JC
HIGH NOBLE YELLOW TYPE 3 CROWN & BRIDGE ALLOY

JC was one of the first alloys developed by Jensen Dental more than 35 years ago. A high noble, yellow crown and bridge alloy, JC is perfect for most cast-gold restorative work including single and partial crowns, onlays, and short-span bridges. JC offers a stunning 18 carat yellow color and is well known by industry professionals to be a strong alloy that melts, casts, finishes and polishes with ease and accuracy.

PROPERTIES	
Melting Range	1670 to 1760ºF (910º to 960ºC)
Density	15.2 g/cm³
Grain Size	24 microns
Hardness	125 HV
Tensile Elongation	50%
Tensile Yield Strength	39,500 psi (270 MPa)
Ultimate Tensile Strength	62,000 psi (430 MPa)

CHEMISTRY	
Gold	75%
Silver	11%
Copper	10%
Palladium	3 %
Contains less than 1% Zinc, Indium, Iridium	
Au & Pt group - 78%	
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 900ºF (480ºC) and should not exceed 1200ºF (650ºC).

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 1850ºF (1010ºC). 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