

JRVT

YELLOW TYPE II/III HIGH NOBLE ALLOY

JRVT is a unique 77% Au that has the characteristics of both inlay-onlay and type III casting golds. JRVT, with its 22 micron grain size and 55% elongation, gives you the ability to burnish without fear of flaking margins. It is ductile enough for intricate inlays and strong enough for full cast crowns. JRVT also rapidly polishes to a brilliant luster.

PROPERTIES

Melting Range 1650° F to 1755° F
Density 15.4 g/cm³
Hardness 120 HV
Tensile Elongation 55%
Grain Size 22 microns
Tensile Yield Strength (PSI) 35,300
Ultimate Tensile Strength (PSI) 59,300

CHEMISTRY

Gold 77%
Silver 13%
Copper 8.5%
Palladium 1%

Contains less than 1%
Zinc, Indium, Iridium

Classification - High Noble

PROCESSING TECHNIQUE

SPRUNG

The indirect method is recommended for small bridges. Direct spruing is recommended for inlays, onlays and crowns. Sprue to the bulkiest section. Patterns should be 1/4 inch (6mm) from the top of the ring.

INVESTMENT

Gypsum bonded investment is recommended. For bridges and full crowns use the thermal technique with a burnout temperature of 1200°F. The hygroscopic technique and a burnout temperature of 900°F is recommended for inlays and onlays.

MELTING AND CASTING

JRVT can be melted with gas and compressed air. When melting with gas and oxygen, set gas pressure at 5 psi. and oxygen pressure at 10 psi. Cast the alloy when it is fully puddled, balled and free from oxide on the surface. Carbon based casting fluxes may be used but should not be necessary when melting with a reducing flame. JRVT can be water quenched or bench cooled without changes in its properties. The casting temperature is 1850°F (1010°C).

DEVESTING AND FINISHING

Devested castings may be pickled. If aluminum oxide blasting is used, protect marginal areas. Use a fine stone to establish a uniform surface finish.

POLISHING

Use low speeds and light pressure

1. Rubber wheel with white flexi wheel
2. Polish with tripoli compound using a soft or medium felt wheel and/or a soft Robinson brush
3. Using a rag wheel and/or a soft Robinson brush polish with rouge
4. Ultrasonically clean in water or ethyl alcohol for five minutes then shine with tin oxide and soft Robinson brush dry or with ethyl alcohol

SOLDER AND FLUX

Solder: 650 Fine Solder
Flux: Brown Fluoride Flux

JRVT.5165Y

