# Complete Product Line for the Dental Professional







s we enter our 95th year, Whip Mix can look back on a proud tradition of research, development, and manufacturing excellence. From the original "egg beater" spatulator for investment, our product range now includes vacuum mixing equipment, model trimmers, ceramic pressing and firing ovens, waxes, die stones, casting investments, fixed and semi-adjustable articulators and face-bows, and a complete line of digital CAD-CAM products.

Our corporate offices and manufacturing facility for both mechanical and chemical products, encompassing over 220,000 sq. ft., are located in Louisville, Kentucky.

Our commitment to quality is certified by SGS, an independent auditor of Quality Management Systems. Based on the results of regularly scheduled audits, Whip Mix is certified as meeting all the mandatory requirements of the internationally recognized standard for quality, ISO13485:2003 and ISO9001:2008.

Whip Mix is proud of its long history, comprehensive product line and commitment to the dental profession. Our success is attributed to our 200 dedicated employees who, through their commitment to the Whip Mix Mission and Values, play an important role in the company's continued success.

Lean manufacturing is essentially a relentless and persistent search for waste... waste in time, money and human capital



Dental labs in the United States are facing three important challenges that affect their survival:

- A shortage of trained technicians
- An inability to raise fees to dentists
- · Low cost crowns imported from overseas labs

The solutions are more efficient process management, better technology, and greater cost containment.

More and more labs are achieving this through Lean manufacturing. Lean manufacturing is essentially a relentless and persistent search for waste. Once waste is identified and eliminated, the process becomes better, leaner and more competitive.

Part of this process is the adoption of lab products that streamline production. Whip Mix offers a number of top-performing products that maximize efficiency and eliminate non-value-added activity.

With experts trained in the art of Lean manufacturing, and with years of experience in developing products for the dental industry, we are in a unique position to offer assistance to our dental lab partners. By utilizing our Lean manufacturing consulting services, you can significantly alter the path your business takes into the future.

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# Rely on Whip Mix as Your Technical Resource.



Our knowledgeable Whip Mix representatives and technical staff have been trained on how to use all of our products. In addition we will help you select equipment, show you how to successfully incorporate techniques and new materials into your practice, and provide parts and service when needed.

### Visit whipmix.com/technical-support for:

- Webinars presented monthly and taped for viewing at your convenience
- Use and care videos for many products
- Product instructions
- Schematic drawings
- · Part identification
- · And more!

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#### Connect with us.













more reasons. one source

# S





# Whip Mix Investments

#### The Most Complete Line In The Dental Industry

Whip Mix Investments are divided into two categories according to their bonding systems: Phosphate and Gypsum. Within these systems you will find a wide variety of investments for general purposes, as well as for specific uses and techniques. Individual descriptions herein will enable you to choose those best fitting your requirements.

Phosphate investments are especially intended for use with high-fusing precious and non-precious alloys as they will withstand burnout as high as 1,000° C/1,800° F. They possess high strength and high expansion. A special liquid is used with most of these investments to help impart these qualities, as well as to enable the user to vary the expansions for different alloys by proper dilution with water.

Gypsum investments, because of their temperature limitation, are restricted to use with metal alloys in the low-fusing range below 1,080° C/1,975° F. Some gypsum investments may be used hygroscopically, others with a high heat burnout of 650° C/1,200° F maximum and a few with either technique.

#### **Physical Properties**

This latest edition of the Whip Mix Products Directory provides detailed Physical Properties for our many investments. Use them as a guide in selecting the material most appropriate for your needs.

ISO 9694 for phosphate investments requires that all testing be done according to manufacturer's recommended mixing directions. This is how the properties listed here have been determined. Phosphate investments may vary widely in their handling properties due to variations in temperature, humidity, mixing time, mixing equipment and investment age. The physical properties reported are typical, recorded from samples prepared from mixes at 27° C/80° F when mixed under slow-speed mixing.

Gypsum investments are covered by ISO 7490, whose tests have been used to determine their physical properties. It should be noted that specification tests are principally for conformance and uniformity, and the figures listed, especially for expansion, do not necessarily predict the actual compensation (casting fit) obtainable. Whip Mix uses its own performance test to ensure reliability in actual use. Some investments of a more specialized nature, such as Jewelry Investment, the Soldering Investments, etc., are not covered by any ISO Specification.

Following is a brief list of the Physical Properties:

#### Consistency

The ratio of water (or special liquid) in milliliters per 100 grams of powder. The figures listed are generally recommended for practical use; the individual product brochure indicates how more or less liquid affects the casting fit.

#### **Working Time**

These figures denote the actual time available for handling the material after spatulation and before it thickens and becomes unusable. The range in values is dependent on investment age, temperature, mixing time, etc.

#### **Ready for Burnout**

The minimum time the investment should be allowed to set before burnout is started.

#### **Setting Expansion**

The relatively free expansion in air as determined by the ISO method. It does not reflect the restraint imposed by the casting ring, impression material, etc.

#### **Hygroscopic Expansion**

Determined by the ISO method, it is the investment's expansion under water. The water is maintained at 38° C/100° F and the specimen is submerged immediately after investing.

#### **Thermal Expansion**

ISO method determination of the effective expansion of the investment when raised to the temperature shown.

#### **Compressive Strength**

The 'green' strength of the investment is determined after the material has set for one or two hours at room temperature and 100% relative humidity.

#### Warning

Phosphate investments are incompatible with gypsum materials. Even a small amount of investment can seriously retard or prevent the setting of gypsum materials. Therefore, a separate bowl should be used to mix phosphate investments.

Properties of investments are subject to change due to moisture absorption and abrupt temperature changes. They should be stored in a dry, cool place, preferably at room temperature. Containers should be kept sealed at all times.

Investment packed in bulk quantities should not be overstocked; a reasonable stock would be a six months' supply. However, the preweighed envelopes extend this period considerably because of the moisture-proof properties of the envelope.

All Whip Mix investment cartons bear two dates: one is the month, day and year of manufacture and the other is the warranted shelf life of the material. Whip Mix investments all have a twoyear shelf life.

# **Liquid Requirement**

For Phosphate Investments

#### The Problem with Freezing Weather and Your Investment Liquid

The liquids used in phosphate bonded casting/ pressing investments should not be exposed to freezing temperatures. When that happens, they freeze and as they thaw the constituents in the liquid separate and can never be put back into solution. Investment expansion control is permanently lost.

There are two solutions to this problem. (1.) Order enough investment liquids to make it through the winter months or (2.) use Whip Mix's Freeze-Stable liquids. They may freeze and separate, but they can also be re-blended back to their original state. This enables you to achieve the expansion you want. Whip Mix's Freeze-stable liquids include FastFire and SLC Liquids (not SLC Plus).

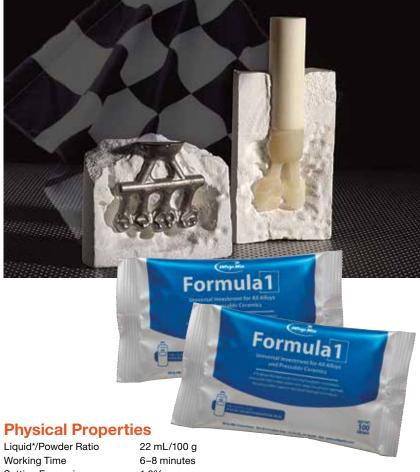
ITEM#	PRODUCT	TYPE OF LIQUID REQUIRED	QTY 340 ML REQ'D	QTY LITER REQ'D
05134	Cerafina 144x60g	SLC		2
05142	Cerafina 144x90g	SLC		3
05096	Cerafina 9 kg - 20#	SLC		2
00362	Ceramigold 11 kg	SLC	1	1
00427	Ceramigold 144x60g	SLC	1	1
00435	Ceramigold 144x90g	SLC		2
38142	FastFire 15 100x90g	FastFire	1	2
38134	FastFire 15 150x60g	FastFire	1	2
38081	FastFire 15 9 kg	FastFire	1	2
38089	Fastfire 15 Inv 25x60g	FastFire	1	
38097	Fastfire 15 Inv 25x90g	FastFire	2	
38171	Formula 1 100x100g	SLC Plus		2
38170	Formula 1 150x60g	SLC Plus		2
38172	Formula 1 25 kg	SLC Plus		5
38148	Formula 1 40x150g	SLC Plus		1
38173	Formula 1 4x2.5 kg	SLC Plus		2
38152	Formula 1 50x100g	SLC Plus		1
38151	Formula 1 50x60g	SLC Plus	2	
00478	Hi Temp 11 kg	SLC	1	1
00663	Hi Temp 144x60g	SLC	1	1
00671	Hi Temp 144x90g	SLC		2
38183	PC 15 100x100g	FastFire	1	2
38176	PC 15 Inv 25x100g	FastFire	2	
24930	Polyvest Inv 24x60g	SLC Plus	1	
32875	Powercast 100x90g	SLC Plus		2
32825	Powercast 150x60g	SLC Plus		2
32795	Powercast 9 kg	SLC Plus		2
18474	VHT Inv 24x60g	SLC	1	
33295	X20 Chrome 22kg	SLC		1
33762	X20 Speed 25kg	SLC		1

SLC = Special Liquid Concentrate

SLC Plus = Special Liquid Concentrate - Plus (replaces High Expansion Liquid)

# Formula 1

#### Universal Investment for All Alloys and Pressable Ceramics



Setting Expansion 1.6% Thermal Expansion 0.65%

Compressive Strength, Wet 1,350 psi (9.2 MPa)

\*Measured at 100% liquid concentration.

Recommended Liquid: Special Liquid Concentrate – Plus (Sold Separately). See pg. 5 for liquid requirements.

#### Item No. Description

#### Item No. Description

Special Liquid Concentrate - Plus (Keep from freezing)

 38122
 340 mL (12 oz.) Bottle

 38127
 1 Liter (34 oz.) Bottle

 38125
 6pk - 340 mL (12 oz.) Bottles

 38130
 6pk - 1 Liter (34 oz.) Bottles

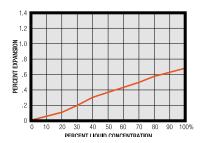


This high-performance, universal investment works equally well for all alloys and pressable ceramics. Its wide expansion range allows the technician to achieve optimal fit for a variety of materials. The robust bimodal nature of Formula 1 strengthens molds and promotes easier devesting when working on more fragile materials such as all-ceramic restorations. Using only a 15-minute benchset and 30-minute burnout, Formula 1 reduces processing time and increases lab productivity.

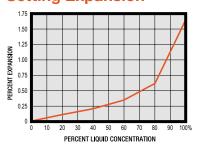
#### **Features:**

- One investment for both crown and bridge alloys and pressable ceramics reduces inventory
- Wide expansion range
- Works well with 3D printed patterns
- Fluid consistency promotes ease of investing and smooth surface
- Advanced hybrid formula strengthens molds and devests easily
- Rapid and standard burnout capabilities require no change in laboratory routines
- 15 minute benchset reduces processing time

#### **Thermal Expansion**



#### **Setting Expansion**



# FastFire 15

#### Universal Phosphate Investment for All Crown and Bridge Alloys



#### **Physical Properties**

Liquid\*/Powder Ratio 22 mL/100 g
Working Time 7–9 minutes
Setting Expansion 1.0%
Thermal Expansion 1.0%

Compressive Strength, Wet 500 psi (3.4 MPa) \*Measured at 100% liquid concentration.

# Recommended Liquid: FastFire Liquid (Sold Separately). See pg. 5 for liquid requirements.

Item N		Dascr	iption
ITCIII IA	10.	DE2CI	iption

38081 9 kg (20 lb.) Carton

Preweighed Envelopes -Liquid Required

 38089
 25 - 60 g Package

 38097
 25 - 90 g Package

 38134
 150 - 60 g Package

 38142
 100 - 90 g Package

#### FastFire Liquid (Freeze Stable)

38166 340 mL (12 oz.) Bottle 38161 1 Liter (34 oz.) Bottle 38165 6pk - 340 mL (12 oz.) Bottles 38164 6pk - 1 Liter (34 oz.) Bottles

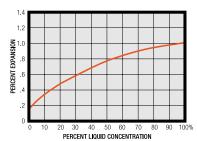


FastFire 15 is a fine-grain phosphate investment which requires only a 15-minute benchset before placing molds into a hot oven for rapid burnout. It produces accurate, smooth castings using either the ringless or metal ring technique. Optimum fit is achieved for all crown and bridge alloys through dilution of the freeze stable FastFire Liquid.

#### **Features:**

- Produces castings in less than one hour
- FastFire Liquid allows year round, problem-free shipping and controlled expansion
- Reliable performance using many casting techniques and alloys
- Exceptionally smooth, accurate castings

#### Thermal Expansion



# PowerCast®

#### A New Breed of Investment that's Rapid, Reliable and Ringless



**Physical Properties** 

Liquid\*/Powder Ratio 23 mL/100 g
Working Time 8–9 minutes
Setting Expansion 0.8%
Thermal Expansion 1.0%

Compressive Strength, Wet 700 psi (5 MPa)

\*Suggested concentration of SPECIAL LIQUID CONCENTRATE - PLUS is 80% (4 parts liquid to 1 part water).

Recommended Liquid: Special Liquid Concentrate – Plus (Sold Separately). See pg. 5 for liquid requirements.

#### Item No. Description

32795 9 kg (20 lb.) Carton

**Preweighed Envelopes** 

32825 150 - 60 g Package 32875 100 - 90 g Package

Special Liquid Concentrate - Plus (Keep from freezing)

38122 340 mL (12 oz.) Bottle 38127 1 Liter (34 oz.) Bottle 38125 6pk - 340 mL (12 oz.) Bottles 38130 6pk - 1 Liter (34 oz.) Bottles

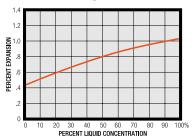


A carbon-free, fine-grain, phosphate-bonded investment for casting crown and bridge and ceramic alloys. This versatile, all-purpose investment has been specially formulated to use with a rapid burnout technique. It can be used both with a metal ring and a ringless technique without cracking. Special Liquid Concentrate – Plus provides the high expansion especially needed for non-precious alloys and can be diluted as needed for other alloys.

#### **Features:**

- Crack-resistant and tolerant to rapid temperature rise
- Can be used both with ring or ringless technique
- Easy breakout for faster cleanup
- Smooth, accurate castings reduce finishing time

#### **Thermal Expansion**



#### **Setting Expansion**



U.S. Patent No. 5,559,063

# **Cera-Fina**

#### Carbon-Free, Fine-Grained Investment for High-Fusing Alloys



#### **Physical Properties**

Liquid\*/Powder Ratio22 mL/100 gWorking Time8-10 minutesSetting Expansion0.25%Thermal Expansion1.3%

Compressive Strength, Wet 600 psi (4 MPa)

\*Suggested concentration of SPECIAL LIQUID CONCENTRATE is 75% (3 parts liquid to 1 part water).

# Recommended Liquid: Special Liquid Concentrate (Sold Separately). See pg. 7 for liquid requirements.

#### Item No. Description

05096 9 kg (20 lb.) Carton

Preweighed Envelopes

05134 144 - 60 g Package 38097 144 - 90 g Package

#### Special Liquid Concentrate

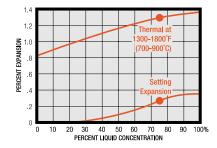
02135 340 mL (12 oz.) Bottle 02194 1 Liter (34 oz.) Bottle 02130 6pk - 340 mL (12 oz.) Bottles 02190 6pk - 1 Liter (34 oz.) Bottles



Cera-Fina is a carbon-free phosphate investment developed for professionals who demand a more finely grained investment. It is designed for use with all classes of casting alloys: precious, semiprecious, and non-precious.

#### **Features:**

- Extremely fine texture results in accurate castings with very smooth surfaces
- Extended working time, as much as 10 minutes, allows the investing of multiple flasks
- Absence of carbon assures compatibility with all casting alloys, especially Palladium and nonprecious
- Increased liquid to powder ratio yields a creamier mix and allows better flow, resulting in bubble-free castings





# **Hi-Temp**

#### Carbon-Free Investment for High-Fusing Alloys



#### **Physical Properties**

Liquid\*/Powder Ratio 16 mL/100 g
Working Time 7–8 minutes
Setting Expansion 0.7%
Thermal Expansion 1.2%

Compressive Strength, Wet 1,500 psi (10 MPa)

\*Suggested concentration of SPECIAL LIQUID CONCENTRATE is 75% (3 parts liquid to 1 part water).

# Recommended Liquid: Special Liquid Concentrate (Sold Separately). See pg. 5 for liquid requirements.

#### Item No. Description

00478 11 kg (25 lb.) Carton

Preweighed Envelopes

00663 144 - 60 g Package 00671 144 - 90 g Package

#### Special Liquid Concentrate (Keep from Freezing)

02135 340 mL (12 oz.) Bottle 02194 1 Liter (34 oz.) Bottle 02130 6pk - 340 mL (12 oz.) Bottles 02190 6pk - 1 Liter (34 oz.) Bottles



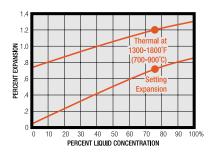
A special investment for non-precious and semi-precious alloys, Hi-Temp contains no carbon.

Non-precious metal alloys require an investment specially compounded to:

- · Compensate for alloy shrinkage
- Withstand high-fusing temperatures
- Provide a non-contaminating atmosphere
- Allow casting of a lighter-density metal

Hi-Temp is the investment with these characteristics and more. It gives a smooth surface to the casting, flows readily and evenly for fine detail and sharp margins, and has high strength to prevent damage to the mold.

The technique is simple. Special Liquid Concentrate is used instead of water. Control of expansion is obtained by dilution of the Special Liquid Concentrate with water - the greater the dilution, the less the expansion of the investment. Four parts liquid to one part water is the proportion suggested to get some frictional retention for full crowns on well-tapered preparation. Otherwise, the technique is essentially the same as handling any casting investment. The chart below shows the various expansions of Hi-Temp at different concentrations of Special Liquid Concentrate.



# **Ceramigold®**

#### Investment with Carbon for Crown and Bridge and Ceramic Gold Alloys



#### **Physical Properties**

Liquid\*/Powder Ratio 16 mL/100 g
Working Time 6–7 minutes
Setting Expansion 0.7%
Thermal Expansion 1.2%

Compressive Strength, Wet 1,500 psi (10 MPa)

\*Suggested concentration of SPECIAL LIQUID CONCENTRATE is 75% (3 parts liquid to 1 part water).

Recommended Liquid: Special Liquid Concentrate (Sold Separately). See pg. 5 for liquid requirements.

#### Item No. Description

00362 11 kg (25 lb.) Carton

Preweighed Envelopes

00427 144 - 60 g Package 00435 144 - 90 g Package

#### Special Liquid Concentrate

 02135
 340 mL (12 oz.) Bottle

 02194
 1 Liter (34 oz.) Bottle

 02130
 6pk - 340 mL (12 oz.) Bottles

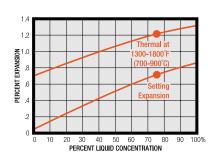
 02190
 6pk - 1 Liter (34 oz.) Bottles

This outstanding phosphate investment has these advantages:

- Contains carbon for bright, goldcolored castings.
- Expansion can be controlled to fit your needs – yet technique is easy to follow.
- Even, extremely thin sections will be cast with sharp, clean margins just like lower-fusing golds.
- Accurately fitting castings with smooth and clean surfaces – without grinding. Uniform results time after time.

The chart below shows the effective expansion figures obtainable by varying the concentration of Special Liquid Concentrate. A 75% concentration, three parts Special Liquid concentrate and one part water, is generally preferred. Thermal and also setting expansion will increase by greater Special Liquid Concentrate concentration; these expansions will decrease by dilution with more water. Consequently, expansion can be controlled to fit individual needs.

There is no additional thermal expansion between 700° C and 1,000° C (1,300°F and 1,800° F). The curve in the chart shows different figures for the thermal expansion merely as a result from higher or lower concentration of Special Liquid Concentrate. The setting expansion for a benchset mold is shown in the lowest curve.



# X-20

#### A Phosphate Investment for Casting Partials with Chromium Dental Alloys



#### X-20 Chrome

Phosphate investment for casting partials with Chromium dental alloys

- Refractory cast is hard, strong and smooth
- No danger of breakage or abrasion
- · May be used without metal ring
- Recommended liquid: Special Liquid Concentrate Sold separately

#### X-20 Speed

Improved casting investment for making Chrome partial denture frameworks in half the time

- Outer mold ready for burnout after 20 minutes
- Recommended liquid: Special Liquid Concentrate Sold separately

#### **Physical Properties**

	X-20	Chrome	X-20 Speed
	For Models Using Liquid*	For Investing Outer Mold	For Investing Outer Mold
Liquid*/Powder Ratio	11 mL liquid/100 g	13 mL water/100 g	12 mL water/100 g
Working Time	4-5 minutes	5-6 minutes	5-6 minutes
Ready for Separating	60 minutes	N/A	N/A
Ready for Burnout	N/A	2 hours	20 minutes
Setting Expansion	0.20%	0.10%	0.10%
Thermal Expansion			
700°-1,000° C (1,300°-1,800° F)	0.90%	1.00%	1.00%
Compressive Strength, Wet	2,500 psi (17 MPa)	1,850 psi (13 MPa)	1,850 psi (13 MPa)
*O	CIAL LIQUID CONCE	NITD ATC := E00/ /1 ===	

<sup>\*</sup>Suggested concentration of SPECIAL LIQUID CONCENTRATE is 50% (1 part liquid to 1 part water).

# Recommended Liquid: Special Liquid Concentrate (Sold Separately). See pg. 5 for liquid requirements.

Item No.	Description
100111 1401	Description

X-20 Chrome

33295 22 kg (50 lb.) Carton

Preweighed Envelopes

27384 50 - 400 g Packages

X-20 Speed

33762 25 kg (55 lb.) Carton

Preweighed Envelopes

27391 50-400 g Packages

Special Liquid Concentrate

 02135
 340 mL (12 oz.) Bottle

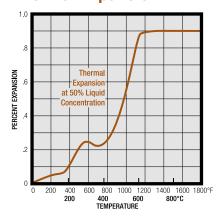
 02194
 1 Liter (34 oz.) Bottle

 02130
 6pk - 340 mL (12 oz.) Bottles

 02190
 6pk - 1 Liter (34 oz.) Bottles



#### **Thermal Expansion**



# Refractory Investments

#### For Direct-Firing Ceramics





#### **Physical Properties**

	V.H.T.	Polyvest
Color	Blue	White
Liquid/Powder Ratio	19 mL/100 g	22 mL/100 g
Working Time	4-5 minutes	2 minutes
Setting Expansion	0.30%	0.80%
Thermal Expansion		
500° C (932° F), 2nd firing	0.80%	0.65%
Compressive Strength (1 hour)	2,500 psi (17 MPa)	2,500 psi (17 MPa)
Compressive Strength (after firing)	4,800 psi (34 MPa)	6,500 psi (46 MPa)
Maximum Furnace Temperature	1,200° C (2,200° F)	1,200° C (2,200° F)

#### Item No. Description

V.H.T. INDUSTRIAL INVESTMENT

Recommended Liquid: Special Liquid Concentrate (Sold Separately). See pg. 5 for liquid requirements.

#### Preweighed Envelopes

18474 24 - 60 g Package

#### POLYVEST REFRACTORY DIE MATERIAL

Recommended Liquid: Special Liquid Concentrate Plus (Sold Separately). See pg. 5 for liquid requirements.

Preweighed Envelopes

24930 24 - 60 g Package

#### **Related Products:**

#### Special Liquid Concentrate (Freeze Stable)

340 mL (12 oz.) Bottle 02135 02194 50 - 400 g Packages 02130 6pk - 340 mL (12 oz.) Bottles 02190 6pk - 1 Liter (34 oz.) Bottles

#### Special Liquid Concentrate - Plus (Keep from freezing)

38122 340 mL (12 oz.) Bottle 38127 1 Liter (34 oz.) Bottle 6pk - 340 mL (12 oz.) Bottles 38125 38130 6pk - 1 Liter (34 oz.) Bottles



Refractory Investment for Porcelains with High Thermal Expansion

- High strength allows multiple firings
- Smooth, hard surfaces for superior fit
- Controlled expansion for perfect fitting veneers, inlays/onlays or jackets
- Compatible with porcelains with CTE of 14.0 or higher
- Recommended liquid: Special Liquid Concentrate. Sold separately

#### **Polyvest**

Refractory investment for porcelains with medium range thermal expansion

- · Fine-grained material for smooth surfaces and accurate reproduction
- High strength allows multiple firings - resists fractures and abrasions
- Compatible with porcelains with CTE of 13.9 or lower
- Recommended liquid: Special Liquid Concentrate - Plus. Sold separately







# **Beauty-Cast**

#### For Low-Fusing Crown and Bridge Alloys



# America's Leading Gypsum Investment

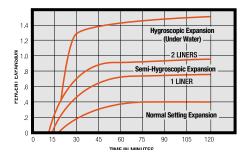
- The proven standard for the Hygroscopic Technique
- Can also be used for the High Heat Technique

The Hygroscopic Technique with Beauty-Cast is as simple and quick as the High Heat Technique, but the results are much more uniform. The use of a water bath at 37.8° C (100° F) automatically brings all patterns to uniform temperature, softening the wax enough for even expansion of the investment. Combined, the wax expansion and the high hygroscopic expansion compensate for most of the gold shrinkage, and thus the low temperature burnout at 480° C (900° F) provides the balance of the required mold expansion.

Fig. 1 shows hygroscopic expansion of Beauty-Cast at 1.5% and Fig. 2 shows thermal expansion at 0.55% at 480° C (900° F). We unhesitatingly recommend the Hygroscopic Technique with Beauty-Cast as best suiting today's needs for a precise yet simple routine technique.

The inherent high thermal expansion of Beauty-Cast at 650° C (1,200° F) (Fig. 2) makes it possible to use the standard High Heat Technique. Setting expansion can be controlled by varying the number of ring liners in the Inlay Ring (Fig. 1), resulting in varying degrees of total expansion. Casting at 650° C (1,200° F) is necessary for the additional 1.2% thermal expansion to compensate for gold shrinkage. In the ADA Specification No. 2 for Investments, the term Type I, Inlay Thermal refers to investments used by the High Heat Technique. With Beauty-Cast either technique - the Hygroscopic or the High Heat - will produce extremely smooth castings of a rich golden color that seldom require pickling.

Fig. 1



#### **Physical Properties**

Water/Powder Ratio 30 mL/100 g Working Time 3 minutes Setting Time (ADA Method) 14.5 minutes Ready for Burnout (Minimum) 30 minutes Setting Expansion 0.40% Hygroscopic Expansion 1.50% Thermal Expansion 480° C (900° F) 0.55% Thermal Expansion 650° C (1,200° F) 1.20% Compressive Strength, Wet 700 psi (5 MPa)

#### Item No. Description

 00019
 2 kg (4 1/2 lb.) Package

 00035
 11 kg (25 lb.) Carton

 Preweighed Envelopes

 00078
 24-50 g Package

 00094
 24-75 g Package

 00108
 144-50 g Package

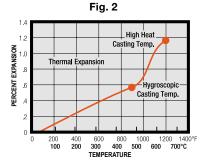
 00124
 144-75 g Package

#### **ISO TYPE 1**

#### **Digital Water Bath**

For use in the Hygroscopic Technique





# **Novocast**

#### For Low-Fusing Crown and Bridge Alloys



Novocast is an advanced inlay investment that provides increased accuracy for casting conventional gold alloys at a mold temperature of 650° C (1,200° F) without the use of a water bath.

**ISO TYPE 1** 

# Features: Expansion Control

Expansion can be controlled by merely varying the water/powder ratio. While many modern investments have been developed to minimize the effect of changing the water/powder ratio, Novocast takes advantage of this convenient property, without requiring an unusually thick mix.

# **Technique the Same for all Types of Castings**

Novocast has the singular property of furnishing the needed expansion to accurately fit both the intra-coronal and extra-coronal surfaces of different preparations.

# Clean and Smooth Gold Castings

Novocast sets rapidly to produce a strong, ultra-smooth mold with easy "dig-out," and produces clean and shiny gold castings.

#### **Physical Properties**

Water/Powder Ratio 34 mL/100 g Working Time 3 minutes Setting Time (ADA Method) 15 minutes Ready for Burnout (Minimum) 30 minutes Setting Expansion 0.45%

Thermal Expansion

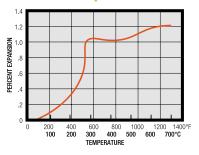
650° C (1,200° F) 1.20%

Compressive Strength, Wet 950 psi (7 MPa)

#### Item No. Description

01015	9 kg (20 lb.) Carton
	Preweighed Envelopes
01058	24-50 g Package
01074	24-75 g Package
01082	144-50 g Package
01112	144-75 g Package

#### **Thermal Expansion**



# **Cristobalite**

#### For Low-Fusing Crown and Bridge Alloys



The principal ingredient, Cristobalite, gives high thermal expansion, even at comparatively low temperatures. It is possible to use the same creamy mix by simple standard vacuum or painting techniques for all types of inlays.

The usual Whip Mix care in compounding and control assure a uniform water/powder ratio and consequent uniform expansion.

#### **Physical Properties**

Water/Powder Ratio 30 mL/100 g Working Time 3 minutes Setting Time (ADA Method) 16 minutes Ready for Burnout 30 minutes (Minimum) 0.50% Setting Expansion Thermal Expansion 650° C (1,200° F) 1.25% Compressive Strength, 700 psi (5 MPa)

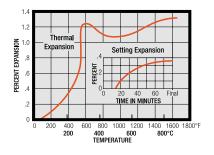
#### Item No. Description

Preweighed Envelopes 24-50 g Package 144-50 g Package

**ISO TYPE 1** 

01171

01228



# **Soldering Investments**

#### For Low- and High-Fusing Precious Metals



#### **Soldering Investment**

#### For all soldering purposes

Multi-purpose Soldering Investment is ideal for soldering all types of dental alloys, including chrome-cobalt. Its fine texture mixes readily with water to a smooth, stackable consistency that invests easily. Heat-shock resistance and high strength enable it to withstand being dried out or flushed with boiling water. This improved soldering investment is strong, yet easy to devest.

#### **Physical Properties**

Water/Powder Ratio 24 mL/100 g Working Time 2–3 minutes

Ready for Dewaxing

(Minimum) 15 minutes Setting Expansion 0.20% Thermal Expansion 700° C

(1,300° F) 1.00%

Compressive Strength,

Wet (2 hours) 300 psi (2 MPa)

#### Item No. Description

01473 2 kg (4 1/2 lb.) Package 01503 11 kg (25 lb.) Carton



#### Hi-Heat

#### For high-fusing precious metals

- Flows freely into the smallest crevice
- · Stacks and molds easily
- · Sets moderately fast
- · Trims smoothly
- Withstands rapid drying out

Hi-Heat Soldering Investment is a gypsum-bound investment that is ideal for any soldering job that requires the use of an oxygen-gas torch, or where an unusually fine and smooth soldering investment is wanted. Excellent for use with high-fusing ceramic alloys for both the pre- and post-soldering technique. Can also be used for soldering precision attachments.

#### **Physical Properties**

Water/Powder Ratio 28 mL/100 g Working Time 2–4 minutes

Ready for Dewaxing

(Minimum) 20 minutes Setting Expansion 0.20%

Thermal Expansion 700° C

(1,300° F) 0.60% Compressive Strength, 1,200 psi Wet (2 hours) (9 MPa)

#### Item No. Description

01546 2 kg (4 1/2 lb.) Package 01562 11 kg (25 lb.) Carton

# SMNS BS MS 5





# Whip Mix Gypsums

Our Reputation is Cast in Stone

#### **Physical Properties** of Whip Mix Gypsum **Products**

In order to help you choose the best gypsum products for your needs from our large selection, as many Physical Properties as practical are listed. A brief explanation of each property follows so the figures will be more meaningful.

All Whip Mix products are tested in accordance with ISO 6873. Certain special products, made to fit a specific rather than a general need, are not covered by the specification; for example SUPER-DIE, MOUNTING STONE, SNAP-STONE, etc.

#### Consistency

The ratio of water in milliliters to 100 grams of powder (water/powder ratio). Proper proportioning of powder by weight and water by volume is strongly recommended.

#### **Working Time**

The lower figure is for mechanically or vacuum-spatulated mixes at the lower consistency. The higher figure covers hand spatulated mixes at the higher consistency. These figures denote the actual time available for handling

the material after spatulation and before it thickens and makes its use inadvisable or impossible.

#### **Setting Time ISO 6873**

The Vicat Set obtained by the ISO 6873

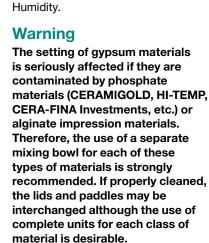
test method is known as the Initial Set. It does not correspond to any practical value, as it is longer than working time and shorter than "ready for use" - it is rather an arbitrary method for testing uniformity.

#### Setting Expansion

Obtained by the ISO 6873 test method, setting expansion is reported at two hours. Minor consistency changes will not affect the value appreciably.

When casts are poured in alginates or hydrocolloids, the gypsum product will usually absorb a little water and the expansion during setting will be slightly higher. Whip Mix guarantees gypsum products for two years from date packaged.

This is another figure obtained by the ISO 6873 test method. It is determined on specimens maintained in an atmosphere of 100% Relative



The primary cause of aging of a gypsum material is exposure to moisture. Proper storage is therefore important — a dry storeroom at room temperature. When not in use, containers should be tightly sealed.

Overstocking of gypsum materials should be avoided. A six months' supply is reasonable but more than this could be excessive because of the aging problem. However, material in preweighed envelopes, because of their moisture-proof design, should be good for a much longer period. As a guide for the user, all Whip Mix gypsum materials show the date packaged on the label.



wet strength). Compressive strength, dry, is given as a general guide, no standard method for this test has been specified. The figures given are based on specimens stored for one week at approximately 50% Relative



Humidity for one hour (also known as



To ensure our customers receive the most reliable and consistent products available, Whip Mix tests every batch of gypsum for setting time accuracy, consistency, setting expansion and strength.

# **Physical Properties**

**Whip Mix Gypsum Products** 

Main	TTTIP TTTX	WATER/POWDER RATIO	MIXING (SECC						RESSIVE H MPA (PSI)		
RESINROCK XLS   20		PER 100 G	AT 350-450					1 HOUR	48 HOURS	COLOR	IS0
LEAN ROCK XLS	DIE STONI	ES									
NABO ROCK   21   20-30   60-90   6-8   15   28   49   104   04   04   04   04   04   04   0	RESINROCK XL5	20	20-30	60–90	5–7	10	.20			, ,	5
MICROSTONE   22   20-30   60-90   5-7   10   18   22   20   70   60   60   60   60   60   60   6	LEAN ROCK XL5	20	20-30	60–90	4–5	5–7	.20			IVORY	5
JADE STONE   22   20-30   60-90   5-7   10   .18   52   97   60-EEN   5	HARD ROCK	21	20-30	60–90	6–8	15	.28				5
PRIMA-ROCK   20   20-30   60-90   6-8   12   .13   .55   .17   .	JADE STONE	22	20-30	60-90	5–7	10	.18			,	5
NOPPY   NOPP	ULTIROCK	20	20-30	60-90	5–7	10-13	.07			,	4
RESINROCK   20   20-30   60-90   5-7   10   .08	PRIMA-ROCK	20	20-30	60-90	6–8	12	.13	55	117	VIOLET, YELLOW,	4
	RESINROCK	20	20-30	60-90	5–7	10	.08	49	76	BLUE, PEACH, GREY, IVORY, WHITE, GREEN,	4
MODEL STONES	SILKY-ROCK	23	20-30	60–90	3–6	10	.09			, ,	4
QUICKSTONE   28   20-30   60-90   3-5   10   .14   27   55   BUFF, BLUE   3	LEAN ROCK	20	20-30	60-90	4–5	5–7	.08			IVORY, BLUE	4
MICROSTONE   28   20-30   60-90   5-7   13   .12   31   .59   GOLDEN, WHITE   3	MODEL ST	ONES									
Continuity   Con	QUICKSTONE	28	20-30	60–90	3–5	10	.14			BUFF, BLUE	3
STONE	MICROSTONE	28	20-30	60-90	5–7	13	.12				3
SPECIALITY STONES		28	20-30	60–90	5–7	10	.09			WHITE	3
SNAP-STONE   23   0	BUFFSTONE	30	20-30	60-90	6-8	15	0.15			BUFF	3
SEC.   (6,000) (14,000)   FLOWSTONE   24   20-30   60-90   6-9   12   .08   41   83   BLUE, LIGHT BLUE, LIGHT GREEN   EIGHT GR	<b>SPECIALIT</b>	Y STONES									
FLOWSTONE FS   24   20-30   60-90   2-3   4-6   .08   41   83   WHITE, BLUE   4	SNAP-STONE	23	0	10–15		2	.15			PINK	4
MOUNTING STONE   26	FLOWSTONE	24	20–30	60–90	6–9	12	.08			BLUE, LIGHT BLUE,	4
STONE	FLOWSTONE FS	24	20-30	60-90	2–3	4–6	.08			WHITE, BLUE	4
SEC.   (3,300)   (7,000)		26	0	30–45	2–3	5	.08			WHITE, BLUE	3
PLASTERS	BITESTONE	29	0	10–15		1–3	.15			WHITE	3
ORTHODONTIC PLASTER         37         20–30         60–90         7–9         14         .20         25         45 (3,500)         WHITE         2           LABORATORY PLASTER, REGULAR SET         45         20–30         60–90         5–7         14         .20         10         23 (1,500)         WHITE         2           LABORATORY REGULAR SET         45         20–30         60–90         2–4         9         .20         10         23 (1,500)         WHITE         2           PLASTER, FAST SET         WHITE         2         10         23 (1,500)         WHITE         2           MOUNTING         63         0         20–30         60–90         3         .09         4         12         WHITE         1	RAPID FLASK	35	20-30			5-7	.10			BUFF	3
ORTHODONTIC PLASTER         37         20–30         60–90         7–9         14         .20         25         45 (3,500)         WHITE         2           LABORATORY PLASTER, REGULAR SET         45         20–30         60–90         5–7         14         .20         10         23 (1,500)         WHITE         2           LABORATORY REGULAR SET         45         20–30         60–90         2–4         9         .20         10         23 (1,500)         WHITE         2           PLASTER, FAST SET         WHITE         2         10         23 (1,500)         WHITE         2           MOUNTING         63         0         20–30         60–90         3         .09         4         12         WHITE         1	PLASTERS	3									
LABORATORY 45 20–30 60–90 5–7 14 .20 10 23 WHITE 2 PLASTER, REGULAR SET  LABORATORY 45 20–30 60–90 2–4 9 .20 10 23 WHITE 2 PLASTER, FAST SET  MOUNTING 63 0 20–30 60–90 3 .09 4 12 WHITE 1	ORTHODONTIC		20-30	60–90	7–9	14	.20			WHITE	2
LABORATORY 45 20–30 60–90 2–4 9 .20 10 23 WHITE 2 PLASTER, FAST SET (1,500) (3,300)  MOUNTING 63 0 20–30 60–90 3 .09 4 12 WHITE 1	PLASTER,	45	20-30	60–90	5–7	14	.20	10	23	WHITE	2
MOUNTING 63 0 20-30 60-90 3 .09 4 12 WHITE 1	LABORATORY PLASTER,	45	20-30	60–90	2–4	9	.20			WHITE	2
	MOUNTING	63	0	20-30	60–90	3	.09				1

# ResinRock

#### Resin-Fortified Die Stone



#### **Physical Properties**

Water/Powder Ratio Working Time Setting Time Setting Expansion Compressive Strength, Wet (1 hour) Compressive Strength, Dry (48 hours)

#### ResinRock 20 mL/100 g 5-7 minutes 10 minutes 0.08% 7,000 psi (49 MPa)

#### ResinRock XL5 20 mL/100 g 5-7 minutes 10 minutes 0.20% 7,000 psi (49 MPa) 11,000 psi (76 MPa) 11,000 psi (76 MPa)

#### **Description**

#### Item No. RESINROCK

Peach	Blue	Grev	Ivorv	White	Green	Golden Brown	
Peacii	Diue	Grey	ivory	wille	Green	DIOWII	
34916	34924	34940	34970	34931	34934	_	5 kg (11 lbs) Package
34975	34967	34959	34971	34932	34960	34985	25 kg (55 lbs.) Carton
							Preweighed Envelopes
34983	_	_	34973	_	_	_	25-70 g Package
34991	_	_	34972	_	_	_	25-70 g Package (Case of
RESINE	OCK XL	5					
	Blue	Pink	Ivory		Green		
_	34995	34993	34994	_	34992	_	25 kg (55 lbs.) Carton



#### ResinRock

Resin-fortified die stone, produces models of the highest quality. The unique blend of synthetic resin and alpha gypsum results in improved surface smoothness and increased resistance to abrasion. Its low setting expansion and dimensional stability make it ideal for implant and complex restorative cases where precision and accuracy are required. ResinRock is easy to work with - its creamy, thixotropic mix pours easily under vibration and stacks readily.

Available in seven colors: peach, blue, grey, ivory, white, green and golden brown. Peach, blue, golden brown and green provide excellent contrast to casting waxes. The neutral tones of grey, ivory and white complement all ceramic materials.

#### **ISO TYPE 4**

#### ResinRock XL5

Same smoothness and high abrasion resistance you've come to appreciate in ResinRock. However, this ISO Type 5 die stone gives you increased expansion to compensate for shrinkage of vinyl polysiloxane and other rubber-based impression materials.

Available in four colors: green, blue, pink and ivory. Pink, blue and green provide excellent contrast to casting waxes. The neutral tone of ivory complements all ceramic materials.

#### Features:

4)

- Ideal for use with rubber-based impression materials which may contract over time
- · Increased setting expansion of 0.20%
- Resin-fortified for advanced abrasion resistance
- Smooth, dense surface for superior detail reproduction
- Thixotropic, creamy mix stacks and vibrates easily into impression

# **UltiRock**

#### Premium Die Stone



#### **UltiRock**

Whip Mix introduces an extremely creamy and hard premium stone for all gypsum applications. New UltiRock is the ultimate model/die stone. With a smooth non-reflective surface and high durability, trimming a full model, ditching dies and scanning is easy and reliable. The stone's flowability and precision enables it to reproduce minute detail. UltiRock, with three colors, enables labs to send out beautiful models. Order your UltiRock Stone in Golden Brown, White and Ivory.

**ISO TYPE 4** 

#### **Physical Properties**

Water/Powder Ratio 20 mL/100 g
Working Time 5–7 minutes
Setting Time 10-13 minutes
Setting Expansion 0.07%
Compressive Strength, Wet (1 hour) 7,200 psi (49 MPa)
Compressive Strength, Dry (48 hours) 11,000 psi (76 MPa)

#### **Item No**

5 kg (11 lbs) Package 35025 Golden Brown 5 kg (11 lbs) Package 35026 White 5 kg (11 lbs) Package 35027 Ivory 35030 Golden Brown 20kg 4-5kg (44 lbs) Pails 20kg 4-5kg (44 lbs) Pails 35031 White 35032 20kg 4-5kg (44 lbs) Pails Ivory Golden Brown 22kg (50 lbs) 35036 35037 White 22kg (50 lbs) 35038 22kg (50 lbs) Ivory



Golden Brown



Ivory

**Description** 

# Silky-Rock

#### Low-Expansion Die Stone



Silky-Rock is characterized by exceptional hardness and density throughout, and an unusual "silky-smooth" pouring quality that makes it flow freely into any type of impression. It works well with all types of impression materials. These properties, together with its low setting expansion, make Silky-Rock one of the world's most popular die materials.

#### **ISO TYPE 4**

02119

01945

01953

02046

Physical Properties		Item No.			Description	
Water/Powder Ratio	23 mL/100 g	Ivory	Yellow	Violet	White	
Working Time	3–6 minutes	_	01996	01910	02070	11 kg (25 lb.) Carton
Setting Time	10 minutes	33163	33162	31755	27219	25 kg (55 lbs.) Carton
Setting Expansion	0.09%					Preweighed Envelopes

# **Hard Rock**

Compressive Strength, Wet (1 hour)

Compressive Strength, Dry (48 hours)

#### High-Strength, High-Expansion Die Stone

The material is compatible with all types of impression materials. Its high expansion makes it especially suited for polyvinyl or polyether impression materials. This material has a creamy and thixotropic consistency for good flow under vibration, yet it is very stackable. Its extended working time facilitates multiple pours. The stone has a smooth non-brittle surface so dies trim easily without chipping.

6,000 psi (41 MPa)

13,000 psi (90 MPa)

#### **ISO TYPE 5**

Physical Properties		Itom No			Description	
Physical Properties		Item No.			Description	
	Water/Powder Ratio	21 mL/100 g	Aqua	Green	Ivory	
	Working Time	6-8 minutes	26107	32050	_	11 kg (25 lb.) Carton
	Setting Time	15 minutes	26530	32069	34002	25 kg (55 lbs.) Carton
	Setting Expansion	0.28%				Preweighed Envelopes
	Compressive Strength,		26565	32077	_	120-70 g Package
	Wet (1 hour)	7,000 psi (49 MPa)	_	32080	_	100-140 g Package
	Compressive Strength,					- 0
	Dry (48 hours)	15,000 psi (104 MPa)				



120-70 g Package

80-140 g Package

Aqua



Green



Ivory

# **Prima-Rock**

#### High-Strength Die Stone

Prima-Rock has the highest compressive strength of any Whip Mix die material.

Vacuum spatulation provides a smooth mix which flows readily. It's compatible with all types of impression materials, and upon setting, Prima-Rock develops a dense surface with superior hardness.

#### **ISO TYPE 4**

#### **Physical Properties**

Yellow

16592

16616

31720

16632

Item No.

Violet

16590 16608

31712

16624

Water/Powder Ratio 20 mL/100 g Working Time 6-8 minutes Setting Time 12 minutes Setting Expansion 0.13% Compressive Strength, Wet (1 hour)

8,000 psi (55 MPa) Compressive Strength, Dry (48 hours) 17,000 psi (117 MPa)

Ivory

34878

#### **Description**

5 kg (11 lb.) Canister 11 kg (25 lb.) Carton 25 kg (55 lbs.) Carton Preweighed Envelopes 120-70 g Package







# **Jade Stone**

High-Strength Die Stone

Jade Stone stacks well after mixing yet flows readily under minimal vibration. Popular for its smooth jade-like surface, high strength, and low setting expansion, it is compatible with all types of impression materials. The light, pastel green and blue colors of Jade Stone provide excellent contrast to casting waxes.

#### **ISO TYPE 5**

#### **Physical Properties**

Compressive Strength, Dry (48 hours)

Water/Powder Ratio 22 mL/100 g Working Time 5-7 minutes Setting Time 10 minutes Setting Expansion 0.18% Compressive Strength, Wet (1 hour) 7,500 psi (52 MPa)

#### Item No.

#### **Description**

Green Blue 18570 16592 11 kg (25 lb.) Carton 25 kg (55 lbs.) Carton 31739 31747 Preweighed Envelopes 18597 120-70 g Package





14,000 psi (97 MPa)

Blue

# **LeanRock**<sup>™</sup>

#### Low-Expansion Die Stone



#### **Physical Properties**

 Water/Powder Ratio
 20ml/100g

 Working Time
 4-5 minutes

 Setting Time
 5-7 minutes

 Expansion – LeanRock
 0.08%

 Expansion – LeanRock XL5
 0.20%

 Compressive Strength
 3,500 psi (15 minutes)

 7,200 psi (1 hour)

**Description** 

11 kg (25 lb.) Carton

25 kg (55 lbs.) Carton

#### Item No.

#### **LEANROCK**

 Ivory
 Blue

 31308
 31305

 31307
 31303

 LEANROCK XL5

31313 — 11 kg (25 lb.) Carton 31315 — 25 kg (55 lbs.) Carton





LeanRock<sup>™</sup> is formulated specifically for laboratories who want to pour small batches (about 6 full arches) and have working models ready in 15 minutes.

Small batch processing is based on Lean principles to improve work flow and reduce wait time because models can be trimmed and pinned after only 15 minutes, decreasing downtime waiting for stone to set. This enables smaller batches to be sent down the line for trimming, eliminating the "bottleneck" associated with large batches hitting all at once, giving you more controlled release of product. The decreased processing time also speeds up remakes and those emergency repairs needed in a hurry.

#### **Features:**

- Saves Time Models can be separated and trimmed after only 15 minutes, producing better process flow and less downtime.
- Scannable Models may be used with Cad/Cam systems eliminating the need for a specialty scanning stone or spray.
- Strength LeanRock is hard with superior abrasion resistance.
- Clear Margins Rich Ivory color provides clean, clear margins.

#### **ISO TYPE 4**

#### LeanRock XL5

LEANROCK XL5 for increased expansion.



# **FlowStone**

#### Fluid, Low-Expansion Base Stone



**Physical Properties** 

Water/Powder Ratio
Working Time
Setting Time
Setting Expansion
Compressive Strength, Wet (1 hour)
Compressive Strength, Dry (48 hours)

Item No.

 FLOWSTONE
 FLOWSTONE FS

 24 mL/100 g
 22-24 mL/100 g

 6-9 minutes
 4-6 minutes

 12 minutes
 8 minutes

 0.08%
 0.08%

 6,000 psi (41 MPa)
 6,000 psi (41 MPa)

#### **Description**

12,000 psi (83 MPa)

12,000 psi (83 MPa)

#### **FLOWSTONE** Light Light Blue White Blue Green 33944 33941 33940 33943 33949 22 kg (50 lb.) Carton **FLOWSTONE FS** 33954 33952 22 kg (50 lb.) Carton

FlowStone produces accurate, bubble-free bases without vibration, making it ideal for use with base formers. Its extended working time allows the pouring of multiple bases with one mix. The dense surface resists dowel pin abrasion and the low setting expansion of FlowStone produces a dimensionally stable base for master models. Available in light blue, white, buff, blue, or light green to provide excellent contrast to die stones.

#### FlowStone FS

FlowStone FS offers a quick setting time of 8 minutes, and provides the same benefits and features as our current FlowStone.

- FlowStone FS Saves time, enables small batch processing.
- Saves time Sets 50% faster than typical base stone products. Early high strength allows model separation in 15 minutes.
- FlowStone FS coupled with LeanRock Die Stone – Streamlines model fabrication process.
- Low expansion fluid base stone 0.08%



# **Snap-Stone**

#### High-Strength, Fast-Setting Stone



#### **Physical Properties**

Water/Powder Ratio 23 mL/100 g
Working Time 60–90 seconds
Setting Time 2 minutes
Setting Expansion 0.15%
Compressive Strength, Wet (1 hour) 6,000 psi (41 MPa)
Compressive Strength, Dry (48 hours) 14,000 psi (97 MPa)

Item No. Description

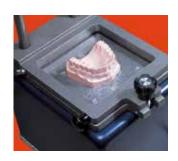
Pink	
23690	5 kg (11 lb.) Package
23698	11 kg (25 lb.) Carton
33219	22 kg (50 lb.) Carton
	Preweighed Envelopes
26514	80-140 g Package



Snap-Stone is an exceptionally fast-setting stone with an early high compressive strength, which allows separation of the cast from the impression in five minutes. **Because Snap-Stone is fast-setting, hand mixing is recommended.**Snap-Stone is compatible with all impression materials and its versatile, light pink color makes it suitable for many uses.

Procedures which can be performed faster with Snap-Stone include:

- · Bleaching trays
- Mouth guards
- Vacuum-formed splints
- · Custom trays
- Orthodontic appliances
- Temporaries
- · Denture repairs
- · Study casts
- Articulator cast mounting
- CAD-CAM restorations



# **Microstone**

#### Premium Dental Stone





Microstone's fine particle size and dense surface makes it our finest general-purpose laboratory stone. It is especially suited for processing acrylic dentures, as it accepts tinfoil substitutes readily.

**ISO TYPE 3** 

#### **Physical Properties**

Water/Powder Ratio
Working Time
Setting Time
Setting Expansion
Compressive Strength, Wet (1 hour)
Compressive Strength, Dry (48 hours)

28 mL/100 g 5–7 minutes 13 minutes 0.12% 4,500 psi (31 MPa) 8,500 psi (59 MPa)

#### Item No.

 Golden
 White

 02305
 02399

 31763
 31771

02364 —

#### **Description**

11 kg (25 lb.) Carton 22 kg (50 lb.) Carton **Preweighed Envelopes** 80-140 g Package

# **Quickstone Laboratory Stone**

#### Economical Dental Stone



Buff



procedures. ISO TYPE 3

#### **Physical Properties**

Water/Powder Ratio
Working Time
Setting Time
Setting Expansion
Compressive Strength, Wet (1 hour)
Compressive Strength, Dry (48 hours)

28 mL/100 g 3–5 minutes 10 minutes 0.14% 4,000 psi (27 MPa) 8,000 psi (55 MPa)

#### Item No.

**Buff Blue** 02453 02526 31798 32689

#### **Description**

Quickstone is an economical dental stone with consistent handling properties. Its smooth, creamy mix makes it ideal for a variety of lab

> 11 kg (25 lb.) Carton 22 kg (50 lb.) Carton

# **Orthodontic Stone**

#### Super-White Dental Stone



Orthodontic Stone is a hard, accurate dental stone of super white color for optimal aesthetics. It's ample working time allows the pouring of multiple models with one mix. The same smooth mixing and easy flowing

properties of all Whip Mix Model Stones are retained in this product, made especially with the orthodontist in mind. To produce a glossy surface, finished models may be treated with Model Glow model soap.

#### **ISO TYPE 3**

#### **Physical Properties**

Water/Powder Ratio 28 mL/100 g
Working Time 5–7 minutes
Setting Time 10 minutes
Setting Expansion 0.09%
Compressive Strength, Wet (1 hour) 4,500 psi (31 MPa)

Compressive Strength, Dry (48 hours) 8,500 psi (59 MPa)

Item No. Description

Super-White

02682 11 kg (25 lb.) Carton 31801 22 kg (50 lb.) Carton

# **Orthodontic Plaster**

Super-White Dental Plaster



Super White

Developed specifically for orthodontic use, Orthodontic Plaster is harder and whiter than ordinary plaster. It has a long working time and trims easily. To provide an accurate and dense cast,

finest results are obtained when mixed under vacuum. To produce a glossy surface, finished models may be treated with Model Glow model soap.

#### ISO TYPE 2

#### **Physical Properties**

Water/Powder Ratio 37 mL/100 g
Working Time 7–9 minutes
Setting Time 14 minutes
Setting Expansion 0.20%
Compressive Strength, Wet (1 hour) 3,500 psi (25 MPa)
Compressive Strength, Dry (48 hours) 6,500 psi (45 MPa)

Item No.

#### **Description**

Super-White

03077 9 kg (20 lb.) Carton 31836 22 kg (50 lb.) Carton

# **Laboratory Plaster**

#### Regular and Fast Set



An economical white plaster formulated for general purpose laboratory use. Improved to provide a creamier mix consistency. Available in both regular and fast set.

#### **ISO TYPE 2**

#### **Physical Properties**

Water/Powder Ratio
Working Time
Setting Time
Setting Expansion
Compressive Strength, Wet (1 hour)
Compressive Strength, Dry (48 hours

#### Fast-Set Regular 45 mL/100 g 45 mL/100 g 5-7 minutes 2-4 minutes 14 minutes 9 minutes 0.20% 0.20% 1,500 psi (10 MPa) 1,500 psi (10 MPa) 3,300 psi (23 MPa) 3,300 psi (23 MPa)



#### Item No.

# **Description**

White	White			
Regular	Fast Set			
02941	31569			

9 kg (20 lb.) Carton 31828 31577 22 kg (50 lb.) Carton

# **Bitestone**

#### Extremely Fast-Setting



White

An extremely fast-setting stone for use in mounting casts and locking gnathological instruments into position.

Free flow is held to a minimum in this product, since a good stacking quality is desirable in the uses for which it is intended. Bitestone is an excellent choice for a model stone when a splint or temporary appliance is needed quickly.

**ISO TYPE 3** 

#### **Physical Properties**

Water/Powder Ratio Working Time Setting Time Setting Expansion Compressive Strength, Wet (1 hour) Compressive Strength, Dry (48 hours) 29 mL/100 g 10-60 seconds 1-3 minutes 0.15% 3,300 psi (22 MPa) 7,000 psi (49 MPa)

#### Item No.

White 12238 33189

**Description** 11 kg (25 lb.) Carton 22 kg (50 lb.) Carton

# **Mounting Stone**

#### Low-Expansion, Fast-Setting Stone





A very hard, fast-setting gypsum material formulated expressly for mounting casts to articulators. Its very low setting expansion prevents inaccuracies in occlusal cast relationships that result when conventional model stone or plaster is used. Although Mounting Stone has excellent stacking qualities, it moves very freely under the slightest pressure during its working time. It can be used as a model stone when a rapid set is required.

#### **Physical Properties**

Water/Powder Ratio 26 mL/100 g
Working Time 2–3 minutes
Setting Time 5 minutes
Setting Expansion 0.08%
Compressive Strength, Wet (1 hour) 4,600 psi (32 MPa)
Compressive Strength, Dry (48 hours) 8,500 psi (59 MPa)

#### **ISO TYPE 3**

Item No.		Description		
White	Blue			
02917	18740	11 kg (25 lb.) Carton		
33197	33200	22 kg (50 lb.) Carton		
		Preweighed Envelopes		
18730	18731	100-100 g Package		

# **Mounting Plaster**

Fast-setting, Low-Strength, Low-Expansion Plaster



#### **Physical Properties**

Water/Powder Ratio 63 mL/100 g
Working Time 60–90 seconds\*
Setting Time 3 minutes
Setting Expansion 0.09%
Compressive Strength, Wet (1 hour) 640 psi (4 MPa)
Compressive Strength, Dry (48 hours) 1,800 psi (12 MPa)
\*Incorporate 15 seconds, hand spatulate 30 seconds.

A specially formulated plaster which offers a low setting expansion and fast setting time. Its low compressive strength allows mounting plates to be easily cleaned.

Item No.	Description
White	
15520	9 kg (20 lb.) Carton
33227	22 kg (50 lb.) Carton
	Preweighed Envelopes
15550	100-100 g Package

# **RapidFlask**<sup>™</sup>

#### Flowable Flasking Stone



Are you looking for a flasking stone that is fluid enough to flow well without vibration? One that flows into all areas of the denture wax up, creating exceptional detail and accurate reproduction without using a vibrator.

Look no further. Whip Mix RapidFlask is a smooth, fast-setting flasking stone for the second pour, made to separate in just 20 minutes.

#### **Features:**

- Pourable Flows without vibration into all areas of the denture wax-up
- Accurately Reproduces Detail -Reduces finishing time and flask repairs
- Low Compressive Strength Easily removed after processing
- Pour multiple flasks quickly -Improves LEAN process efficiency in the lab
- Use in any flask new or old (with Whip Mix Flask Bands)

**ISO TYPE 3** 

#### **Physical Properties**

Water/Powder Ratio 35ml / 100g
Working Time 2–3 minutes
Setting Time 5-7 minutes
Expansion 0.10%
Compressive Strength 3,500 psi (1 hour)
Compressive Strength, Dry (48 hours) 8,500 psi (59 MPa)

#### Item No. Description

33975 Buff - 50 lbs. (22kg) Carton 33977 Flask Bands (Pkg. 3)



#### Flask Band

Flask Band reduces leakage of flasking stone in older and mismatched flasks

- Neater/Cleaner flasking procedure
- Extends the life of your brass flasks by improving the seal of the upper and lower connecting surface
- Enables the use of flowable Flasking Stone resulting in a smoother and more accurate reproduction

# **Dazzle PS and Pumice**

#### Polishing Medium



#### **Dazzle PS**

#### **Pumice Substitute for Polishing Acrylic**

Specially formulated with unique abrasives to cut faster and smoother than pumice. And unlike pumice which holds moisture, Dazzle PS dries quickly when not in use, eliminating odors and providing for a more sanitary work environment. Its fine-grain powder is also easier on the hands when polishing dentures and appliances.

#### **Features:**

- Produces a smoother finish
- · Cuts easier and faster
- · Gentle on hands
- Odor-free

# Item No. Description DAZZLE PS

32672 9 kg (20 lb.) Carton





# **Pumice**

#### **Polishing Medium**

Whip Mix Pumice is selected for its superior cutting and polishing qualities. Available in Medium and Coarse grades.

Item No.	Description
11011111101	<b>D</b> CCC iption

PUMICE		
Grades		
Coarse CL-60	Medium CL-85	
03417	03476	1.6 kg (3.5 lb.) Package
03433	03492	9 kg (20 lb.) Carton
32646	32654	22 kg (50 lb.) Carton

# **Pumice Preppies**<sup>™</sup>

#### Unit Dose Flour of Pumice Paste



( (

Preppies<sup>™</sup> Flour of Pumice Paste has been specifically formulated for dental professionals requiring a cleaning agent that contains no flavoring agents, oils or fluoride. Pumice Preppies<sup>™</sup> leave no residue and are ideal for a variety of operatory procedures including:

- Cleaning the tooth surface prior to acid etching procedures
- · Cleaning the tooth surface prior to restoration cementation
- · Polishing amalgam or composite restorations
- · Prophylaxis of heavily stained teeth
- New Technique Prepping tooth surface prior to bleaching procedure
- Gluton free, safe for most common allergies

Each cup provides enough flour of pumice paste for a single use, thus providing optimum infection control.

Item No.

**Description** 

03400

Jar of 100 2-gram Cups



# **Preppies Plus**<sup>™</sup>

#### Unit Dose Flour of Pumice Paste with Chlorhexidine



 $C \in$ 

Preppies Plus" pumice paste has been specifically formulated with 2.0% Chlorhexidine gluconate. Each cup provides enough flour of pumice paste for a single patient.

- For use prior to restoration cementation.
- For use prior to acid etching procedures:
  - Sealants
  - Composite restorations
- Minimizes the potential for post-op sensitivity.
- Contains no fluoride, oils, or added flavoring agents.
- · Gluten free.
- Silky Smooth paste easily fills prophy cup.

Item No.

**Description** 

03410

Jar of 100 1.3-gram Cups





# **Articulators/Accessories**

# Faithful Mandibular Reproduction and Ease of Use with Consistently Accurate Results

Whip Mix articulators are designed to mechanically imitate the human jaw. All are engineered to close tolerances and built with traditional Whip Mix precision and accuracy. Their sturdy, durable construction assures the user reliability and dependability at a price well within the means of every practicing dentist. A variety of Whip Mix articulator accessories are available to accommodate individual needs and enhance the use of any Whip Mix articulator.

Whip Mix Semi-Adjustable Articulators are arcon instruments that are reliable and easy to use and understand. Used in conjunction with the "Quick Mount" Face-Bow, each offers:

- Quick reproduction of craniomaxillary relationships without the use of expensive equipment or time-consuming techniques
- Fast and easy mounting of study casts for diagnosis and patient education

- Easy progression from a Whip Mix articulator to a fully adjustable arcon instrument
- Minimal adjustments which offer exceptional ease in teaching, clinical and laboratory use
- Parts made of anodized aluminum, phosphor bronze or stainless steel, assuring maintenance-free use

Whatever the demands of your practice, from simple dentistry to more complex orthognathic reconstructions, there is a Whip Mix articulator that is right for you, along with many helpful accessories to complement its use.

#### **Articulator Features**

	Articulator Model Number						
FEATURE	2240	2340	3040	3140	4640	4641	8500
Adjustable	Х	Х	Х	Х	Х	Х	Х
Interchangeability	Х	Х	Х	Х	Х	Х	
Arcon Design	Х	Х	Х	Х	Х	Х	Х
Adjustable Condylar Inclination	Х	Х	Х	Х	Х	Х	Х
Curved Eminentia (3/4" radius)	Х						
Adjustable Bennett Angle		Х	Х	Х	Х	Х	Х
Adjustable Immediate Side Shift	Х						
Adjustable Intercondylar Distance							Х
Centric Latch/Lock	Х	Х	Х	Х			
Magnetic Mounting System	*	*	*	*	*	*	*
Full Tracking Fossae			Х		Х		
Half Tracking Fossae				Х		Х	
Occlusal Analyzer							

<sup>\*</sup> All Semi-Adjustable Articulator Models may be easily modified for use with the QuickMount Magnetic System accessory

# 2000 Series Articulators

### Featuring Interchangeability



### "Accumount" **Mounting System**

The patented "Accumount" Mounting System, makes it possible to exchange mounted casts between any Model 2240 or between any Model 2340 Articulator without loss of accuracy. During manufacture, each articulator has a special table firmly and precisely attached to the lower frame using a special fixture and lowfusing alloy.

#### Advantages of Interchangeability

- · Users can transfer mounted casts without loss of accuracy
- Mounted casts need no longer be sent on an articulator when shipped to or from a laboratory using the same articulator model
- · Reduces the number of instruments required in both the dental office and dental laboratory
- Instrument damage caused by shipping the articulator to and from the dental lab is eliminated
- · No expensive equipment or timeconsuming calibration is necessary with the "Accumount" System

**Model 2240** 

The Model 2240 Articulator features the "Accumount" Mounting System for interchanging mounted casts between articulators. The Model 2240's ergonomic frame design offers:

- Interframe spacing of over 4 inches allowing for easy mounting of even the bulkiest casts
- Rounded edges and frame corners for enhanced visibility and posterior access
- Bilateral elastics provide optimum feel during excursive movements which can be easily detached to remove the upper frame
- · Quick-acting centric lock allows easy return of the articulator to centric position and simple hinge movement
- Upper frame can easily be set at an open position for convenience during laboratory procedures
- Condylar guidance featuring:
  - Adjustable condvlar inclination with curved eminentia
  - Immediate side shift
  - Fixed intercondular distance of 110 mm

The 2240 is so accurate and easy to use it was "rated excellent or good by 100% of evaluators" by an independent research institute.

#### **Model 2340**

The Model 2340 Articulator combines the condylar guidance of the Model 8500 Articulator with the innovative frame design of the Model 2240 Articulator. An interframe distance of over four inches makes the Model 2340 an excellent instrument for orthodontists and oral surgeons. The Model 2340 offers:

- Condylar guidance featuring:
  - Adjustable condylar inclination
  - Progressive side shift
  - Fixed intercondylar distance of 110 mm



Rubber foot stabilizes the articulator when open and prevents it from sliding on a slick surface

#### Item No. **Description**

		•
02267	#2240	ARTICULATOR with Series 2000 Frame, Immediate Side Shift and "Accumount" System
34219	#2240Q	ARTICULATOR with Series 2000 Frame, Immediate Side Shift, "Accumount" System and Magnetic Mounting System
28649	#2340	ARTICULATOR with Series 2000 Frame, Progressive Side Shift and "Accumount" System
34220	#2340Q	ARTICULATOR with Series 2000 Frame, Progressive Side Shift, "Accumount" System and Magnetic Mounting System
DVD		

Ultilization of the #2240 Articulator and Quick Mount Face Bow (See page 87 for details)

33040

37

# **3000 Series Articulators**

### With Tracking Condylar Guidance



Model 3040



#### Item No. Description

		•
34223	#3040	ARTICULATOR with Full Tracking Condylar Guidance, Progressive Side Shift and "Accumount" System
34222	#3040Q	ARTICULATOR with Full Tracking Condylar Guidance, Progressive Side Shift, "Accumount" System and Magnetic Mounting System
34225	#3140	ARTICULATOR with Modified Tracking Condylar Guidance, Progressive Side Shift and "Accumount" System
34221	#3140Q	ARTICULATOR with Modified Tracking Condylar Guidance, Progressive Side Shift, "Accumount" System and Magnetic Mounting System
DVD		

Whip Mix Articulator Utilization: The 3000 Series (See page 88 for details)

#### **Model 3040**

Incorporating a new frame design featuring:

- Tracking fossae which allow upper and lower frames to remain together during excursive movements
- Wide posterior access which gives enhanced visibility and lingual
- Single centric lock which engages with a simple finger movement
- "Accumount" System of Interchangeability which allows accurate interchanging of casts between articulators
- Generous interframe distance for bulky casts and die systems
- Condyle release mechanisms to permit easy separation of upper and lower frames, if desired
- Condylar guidance featuring:
  - Adjustable condylar inclination
  - Progressive side shift
  - Fixed intercondylar distance of 110 mm

#### **Model 3140**

The Model 3140 is identical to the Model 3040 Articulator, but offers a different type of condylar guidance. Each condylar guide assembly has the lower wall reduced which allows the articulator to function like an open fossa articulator during excursive movements and a closed tracking articulator during simple hinge movement. Both models are recommended for dentures.



Rubber foot stabilizes the articulator when open and prevents it from sliding on a slick surface

33032

# **4000 Series Articulators**

### With Tracking Condylar Guidance



Closeup of 1/2 track

Model 4641Q shown with optional QuickMount Magnetic System



Fully open access from the lingual position for easy access during denture setup

#### Item No. Description

пеш	10.	Description
02275	#4640	ARTICULATOR with Full Tracking Condylar Guidance, Progressive Side Shift and "Accumount" System
02276	#4640Q	ARTICULATOR with Full Tracking Condylar Guidance, Progressive Side Shift, "Accumount" System and Magnetic Mounting System
02278	#4641	ARTICULATOR with Modified Tracking Condylar Guidance, Progressive Side Shift and "Accumount" System
02279	#4641Q	ARTICULATOR with Modified Tracking Condylar Guidance, Progressive Side Shift, "Accumount" System and Magnetic Mounting System

#### **Model 4640**

The main difference between the Model 4640 Articulator and traditional Whip Mix articulators is the elimination of the crossbar between the uprights on the lower member. This frame design provides optimum posterior access for enhanced visibility and lingual access of any Whip Mix articulator.

#### **Features**

- Tracking fossae which allow upper and lower frames to remain together during excursive movements
- Stainless steel condyle elements increase durability
- "Accumount" System of Interchangeability which allow accurate interchanging of casts between articulators
- Fully open access from the lingual position for easy access during denture set up
- Easy to operate Locking Mechanism provides the following actions:
  - Allows removal of upper frame from lower frame for cleaning and servicing the articulator
  - In the locked position it provides a quick way to return to centric position and locks the articulator for added stability
  - In the mid-range position the Locking Mechanism allows the condylar ball to move freely down the track of the condyles during excursive movements
- A Support Rod to support the upper frame of the articulator when open
- A built-in storage compartment for storing the support rod when not being used
- · Condylar guidance featuring:
  - Adjustable condylar inclination
  - Progressive side shift
  - Fixed intercondylar distance of 110 mm

#### **Model 4641**

The Model 4641 is identical to the Model 4640 Articulator, but offers a modified type of condylar guidance. Each condylar guide assembly has the lower wall reduced which allows the articulator to function like an open fossa articulator during excursive movements, and a closed tracking articulator during simple hinge movement.

# **8500 Series Articulator**

The Original Whip Mix Articulator



#### Item No.

#### **Description**

03689

#8500 ARTICULATOR (Standard Model)

Video DVD Series

24015

The Face-Bow Transfer and Mounting of Casts: Whip Mix #8645 "QuickMount" Face-Bow and #8500 Articulator See page 88 for details.

#### **Model 8500**

Based on research by renowned gnathologist Dr. Charles Stuart, the original Whip Mix articulator is a step forward from plain line or mean value articulators. Its simplicity and ease-of-use make the Whip Mix Model 8500 inviting and practical for any clinician.

#### **Features:**

- Condylar Guidance featuring:
  - Adjustable condylar inclination
  - Progressive side shift
  - Adjustable intercondylar width
- A Spring Latch Assembly holds the upper and lower members of the articulator tightly together and returns the upper member to centric position when released from the excursion. It is easily released to allow separation of the upper and lower members.

## **Face-Bows**

### **Indirect Mounting**



The #8587 Face-Bow Fork Support is available separately





#### **Conversion Package**

All Whip Mix "QuickMount" Face-bow can be modified to have indirect mounting capability. The conversion package includes:

- 1 Transfer Base Assembly (#9176A)
- 1 Cross Bar (#8679)
- 1 Transfer Assembly

#### Item No. Description

Please call for more information.

	•			
34126 #9185	Face-Bow for 2000, 3000 and 4000 Series Articulators			
34358 #91850	Face-Bow with Magnetic Mounting System			
34342 #9155	Face-Bow with Quick Lock Toggle for 2000, 3000 and 4000 Series Articulators			
34344 #91550	Face-Bow with Quick Lock Toggle for Magnetic Mounting System			
Face-Bows are also available in plastic material for universities.				

#### Conversion of Direct Mounting Face-Bow to Indirect Mounting

34436	#9197	Transfer Assembly for #8500 Articulators
34371	#9188	Transfer Assembly for 2000, 3000 and 4000 Series Articulators
34444	#9176A	Transfer Base Assembly
06890	#8679	Cross Bar

Whip Mix Indirect Mounting Face-Bows combine the time-proven face-bow registration technique of the traditional "QuickMount" Face-bow with the many advantages of indirect mounting. The indirect mounting procedure offers the user more access, increased stability, greater ease of use, and optimum instrument efficiency.

Incorporating the indirect mounting technique does not require dramatic technique changes. The face-bow registration is taken on the patient utilizing the same technique as with the original Whip Mix "QuickMount" Face-bow. Once the registration is obtained, the Transfer Assembly is removed from the face-bow and positioned onto the lower frame of the articulator.

Three indirect mounting face-bows have been designed to be used with specific Whip Mix articulators as described below.

Two separate indirect Mounting
Face-Bows and their corresponding
Transfer Assembles have been
designed to be used with the Whip
Mix Articulators. The #9185 Face-Bow
(for the screw type articulator) and the
#9185Q Face-Bow (for the Quick Mount
Magnet System) come with the #9188
Transfer Assembly. The #9155 FaceBow (for the screw type articulator) and
#9155Q Face-Bow (for the Quick Mount
Magnet System) come with the #9650
Transfer Assembly.

Additional transfer assemblies are available separately which allow the operator to mount one case and, with the aid of an additional transfer assembly, have the face-bow available for a second face-bow registration.



#9155 Face-Bow with Quick Lock Toggle

# **QuickMount Face-Bows**

### **Direct Mounting**



#### **Model 8645**

"QuickMount" Face-Bows provide a convenient, quick and accurate method of securing an axis location without the use of expensive equipment and time-consuming techniques. Employing as the three reference points, the two external auditory meatus of the ears and the bridge of the nose, no measurements or markings on the patient are needed. The self-centering caliper design is easily adjusted, and the nasion relator utilizes the bridge of the nose to obtain an accurate and reproducible anterior reference.

The Model 8645 Face-Bow is compatible with all Whip Mix articulators, and allows for the recording of an approximate intercondylar distance. The Model 8645 utilizes "T" screws that are tightened by hand, which are a convenient and time-saving feature.

Item No. Description

15911 #8645 "QuickMount" Face-Bow with T-Screws







# QuickMount Magnetic System™

### A Universal Magnetic Mounting System for Articulators



Item No. Description

28701 "QuickMount" Plates, WHITE, with Metal Disks (Pkg. of 20) for:

Whip Mix, Panadent, Hanau 2 Pin Articulators

28703 "QuickMount" Plate Holder, 13 mm, for Semi-Adjustable Articulators Except the Following: Lower frame of Whip Mix Accumount Articulator Model

#8340, #2240, #3040, #3140, 4640, 4641, Hanau 1 Pin Articulators and Upper

Frame of Hanau Wide Vue. Includes Plastic Wrench

28704 "QuickMount" Plate Holder, 25 mm, for Lower Frame of Whip Mix Accumount Articulator Models #8340, #2240, #3040, #3140, 4640, 4641, Upper and Lower

Frames of Hanau 1 Pin Articulators and Upper Frame of Hanau Wide Vue

"QuickMount" Magnetic System Kit for Whip Mix Models 8500, 9800, 8300, 2200, Panadent and Hanau (Modular) Articulators. Includes One Package

of 20 "QuickMount" Plates, White, with Metal Disks and Two "QuickMount"

Plate Holders, 13 mm, with Plastic Wrenches

28708 "QuickMount" Magnetic System Kit for Whip Mix Models 8340, 2240, 2340,

3040, 3140,, 4640, 4641 and Hanau Wide Vue Articulators. Includes One Package of 20 "QuickMount" Plates, White, with Metal Disks, One "QuickMount" Plate Holder, 13 mm, with Plastic Wrench and One "QuickMount" Plate Holder (25 mm)

Accessories

28707

"QuickMount" Magnetic System Transfer Base Assembly for Use with 28705

Indirect Mounting Face-Bows

28706 "QuickMount" Magnetic System Face-Bow Fork Support

03737 #8579Q "QuickMount" Remounting Jig

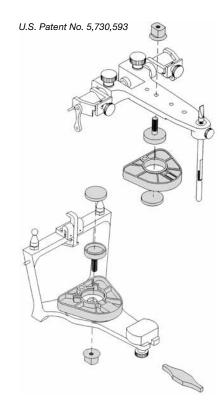
#### **Selection Guide**

Item No.	28701	28703	28704	28710
	White Plates (Pkg. 20)	13mm Plate Holder	25mm Plate Holder	White Plates (Pkg. 100)
Whip Mix: 8500, 8300, 2200, DB2000	Х	2		Х
Whip Mix: 8340, 2240, 2340, 3040, 3140, 4640, 4641	Х	1	1	Х
SAM*	Х	2		
Panadent	Х	2		Х
Hanau (Modular)	Х	2		Х
Hanau (Wide Vue)	х	1	1	Х
Hanau 1 Pin			2	

The "QuickMount" Magnetic System allows the quick, precise, and easy placement and removal of mounted casts on many of the most popular semi-adjustable and fully adjustable articulators. The end result is the saving of time and money.

The upper and lower members of the selected articulator are fitted with "QuickMount" Plate Holders which are used in place of the regular mounting plate screws and/or knobs. The "QuickMount" Plates are made of a highly-filled composite resin material and are held precisely and firmly in place by the mounting plate pins and the rare earth super magnet. Each "QuickMount" Plate can be easily removed by simply breaking the magnetic contact. This eliminates the tedious and time-consuming process of screwing the plates on and off.

The White Mounting Plate is designed for use with Whip Mix, Panadent or Hanau 2 Pin articulators.



#### For Articulators

Whip Mix accessories enhance the capabilities of Whip Mix articulator systems and provide the clinician with a wide range of options for specialized needs.



#### **Adjustable Guide Table**

Hanau<sup>™</sup> Adjustable Guide Table for Whip Mix® Articulators May be moved anteriorly or posteriorly which minimizes having to adjust for the "x" dimension. Incline may be adjusted and locked from 0° to 40° protrusive. Adjustable lateral wings establish the degree of incisal freedom from 0° to 45°.



## #8533 Dovetail Incisal Block

Specifically made for clinicians and technicians who prefer to use a custom incisal guide table formed with cold-cure acrylic. A custom guide prevents wearing of the anterior guidance surfaces of the casts and provides a permanent record of anterior disclusion. Designed so the acrylic guide can be easily removed and replaced, the dovetailed sides and centering screw ensure accurate repositioning, time after time.



#### #8575 Remounting Jig

Temporarily replaces the mandibular cast and its mounting plate. Made of anodized aluminum, it eliminates the need for a second face-bow recording and transfer if remounting finished dentures. Attaches to the articulator with the mounting plate screw.



# #8579Q "QuickMount" Remounting Jig

Temporarily replaces the mandibular cast and its mounting plate. Made of anodized aluminum, it eliminates the need for a second face-bow recording and transfer if remounting finished dentures. Attaches quickly to an articulator equipped with the "QuickMount" Magnetic System.



## #8580 Mounting Plate, Standard

Durable and reusable. Set of two.



### #8580B Plastic Mounting

An economical alternative to metal mounting plates. Threaded metal inserts resist stripping. Fits Whip Mix, Sam, Quick and Panadent Articulators. Box of 20, 100 or 500.

### Item No. Description

010631-000		Adjustable Guide Table
18870	#8533	Dovetail Incisal Block
03735	#8575	Remounting Jig
03737	#8579Q	"QuickMount" Remounting Jig
03867	#8580	Metal Mounting Plates (Set of 2)
28495	#8580B20	Plastic Mounting Plates (Box 20)
28509	#8580B100	Plastic Mounting Plates (Box 100)
28517	#8580B500	Plastic Mounting Plates (Box 500)

#### For Articulators



#### **Universal Tote Bag**

Designed to accommodate articulators, face-bows and accessories, the Universal Tote Bag has three separate, padded storage compartments. Storing the articulator in the middle compartment with the elastic band in place will secure the instrument during transport. The end compartments are designed to hold the face-bow, as well as accessories.

# Whip Mix Verification Gage System

Verification Gages are quick and easy way to verify that your Denar, Hanau and Whip Mix articulators are in calibration. With articulators in calibration, you may transfer just the casts between compatible articulators with confidence. If you can hear a pin drop, you will know you are in calibration.

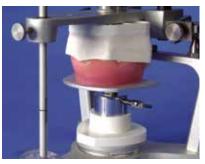
- · Verify the height for flatness
- Verify and calibrate lateral and anterior/posterior
- Does not work with the 8500 series articulator



#### #8780B Carrying Case

Designed to accommodate any Whip Mix articulator, "QuickMount" Face-Bow and accessories. While not recommended as a shipping container, the custom fit of the inner wall provides for exceptional protection in daily handling.





#### #2224Q Occlusal Stand Assembly Two-Dimensional Occlusal Template Stand

The #2224Q Occlusal Stand Assembly quickly relates working casts to the Whip Mix Articulator without the use of a face-bow. Using the theory of Bonwill's Equilateral Triangle the Occlusal Template Stand relates the casts to the articulator's hinge axis. It serves as a permanent record of the occlusal relationship during the denture set-up. It allows for quick and easy adjustments to the set-up if needed. Markings are clearly visible to record amount of change.



### Item No. Description

10111 1101	Becompain		
18156		Universal Tote Bag	
18155	#8780B	Plastic Carrying Case with Metal Hinges (Not for Shipping with Mounted Casts)	
34211	#2224Q	Occlusal Stand Assembly	
20011670		Whip Mix Verification Gage	

#### For Face-Bows



#### #8587 Face-Bow Fork **Support**

Screws into the #9176A Transfer Base Assembly of all Whip Mix Indirect Mounting Face-Bows. The swivel cross arm supports the face-bow fork and maxillary cast firmly during cast mounting procedure.



### #8585 Face-Bow Fork **Support**

Designed for use with all Whip Mix Direct Mounting Face-Bows, the Fork Support attaches to the lower frame of the articulator. Swivel cross arm supports Face-Bow Fork and maxillary cast firmly during maxillary cast mounting procedure.



#### #9176A "QuickMount" **Transfer Base Assembly**

Used to attach the Transfer Assembly to the lower frame of Whip Mix articulators during the indirect mounting procedure.



#### #9176Q "QuickMount" **Magnetic Transfer Base** Assembly

Used to attach the Transfer Assembly to Whip Mix articulators equipped with the "QuickMount" Magnetic Mounting System.



#### "QuickMount" Face-Bow Fork Support

Attaches to the lower member of the articulator via the magnetic plate holder. A #28706 Fork Support is required to secure any "QuickMount" Transfer Base Assembly to an articulator.



#### #9186 Face-Bow Adaptor

Allows the #9188 Transfer Assembly from a #9185 or #9285 Whip Mix Indirect Mounting Face-Bow to be adapted to Hanau Wide-Vue Articulators. The #9186 Adaptor replaces the standard #8686 Support Bar to accurately position the upper frame of the articulator in relation to the Transfer Assembly.



### #20011720 Universal **Occlusal Stand**

The Denar® Universal Occlusal Stand allows you to mount the working casts at Bonwill's Equilateral Triangle on Denar, Hanau, and Whip Mix articulators with QuickMount. Per lab owner. Al Fillastre, the new occlusal stand "allows the confident use of the articulator to capture all of its functional benefits even when a facebow is not available."

#### Item No. **Description**

33359 #8587 Fork Support for Indirect Face-Bow 03743 #8585 Face-Bow Fork Support "QuickMount" Transfer Base Assembly #9176A 34444 28705 #9176Q "QuickMount" Magnetic Transfer Base Assembly "QuickMount" Face-Bow Fork Support 28706 33375 #9186

Face-Bow Adapter for Hanau Wide-Vue Frame Articulators

and #9185 or #9285 Face-Bow

#20011720 Denar® Universal Occlusal Stand

#### For Face-Bows



# **#9650 Quick Lock Toggle Assembly**

The Quick Lock Toggle Assembly has a variety of customer-oriented features including a stainless steel universal joint for a wide range of movement. Single toggle locking mechanism obtains registration quickly and precisely.



### #8631 Offset Face-Bow

An excellent choice for full denture techniques where it is necessary for the incisal guide pin to remain in place while making the face-bow transfer.



### Alminax Bite Registration Wax

A metallized wax furnished in sheet form so it can be conveniently cut to the desired shape. Easily softened in warm water or over a flame. When chilled it possesses sufficient strength to resist deformation by normal handling.



#8609 Bite Fork

Used with all Whip Mix "QuickMount" Face-Bows. Additional holes have been added to increase retention of various registration materials.



#9659 Face-Bow Fork for Quick Lock Toggle

Bite fork for use with the Quick Lock Toggle Face-Bow



#9661 Face-Bow Offset Fork for Quick Lock Toggle

This bite fork is used with the Quick Lock Toggle Face-Bow for complete dentures.



**#9189 Support Block** 

Support Block for Whip Mix® 2000, 3000 and 4000 Articulators using Slidematic



#8588 Fork Support Assembly

Fork Support Assembly for 200088Q Index

### **Item No. Description**

item	NO.	Description
04464		#8609 Bite Fork
34340		#9659 Face-Bow Fork for
		Quick Lock Toggle
34333		#9661 Face-Bow Fork
		Offset for Quick Lock Toggle
04480		#8631 Face-Bow Fork
		(Offset Stem)
03905		Alminax (Box of 9 sheets)
34341		Quick Lock Toggle
		Assembly
33370		#9189 Support Block
33371		#8588 Fork Support
		Assembly

# **Articulating Paper**

For the Best in Articulating Papers, Films and Accessories



Superior quality control at the manufacturing level means Ardent™ articulating paper delivers clear, positive markings without smudging.

Those manufacturing processes assure you of a paper or film that delivers exact coating and ink penetration that virtually eliminates false markings. What's more, Ardent articulating paper and articulating film achieve superior dental markings in wet or dry fields.



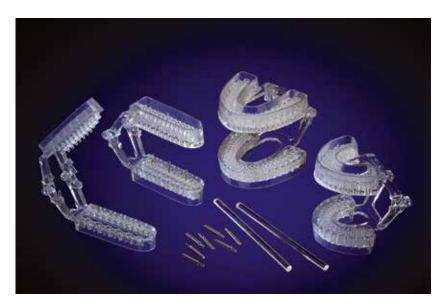
#### Item No. Description

Articulating Paper - Premium - Strips						
60000	Premium Thin Blue	140 strips	88 microns	(0.0035")		
60001	Premium X Thin Blue	140 strips	63 microns	(0.0025")		
60007	Premium Thick Blue	70 strips	225 microns	(0.009")		
60009	Premium Thin Blue "P.C.s"	150 strips	88 microns	(0.0035")		
Articulating Pa	aper – Standard Waxed – Strips					
60002	Chrom-Coat Thin Blue	140 strips	76 microns	(0.003")		
60003	X Thin Blue	140 strips	63 microns	(0.0025")		
60004	XX Thin Blue	140 strips	37 microns	(0.0015")		
60005	Red/Red	144 strips	63 microns	(0.0025")		
60006	Red/Blue	144 strips	63 microns	(0.0025")		
60008	Quadrant Red/Blue Curved	144 strips	63 microns	(0.0025")		
Articulating Pa	aper – Horseshoe/Full Arch					
60100	Red/Blue	72 strips	63 microns	(0.0025")		
60101	Premium Blue/Blue	60 strips	63 microns	(0.0025")		
"Exacta-Film"	Articulating Film					
60200	Red/Black	75 strips	19 microns	(0.00075")		
60201	Black/Black	75 strips	19 microns	(0.00075")		
60202	Red/Red	75 strips	19 microns	(0.00075")		
60203	Red/Black	225 strips	19 microns	(0.00075")		
60204	Black/Black	225 strips	19 microns	(0.00075")		
60205	Red/Red	225 strips	19 microns	(0.00075")		
Forceps						
60300	Hold-Tight Forceps Disposable		100 per bag			
60301	Miller Type Forceps, Stainless St	eel	1 per pack			



# MainStay™ Disposable Articulator System

### Articulating your way!



The MainStay™ Disposable Articulator System was designed to save you time, money and waste. This system of disposable articulators does not require model formers or a gypsum base, and adjusts to accommodate any occlusal relationship. Its base was designed without external walls or raised edges to prevent interference with the seating of dies and model segments. This unique feature also means that it can easily be used with gypsums of all expansion ratios.

Choose between Pin Models in Full Arch, Anterior and Quadrant sizes. Pinless Models offered in a Quadrant size.

#### **Features:**

- No External Walls- Flat table for easy removal and replacement of segments
- Support Rods-Built-in to provide a vertical stop, ideal for edentulous models
- Hinges- Durable and easy to separate. Resists breakage. Can be heated for custom occlusal relationship.

#### **Pin System**

- Stability of the MainStay<sup>™</sup> Pins
- · Numbered bases for quick, easy reference of die placement
- No drilling- saves time
- · Raised anti-rotational spine prevents movement of die

#### **Pinless System**

- · Excellent for scanning
- · No pinning, no drilling, no gluing- saves time
- · Built-In anti-rotational spine prevents movement of die
- · Numbered bases for quick, easy reference of die placement

### Item No. Description

#### Pin System

08252 Quadrant Pin Includes: 50 Articulators, 100 MainStay™ Pins and 3

Support Rods

08251 Full Arch Pin Includes: 25 Articulators, 100 MainStay™ and 3 Support Rods

08253 Anterior Pin Includes: 25 Articulators, 100 MainStay™ Pins and 3

Support Rods

#### Pinless System

08254 Quadrant Pinless Includes: 50 Articulators and 3 Support Rods

#### Accessories

08256 MainStay™ Pins Set of 1000

08255 Support Rods for the MainStay™ Disposable Articulator System. Set of 20.

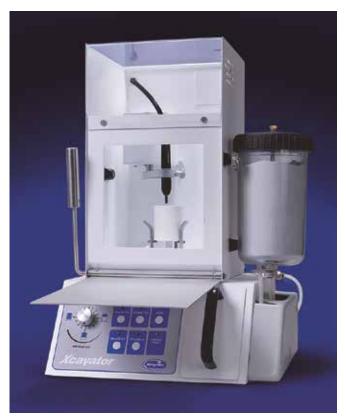






# **Xcavator**<sup>™</sup>

### Automated Divesting Unit



Xcavator, the first-ever automated divesting unit for use with pressable ceramics. The Xcavator drastically reduces work time and streamlines your whole process.

- Place the hot ring directly into the machine, saving an hour or more of cooling time
- Ideal for pressable ceramics, press to Zirconia, press to Captek<sup>™</sup>, press to metal, and metal castings
- Use the variable speeds to ensure proper depth of cut for any investment type every time
- Switch between the two most common size rings (100 and 200 gram) with only minor adjustments to the equipment
- 3 year parts and labor warranty (U.S. & Canada only)









Ring

#### **Technical Specifications:**

POWER SUPPLY	110–120 VAC, 60 Hz 208–240 VAC, 50 Hz
WEIGHT	13.1 kg (29 lbs)
DIMENSIONS	36.9 cm (14.5") Wide 48.9 cm (19.v") High 39.4 cm (15.5") Deep
RING CAPACITIES	100 g, 200 g
DELAY START TIME	100 g Delay = 6.25 min 200 g Delay = 9.6 min
WARRANTY	3 years parts and labor (US and Canada only)

### **Xcavator Bead Dryer Belt**

The Whip Mix Bead Dryer Belt warms blasting abrasives to prevent clumping due to moisture and insure that the beads flow through the strainer and transport reliably. To use, place the belt around the middle of the bead container and stretch springs to connect. Plug into a 110V wall socket and keep plugged in until beads are gone. May be re-used indefinitely. The product is equally effective with glass beads and aluminum oxide abrasive in the Whip Mix Xcavator or any conventional manual microblaster.

#### Item No. Description

item ite.	Description
09800	Xcavator (115V/60Hz)
09803	Xcavator (230V/50Hz)
09805	Glass Beads-Xcavator
	50 lb. Pail
09806	Xcavator Bead Dryer Belt



Demonstration video







# AquaSpense™

### Two Lean Advantage Products



AquaSpense and AquaSpense SL improve accuracy, maintain quality and reduce remakes

#### AquaSpense & AquaSpense SL Specifications:

POWER SUPPLY	110–120 VAC, 50/60 Hz, 1A 200–240 VAC, 50/60 Hz, .5A
WEIGHT	9.3 kg (20.5 lbs) Shipping Weight
DIMENSIONS	29.8 cm (11.75") Wide 59.1 cm (23.25") High 33.3 cm (13.125") Deep
DISPLAY	4 lines x 20 characters
OPERATIONAL ALTITUDE	Sea Level -1,999.5 Meters (6,560 Feet)
OPERATIONAL TEMPERATURE	13°C (55° F) – 41°C (105°F)
WARRANTY	3 years parts and labor (US and Canada only)

### Item No. Description

09560 AquaSpense, 115 V 09561 AquaSpense, 230 V 09550 AquaSpense SL, 115 V 09551 AquaSpense SL, 230 V





#### AquaSpense™

AquaSpense is designed primarily for model production, rapidly dispensing a single liquid (distilled water) by weighing the bowl with the powder on a calibrated scale. By dispensing the exact amount of liquid for each preprogrammed powder, remakes are virtually eliminated. Inconsistencies and inaccuracies due to human error in water/powder ratios are removed from the modeling process. You'll achieve predictable working times, set times, hardness and expansion. Accurate models are produced every time.

### AquaSpense SL™

AquaSpense SL is used primarily in the investment area. The key difference in the two units is that the SL is capable of accurately dispensing two different liquids. On one side of the unit, two pumps quickly dispense water. The other side uses a pinch valve for dispensing Special Liquid for investments. The results are consistent casting sizes with less finishing time.

The SL unit is extremely versatile and can be used in smaller labs as a combination unit that dispenses liquids for models as well as investments. The SL can also be used in the model department, when using a Gypsum Hardener or other enhancing liquid.

# **Both AquaSpense Liquid Dispensers:**

- Accurately weigh gypsum or investment powder and dispense the precise amount of water and/or Special Liquid required.
- Eliminate human error with no hand measuring required.
- Maintain accurate liquid/powder ratios.
- Provide predictable end results for both models and castings.
- Offer program memory settings for up to 15 gypsums or investments.



### Programmable Vacuum Mixing Unit



VPM2 Vacuum Mixing Unit



Reverse LCD display clearly shows programs and parameters



Vacuum holds the Vac-U-Mixer to the unit for hands-free mixing

#### Item No. Description

#### **VPM2 VACUUM MIXING UNIT**

29339 Complete with wall bracket and 500 mL Vac-U-Mixer (115V/60Hz) 29340 Complete with stand and 500 mL Vac-U-Mixer (115V/60Hz) 29341 Complete with wall bracket and 500 mL Vac-U-Mixer (230V/50Hz)

#### **VPM2 VAC-U-MIXERS**

29344 #4485 300 mL (150g capacity) 29345 #6585 500 mL (350g capacity) 29346 #6685 875 mL (650g capacity) 29348 #7685 1200 mL (1000g capacity)

29352 #6785 Flexible Vac-U-Mixer 350g (Lid & Paddle Assembly Included) #6790 Flexible Vac-U-Mixer 650g (Lid & Paddle Assembly Included) 29355

15680 #6711 Spatula **VPM2 PARTS & ACCESSORIES** 

29343 Stand 29342 Wall Bracket The VPM2 is designed for vacuum mixing all types of gypsums, plasters and investments. You can enter up to 30 separate programs using several parameters to custom mix a material. Utilizing multiple stages, the VPM2 can be programmed for time, speed and paddle direction.

- Pre-mix stage blends powder and liquid using alternating paddle direction, eliminating the need for hand mixing
- Twin chamber, oil-less vacuum pump offers a powerful vacuum, providing a bubble-free mix
- Vortex inducing paddle design quickly and efficiently incorporates
- Inlet filter prevents material from entering vacuum pump
- Display programmable in 5 languages (English, German, French, Italian and Spanish)
- · Compact, space saving design

DIMENSIONS	19.05 cm (7.5") Wide 57.7 cm (23.5") High 19.05 cm (7.5") Deep
WEIGHT	20 kg (45 lbs.)
VOLTAGE	85-245V 50/60 Hz
MIXING SPEED	100–500 RPM Premix, 100–400 RPM
VACUUM	27.5 In Hg (930 mbar)
USER PROGRAMS	30
MIXING TIME	1–255 Seconds (4.25 Minutes)
WARRANTY	3 years on unit (US and Canada only)



# Vacuum Mixing and Investing

### Combination Unit and Vacuum Power Mixer Plus



Combination Unit (Bench Stand sold separately)



Vacuum Power Mixer Plus (Bench Stand sold separately)

VOLTAGE

WEIGHT

AMPERAGE

DIMENSIONS

**DRIVE MOTOR** 

**ROTARY VANE** 

WARRANTY

**Technical Specifications:** 

4A

115V/60Hz

22.8 cm (9") Wide

68.6 cm (27") High

20.3 cm (8") Deep

68.6 cm (27") at sea level

each 1,000 feet (300 meters

Deduct 1" (2.54 cm) for

\*US and Canada only

12.2 kg (27 lbs.)

1/4 HP

3 years\*

230V/50Hz

### **Combination Unit – Dual Speed**

The Combination Unit is equipped with two drive shafts which rotate at different speeds. The faster speed (1,725 RPM) reduces mixing time required for small quantities (90 gram or less) of investment. The slower speed (425 RPM) is for all mixing purposes, with or without vacuum.

### **Vacuum Power Mixer Plus** - Single Speed

The Vacuum Power Mixer Plus provides a single drive speed of 425 RPM. This slow speed is ideal for mixing quantities from 5 gram to 1,000 gram of plaster, stone, die material, investment and alginate.

#### **Ortho Vacuum Power Mixer Plus**

Includes the Handy-Holder Bowl Support, 875 mL Vac-U-Mixer (#6615), plastic tubing and connections.

#### **Features:**

- · Vacuum-invest inlays, crowns and bridges with the Vac-U-Spat - your patterns are smooth and bubble-free.
- · Convenient built-in Vibrator Arm enables user to vibrate mix with or without vacuum.
- Both units are easily installed on wall with the mounting board (included) - a #6380 Bench Stand is also available for bench-top mounting.

### Item No. Description

#### **COMBINATION UNIT**

08265 Complete with 200 mL

Vac-U-Spat and Accessories and 500 mL Vac-U-Mixers

(115V/60Hz)

18082 Complete with 200 mL VAC-U-SPAT and Accessories

and 500 mL VAC-U-MIXER (230V/50Hz)

#### **VACUUM POWER MIXER PLUS**

Complete with 500 mL and 29181 300 mL Vac-U-Mixers and

2-1/4 ft. Plastic Tubing and Connections (115V/60Hz) Complete with 500 mL and

300 mL Vac-U-Mixers and 2-1/4 ft. Plastic Tubing and Connections (230V/50Hz)

#### ORTHO VACUUM POWER MIXER PLUS

29262 Complete with Handy-Holder Bowl Support and

875 mL Vac-U-Mixer

29920 Complete with Handy-Holder Bowl Support and

875 mL Vac-U-Mixer (230V/50Hz)



29866





Ortho Vacuum Power Mixer Plus

# Vac-U-Mixer™

### Mixing Under Vacuum



#### Item No. Description

#### VAC-U-MIXER

08664	#6400	200 mL (100 g cap.) – 2 Scoops of Alginate*, with #6406 Paddle Assembly and Drive Nut #6375
08672	#6400	200 mL (100 g cap.) with #4007 Paddle Assembly and Drive Nut #4109
08710	#4450	300 mL (150 g cap.) – 3 Scoops of Alginate* with #4458 Teflon Paddle Assembly and Drive Nut #6375
08702	#4450	300 mL (150 g cap.) with #4455 Paddle Assembly and Drive Nut #6375
08729	#4450	300 mL (150 g cap.) with #4507 Paddle Assembly and Drive Nut #4109
08761	#6500	500 mL (350 g cap.) with #6506 Paddle Assembly and Drive Nut #6375
08818	#6500	500 mL (350 g cap.) – 5 Scoops of Alginate* with #6508 Flat Paddle Assembly and Drive Nut #6375
08788	#6500	500 mL (350 g cap.) with #6507 Paddle Assembly and Drive Nut #4109
15652	#6515	500 mL (350 g cap.) - For Use with Handy-Holder
08834	#6600	875 mL (800 g cap.) with #6606 Paddle Assembly and Drive Nut #6375
15660	#6615	875 mL (800 g cap.) – For Use with Handy-Holder
08842	#7600	1200 mL (1000 g cap.) - Stainless Steel Bowl and Lid
VAC-U-SPAT		
07439	#4120	200 mL (75 g) with Drive Nut #4109

<sup>\*</sup> Flat and Teflon paddles are recommended for alginates; also the use of a separate bowl.

#### Flexible Vac-U-Mixer

Flexible bowl for mixing gypsums and investments under vacuum. The Flexible Vac-U-Mixer takes the frustration out of the mixing process. With just a firm squeeze, the technician can crack and release a majority of the hardened stone without damaging the bowl. Higher impact resistance than a standard mixing bowl. Use with Vacuum Power Mixer Plus, VPM2 and Combination Unit. (To see video demonstration of the Flexible Vac-U-Mixer, visit www.whipmix.com)

#### Item No. Description

FLEXIBLE VAC-U-MIXER (Lid and Paddle Assembly included)

15665 #6720 350g For use with VACUUM POWER MIXER PLUS and COMBINATION UNIT

29352 #6785 350g For use with VPM2

15667 #6750 650g For use with VACUUM POWER MIXER PLUS and

COMBINATION UNIT

29355 #6790 650g Flexible Vac-U-Mixer For use with VPM2

15680 #6711 Spatula

\*Flat and Teflon paddles are recommended for alginates. To avoid contamination, separate Vac-U-Mixers should be used for investments, alginates and gypsum materials.

The Whip Mix Vac-U-Mixer allows thorough spatulation of stones, plasters, die materials, investments and alginates under vacuum to produce smooth, dense, detailed casts or impressions. Every Vac-U-Mixer size can be driven by both the Combination Unit or the Vacuum Power Mixer Plus.

#### **Easy Operation**

Simply insert drive nut in the drive chuck of your vacuum-mixing unit and the Vac-U-Mixer will do the rest. To avoid contamination, separate Vac-U-Mixers should be used for mixing phosphate investments, alginates and gypsum materials. The #4450, 300 mL size with a Teflon-coated paddle for easy cleanup is recommended for alginates.

The Vac-U-Mixer is available in five sizes to satisfy the needs of any office or laboratory. These mixers provide a range of capacities from 100 grams to 1,000 grams. Sturdy construction ensures trouble-free operation; bowls are rigid, clear plastic or stainless steel (#7600, 1,200 mL). All models have stainless steel paddles and shafts

Provide a description of your present equipment and materials to be mixed when you order so proper drive nuts will be supplied.

#### Vac-U-Spat

The Vac-U-Spat permits spatulating and investing of inlay, crown, and bridge patterns completely under vacuum. The resulting castings are smooth and bubble-free.





# **Replacement Parts**

#### Vac-U-Mixer



Parts for Vac-U-Mixer

#### Item No. Description

#### VAC-U-MIXER

09091	#6375	Slotted Drive Nut for Operation with Combination Unit or Vacuum Power Mixer – R.H. Thread
09113	#4109	Friction Grip Drive Nut (for 200, 300, and 500 mL Size Only) for Operation with Vac-U-Vester and Combination Unit – L.H. Thread
09105	#6865	Slotted Drive Nut (for 1200 mL Vac-U-Mixer or #6800 Mechanical Mixer) for Operation with Combination Unit or Vacuum Power Mixer – R.H. Thread
15555	#6393	Drive Nut for Operation with Handy-Holder on Combination Unit or Vacuum Power Mixer – R.H. Thread

		Vacadiii i ewei wixer i i.i.i. i iii caa	
Plastic Tubing and Connections			
09156	#5700	Plastic Tubing, 2-1/4 ft. with Plastic Trap, Trap Cap and O Rings	
09172	#5701	Metal Trap Cap with O Rings #1 and #2	
09180	#5703	Gauze for Plastic Trap (Pkg. of 6)	
09199	#5704	Retainer Spring	
09202	#5705	Plastic Trap with Retainer Spring and Gauze	
09211	#5709	Plastic Tubing – 5 ft. Length	
16721	#5707	Plastic Tubing – 2-1/4 ft. Length	
07366	#4008	O Ring #1-5/16" O.D. for Tip of Trap Cap (Pkg. of 6)	
07374	#5702	O Ring #2-7/16" O.D Fits Inside Trap Cap (Pkg. of 6)	

#### **Drive Nuts and Chucks**

Whip Mix driving motors provide two basic speeds. High speed, at 1,725 rpm, is recommended only for vacuum-investing with the 200 mL Vac-U-Spat. Because of its small paddle diameter, the Vac-U-Spat gives the most uniform results with all inlay investments with high speed spatulation.

Low speed, at 425 rpm, is recommended for all Vac-U-Mixers when spatulating gypsum materials, alginates and large quantities of investments. The Vac-U-Mixer Plus provides only low speed. But the Combination Unit has two drive speeds: the rear Drive Chuck #6108 is the high speed at 1,725 rpm, and the front is the low speed at 425 rpm. Drive Nuts on the mixing units and corresponding drive chucks on motors have been designed to prevent the interchange of a mixing unit between these two speeds.

Also, the directions of rotation of the drive chucks for these speeds is opposite. The high-speed drive chucks of the Combination Unit and the discontinued Vac-U-Vestor require a left-hand thread for the paddle shaft and drive nut. The low-speed drives of the Combination Unit and the Vacuum Power Mixer Plus need a right-hand thread for the paddle shaft and drive nut.

It is important, therefore, that the proper drive nut is specified whenever a mixing unit is ordered. And when adapting a mixer already in use, the thread direction must be considered – sometimes the entire paddle assembly must be changed.



### For Vacuum Mixing Units





Vac-U-Timer

Bench Stand



Vac-U-Care Maintenance Kit

#### Item No. Description

**VAC-U-TIMER** 

25585 #6125 Vac-U-Timer

**BENCH STAND** 

06149 #6380 Bench Stand, White **VAC-U-CARE MAINTENANCE KIT includes:** 

28398 #5700 Tubing and Connections

#6010 Vanes

#4008 O Ring #1 (pkg. 6) #4079 Lubriplate (1 tube) #6012-15 Felt Set for Oiler Unit

#6012-4 Wick

#6040 Cork Gasket

#6475 4 oz. VV56 Lubricant

#### **Vac-U-Timer**

The Vac-U-Timer will accurately time your mixing and other laboratory operations.

- Minutes and seconds programmable up to 99 minutes/59 seconds with responsive touchtone buttons
- Easy-to-activate alarm and memory function
- Velcro back easily affixes Vac-U-Timer to your mixing unit or any convenient surface
- Timer automatically resets at the end of timing cycle

#### **Bench Stand**

A Bench Stand #6380 is available for bench-top mounting of the Combination Unit or Vacuum Power Mixer Plus.

#### Vac-U-Care Maintenance Kit

When it comes to taking care of any kind of machinery or equipment, we all know a little maintenance always goes a long way. So if your Whip Mix Combination Unit or Vacuum Power Mixer Plus has yellow, oily tubing or your vacuum gauge is not reading as high as it should, it's time to order the simple, do-it-yourself Vac-U-Care Maintenance Kit.

(For a video on how to use the Vac-U-Care Maintenance Kit, visit www.whipmix.com)



Use of Vac-U-Care maintenance kit video

# **Model Trimmers**

#### 10-Inch and 12-Inch Sizes



Quality crafted, easy-to-use Whip Mix model trimmers provide excellent cutting action to produce consistently attractive casts.

Available in 10-inch and 12-inch sizes, all units are constructed of rigid cast aluminum housings and backing plate, and are shipped completely assembled for immediate use.

The 12-inch model features a fully adjustable work table. A hinged front cover held by a single wing nut, allows

easy access to change or reverse the abrasive wheel. A full radius water supply provides effective abrasive surface cleaning, while removable clean-out plugs provide access for general cleaning. Unit comes with a coarse abrasive wheel.

The 10-inch model offers a twoposition work table and many of the same general features but in a more compact size and at a lower price. It comes with a coarse abrasive wheel. The Deluxe 12-inch Model Trimmer includes the following accessories:

- Electric water valve, which eliminates constant flow adjustment
- Water spray attachment for easy clean-up
- Splash shield which provides protection from spray and debris

The Diamond Deluxe Model Trimmer, with the super-abrasive Blue Wonder diamond wheel, trims models with exceptional speed, efficiency, and virtually no downtime. The wheel lasts an average of two to five years.

Diamond particles embedded in the fiberglass substrate of the wheel create tough, durable cutting edges which trim gypsum or refractory casts more quickly, quietly, and smoothly than with traditional stone or abrasive wheels.



#### Item No. Description

#### 10-inch Model Trimmer

09474 Equipped with 2 Position Work Table and 10" x 1/4" Coarse

Abrasive Wheel (115V/60Hz, 1/3 HP)

28029 (230V/50Hz, 1/3 HP)

#### 12-inch Model Trimmer

09644 Equipped with Fully Adjustable Work Table and 12" x 1/4"

Coarse Abrasive Wheel (115V/60Hz, 1/2 HP)

22691 (230V/50Hz, 1/2 HP)

#### Deluxe 12-inch Model Trimmer (With Accessories\*)

09512 Equipped with Fully Adjustable Work Table and Coarse

Abrasive Wheel (115V/60Hz, 1/2 HP)

21644 (230V/50Hz, 1/2 HP)

#### Diamond Deluxe 12-inch Model Trimmer (With Accessories\*)

25143 Equipped with Fully Adjustable Work Table and Blue Wonder™

Diamond Wheel (115V/60Hz, 1/2 HP)

25178 (230V/50Hz, 1/2 HP)

\*Accessories Include: Electric Water Valve, Water Spray Attachment and Splash Shield

reclinical Specifications:		
VOLTAGE	115V/60Hz	230V/50Hz
AMPERAGE	4A	2A
	10-INCH	12-INCH
DIMENSIONS	35.5 cm (14") W 40.5 cm (16") H 38 cm (15") D	40.5 cm (16") W 43 cm (17") H 38 cm (15") D
WEIGHT	15.27 kg (33.65 lbs.)	19.3 kg (42.65 lbs.)
DRIVE MOTOR	1/4 HP	1/2 HP
TABLE	Two-position	Fully-adjustable 85° to 120° angle ranges from grinding wheel surface
WARRANTY	3 years*	1 year
	*US and Canada	only

# **Model Trimmers**

### 12-Inch Orthodontic



The 12-inch Orthodontic Model Trimmer was designed for professionals who wish to simplify the trimming of casts. The adjustable work table is simple and easy to use, with only two functional accessory devices necessary to trim a complete model. Table will adjust vertically with near vertical cutting force.

As with all Whip Mix Model Trimmers, this unit is quality constructed for precision and dependability and includes many of the same convenience features. Unit comes with Orthodontic Work Table including Vertisquare, Angle Guide and Coarse Abrasive Wheel.

#### Item No. Description

20753

Deluxe 12-inch Orthodontic Model Trimmer (With Accessories\*)

09601 Equipped with Orthodontic Work Table and Coarse Abrasive Wheel

(115V/60Hz, 1/2 HP) (230V/50Hz, 1/2 HP)

\*Accessories Include: Electric Water Valve, Water Spray Attachment and Splash Shield

VOLTAGE	115V/60Hz	230V/50Hz
AMPERAGE	4A	2A
DIMENSIONS	40.5 cm (16") Wid 43 cm (17") High 38 cm (15") Deep	
WEIGHT	19.6 kg (43.15 lbs	s.)
DRIVE MOTOR	1,725 RPM 1/2 H	P
WARRANTY	3 years* *US and Canada	1 year only

# **Model Trimmers**

### 3/4 HP Wet Model Trimmer



#### Item No. Description

3/4 HP WET MODEL TRIMMER\*

09650 Equipped with a Two-Position Stainless Steel Work Table and a 12" x 1/4" Coarse Abrasive Wheel. (115V/60Hz, 3/4 HP)

\*Also includes: Electric Water Valve, Splash Shield and Water Spray Attachment



This innovative 3/4 HP WET Model Trimmer was designed with power, performance and safety in mind. Engineered for heavy-duty use, the 3/4 HP wet trimmer operates at a full 1,800 RPM.

Designed for the professional lab, this unit will withstand years of rigorous use.

#### **Special Features Include:**

- Self-cleaning design flushes slurry from unit, preventing stone or plaster build-up
- Easy-to-open, single-clasp door
- Electric Water Valve
- · Splash Shield
- Water Spray Attachment

### **Safety Features Include:**

- Enclosed motor
- Special "trip-to-off" safety switch which shuts off motor if the door is opened during operation or in the event of a power failure
- Waterproof on/off switch

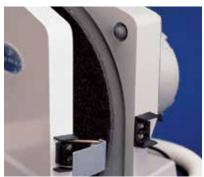
VOLTAGE	115V/60Hz
AMPERAGE	4A
DIMENSIONS	38 cm (15") Wide 39 cm (15.25") High 48 cm (19") Deep
WEIGHT	28.3 kg (62.45 lbs.)
DRIVE MOTOR	1,800 RPM 3/4 HP
TABLE	Two-position
WARRANTY	3 years US and Canada only



Two-position, stainless steel work table; 90° angle and 105° relief angle to wheel



Self-cleaning design reduces stone/plaster buildup



Safety switches include: waterproof on/off switch and "trip-to-off" safety switch

#### For Model Trimmers



12-Inch Model Trimmer With Optional Accessories

#### Item No. Description

22590	Plastic Sediment Tray, Fits Most Model Trimmers	
12823	#34008	Electric Water Valve (115V/60Hz)
12939	#35175	Water Spray Attachment
22373	#35173	Splash Shield
12777	#35015	Orthodontic Work Table Including Vertisquare, Angle Guide and Template

#### BLUE WONDER™ DIAMOND WHEEL (With Gasket)

28614	#30430	10-inch Super Abrasive
25135	#30432	12-inch Super Abrasive
09602	Cleancut	Wheel Cleaner

#### MODEL TRIMMER WHEEL (With Gasket)

		(
12963	#30102	10-inch Medium Abrasive
29327	#30293	10-inch Coarse Abrasive
12998	#30097	12-inch Medium Abrasive
13005	#30292	12-inch Coarse Abrasive
13013	#30138	12-inch Extra Coarse Abrasive

#### PSA DISC (Pressure Sensitive Adhesive Disc)

12-Inch with 1-Inch Diameter Center Hole 50 Grit-Coarse (3M)

13056 #30433 Box of 4 Discs 13064 #30433 Box of 25 Discs

#### CONVERSION KIT (From Abrasive Wheel to PSA Disc)

13730 12-Inch Plastic Backup Disc w/3-50 Grit PSA Discs

#### **Orthodontic Work Table**

A precision-calibrated, easily adjustable work table offering near vertical cutting force. Comes with durable Vertisquare, Angle Guide and Template. Fits 12-inch size

#### **Electric Water Valve**

Regulates water supply in conjunction with the trimmer's on/off switch, saving water and eliminating constant flow adjustment.

#### **Plastic Sediment Tray**

Designed to fit under all Whip Mix Model Trimmers and most other major brands, this high-impact polystyrene sediment tray is extremely strong yet lightweight and easy to clean.

A central platform keeps trimmer clean and dry. Left and right side drain holes make for convenient placement on either side of sink. Unit measures 18" long x 16-1/2" wide x 3" high (45.7 cm x 42 cm x 7.6 cm).

#### **Water Spray Attachment**

A lever-operated water spray head for easy cleaning of casts.

#### Splash Shield

Clear plastic shield provides protection from water spray/debris.

#### **Model Trimmer Wheels**

12" abrasive wheel available in medium, coarse and extra coarse grits. 10" available in medium and coarse grit.

## Blue Wonder<sup>™</sup> Diamond Wheels

Diamond particles embedded in fiberglass substrate provide fast, aggressive cutting action. One year guarantee. Available in 10-inch and 12-inch sizes.

#### 12-Inch PSA Disc

Pressure-sensitive discs available in 50 grit.

#### **Conversion Kit**

Allows conversion from abrasive wheel to Pressure Sensitive Adhesive Disc System (PSA). Standard kit contains three 50 grit discs, plus a 12" Plastic Backing Disc.

# The Heat Zone™

### Wax Tool Heater



### Item No. Description

10147 115V The Heat Zone 10247 230V The Heat Zone

10149 Replacement Silicone Liners - package of 2



- · Heats wax tools fast without flame
- Reduces carbon build up on instruments
- Energy efficient as power is used only at the moment of heating
- No gas lines required, making unit mobile and operational anywhere an electric outlet is available
- Indicator light glows green for ready mode and red for when in use
- Safety light blinks if instrument is left heating too long
- Replaceable silicone inserts keeps unit clean of wax residue (2 included)

VOLTAGE	AC 100/120V 50/60Hz AC 220/240V 50/60Hz
DIMENSIONS	3.5" W x 8.3" D x 3.5" H 89mm x 211mm x 89mm
<b>WEIGHT</b> 1 lb. (0.45 kg)	
NOTE: Minimum voltage supply should not exceed ± 10% of the nominal value	

# **Digital Wax Carving Pencils**

Digital Waxing Units



#### **Standard Features**

- · Easy to use
- · Excellent heat conductivity
- · Long service life
- Accurately maintains desired temperature
- Digitally displays temperature in either Celsius or Fahrenheit temperature scales
- Previous working temperature is stored in memory, even if the unit has been turned off
- Silicone cool-grip handle reduces hand fatigue and temperature transfer
- · 2-year warranty

# Digital Wax Carving Pencil – Single

In addition to standard features:

- Switch between two temperatures at the touch of a button
- · Space-saving small footprint
- Compartment in rear of unit for easy storage of carving tips
- Includes wax tips #1 and #2 (shown on page 65)

### Item No. Description

10157 10257 10150 10250 10163 115V Digital Wax Carving Pencil - Single 230V Digital Wax Carving Pencil - Single 115V Digital Wax Carving Pencil - Dual 230V Digital Wax Carving Pencil - Dual Replacement Wax Carving Pencil

# Digital Wax Carving Pencil – Dual

In addition to standard features:

- Easy-to-use control buttons
- Two-line circuit, designed for simultaneous work
- Convenient external cradles
- Comes complete with six of the most commonly used waxing tips (#1 – #6, shown of page 65)

# Digital Wax Carving Pencil - Dual **Technical Specifications:**

VOLTAGE	AC 100/240V 50/60Hz 20W
DIMENSIONS	4.7" W x 6.3" D x 2.9" H 119mm x 160mm x 74mm
TEMPERATURE	50°C-200°C 122°F-392°F
<b>WEIGHT</b> 2.8 lbs. (1.27 kg)	
NOTE: Minimum voltage supply should not exceed ± 10% of the nominal value	

# Digital Wax Carving Pencil - Single Technical Specifications:

VOLTAGE	AC 100/240V 50/60Hz
DIMENSIONS	3" W x 4.7" D x 2.5" H 76mm x 119mm x 64mm
TEMPERATURE	50°C-200°C 122°F-392°F
WEIGHT	1.2 lbs. (0.54 kg)
NOTE: Minimum voltage supply should not exceed ± 10% of the nominal value	

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# Digital Wax Carving Pencils - Continued

Digital Waxing Units



### Item No. Description

10155
 115V Wax Carving Touch Pencil - Dual (includes tips #1 - #6)
 10255
 230V Wax Carving Touch Pencil - Dual (includes tips #1 - #6)

#### **Accessories**

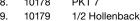
10159 Electric Heating Tool

10165 Replacement Pencil (compatible with

Touch Unit only)

### **Tips** (available individually) Compatible with all Digital Waxing Units

	1	
1.	10171	Offset Explorer
2.	10172	PKT 1
3.	10173	PKT 2
4.	10174	Discoid
5.	10175	Mini-Beavertail
6.	10176	Beavertail
7.	10177	Large Beavertail
8.	10178	PKT 7





# Digital Wax Carving Touch Pencil - Dual

- Touch-controlled temperature setting
- Two-line circuit, designed for simultaneous work
- Convenient magnetic cradle on surface
- Compartment in rear of unit for easy storage of carving tips
- Comes complete with six of the most commonly used waxing tips (#1 – #6)
- · Easy to use
- · Excellent heat conductivity
- · Long service life
- Accurately maintains desired temperature
- Digitally displays temperature in either Celsius or Fahrenheit temperature scales
- Previous working temperature is stored in memory, even if the unit has been turned off
- Silicone cool-grip handle reduces hand fatigue and temperature transfer
- 2-year warranty

### **Technical Specifications:**

VOLTAGE	AC 100-240V 50/60Hz 20W
DIMENSIONS	6" W x 4.8" D x 2.8" H 152mm x 122mm x 71mm
TEMPERATURE	50°C-200°C 122°F-392°F
<b>WEIGHT</b> 2.9 lbs. (1.3 kg)	
NOTE: Minimum voltage supply should not exceed ± 10% of the nominal value	

### **Electric Heating Tool**

- Operates with a variety of milling machines and surveyors
- Specially designed pencil tip permits excellent heat conductivity
- Five tips available for 0° (thin and thick gauge), 2°, 4° and 6°







# **Digital Wax Pots**

Wax Pots



#### **Standard Features**

- Easy to operate
- Excellent insulation and heat conductivity
- Current and preset temperature readings are easily visible
- Heats wax quickly and maintains its liquid state
- Maintains desired temperature accurately and precisely
- 2-year warranty

### Digital Wax Pot – Multi Well

#### In addition to standard features:

- Multi-well pot is capable of heating four different waxes simultaneously
- Built-in thermostat to accurately maintain desired temperature
- LED indicates when setpoint has been reached



### Item No. Description

10160	115V Digital Dipping Pot
10260	230V Digital Dipping Pot
10158	115V Wax Pot – Multi Well
10258	230V Wax Pot - Multi Wel

# Digital Wax Pot – Multi Well Technical Specifications:

VOLTAGE	AC 100/240V 50/60Hz
DIMENSIONS	7.6" W x 4.5" D x 2.8" H 193mm x 114mm x 71mm
TEMPERATURE	50°C-120°C 122°F-248°F
WEIGHT	2.5 lbs. (1.13 kg)
NOTE: Minimum voltage supply should not exceed + 10% of the nominal value	

# Digital Wax Pot Technical Specifications:

VOLTAGE	AC 100/240V 50/60Hz
DIMENSIONS	4.3" W x 5.4" D x 2.8" H 108mm x 137mm x 71mm
TEMPERATURE	50°C-120°C 122°F-248°F
WEIGHT	1.9 lbs. (0.87 kg)
NOTE: Minimum voltage supply should not exceed ± 10% of the nominal value	



# **Vibrators**





#### **Heavy Duty Vibrator**

- Wide vibration table enables simultaneous work on many rings
- Long wave or short wave options
- Variable intensity in both wave lengths

### **General Purpose**

- Easily detachable rubber top allows for convenient cleaning.
- Variable intensity vibration helps prevent bubbles
- Ergonomic Design

### Item No. Description

GENERAL PURPOSE VIBRATOR

10650 (115V 50Hz) 10655 (230V 50/60Hz) **HEAVY DUTY VIBRATOR** 10675 (115V 50Hz) 10680 (230V 50/60Hz)

	GENERAL PURPOSE	HEAVY DUTY
VOLTAGE	115V/60Hz	230V/50Hz
	10-INCH	12-INCH
DIMENSIONS	140 mm (5.5") W 76 mm (3") H 140 mm (5.5") D	280 mm (11") W 110 mm (4.3") H 220 mm (8.7") D
WEIGHT	2.10 kg (4.6 lbs.)	6 kg (13.2 lbs.)



# **Digital Water Bath**

### With Variable Temperature Control



A thermostatically controlled unit that maintains temperatures in a range of 32° C to 71° C (90° F to 160° F) to soften a variety of wax or compound materials.

#### **Features:**

- Digital temperature control with indicator light
- Removable stainless steel pan for easy sterilization
- Temperature indicator light shows when unit is heating
- Accommodates Hanau water bath pan
- Safety feature: unit stops heating when pan is removed

#### Item No. Description

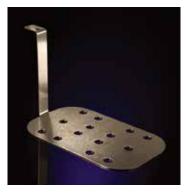
05350 Water Bath Including Removable Stainless Steel Pan and Thermometer, 115V/60Hz

05335 Water Bath Including Removable

Stainless Steel Pan and Thermometer,

230V/50/60Hz

05326 Lift Tray (sold separately)



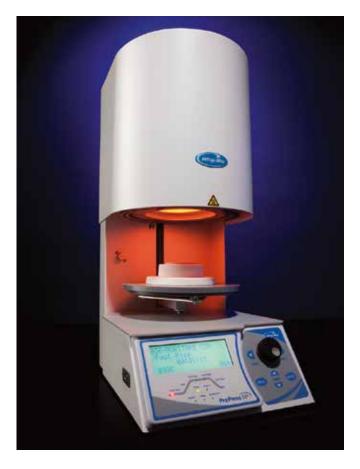
VOLTAGE	115 VAC/60Hz	230 VAC 50/60 HZ
AMPERAGE	1.5A	0.9A
WATTAGE	175W	200W
DIMENSIONS	19 cm (7.5") Wi 12.7 cm (5.0") 22.2 cm (8.75")	High
CAPACITY	16.5 cm (6.5") 10.8 cm (4.25") 7.0 cm (2.75") I	) High
TEMPERATURE	32° C-71° C (90° F-160° F) Variable	
WEIGHT	2.3 kg (5 lbs.)	





## **ProPress SP**

### Porcelain Pressing Furnace



#### **Technical Specifications:**

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POWER SUPPLY	120 V ± 10% 50/60Hz	
POWER CONSUMPTION	Furnace Alone: 1,200W Furnace and Pump: 1,400W	
SHIPPING WEIGHT	32 kg (77 lbs.)	
MUFFLE WINDINGS	Quartz Tubing	
MUFFLE CHAMBER	(3¾" W x 2½" H x 3¾" D)	
MAXIMUM TEMPERATURE	1,200° C (2,200° F) Maximum	
DIMENSIONS	28 cm (11") W x 44 cm (17.5") D x 64 cm (25") H	
WARRANTY	3 years or 3,750 muffle hours on Unit, Muffle and Thermocouple U.S. and Canada only	

#### Item No. Description

#### PROPRESS SP PRESSING FURNACE

92025 115V/60Hz 92035 230V/50Hz

Accessories

95015 Vacuum Pump, High-Efficiency (115V/60Hz) 95005 Vacuum Pump, High-Efficiency (230V/60Hz)

96078 Silver Calibration Kit 95030 ProCal Calibration Device

#### **ProPress SP Furnace**

The Whip Mix Pro Press SP Furnace offers a new level of true pressing control. A unique component monitors the flow of the glass and senses the movement of the ceramic into the ring in real time from start to finish. When the movement ceases (the mold is filled), the muffle heater is turned off, the vacuum is released, and the table is lowered as quickly as possible to drop the mold temperature below the vitreous point of the ceramic. This faster press not only saves time, but minimizes – and in many cases prevents – the formation of the reaction layer, so often seen with other press systems.

Another great feature of the Pro Press SP Furnace is its ability to successfully press split (cracked) molds. When the operator discovers a crack they can select a reduced pressure pressing, which will add a few seconds to the sense press time, but increase the likelihood of a complete press without finning or slitting the mold.

#### Features:

- Includes Master Suite<sup>™</sup> software to download the firing/pressing parameters for many popular porcelains
- Pre-programmed with crystallization parameters for Emax Cad<sup>™</sup> (Blue Block)
- Accommodates 100 and 200 gram rings
- Patented Quick-Cool Jet on all Pro Series furnaces
- 200 open programs for pressing or veneering porcelains
- Enables successful pressing of more units per ring
- Presses faster than conventional pressing furnaces
- Minimizes the reaction layer
- Allows split molds to be pressed successfully



A USB drive allows software upgrades and program transfers in a matter of seconds



Pro Series Quick-Cool Jet for fast cool with vacuum

# **Pro 200 Series**

# **Furnaces**



# **Technical Specifications:**

reomination opeomoations.				
VOLTAGE	120 V ± 10% 50/60H 220 V± 10% 50/60H	· <del>-</del>		
POWER CONSUMPTION	Furnace Alone: 1,080W Furnace and Pump: 1,440W			
TEMPERATURE	1,200° C (2,200° F) Maximum			
WEIGHT	PRO PRESS 200 32 kg (71 lbs.)	PRO 200 27 kg (59 lbs.)		
MUFFLE CHAMBER	10 cm W x 6 cm H x 10 cm D (3¾" W x 2½" H x 3¾" D)			
MUFFLE WINDINGS	Quartz Tubing			
WARRANTY	3 years or 3,750 mu Unit, Muffle and The U.S. and Canada onl	rmocouple		

# Item No. Description

#### PRO 200 PORCELAIN FURNACE

93005 115V/60Hz 93015 230V/50Hz

#### PROPRESS 200 PRESSING FURNACE

92005 115V/60Hz 92015 230V/50Hz

#### Accessories

95015 Vacuum Pump, High-Efficiency (115V/60Hz) 95005 Vacuum Pump, High-Efficiency (230V/60Hz)

96078 Silver Calibration Kit 95030 ProCal Calibration Device



A USB drive allows software upgrades and program transfers in a matter of seconds



Pro 200 Series Quick-Cool Jet for fast cool with vacuum

## Pro 200 and ProPress 200

Porcelain Furnaces are affordable yet intelligently designed with cutting edge technology. They have advanced cycles for e.max\*, In-Ceram\*, Wol-Ceram\*, Captek\*, sintered alloys and advanced porcelain products.

All Pro Series Porcelain Furnaces come standard with a Vacuum Pump and a 3-Year or 3,750 muffle hours warranty (US & Canada only). Should the unit ever need servicing, direct access to a service technician is provided, greatly reducing the turnaround time on repairs.

So when you buy Whip Mix Porcelain furnaces, you can be sure you're making an investment in the long-term success of your laboratory.

#### **Features:**

- Includes Master Suite<sup>™</sup> software to download the firing/pressing parameters for many of the most popular porcelains
- Master Suite<sup>™</sup> software creates, modifies & transfers programs from computer to furnace using a standard flash drive
- Pre-programmed with crystallization parameters for Emax Cad<sup>™</sup> (Blue Block)
- ProPress 200 accommodates 100 and 200 gram rings
- Patented Quick-Cool Jet on all Pro Series furnaces
- 200 open programs for pressing or veneering porcelains

# **FireLite**

# Porcelain Furnace



FireLite Porcelain Furnace



Adjustable keypad/display panel can be angled for easy reading



LED status indicators allow the technician to follow the stages of a program while firing

# Item No. Description

#### FIRELITE PORCELAIN FURNACE

91600 115V/60Hz 91601 230V/50Hz

Accessories

95015 Vacuum Pump, High-Efficiency (115V/60Hz) 95005 Vacuum Pump, High-Efficiency (230V/60Hz) The Firelite is the perfect furnace for labs that demand performance and accuracy. With its small footprint and a multi-position keypad/display panel, this furnace is easy to use.

#### **Features:**

- Stores up to 50 firing programs you can customize for any type of porcelain
- Two-point calibration ensures firing accuracy for low- and high-fusing porcelains
- Special design ensures smooth lift operation – work pieces won't slump or vibrate off the lift
- Fast-cool cycle uses vacuum to cool the muffle, reducing down time between firing cycles
- Large elevated cooling tray allows for easy staging of work and quickly cools just fired restorations
- Customize the program end tune to distinguish this furnace from others in the lab

# **Technical Specifications:**

VOLTAGE	110 VAC ± 10% 50/60 Hz
POWER CONSUMPTION	Furnace Alone: 850W Furnace and Pump: 1,100W Maximum
UNIT DIMENSIONS	28 cm (13.5") Wide 28 cm (13.5") Deep 41 cm (20.5") High
TEMPERATURE	1,200° C (2,200° F) Maximum
WEIGHT	31 kg (50 lbs.)
MUFFLE CHAMBER	10 cm x 6 cm (3¾" x 2½")
MUFFLE WINDINGS	Spiral-wound Quartz Tubing
WARRANTY	3 years or 3,750 muffle hours on Unit, Muffle and Thermocouple U.S. and Canada only

# **Accessories**

# For Porcelain Furnaces



# **High-Efficiency Pump**

High-efficiency pump runs quietly. Rated at 29.5" HG Maximum Vacuum and 1.75 CFM open flow. This oil-free, rocking-piston, low-noise with rugged construction pump comes complete with rubber feet and the muffler assembly in place. Use with Pro 100 Series, Pro 200 Series, and FireLite furnaces.



#### Silver Calibration Kit

The Silver Calibration Kit allows for accurate temperature calibration. Use with Pro Press 100, Pro 100 and Pro 100 Plus furnaces.



# **ProCal™ Calibration Device**

The ProCal Calibration Device both checks and recalibrates the temperature settings on all Pro 200 Series furnaces. The easy to use device features automatic calibration, no manual adjustment is required. Functions include:

- Quick QC Check mode quickly checks a specified temperature in around 5 minutes.
- ProCal Soaked Muffle mode automatically analyzes and recalibrates any Pro 200 Series Furnace for both low and high fusing porcelains temperatures.
- ProCal Cool Muffle function automatically heat soaks the furnace to 800°C before beginning full calibration.

 Adaptor included for use with Pro 100 Series furnaces to check temperature but full calibration requires manual setting.

To maintain consistency and accuracy when firing porcelain, run the Quick QC Check when furnace programs are initially set and then on a monthly maintenance schedule. The ProCal provides comparison data on all Pro Series furnaces so that all furnaces are standardized to one calibration device. Convenient, reliable and fully automatic; the ProCal requires no supervision for furnace calibration.v

# Item No. Description

#### Accessories

95015 Vacuum Pump, High-Efficiency (115V/60Hz) 95005 Vacuum Pump, High-Efficiency (230V/60Hz)

96078 Silver Calibration Kit 95030 ProCal Calibration Device

# **Jelrus** *Burnout Oven*



# **Technical Specifications:**

POWER SUPPLY	115V 50/60Hz, 220/230V		
POWER CONSUMPTION	Medium 1150W Large 1610W		
DIMENSIONS	M30/PDQ M 27.2 cm (10.7") W 38.1 cm (15.0") H 26.9 cm (10.2") D	L30/PDQ L 36.6 cm (14.4") W 38.1 cm (15.0") H 28.0 cm (11.0") D	
TEMPERATURE	Stage 1: 150°F - 2012°F (66°C - 1100°C) Stage 2-4: 100°F - 2012°F (38°C - 1100°C)		
HOLD TIME	0-4 Hours		
WARRANTY	1 year		

# Item No. Description

INFINITY	
96403	Infinity M30 115V Medium
96402	Infinity L30 115V Large
96407	Infinity M30 230V Medium
96406	Infinity L30 230V Large
P.D.Q	
96401	PDQ Digital 115V Medium
96400	PDQ Digital 115V Large
96405	PDQ Digital 230V Medium
96404	PDQ Digital 230V Large

# P.D.Q. Digital

- Large and medium sizes
- Fully automatic single-phase, single program capability
- Highest accuracy with even heat distribution
- Program adjustable while in process
- Overnight timer
- LED Time-Line-Graph shows progress at a glance
- Cool-touch counter-balanced stainless steel door
- UL, CE and CSA certified for your safety

# Infinity M30 & L30

- Large and medium sizes
- Multiple stage burnout capability
- Up to four different stages and 30 program slots
- Highest accuracy with even heat distribution
- Program adjustable while in process
- · Overnight timer
- LED Time-Line-Graph shows progress at a glance
- Cool-touch counter-balanced stainless steel door
- UL, CE and CSA certified for your safety

# **Infinity ZR**

# Sintering Furnace









Item No. Description

96500

Infinity XR Includes 1 lidded sintering tray, 1 (8 oz.) jar of sintering beads, and 1 spatula.

Accessories

96501 96502 96503 8 oz. Jar of Sintering Beads Lidded Sintering Tray

Sintering Tray Spatula

The Whip Mix Infinity ZR Sintering Furnace features the latest furnace technology to give you many years of dependable service. With 30 programs and four stages, the Whip Mix Infinity ZR furnace has been designed to offer the user flexibility and consistently accurate sintering of zirconia materials.

- Working temperature: 1550°C (2822°F).
- 30 user-programmable programs with up to 4 stages.
- Thermal Web Technology reflects infrared heat for more even heating.
- Delay start time up to 8.0 hours.
- Up to 3 uniquely designed, lidded sintering trays can be stacked.
- Up to 60 units sintered at a time.
- Overall Dimensions: 18"W × 16.5"D × 29"H (73.7cm × 45.7cm × 42cm)

Proudly Made in the U.S.A.

# **Technical Specifications:**

1001111100	ii opoomoationoi
VOLTAGE	208-230V 50/60Hz Single Phase, 40 Amps
POWER CONSUMPTION	9200W
UNIT DIMENSIONS	45.7 cm (18") Wide 42 cm (16.5") Deep 73.7 cm (29") High
HEATING CHAMBER DIMENSIONS	15.24 cm (6") Wide 21.25 cm (8.36") Deep 15.24 cm (6") High
TEMPERATURE	1,550° C (2,822° F) Maximum
WEIGHT	65.8 kg (145 lbs.)
NUMBER OF PROGRAMS	30
NO. OF STAGES PER PROGRAM	1-4, User defined
DELAY START	0-4.0 hours
HVAC LOAD	31,320 BTU/Hour
HEAT RATE	1-104°F/min. (1-40°C/min.)
HOLD TIME	0 – 4 hours on each stage
WARRANTY	2 Year warranty/1 Year warranty for muffle, thermocouple, and heating elements U.S. and Canada only







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200-626-5651

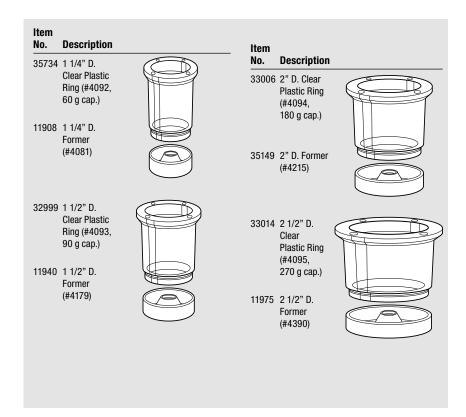
INSTEP

(WIND MIX



# **Ringless Casting System**

# Makes Casting Even Easier



Whip Mix's Ringless Casting System includes four sizes of Rings and Formers and Preformed Wax Shapes.

#### **Features:**

- Tapered ring design for easy removal of mold
- Clear plastic rings are economical, durable and reusable
- Allows for maximum expansion of investment
- Eliminates the need for ring liner
- Clean burnout of all wax shapes
- Durable, reinforced plastic former bases

# **Casting Rings and Formers**



All Whip Mix Casting Rings are made of a special stainless steel. Even after repeated heatings they remain precision fitting and stable in size. They do not flake, corrode, or peel away, thus they have an unusually long life.

Whip Mix Crucible Formers are available in several diameters made of durable plastic.

# **Selection Guide**

CASTING RINGS				CRUCIBLE FORMERS			
ltem Number	Product Number	Size O.D. x Height	Metric Dimensions O.D. x Height	Mixing Amount (g) Phosphate/Gypsum	Item Number	Product Number	Diameter
11681	4085	1-1/4" x 1-3/8"	31.6 mm x 34.9 mm	60/50			
11703	4086	1-1/4" x 1-5/8"	31.6 mm x 41.3 mm	65/60			
11711	4087	1-1/4" x 1-7/8"	31.6 mm x 47.6 mm	75/60	11908	4081	1-1/4" (31.6 mm)
11762	4088	1-1/4" x 2-3/16"	31.6 mm x 55 mm	90/80			
11738	4181	1-1/2" x 1-9/16"	38 mm x 39.7 mm	90/80			
11770	4089	1-1/2" x 2-3/16"	38 mm x 55 mm	120/100	11940	4179	1-1/2" (38 mm)
11746	4180	1-3/4" x 1-9/16"	44.5 mm x 39.7 mm	120/100	11967	4177	1-3/4" (44.5 mm)
11789	4090	1-3/4" x 2-3/16"	44.5 mm x 55 mm	150/140			
29319	4214	2" x 1-7/8"	50.8 mm x 47.6 mm	120/100	35149	4215	2" (50.8 mm)
11754	4391	2-1/2" x 2-1/4"	63.5 mm x 57.2 mm	300/260	11975	4390	2-1/2" (63.5 mm)

# **InStep Wax**

Casting Wax System



Whip Mix InStep waxes take the guesswork out of compatibility. The InStep family of products is formulated and manufactured with each component of the entire waxing process in mind. This ensures from blockout to final wax-up all your waxes will be compatible, greatly reducing the chance of defects in your castings.

The Whip Mix Instep Wax system contains four different waxes which have melting ranges which have been designed to work InStep with one another. These include a blockout wax for filling undercuts, a dipping wax with enhanced margin visibility and uniform thickness, and a carving wax which provides consistent control during build-up and cuts cleanly without stickiness or tackiness. The beige version of the carving wax is also scannable with many of the scanners available on the market today. Each component is designed to work InStep providing a burn-out without residue and optimized casting results.



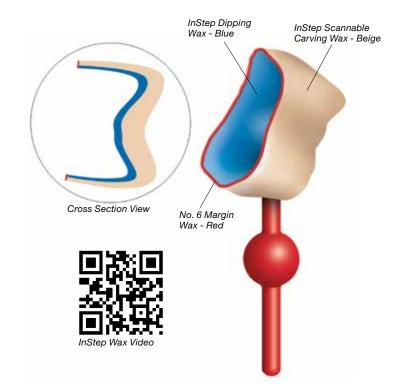
#### **Blockout Wax**

Melting Range: 200°F - 210°F (93°C - 99°C)

- Used for blocking undercuts
- · Adheres firmly to the model
- Dimensionally stable
- Carvable

# Item No. Description

03884 InStep Wax Blockout Red 1.5 oz (42 g)



# InStep Wax - Continued

Casting Wax System



# Item No. Description

InStep Wax Dipping Blue 7.05 oz (200 g)

1.5 oz (42 g)

03887 InStep Wax Carving Grey 1.5 oz (42 g)

# **Carving Wax**

Melting Range: 145°F -155°F (63°C - 68°C)

- · Provides visual discernment of anatomy
- · Solidifies quickly
- · Visual cue when ready to carve
- Melts at higher temperature than formers/sprues and lower than dip wax
- · High polishability
- · Cuts cleanly without stickiness or tackiness

# **Dipping Wax**

Melting Range: 170°F - 180°F (77°C - 82°C)

- Produces uniform thickness (0.3-0.4 mm) within given temperature range
- Does not thin at the corners
- Doesn't have margin lift
- Elasticity/Memory to pull from undercut without distortion
- Visual cue to judge thickness
- · Melts at higher temperature than carving wax
- · Wax drains quickly and cleanly

# 03885

InStep Wax Scannable Carving Beige 03886

# **InStep Die Lube**

Long Lasting, fast drying release film that prevents wax copings from sticking to stone or epoxy die. Wax patterns separate easily from die, even when left for several days

# Item No. Description

03888 14 mL (1/2 oz) Bottle with Brush in Cap

03889 100 mL (3-1/2 oz) Bottle 03890 225 mL (8 oz) Bottle



INSTEP

# **Waxes**

# **Casting Waxes**

Whip Mix inlay waxes are compounded for use in the production of the finest inlays. They may be flowed in the liquid state, softened over a flame, or in water at 54-60° C (130-140° F) and are easily adaptable to the cavity without crumbling. They maintain an even degree of workability over a wide temperature range, assuring ease and accuracy of adaption under pressure. Wax additions and corrections may be made with resultant homogeneous bonding. They are particularly outstanding for their excellent carving properties in which they shave smoothly without chipping or flaking. They conform to F.D.I. Spec. No. 4.

The **REGULAR** type is especially suited for indirect work at room temperature, or general use in cool weather.

The **HARD** type has a low flow property and is thus eminently suited for general use in warm weather.

The **#6** type is similar in flow to the Regular and is physically harder in carving.



# Denar® Bite Registration Wax

Preformed wax wafers accurately capture patient bite records

- Malleable when warmed, brittlehard when cooled.
- Tapered wafer allows more even penetration by the teeth from back to front.
- One-piece records are easier to control and securely seat casts in cross arch indentation.
- Precut notch accommodates anterior deprogrammers.

# Pliable Sticky Wax (Light Orange)

Its unusual tenacity ensures a positive attachment of patterns to sprue pins. Does not become brittle but retains its "tacky" property throughout a wide range of room temperatures. It has a low ash content, so elimination during burnout is readily achieved.

# **Regular Sticky Wax (Red)**

A superior wax for all usual applications. Rigid at room temperature without being overly brittle. Flushes away cleanly with boiling water.



# Life-Like Presentation Wax (White)

A white enamel-like wax that makes a more aesthetic case presentation. The hardness of Life-Like Presentation Wax assures easy carving properties and additions can be made with perfect blending. Its opacity is sufficient to hide colored die stones even with thin laminate veneer waxups. The Life-Like Presentation Wax wax-up also aids in the fabrication of temporaries.

Every case presentation with Life-Like reflects the quality, skill and attention to aesthetics the clinician's practice is built on.



#### Item No.

# **Description**

#### CASTING WAX

Blue	Green	Red
(Regul		

09911 – Box of 12 Sticks – 28 g (1 oz.)

10391 10383 – Bulk Package of 120 Sticks – 280 g (10 oz.)

10170 10162 10189 Covered Tin - 42 g (1-1/2 oz.)

(Hard)

10464 10456 – Bulk Package of 120 Sticks – 280 g (10 oz.)

(Regular - Assorted Colors)

09873 – Box of 12 Sticks (3 ea. Blue, Green, Yellow, Red)

10367 – Bulk Package of 120 Sticks (30 ea. Blue, Green, Yellow, Red)

(Hard - Assorted Colors)

09954 – Box of 12 Sticks (3 ea. Blue, Green, Yellow, Red)

DENAR® BITE REGISTRATION WAX

20000040 Box of 25 Wax Wafers

NO. 6 MARGIN WAX (Assorted Colors)

0014 Box of 12 Sticks (3 ea. Blue, Green, Yellow, Red)

PLIABLE STICKY WAX (Light Orange)

10847 Box of 12 Sticks — 28 g (1 oz.)

10855 Bulk Package of 120 Sticks - 280 g (10 oz.)

REGULAR STICKY WAX (Red)

10898 Box of 12 Sticks — 28 g (1 oz.)

10901 Bulk Package of 120 Sticks — 280 g (10 oz.)

LIFE-LIKE PRESENTATION WAX (White)

03875 Box of 12 Sticks — 28 g (1 oz.) 04359 Covered Tin — 42 g (1-1/2 oz.)

# **Gator Wax**

# Dip and Build-Up Waxes



Gator Waxes are tough and durable, yet incredibly carvable. They don't shrink towards bulk – so they won't pull away from the sides of the die. Once they're applied, low surface tension helps them adhere to all surfaces, producing a seamless, gapless fit. And because of their minimal shrinkage and distortion, you can wax cases today, then invest them at your convenience.

Because they are from the same family, yellow Dip Wax and blue Build-Up Wax can be used separately or blended together to create a green wax that is both tough and carvable and useful in many applications.

# Item No. Description

GATOR DIP WAX (Yellow)

27162 Box of 88 Wafers — 227 g (8 oz.)

**GATOR BUILD-UP WAX (Blue)** 

27170 Box of 88 Wafers — 227 g (8 oz.)



# Liquids

# For Models and Dies



# Lubritex No. 12 – Die Lubricant

A water-soluble lubricant that is equally effective on all types of die materials. Lubritex will not react with die or pattern materials and will not affect investments.



LUBRITEX NO. 12

09784 100 mL (3-1/2 oz.) Bottle 09792 450 mL (1 pint) Bottle

**SMOOTHEX** 

29386 115 mL (4 oz.) Bottle with

Fine Spray Pump

02313 225 mL (8 oz.) Bottle with

Fine Spray Pump

09849 450 mL (1 pint) Bottle 29394 1 Liter (34 oz.) Bottle 12912 3.75 Liter (1 gallon)

Container

ARMOR SHINE

09678 100 mL (3-1/2 oz.) Bottle 09679 1 Liter (34 oz.) Bottle

**FOILCOTE** 

09687 100 mL (3-1/2 oz.) Bottle

09709 3.75 Liter (1 gallon)

Container

27782 15 Liter (4 gallon) Case



# Smoothex – Debubbling Solution

A surface tension-reducing liquid for treating patterns to permit better adherence and flow of investment. Also excellent for treating synthetic impressions (Polysulfide, Silicone, or Polyether) before pouring casts.

Refillable, fine-spray bottles are easy to use and help keep debubblizer clean by eliminating the need for dipping brushes or patterns.



# Foilcote – Liquid Foil Substitute

When applied to plaster or stone, it seals the pores and forms a smooth surface that gives excellent separation of the denture from the mold. Eliminates the time-consuming tinfoiling and resulting creases.



# Armor Shine – Paint-on Model Gloss

Armor Shine improves case presentations by providing a protective, high gloss coating to gypsum models. A single coat prevents dirt and oils from staining the model and protects against chipping. With less than one micron in thickness, Armor Shine does not create occlusal interference. Ideal for producing diagnostic wax-ups, study, C&B and ortho models of the highest quality.

# Liquids - Continued

# Gypsum Hardener (Winterized)

Replaces water as the gauging liquid for mixing with gypsum materials where increased hardness and reduced brittleness are desired; will also improve the "running" or flowing quality of the mix. It does not clinically affect the other properties of the die or model materials or plasters. This formula is not damaged by freezing.

# **Gyp-Strip**

A highly effective gypsum remover, not only keeps equipment sparkling clean, it saves time and energy, too. Gyp-Strip's penetrating action removes plaster, stone and gypsum investments from mixing bowls, acrylic dentures, denture flasks, casting rings and non-aluminum articulators. Gyp-Strip is versatile – you can use it in an ultrasonic, or as an overnight soaking agent. Available in one-gallon jugs, Gyp-Strip requires no mixing or diluting.

# Model Glow - Model Soap

Model Glow gives an incredibly high luster to gypsum models. Its special formulation does not yellow or flake and seals the pores to provide a protective coating. Its thin consistency does not affect occlusal accuracy. Long-lasting and can be used full strength or diluted. Models can be buffed wet or dry.







# **Green Envy**

#### **Tray Cleaner**

- Removes alginate and gypsum from impression trays naturally pH Neutral
- Dissolves the alginate and plaster residue - interacts instead of reacts with soils and surfaces - no need to scrape or scour
- Gentle to the skin and biodegradable - safer for the skin and safer for the environment
- Concentrated mix with water to clean approximately 200 trays



#### Item No. Description

GYPSUM HARDENER (Winterized)

 09717
 450 mL (1 pint) Bottle

 09725
 3.75 Liter (1 gallon) Container

 27774
 15 Liter (4 gallon) Case

GYP-STRIP

27014 3.75 Liter (1 gallon) Container
 27022 15 Liter (4 gallon) Case

MODEL GLOW

29009 3.75 Liter (1 gallon) Container 29017 15 Liter (4 gallon) Case

**GREEN ENVY** 

09637 .45 Kg (1.0 lb) Bottle

# P.D.Q. Kit – Prep Dies Quickly

# A Complete System for Preparing Dies



# Item No. Description

P.D.Q. KIT

10839 Complete P.D.Q. Kit, Including Hardener,

Blue & Grey Spacer, Lubricant & Thinner

#### Items also available separately:

10626 14 mL (1/2 oz.) P.D.Q. HARDENER 10790 14 mL (1/2 oz.) P.D.Q. SPACER, Blue 10804 14 mL (1/2 oz.) P.D.Q. SPACER, Grey 10812 14 mL (1/2 oz.) P.D.Q. LUBRICANT 10820 28 mL (1 oz.) P.D.Q. THINNER

**NOTE:** These products cannot ship by air, ground freight only

The P.D.Q. Kit is designed to facilitate the production of conventional crown and bridges and refractory dies for all porcelain restorations. Each kit contains half-ounce bottles of stone hardener, blue and grey spacer liquids, and lubricant, each with a convenient brush applicator and packaged in a functional plastic organizer for convenient access. The kit also includes a one-ounce bottle of thinner formulated for use with both the space liquids and the hardener. Each item in the kit is available separately.

#### P.D.Q. Hardener

P.D.Q. Hardener is a liquid polymer that is painted on the stone die. It soaks into the stone pores to seal, harden and waterproof. It protects margins, yet does not change the dimensions. This hardener also prevents water absorption from porcelain during build-up.

#### P.D.Q. Spacer

P.D.Q. SPACER liquids each provide a 12 micron space in a single coating. Alternating blue and grey colors ensure thickness – two applications provide the optimum 24 microns of space to relieve dies. The liquids are extremely fast-setting to maximize efficiency and are highly visible.

#### P.D.Q. Lubricant

P.D.Q. LUBRICANT is a water soluble lubricant with low surface tension that will form an extremely thin, even film. It facilitates the removal of wax patterns.

#### P.D.Q. Thinner

P.D.Q. THINNER may be used with both the spacer liquids and the hardener as required to restore optimum handling properties. Thinner replenishes the liquid that evaporates if the bottle is left uncovered.

# **MainStay**<sup>™</sup>

# Dowel Pin Systems





1 Protective sleeve grips the pin creating positive indexing while protecting the base stone material from abrasion

Item No.

08236

08240

08245



2 End caps stabilize quadrant model while pouring base stone

MainStay, Box of 1,000 Single Pins, Plastic

MainStay II, Box of 1,000 Dual Pins, Plastic

Sleeves and Rubber End Caps

Sleeves and Rubber End Caps

MainStay Drill Bit (1 bit per package)



3 End caps can easily be removed to expose dowel pins - eliminates use of dowel pin bur



MainStay Drill Bits

The MainStay Dowel Pin System is a uniquely designed system for fabricating crown and bridge working models with sectioned, removable dies.

## MainStay II™

- Asymmetric, double pin design stabilizes pin in the base
- Ribbed plastic sleeve holds tight to the base while pin removes easily
- Rubber end cap stabilizes case while pouring base stone and eliminates searching for pins after basing
- Metal to stone contact at bottom of pin for added stability

# MainStay™

- Single pin design aids placement in tight places
- Tapered blade design prevents rotation of sectioned dies
- Protective sleeve grips the pin and protects the base material from abrasion
- Rubber end caps stabilize quadrants and eliminates use of pin finding burs, saving time and increasing work flow





20.5 mm

Lenath



**MainStay**<sup>™</sup>

**Description** 

# Glue/Accelerator

Formulated specifically for the dental laboratory, Mainstay Glue from Whip Mix offers an advanced cyanoacrylate adhesive that exhibits versatility, reliability, precision, and extended shelf life. It instantly bonds plaster, metal,

acrylic or porcelain and lasts a long time with an extended shelf life. The system features two viscosities (Thin and Medium with a non-clog pin-in-cap design), precision applicators and an accelerator.

# Item No. Description

08246 MainStay Glue Medium 1 oz. 08247 MainStay Glue Thin 1 oz.

08248 MainStay Accelerator with Pump 2 oz. 08249 MainStay Accelerator Refill 8 oz. Mainstay Glue is ideal for . . .

- · cementing dowel pins into models
- repairing and sealing all types of models
- gluing plaster-less articulators
- · sealing dies, protecting margins
- repairing loose and broken denture teeth
- · repairing porcelain facings



# **Accessories**

# Special Liquid **Concentrate**

Formulated for use with X-20 Chrome. X-20 Speed, Ceramigold, Hi-Temp. Cera-Fina and V.H.T. Freeze stable

# **Special Liquid** Concentrate - Plus

Formulated for use with PowerCast. Formula 1 and Polyvest. Also formulated for use with Hi-Temp, Ceramigold, Cera-Fina and FastFire 15 investments to achieve greater expansion. Keep from freezing





# Item No. Description

#### SPECIAL LIQUID CONCENTRATE (Freeze Stable)

02135 340 mL Bottle 02194 1 Liter Bottle 02130 6 Pk./340 mL Bottles 02190 6 Pk./1 Liter Bottles

#### SPECIAL LIQUID CONCENTRATE - PLUS

38122 340 mL Bottle 38127 1 Liter Bottle 38125 6 Pk./ 340 mL Bottles 38130 6 Pk./1 Liter Bottles

#### WATER GRADUATES (Plastic)

26 mL (1 oz.) with 05622 1 mL Marks

05630 100 mL (3-1/2 oz.) with

2 mL Marks

#### RING LINER (Cellulose, Non-Asbestos, Rolls - 60 Ft. Approx.)

14605 28 mm (1-1/8") Wide 14621 35 mm (1-3/8") Wide 41 mm (1-5/8") Wide 14648 16195 50 mm (2") Wide 14656 76 mm (3") Wide

#### **DOUBLE END PATTERN PAINTERS**

11665 Small 11673 Large

#### PREFERENCE LIQUID HAND SANITIZER

11451 16 oz Bottle with pump 11452 2 32 oz Bottles with pump

# Preference Liquid Hand Sanitizer

Favored 3:1 over the leading liquid sanitizer. Preference leaves your hands feeling soft and gloves slide on easily immediately after use.

- Kills 99.9% of most common germs
- Dries in less than 10 seconds
- · Gloves slide on easily
- Moisturizes the skin
- · Not harmful to beneficial microorganisms



# **Water Graduates**

The water/powder ratio of investments or die stones must be maintained precisely to secure the most accurate results. Whip Mix Water Graduates provide the means for measuring the water (or liquid) accurately. Water Graduates are plastic and are available in two sizes, 26 mL and 100 mL, and are marked off in 1 mL and 2 mL intervals, respectively. The flanged base of each graduate provides stability.



### **Double End Pattern Painters**

The highest quality Red Sable provides a soft yet resilient brush that does not mat or become limp when wet. The specially contoured handles provide a comfortable and secure grip. Their long life makes them a most economical brush to use.

One end has hairs 5/8" long, while the other end has a small cluster 3/8" long. An excellent applicator of mixed investment to patterns, it is also the ideal brush for applying die lubricants, surface tension reducers (debubblizer), and tinfoil substitutes. It is equally effective as an applicator for porcelain, plastic and stains used in crown and bridge work.

One end has hairs 5/8" long, the other has 1" long, stiffer, white bristles. Both ends are used in applying investment material, especially to the gingival and interproximal areas, when flasking full and partial dentures.



# Ring Liner (Non-Asbestos, Cellulose)

A liner that has no asbestos and none of its inherent hazards. This material has the necessary cushioning, but more importantly the correct water absorption quality which it feeds to the investment to provide and control setting expansion. During burnout it chars to a black ash which crumbles easily when the mold is pushed out of the ring. Liners should be 3 mm (1/8") short of each end of the casting ring.



# 



# **Teaching Aids**





# Mannequin Learn-A-Prep II

The #9684 Mannequin Learn-A-Prep II, is an excellent tool for hand coordination exercise.

It is designed to be placed inside the mannequin head to simulate tooth reduction inside the oral cavity.

The Mannequin Learn-A-Prep II will fit any mannequin that has a  $\frac{1}{4}$  x 28 inch screw size.

# Item No. Description

LEARN-A-PREP II

15810 #9683 Pkg. of 10 *Mannequin LEARN-A-PREP II* 

15829 #9684 Mannequin II, Pkg. of 10

Waxing Kit for "Drop Wax" Technique

Ivory

15385 Complete Kit (Includes: One Casting Wax, Regular, Assorted

Colors, Box of 12 Sticks, 25 g Bottle Waxing Powder, Double End

Pattern Painter - Large

15377 Waxing Powder, 25 g Bottle

Wax Carving Blocks (Opaque)

*Ivory* 11398

4.9 cm x 1.5 cm x 1.5 cm Block, Box of 50 (1-15/16" x 5/8" x 5/8")

Wax Carving Rods (Opaque)

Blue Green

11614 11630 4.6 cm (1-3/16") Diameter x 8.2 cm (3-1/4") Long, Each

#### Learn-A-Prep II

Learn-A-Prep II is an effective aid for the teaching of pre-clinical operative dentistry and a valuable tool for helping the dental student develop necessary dexterity and skill with a dental handpiece.

The three distinct resin layers of Learn-A-Prep II provide a way for students to:

- Learn the depth of the enamel, dentin and pulp layers
- Learn to differentiate the hardness between the enamel and dentin layers
- Practice before attempting a particular preparation on dentoform teeth

Recommended by Drs. Hardison and Skeeters of the University of Kentucky, College of Dentistry.

#### **Wax Carving Shapes**

Blocks and Rods. Especially developed to provide dental students with a wax suitable for carving tooth anatomy. Dental schools are invited to write for free samples and quotations.



# eaching Aids

# **Instructional Materials**

# CD/DVD Series



# Laboratory Techniques for Successful Crown & Bridge Restorations

This training module is filled with PowerPoint presentations offering laboratory techniques and step-bystep instructions for successful crown and bridge restorations. Included in this module are:

- Phosphate Investment Technique using FastFire 15
- Technical Tips for Crown & Bridge, Spruing and Investing
- Gypsum Bonded Investments
- · Refractory Investments
- Maryland Bridge Technique
- Gypsum Overview
- Producing Working Models using Resin-Fortified Die Stone
- Removable Partial Denture Framework Fabrication
- Trimming Orthodontic Study Models



# Obtaining Face-Bow Registration and Mounting Casts

This is the most complete series on articulation available from Whip Mix. Included in this module are:

- Model #8500 Articulator
- 2000 Series Articulators
- Model #2340 Articulator
- Complete Denture Technique using the Model #2240 Articulator
- 3000 Series Articulators
- 4000 Series Articulators
- Indirect Mounting Face-Bow
- Model 100 Simple Articulator



# Utilization of the 2240Q Articulator and Quick Mount Face Bow DVD

Featuring Robert F. Faulkner, DDS
Utilizing a Whip Mix 2240Q Articulator and QuickMount Facebow, Dr.
Faulkner takes you step-by-step through the making of maxillary and mandibular impressions; recording a Face Bow record; obtaining a centric relation interocclusal record; obtaining the protrusive guidance record; and proper mounting of a patient cast. In addition this video shows the basic procedures of setting an articulator prior to mounting a patient cast. The video is divided into several chapters for easy review of each step.

Length: 32 minutes



# Crown & Bridge Model & Die Preparation DVD

DVD will cover proper procedures involved with good model preparation. Pouring; Separating and Trimming; Pinning; Basing; Sectioning and Die Trimming are covered in this video. Successful completion of these steps will help insure the success of every prosthetic case.

Length: 16 minutes

The video is divided into chapters for easy review of each step.

# Item No. Description

Laboratory Techniques for Successful Crown & Bridge Restorations
 Obtaining Face-Bow Registration and Mounting Casts
 Utilization of the 2240Q Articulator and Quick Mount Face Bow
 Video: Crown & Bridge Model & Die Preparation

# **Instructional Materials**

# CD/DVD Series



# The Face-Bow Transfer and Mounting of Casts: Whip Mix Model 8645 "QuickMount" Face-Bow and Model 8500 Articulator

This demonstration video provides an in-depth examination of the features and uses of the Whip Mix Model 8645 "QuickMount" Face-Bow and Model 8500 Articulator, including techniques for obtaining interocclusal records. Program features clinician Dr. Jeffrey P. Okeson, D.M.D., and was produced in cooperation with the University of Kentucky, College of Dentistry, Department of Restorative Dentistry.

Length: 25 minutes. DVD format.



# Whip Mix Articulator Utilization: The 3000 Series

This video provides instructions on using the 3000 Series Articulators. Produced at the University of Manitoba Faculty of Dentistry by Dr. Duane Douglas and Dr. Denny Smith, this DVD covers procedures on both dentate and edentulous patients. Topics covered on the video include: Face-Bow registration, making interocclusal records, cast mounting, fabrication of a custom incisal guide table, and utilization of the Adjustable Guide Table.

Length: 24 minutes. DVD format.

# Item No. Description

24015 The Face-Bow Transfer and Mounting of Casts: Whip Mix #8645

"QuickMount" Face-Bow and Model 8500 Articulator
33032 Whip Mix Articulator Utilization: The 3000 Series



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**Connect with Us!** 







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