

NEOLOY® PLUS CoCr ALLOY



Excellent Quality for Cobalt-Chromium Cast Partial Dentures

Neoloy Plus CoCr alloy is excellent for torch casting or induction casting. Its cylindrical ingot design provides quick melting and reduces oxidation. Neoloy Plus CoCr alloy delivers inclusion-free precision castings with adjustable spring hardness, fracture resistant elasticity, and a brilliant luster, highly resistant to corrosion.

Features

- Excellent homogeneity and precise alloy chemistry with a balanced formulation of cobalt, chromium, and molybdenum
- Consistent performance and longevity under repeated masticatory force
- Longevity due to yield strength and modulus of elasticity which prevent deformation of the primary framework and clasps
- A strong, passive protective oxide layer formulation, preventing corrosion damage
- Comfort, wearability, and lasting beauty

Applications

- Removable partial denture frameworks
- Clasps
- Saddles
- Implant superstructures
- Sub-structure for polymer resins (acrylic & composites)

Typical Material Properties*

Tensile Strength, Kpsi (MPa)	109.5 (755)	Vickers Hardness, HV1	354
Yield Strength, Kpsi (MPa)	86.5 (597)	Density, g/cm ³	8.7
Modulus of Elasticity, psi (Mpa) x 106	26.1 (0.18)	Color / Form	White / Ingot
Elongation, %	7	Melting Range, °C	1,375-1,400

*These results are based on the testing methods, frequency and procedures of Ransom & Randolph or its approved suppliers. The levels referenced herein are only for general guidance and do not constitute a firm specification.

Elemental Composition (wt %)**

Cobalt (Co)	Chromium (Cr)	Molybdenum (Mo)	Iron (Fe)
63.5%	27.0%	5.5%	2.0%

**As provided by the manufacturer.

Storage

Keep bag closed when not in use. Store locked up in a cool, dry area.

Safety

Danger. Harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Suspected of causing cancer inhalation. May cause



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damage to organs (lungs) through prolonged or repeated exposure inhalation. May cause long lasting harmful effects to aquatic life. Prevention Cobalt dust may form combustible dust concentrations in air. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink, or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. If feeling unwell, get medical advice/attention. See SDS for more information.

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local regulations remains the responsibility of the user. All potential liability related to the sale and use of this product is limited to the cost of the particular goods sold in their respective transactions.



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