



BOCRAFT G

HARD

PALE YELLOW - BONDING - 75% GOLD

Au=75%, Pd=7.6%, Pt=3%, Ag=10.8%, In=2.5%,
Others=1.1%

- High Gold And PGM content bonding alloy
- A versatile high gold yellow alloy
- Economic alloy suitable for all applications

Properties:

MELTING RANGE	1100 - 1150°C. Cast at 1250°C
DENSITY	16.2 g/cm ³
HARDNESS	220 HV2.5 - After porcelain firing
MODULUS OF ELASTICITY	70 GPa - After porcelain firing
0.2%PROOF STRESS	453 MPa - After porcelain firing
ELONGATION	17% - After porcelain firing
THERMAL EXPANSION COEFFICIENT	14.9 m/m/°K (20 - 500°C)

Working Procedure:

PRE-HEATING AND INVESTMENT

Use only high quality phosphate bonded investment. Pre-heat at 900°C for 30 - 120 minutes according to cylinder size, usually around 45 minutes.

CASTING

Casting temperature is 1250°C. Do not quench after casting; bench cool.

FINISHING & CLEANING

Use only aluminium oxide stones, carbide burrs or ceramic bonded stones, then boil in distilled water or use ultrasonic with distilled water for at least 5 minutes.

DEGASSING AND OXIDATION

If vacuum degassing is used - not essential - hold the unit at 960°C for 3 minutes prior to oxidising. As a rule, oxidise for 2 minutes in air at the same firing temperature that is to be used for the first layer of opaque, usually 960°C. The oxidation layer is usually dark grey in colour and should be even over the surface of the restoration. If the colour is patchy, then air blast the oxide away and re-oxidise.

PORCELAIN - MOST IMPORTANT

Each porcelain firing must have a slow cool; Hold at 850°C for 5 minutes, then slowly lower the platform. This ensures that the expansion differences between the metal and porcelain do not cause cracking during cooling. Cracking in the porcelain may occur through thermal expansion differences if you do not follow this procedure.

SOLDERING

Pre-porcelain firing use Charles Booth 1030°C yellow; post-porcelain use Charles Booth 720°C yellow. Use a low aggressive flux when soldering to ensure no etching of existing porcelain.

PRODUCED TO NHS/MDD REQUIREMENTS AND COMPLIES WITH ISO 9693:2000