, per 100 parts powder (28 - 30/100)
- Using a heavy duty, high torque commercial mixer such as a Hobart, or Kitchen Aid, add the require amount of binder solution to the mixing bowl.
- On low speed, slowly add the powder, a little at a time to the mixing bowl. Allow each amount added to thin before adding more. The mixed slurry will appear very thick, but will thin down as it mixes, this is normal. Once all the powder has been added, increase mixing speed to a medium setting and mix for an additional 10 – 15 minutes
- Place the mixed slurry under full vacuum until it rises, breaks and begins to boil. Continue vacuum for 2 minutes.
- Pour investment slurry gently down along the inside of the flask. Avoid directly hitting the patterns. Fill with 2" (5.08cm.), or more over the top row of patterns.
- Place the filled flasks under vacuum and vacuum for 2 minutes.
- After investing is complete, to cure place flask onto a thickness of old newspaper. If rubber bases are used, place flask onto a 3" (7.62cm.) bed of unused Ferro-Vest powder, which can be used many times over before replacing. Leave flasks undisturbed until the slurry becomes a thick, dull gray paste. The time required to cure the investment can vary from a few hours to overnight depending on flask size used. Note: As the investment cures, it will sink down in the middle approx. 1" (2.54cm) from the top. To compensate, cover the top row of patterns with 2" (5.08cm.), or more of investment.
- When a rubber base is used, allow two additional hours after the investment appears hard before carefully removing the base.

Note: As the investment cures, it will sink down in the middle approx. 1" (2.54cm) from the top. To compensate, cover the top row of patterns with 2" (5.08cm.), or more of investment.

- When a rubber base is used, allow two additional hours after the investment appears hard before carefully removing the base.

RECOMMENDED BURNOUT CYCLES



BURNOUT OF FLASKS SIZES UP TO 3"x 3" (7.62 x 7.62cm.),

1. Room temp to 93C. over 30 minutes.
2. Hold 93C. 2 hours.
3. Ramp to 180C. over 1 hour.
4. Hold 180C. 2 hours.
5. Ramp to 900C. over 4 hours.
6. Hold 900C. 3 hours.
7. Cast.

Note: For larger flask sizes hold 900C. 4 hours.



PRESTIGE INVESTMENT POWDERS

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PRESTIGE

MAGNA-VEST™ PT.

WATER MIX INVESTMENT POWDER FOR CASTING PLATINUM AND STAINLESS STEEL

Magna-Vest™ is a premium, high-temperature phosphate bonded investment mold material specifically designed & engineered by Certus for casting designs in platinum, palladium, stainless steel and chrome cobalt alloys. This extra user friendly formula mixes easily using only water, no additional binder liquid required, creating a smooth, consistent slurry that is simple and highly reliable to use.

Manufactured with high purity ingredients, Magna-Vest™ delivers outstanding quality and batch to batch consistency making it the first advancement in water mix, high temperature investment in decades that actually provides a smooth casting surface, not the rough, distorted surfaces usually obtained using the old outdated water mix, high temperature investments still on the market today.

FEATURES

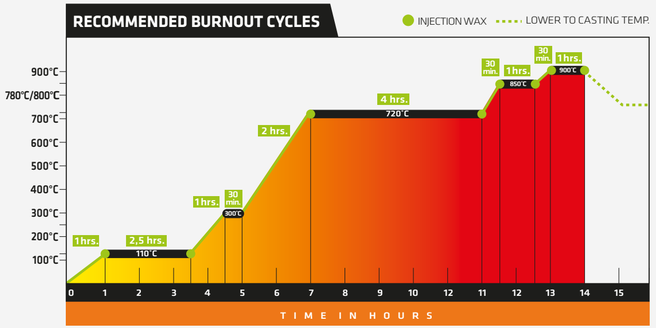
- Advanced user friendly formula
- Mixes only with water - No additional binder liquid required
- Provides a lower rise under vacuum
- Utilizes high purity ingredients for superior quality & consistency
- Stable high temperature resistance throughout burnout
- Captures sharp, delicate details with super smooth casting surfaces unmatched by any other brand
- Greatly reduces porosity and times in finishing, saving the user time & money



Used by quality conscious casters worldwide, Prestige "MAGNA VEST PT has proven to be a truly superior phoshpate bonded investment for platinum and stainless steel casting ***"PERFECTION IN CASTING TECHNOLOGY"***

Magna Vest PT comes in 10Kg. Aluminum Vacuum Sealed Sacks

RECOMMENDED BURNOUT CYCLES



- Burnout time may vary depending upon flask size

INSTRUCTION FOR MIXING

Powder: Water Ratio (28% - 29%)	Powder (Kg.)	Water (cc.)	Powder (Lb.)	Water (cc.)
Automatic Vac. Mixing	1	280	1	127
Conventional Mixing	1	290	1	132
Water Temperature °C	10-15	10-15	10-15	10-15

- Increasing the powder amount 1% will decrease the total working time for approximately 30 seconds.

Automatic Vac. Mixing Mach.	Minutes
Accurately Weigh Powder / Water	-----
Add Powder to Water	-----
Mixing & Vacuuming	4
Pour into Flask	1
Vacuum Invested Flask	2
Total Working Time	7

- Allow to sit undistributed for 180-240 minutes before burnout

Conventional Mixing Mach.	Minutes
Accurately Weigh Powder Water	-----
Add Powder to Water & Mix	4
Vacuum the Bowl	1
Pour into Flask	1
Vacuum Invested Flask	2
Total Working Time	8

- Allow to sit undistributed for 180-240 minutes before burnout

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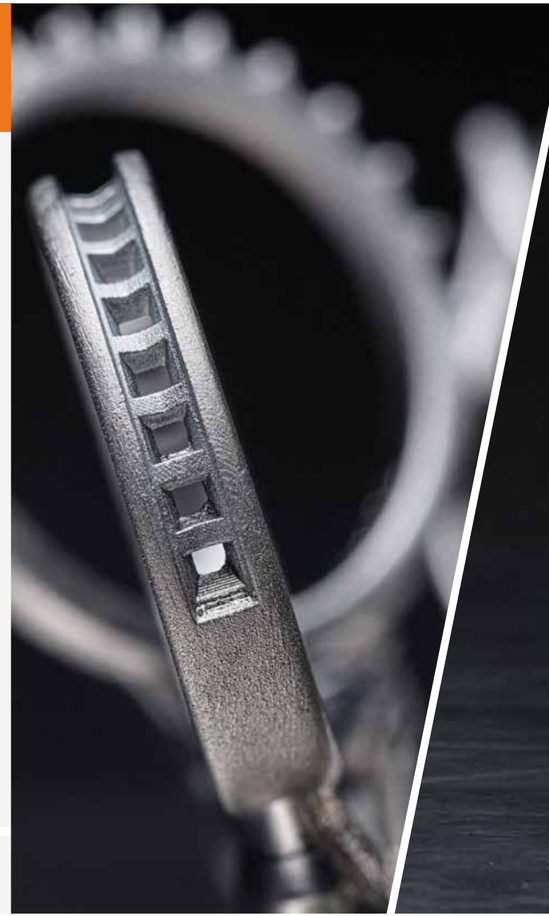



PRESTIGE

ALL SEASONS

ALL SEASONS JEWELRY INJECTION WAX

ALL SEASONS™ Jewelry Injection Wax is formulated for use in all countries and climates. "All Seasons" has a higher fluidity at lower injection temperatures, is flexible, non-brittle and provides crisp, sharp details of even the most complex designs. Used for filigree and both thick and thin designs, "All Seasons" injection wax solidifies quickly, offers the lowest possible shrinkage and due to having an extra low ash content, burns out cleanly for superior design reproduction time after time.

CERTUS, the company with products that continually

"PERFECTION IN JEWELRY CASTING TECHNOLOGY"

FEATURES

- "All Season" Reliability – Perfect for use all year round in all types of climates.
- Reproduction – Captures sharpest details of the most intricate designs.
- Smooth Finish – Provides a high gloss surface finish for superior castings that require less finishing.
- Complete Fills – High fluidity fill's the most complex designs.
- Easy View – Any imperfections present are easy to identify for repair.
- Low Shrinkage – Low injection temperature (68c.) for less shrinkage and sink in thick sections
- Low Injection Pressure – High fluidity and better flow allows for the lowest injection pressures to be used.
- Versitile – One wax for everything. unique formula works perfectly for all types of patterns. great for everything. from thick too thin to fine filigree.
- Extra Long Shelf Life – Properly stored, patterns made with "all seasons" injection wax will remain ready for use almost indefinitely.
- Low Ash Content – High purity of ingredients and near zero ash content provide cleaner burnouts for a superior casting surface.

Color (Visual)	
Drop Melting Point [ASTM D3954]	68-74°C
Congealing point [ASTM D938]	66-70°C
Penetration at 25°C [ASTM D1321]	4-8*0.1mm
Viscosity at 100°C [ASTM D3236]	90-130mPa.s

PROCESSING ADVICE
Recommended injection temperature is 68-74°C



All Seasons comes in 20 Kg. Plastic lined Poly Sacks



Supplied in 25 Kg. Boxes

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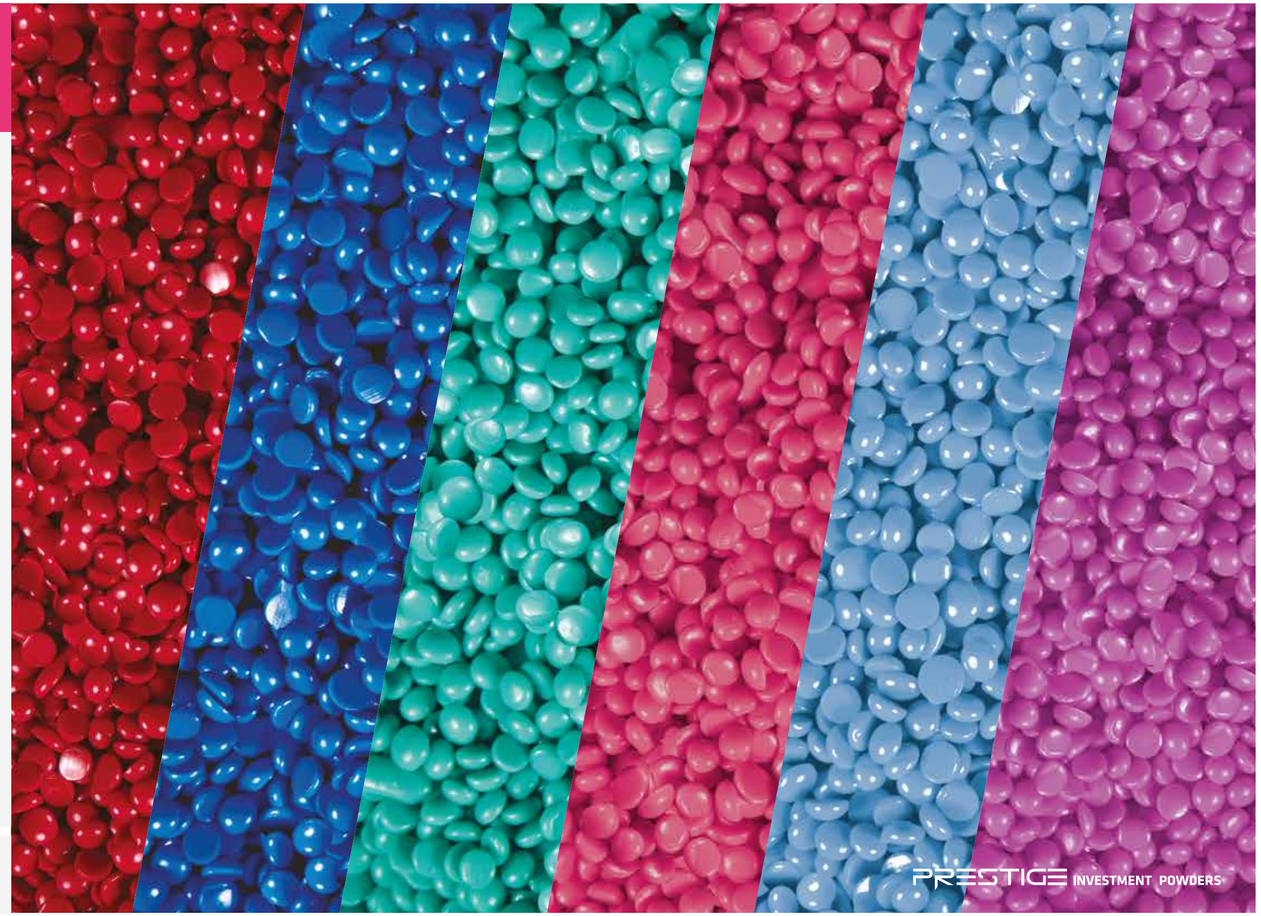

PRESTIGE

ACCU-SIL

SILICONE MOLDING RUBBERS

Prestige Accu-Sil™ silicone mold rubbers series offers reliable rubbers in various hardness to cover all applications that suits the needs of both custom jewelers and high volume casting shops. Accu-Sil™ rubbers are strong, tear resistant and fully compatible with both vacuum and traditional wax injectors, allowing for easy wax release without the need for sprays. Choose based on the needed flexibility vs. rigidity for your specific patterns.

FEATURES

- Low shrinkage for dimensional accuracy
- High detail reproduction
- Ease of use / User friendly
- Flexible elongation for easy demolding of complex designs
- Durability and longevity
- Excels in release and finish
- High tear/tensile strength, withstands repeated wax injections
- Consistency – stable shapes under injection pressure, reliable sealing
- Cost effective – Ease of producing complex molds





Physical Properties	Accu-Sil 20	Accu-Sil 30	Accu-Sil 40
Color	Shiny Turquoise	Pale Turquoise	Phosphoric Green
Hardness Shore A	38-40	48-50	48-50
Vulcanizing Temp	80°C-176°F	80°C-176°F	80°C-176°F
Shrinkage	1-2%	1-3%	1-3%
Tensile N/mm2-Psi	8.9-1289	9.5-1378	7.8-1132
Elongation	625%	660%	680%



Physical Properties	Accu-Sil 70	Accu-Sil 80	Accu-Sil 90
Color	Shiny Yellow	Bordeaux	Pale Yellow
Hardness Shore A	38-40	48-50	48-50
Vulcanizing Temp	170°C-338°F	170°C-338°F	170°C-338°F
Shrinkage	3-5%	3-5%	3-5%
Tensile N/mm2-Psi	8.3-1204	6.2-897	7.7-1117
Elongation	670%	565%	640%

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PRESTIGE

POWERCAST "T" FOR TIRE MOLD CASTING

POWERCAST "T" is a superior quality, non-foamed investment molding plaster developed for the casting of aluminum alloys via the perminant mold process. Engineered to provide the highest quality molds for the vulcanization of tires, POWERCAST "T" is a consistent, easy to use tire mold casting plaster that provides sharper, detailed replication of even the most complex tread configurations.

INSTRUCTIONS FOR USE

- User friendly, easy to mix formula,
- Expansion & shrinkage values are strictly controlled
- Added surface tension reducer assists in removing trapped air bubbles
- Precise particle sizing for a far smoother, as cast surface
- Excellent mold permiability
- Formula greatly reduces the instance of mold cracking and warping
- Provides tight tollerances
- Highest batch to batch consistency
- Reduces rejects. saves time and money spent in finishing

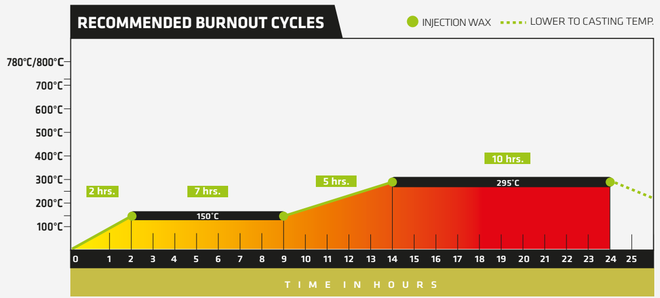


Used by quality conscious casters worldwide, Prestige "POWERCAST "T" has proven to be a truly superior gypsum bonded investment for tire mold casting

"PERFECTION IN CASTING TECHNOLOGY"

Powercast "T" comes in 22.5Kg. Plastic lined Poly Sacks or 1Ton Heavy Duty Bulk Bags

RECOMMENDED BURNOUT CYCLES



- Burnout time may vary depending upon flask size

INSTRUCTION FOR MIXING

Powder: Water Ratio (50% - 52%)	Powder (Kg.)	Water (cc.)	Powder (Lb.)	Water (cc.)
Automatic Vac. Mixing	1	500	1	227
Conventional Mixing	1	520	1	236
Water Temperature °C	21-24	21-24	21-24	21-24

- Increasing the powder amount 1% will decrease the total working time for approximately 30 seconds.

Automatic Vac. Mixing Mach.	Minutes
Accurately Weigh Powder / Water	-----
Add Powder to Water	-----
Mixing & Vacuuming	5
Pour into Flask	3
Vacuum Invested Flask	3
Total Working Time	11

- Allow to sit undistributed for 120-150 minutes before burnout

Conventional Mixing Mach.	Minutes
Accurately Weigh Powder Water	-----
Add Powder to Water & Mix	5
Vacuum the Bowl	1
Pour into Flask	2
Vacuum Invested Flask	3
Total Working Time	11

- Allow to sit undistributed for 120-150 minutes before burnout

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PRESTIGE INVESTMENT POWDERS

PRESTIGE

POWERCAST

FOR CASTING LARGER NON-FERROUS ART DESIGNS & COMMERCIAL PARTS

POWERCAST is a gypsum bonded, industrial grade investment mold material specially formulated for non-ferrous casting of small sculpture, art forms & figurines, class rings, decorative pieces and also complex parts used in commercial applications. Containing specially graded refractory grains and high purity cristobalite, Powercast utilizes proprietary control additives that provides a lower rise under vacuum, eliminates water marking on the cast surface and greatly reduces casting defects still obtained using other competitive brands.

INSTRUCTIONS FOR USE

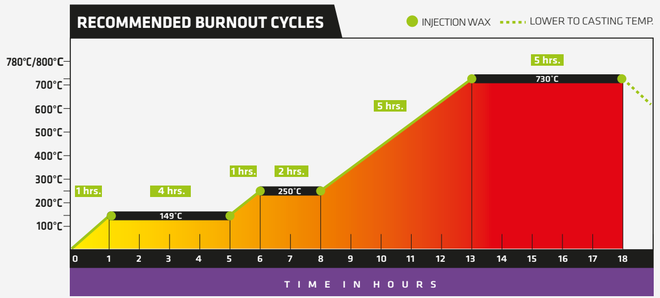
- Powercast is mixed at a ratio of 34 - 35 parts water, per 100 parts powder (34 -35/100), by weight.
- Using a mechanical mixer, add the powder to the water. Mix for 3 ½ - 4 minutes.
- Vacuum mixed slurry until it rises, breaks and begins to boil vigorously. Continue full vacuum for an additional 1 - 1 ½ minutes.
- Pour the investment slurry down along the inside of the flask allowing it to flow up, around and through the patterns, covering them by a minimum depth of 2.5cm. (1 inch) of investment.
- Vacuum investment slurry until it rises, drops and begins to boil. Continue to vacuum for 1 to 1 ½ minutes.
- Allow flasks to sit undisturbed in a vibration free area for 2 hours before starting burnout.



Used by quality conscious casters worldwide, Prestige "POWERCAST" has proven to be a truly superior gypsum bonded investment for casting larger non-ferrous art designs & commercial parts.
"PERFECTION IN JEWELRY CASTING TECHNOLOGY"

Powercast comes in 22.5Kg. Plastic lined Poly Sacks or 1Ton Heavy Duty Bulk Bags

RECOMMENDED BURNOUT CYCLES



- Burnout time may vary depending upon flask size

INSTRUCTION FOR MIXING

Powder: Water Ratio (34% - 35%)	Powder (Kg.)	Water (cc.)	Powder (Lb.)	Water (cc.)
Automatic Vac. Mixing	1	340	1	154
Conventional Mixing	1	350	1	159
Water Temperature ˚C	21-24	21-24	21-24	21-24

- Increasing the powder amount 1% will decrease the total working time for approximately 30 seconds.

Automatic Vac. Mixing Mach.	Minutes
Accurately Weigh Powder / Water	-----
Add Powder to Water	-----
Mixing & Vacuuming	5
Pour into Flask	3
Vacuum Invested Flask	3
Total Working Time	11

- Allow to sit undistributed for 120-150 minutes before burnout

Conventional Mixing Mach.	Minutes
Accurately Weigh Powder Water	-----
Add Powder to Water & Mix	5
Vacuum the Bowl	1
Pour into Flask	2
Vacuum Invested Flask	3
Total Working Time	11

- Allow to sit undistributed for 120-150 minutes before burnout

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STEAM DE-WAXING & BURNOUT

Place flask into a stream chamber only allowing for the minimum amount of time needed to remove the bulk of the wax from the mold.

Note: Leaving in steam too long will erode investment surface. Once de-waxing is complete, immediately transfer flasks directly to burnout oven.

Note: Do not allow flasks to cool before transferring to pre-heated oven for burnout.

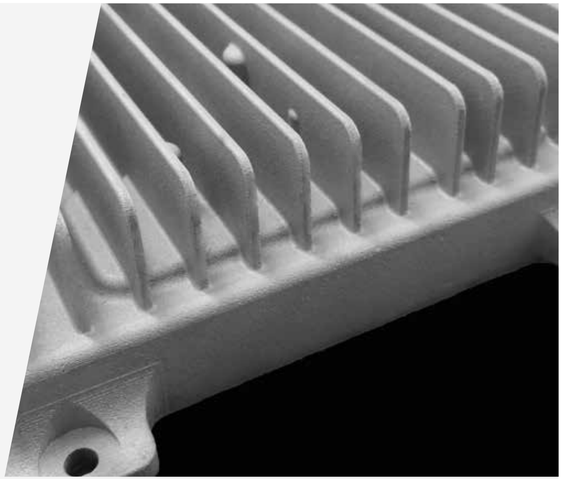
1. Load flasks into oven preheated to 149°C. (300F.)
2. Hold 149°C. (300F.) for 4-6 hours.
3. Increase temperature to 250°C and hold for 2hours.
4. Increase temperature to 732°C. (1350F.) at a rate of 66-93°C. (150 - 200F.) per hour.
5. Hold 732°C. (1350F.) four (4) to five (5) hours
6. Decrease temperature to desired mold temperature for casting
7. Hold mold temperature for casting 2 hours to stabilize temperature throughout the mold.
8. CAST

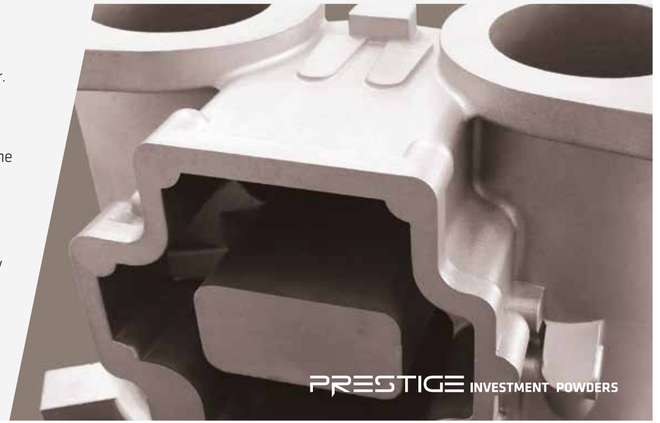
DRY DEWAXING & BURNOUT:

1. Place flasks into the burnout oven preheated to 149C. (300F.)
2. Hold temperature at 149C. (300F.) for 4-6 hours.
3. Increase temperature to 250°C and hold for 2hours.
4. Increase temperature to 732C. (1350F.) at a rate of 66 – 93C. (150 – 200F.) per hour.
5. Hold temperature at 732C. (1350F.) for four (4) to five (5) hours, or until all the carbon residue from the wax has been completely eliminated.
6. Once burnout at peak temperature is complete, reduce oven temperature to the desired flask temperature required for casting.

Note: Mold temperature for casting Aluminum: 204 – 282C. (400 – 540F.). Bronze & most copper based alloys: 427 – 538C. (800 – 1000F.)

7. Hold oven at desired temperature for casting for 2 hours, or longer if necessary until the temperature has completely stabilized throughout the mold.
8. The mold is now ready to be CAST.





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