

# JA

## YELLOW INLAY HIGH NOBLE ALLOY

**JA** is a type I soft, single-surface inlay casting gold. It is one of a family of eight high gold content casting alloys offered by Jensen Industries. JA features 83.3% nobility, rich gold color, high burnishability, low vickers hardness, competitive cost, and melts, casts, finishes and polishes with speed, ease and accuracy.

### PROPERTIES

Melting Range . . . . . 1735° to 1815°F  
Density . . . . . 16.4 g/cm<sup>3</sup>  
Hardness . . . . . 70 HV  
Tensile Elongation. . . . . 45%  
Tensile Strength (PSI) . . . . . 14,600  
Ultimate Tensile Strength (PSI) . 40,000

### CHEMISTRY

Gold . . . . . 83.3%  
Silver . . . . . 12.5%  
Copper . . . . . 3.5%

Contains less than 1%  
Zinc, Iridium

Classification - High Noble

### PROCESSING TECHNIQUE

#### SPRUNG

The direct method is recommended.

#### INVESTMENT AND BURNOUT

Gypsum bonded investment is recommended. The hygroscopic technique and a burnout temperature of 900°F (480°C) is recommended for inlays.

#### MELTING AND CASTING

Extra winds of the casting arm are not required. A gas/compressed air or gas/oxygen flame with 5 PSI gas pressure and 10 PSI oxygen pressure is recommended. JA 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