

# **JB**

## YELLOW HIGH NOBLE CASTING ALLOY

**JB** is a type II inlay, onlay and crown casting gold. It is one of a family of seven high gold content casting alloys offered by Jensen Industries. JB features 78% nobility, rich color, gold strength, competitive cost, and melts, casts and finishes and polishes with speed, ease and accuracy. JB has a very low vickers hardness and high quality of burnishability making it the ideal alloy for multi-surface inlay and onlay restorations.

### PROPERTIES

Melting Range . . . . . 1700° to 1825°F  
Density . . . . . 15.4 g/cm<sup>3</sup>  
Hardness . . . . . 95 HV  
Tensile Elongation . . . . . 45%  
Tensile Yield Strength (PSI) . . . . . 24,700  
Ultimate Tensile Strength (PSI) . . . . . 47,800

### CHEMISTRY

Gold . . . . . 75%  
Silver . . . . . 15%  
Copper . . . . . 6%  
Palladium . . . . . 3%

Contains less than 1%  
Zinc, Indium, Iridium

Classification - High Noble

### PROCESSING TECHNIQUE

#### SPRUIING

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" (6mm) from the top of the ring.

#### INVESTMENT AND BURNOUT

Either gypsum or phosphate bonded investment may be used following the manufacturer's instructions. The burnout temperature should be at least 900°F (480°C) and should not exceed 1200°F (650°C)

#### MELTING AND CASTING

Extra winds of the casting arm are not required. Gas/compressed air or gas/oxygen flame with 5 PSI gas pressure and 10 PSI oxygen pressure is recommended. JB will fully puddle and form a ball before it is ready to cast. **DO NOT OVERHEAT.** The casting temperature is 1900°F (1040°C).

#### DEVESTING AND FINISHING

Bench cool - quench when bottom of button turns dark. Remove castings from investment. Blast with aluminum oxide to remove investment particles and oxidation. Finish and polish using standard techniques.

#### SOLDER AND FLUX

Solder: 650 Fine Solder  
Flux: Brown Fluoride Flux