JC

YELLOW CROWN AND BRIDGE ALLOY

JC is a type III crown and bridge casting gold. It is one of a family of seven high gold content casting alloys offered by Jensen Industries. JC features 78% nobility, rich gold color, high strength, competitive cost, and melts, casts, finishes and polishes with speed, ease and accuracy.

PROPERTIES

Melting Range	1670 to 1760°F
Density	15.2 g/cm^3
Grain Size	24 microns
Hardness	125 HV
Tensile Elongation	50%
Tensile Yield Strength (PSI)	39,500
Ultimate Tensile Strength (PSI)	62,000

CHEMISTRY

Gold	75%
Silver	11%
Copper	10%
Palladium	3 %

Contains less than 1%
Zinc, Indium, Iridium

Classification - High Noble

PROCESSING TECHNIQUE

SPRUING

The indirect method is recommended for multi-units. Use an 8 gauge runner bar with 10 gauge connectors. If preferred, the direct method may be used on both single units and small bridges. Use a 10 gauge sprue 1/4" (6mm) to 3/8" (9mm) long. Sprues longer than 3/8" (9mm) should have a reservoir 1/16" (1.5mm) from pattern. Patterns should be a maximum of 1/4" (6mm) from top of investment.

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. A gas/compressed air or gas/oxygen flame with 5 PSI gas and 10 PSI oxygen is recommended. The alloy will fully puddle and form a ball before it is ready to cast. The casting temperature is 1850°F (1010°C). Bench cool to a dull red heat before quenching.

DEVESTING AND FINISHING

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