

VIGOR-VEST INVESTMENT

JEWELRY AND ART INVESTING INSTRUCTIONS

Vigor-Vest (with reinforcing fibers) Investment is designed to make investment molds with the maximum tolerance to process needs.

It contains refractory reinforcing fibers. It can be used for very finely detailed jewelry items as well as rings and sculptured figures.

DIRECTIONS FOR MIXING

Water to Powder Ratio - 38/100 to 39/100

Working Time - 8 to 9 Minutes

Consult the proportioning chart to determine the proper amount of water for the size mix to be made. Measure this amount of water into the mixing bowl. Add the properly weighed investment powder to water. Stir by hand, using the beater from the mixer or any convenient instrument to wet out the powder and break up any large lumps. Place bowl on mixer and mix at moderate speed for two to four minutes. Remove bowl from mixer and place on vacuum table and vacuum until the investment rises in bowl and collapses. The next step is to fill flasks by pouring investment down the side of the flask, allowing the investment to flow up around and through the patterns. This will help to prevent trapping of air bubbles. Applying light vibration while filling flasks will also help to prevent air entrapment. Fill flasks with investment to a height which completely covers the top of the patterns. Place invested flasks under vacuum and vacuum for one and a half to two minutes. While under vacuum, the flasks should be vibrated to help release air bubbles from the surface of patterns. This vibration should be continued for a few seconds after the vacuum has been released. This will allow the investment to flow back around the pattern. The flasks are filled to the top and vibrated to level off the investment. The completed investing cycle should take eight to nine minutes.

FACTS TO REMEMBER

The following should be kept in mind when working with investment:

Temperature

Increasing the temperature of the water will cause the investment to set faster and shorten the working time. Also increasing temperature of powder will cause the investment to set faster and shorten the working time.

Working Time

The working time of Vigor-Vest is eight to nine minutes. If you have been using a shorter working time, merely lengthen it (eight to nine minutes) by increasing the mixing time.

(Working time is the length of time from the point when the water touches the powder to point when the flask is set aside to harden.)

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VIGOR-VEST (continued)

Cleanliness

Previously set or hardened investment will act as an accelerator. Therefore, mixing equipment should be cleaned thoroughly after each mix.

DIRECTIONS FOR MIXING

The basic Water/Powder ratio is 38 parts water per 100 parts powder by weight. The use of less water will produce a thicker (i.e. higher viscosity) slurry. This will also result in an increase in mold strength.

The use of more water (example: W/P = 39/100) will give a thinner mix (i.e. less viscose). Such a mix will give slightly weaker molds. Critical pattern setups will thus be more likely to develop mold cracks.

WATER / POWDER CHART

Wt of Powder (avoir)	W/P = 38/100 Volume of Water		W/P - 39/100 Volume of Water	
	(Fl.Oz.)	(Milliliters)	(Fl.Oz.)	(Milliliters)
1 ounce	3/8.....	11	3/8.....	11
4 ounce	1-1/2.....	43	1-1/2.....	43
8 ounces	3.....	86	3-1/8.....	88
12 ounces	4-1/2.....	129	4-5/8.....	133
1 pound	6.....	172	6-1/4.....	177
2 pounds	12.....	345	12-1/2.....	354
3 pounds	18-1/4.....	517	18-3/4.....	531
4 pounds	24-3/8.....	690	25.....	708
5 pounds	30-3/8.....	862	31-1/4.....	885

Recommended graduates:

21.740 250ml
21.74010 1000ml

To order Vigor-Vest Investments:

21.0843/10 4 lb. "Starter" Carton
21.0843/25 25 lb. Carton
21.0843/100 100 lb. Economy Carton



Carlstadt, NJ 07072

IS 21.0843