

## VARZENE DENTAL

### Co Cr Based alloys (Discs, Round bars and Powder)

#### VARZENT - DISC

Co Based Disc are used Dental application, for example, crowns and bridge and abutments as a one piece. CoCr Disks are commonly use in Dental Surgery application. Therefore, CoCr Disks as a Medical implant Class 2a grade CoCr alloy (composition ISO 5832-4) for ultimate biocompatibility. Also, Easily sintered to conform with EN ISO 22674 2006 Class 4 metallic material for single and multiple units, and implant retained superstructure. Consequently, CoCr Based Disks are use for milling in Dental application, the disks have good biocompatibility and suitable mechanical and physical properties.

#### VARZENT - Co

Co Based round bar or line are used in Dental application, for example, ceramic veneered crowns and bridges, telescopic crowns, combined restorations and attachments. Co round bars are commonly use in Dental Surgery application with different type of production technique according to requirement. Therefore, these materials are partial removable dental materials which, exploiting the alloy's elasticity, can be attached to natural teeth of casted hooks. Moreover, Co round bars have strong resistance to traction and excellent workability, which are smooth, also compact surface. Regarding to Co properties its reduce the oxide formation, with a low specific weight and excellent mechanical properties. All in all, the bars have good biocompatibility and suitable mechanical and physical properties for Dental Industry.

#### VARZENT - Ni

Ni Based round bar or line are used in Dental application, for example, bridge which is fixed prosthesis enables to replace the missing teeth, and also it can be use as a crowns where bridge is anchored on those teeth. Ni round bars are commonly use in Dental Surgery application with different type of production technique according to requirement. Therefore, these materials which are all of bridges and crowns alloys resistance to corrosion and bio-compatibility.

#### VARZENT - POWDER

Co Based Powder are used in Dental application, for example, crowns and bridge and abutments as a one piece after production. Co Powder are commonly use in Dental Surgery application. Therefore, Co Powder used in 3D printer industry which produce dental implant in different shape, the powders have good biocompatibility and suitable mechanical and physical properties. Most important things, powder can be produce with various grain size according to customer requirement.

(Values given in mass - %; Co = base) :

C	Si	Mn	Cr	Mo	W	Fe	Ni
< 0,1	1	0,8	25	4	10	< 0,1	< 0,1

#### Nickel Based alloy (Round Bars)

Ni	Cr	Mo	Mn	Si	Ta	Nb	Fe
59,53	24	10	1.5	1,2	1,5	1	0,2

## VARZENE MEDICAL

#### Ti - VAR

Titanium Grade 5 is the most commercially available of all titanium alloys. It offers an excellent combination of high strength and toughness. Grade 5 titanium has good welding and fabrication characteristics.

- High Strength Titanium
- Heat Treatable
- Good Ductility
- Good Fabricability
- Good Weldability

Standards

AMS 4928, AMS 4965, AMS 4967, ASME SB-348, DMS 1570, MIL-T-9047, ASME SB-265, AMS 4905, AMS 4911, BMS 7-347 (P.Q.), DMS 1592, MIL-T-9046

Forms Available

Bar, Wire, Sheet

C %	N %	O %	H %	Cb+Ta %	Ti %	Al %	Fe %
0,08	0,05	0,2	0,0125	3,5 - 4,0	Ba	5,50 - 6,75	0,25

#### IMP - VAR 1.4441 LVM

Medical, Surgical or Implant grade stainless that we provide as round bar.

316 LVM is commonly used for medical industry for many years. 316 LVM (Low Carbon Vacuum melt) stainless steel has high level of purity and cleanliness as a result of vacuum melted process.

This alloy contain nickel, chromium and molybden elements so another important property is excellent corrosion resistant as compared to 316 L stainless steel.

C %	Mn %	P %	S %	Si %	Cr %	Ni %	Mo %
≤ 0,03	≤ 2	≤ 0,025	≤ 0,01	≤ 1	17 - 19	13 - 15,5	≤ 3,2





*Steel With You..*

*"From Turkey"*



**VARDENT - DISC**  
**VARDENT - Co**  
**VARDENT - Ni**  
**VARDENT - POWDER**  
**Ti - VAR**  
**Ti - VAR - Powder**  
**IMP - VAR 1.4441 LWM**

## Special Brand Materials of **"VARZENE"**

CoCr Powder



Ti Alloy Powder

