

-Instruction for Use-

Storage

- JP Vest powder and liquid should be stored in a dry place at temperatures between **19-23Deg C**
- The liquid is sensitive to freezing and should not be stored below 5degC.
- Please dispose and use a new bottle if exposure to low temperatures has been suspected.

Working Temperature

- Investing should be carried out at temperatures of **19-23degC**.
- Great variations in working temperatures can have significant effects on Working time and expansion.

Powder to Liquid ratio

14ml liquid + 10ml Deionised Water /100g of Investment

Note – the supplied liquid needs to be diluted as required using deionised water. A concentration of 58% (14 liquid:10 water) is recommended as a starting point for muffles between 100-200g scale. Please ensure that all liquids used are at **19-23degC**.

Spruing Technique

- Try to keep a space of at least 3mm between objects
- Avoid exceeding 2 objects on 100g muffles and 4 objects with 100g muffles (3 part Bridges deemed at 2 objects)

Investing Procedure

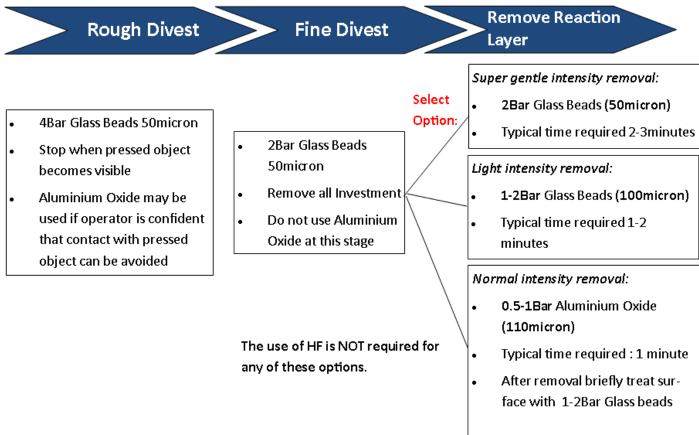
- Hand mix the Powder/liquid mix for 30-45 seconds prior to machine mixing (mixture may be quite viscous at first but will become more fluid throughout mixing.
- Mixing time (Vacuum mixer) **2.5 minutes** @ 300-400 RPM
- Investing Gently vibrate the ring using a dental vibrator avoiding excessive movement
- Working time 6-7 minutes (at Room Temperature)
- Set time 9-11 minutes (at Room Temperature)
- Allow to stand for 30minutes prior to speed heating (measured from start of liquid addition).
 Note use of higher liquid concentrations will result in working times and set times at the longer end of the specified ranges
- The investment may be removed from the silicone ring and sprue former after 20mins and further drying allowed uncovered for the remaining 10min bench set time.

Burnout

- Preheat temperature of burnout furnace should be at 850 Deg C
- Please follow the manufacturer's instructions for Ingot and Plunger pre-heat requirements and procedure.
- Place Investment muffle into the burnout furnace at 850 Deg C.
- Once 850 Deg C has been reached again, a Hold Time of at least 45minutes should be applied for 100g investments
- Transfer from Burnout furnace to Pressing Furnace must not take longer than 30seconds to avoid excessive temperature drop (cracking may occur below 650deg C) Note – for larger investments of **200g**, please increase the minimum hold time to **60minutes**.

Pressing Procedure

-Please follow the Ingot and Press Oven manufacturer's procedure-



Note – final treatment with low pressure Aluminium Oxide followed by Glass beads affords a smoother surface but can affect the fit if carried out on inside of crow. Please use as per preference.

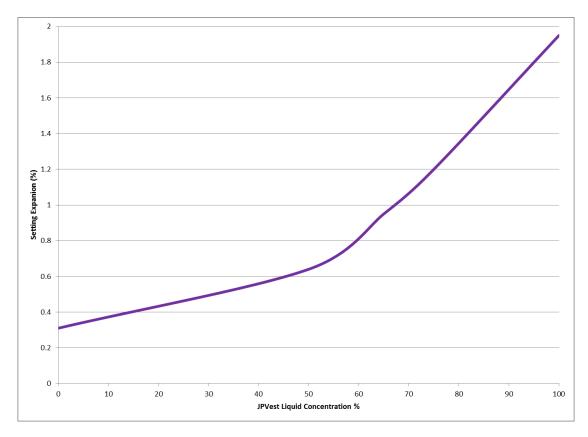
Typical setting expansion results at 20°C:

Setting Expansion %	0.86
Working time (mins)	7
Set Time (mins)	10

- This product has not been fully tested with debubblisers and the use of these should therefore be avoided in case of any unforeseen interactions.
- Please ensure that all mixing equipment is dry and decontaminated prior to use
- The supplied liquid should be diluted with deionised water at 19-23degC prior to use.
- This investment material contains quartz powder and inhalation should be avoided.
- Where supplied, examine the Freeze Indicator for a distinctive purple colour if this is the case, the liquid may have frozen during transit or storage and should not be used.

Divesting

Expansion Data:



Setting Expansion vs JPVest Liquid concentration:

Thermal Expansion at 50% liquid concentration (total- 1.1%):

