DINSMORE AND ASSOCIATES, INC.

COBALTCHROME SP2

DIRECT METAL LASER SINTERING MATERIAL

DESCRIPTION:

COBALTCHROME SP2 IS A CO, CR, MO AND W BASED ALLOY IN FINE POWDER FORM. ITS COMPOSITION CORRESPONDS TO TYPE 4 COCR DENTAL MATERIAL IN EN ISO 22674:2006 STANDARD. IT ALSO FULFILLS THE CHEMICAL AND THERMAL REQUIREMENTS OF EN ISO 9693 FOR COCR PFM (PORCELAIN FUSED METAL) OF DENTAL MATERIALS (NI CONTENT: < 0.1 %, NO CD OR BE) AND REQUIREMENTS OF EN ISO 7504, EN ISO 10993-1:2003 AND 10993-5:1999 REGARDING THE BIOCOMPATIBILITY AND CYTOTOXICITY OF THE DENTAL MATERIALS.

APPLICATIONS:

THIS MATERIAL IS IDEAL FOR PRODUCING DENTAL RESTORATIONS (CROWNS, BRIDGES ETC.). STANDARD PROCESSING PARAMETERS USE FULL MELTING OF THE ENTIRE GEOMETRY WITH 20 μM LAYER THICKNESS.

COBALTCHROME SP2

PROPERTY	ASTM	METRIC UNITS AT 20 °C	METRIC UNITS STRESS RELIEVED
ULTIMATE TENSILE STRENGTH	E466	800 MPA	900 MPA
0.2% PROOF STRENGTH	E466	600 MPA	700 MPA
ELONGATION	E466	10 %	MIN 2%
YOUNGS MODULUS	E466	170 GPA	180 GPA
HARDNESS HV10	E466	320	350

Stress Relieved Condition : Mechanical properties of parts at 20 °C, after stress relieving at 750 °C for 1 hour and firing at 880 °C for 5 minutes

SERVICES AVAILABLE

PRODUCT DESIGN
RAPID PROTOTYPING
SLA
FRSLA
POLYJET
SLS
DMLS
FDM
PLASTIC CASTING
CNC MACHINING
INJECTION MOLD TOOLING
RAPID TOOLING
PRODUCTION TOOLING
INJECTION MOLDING
METAL CASTING

1681 KETTERING STREET
IRVINE, CA 92614
PHONE 714.641.7111
FAX 714.641.3111

DINSMOREINC.COM