## Infogramm® remanium® star

| Characteristics    | remanium® star is a new generation CoCr bonding alloy with unusually low hardness.   |  |  |  |
|--------------------|--|--|--|--|
| Indications        | A variety of indications:  Crowns and bridges  Telescope crowns  Implant supported supra-structures  Adhesively fixed bridges  Secondary parts for cast alloy partial denture frameworks |  |  |  |
| Product advantages | <ul> <li>Exceptionally good working characteristics, especially<br/>when trimming and polishing, due to the unusually low<br/>hardness.</li> </ul>                                       |  |  |  |
|                    | <ul> <li>Excellent for ceramic bonding due to a low coefficient of<br/>thermal expansion.</li> </ul>   |  |  |  |
|                    | Increased working efficiency: No oxide firing required.  |  |  |  |
|                    | Excellent melting and casting characteristics.   |  |  |  |
|                    | <ul> <li>Flexible handling:         High frequency, electrical arc and the torch are all methods with which remanium® star can be molten without spitting.     </li> </ul>               |  |  |  |
|                    | • Excellent laser welding because <i>remanium® star</i> is carbon-free.  |  |  |  |
|                    | Bio-compatible:     Nickel-free     Beryllium-free     Iron-free     No questionable elements such as indium or gallium     High resistance to corrosion                                 |  |  |  |



| Composition                        | C -                                    | C :-          | 1.4.7                   | C:    |  |
|------------------------------------|--|---------------|-------------------------|-------|--|
| % Mass                             | Co                                     | Cr            | W                       | Si    |  |
|                                    | 60,5                                   | 28,0          | 9,0                     | 1,5   |  |
|                                    | Other elements under 1%: N, Mn, Nb     |               |                         |       |  |
| T 1 ' 1 1 .                        |  |               |                         |       |  |
| Technical data After DIN-No. 13912 | Proof stress R <sub>p 0,2</sub> (MPa)  |               | 620                     |       |  |
|                                    | Tensile strength R <sub>m</sub> (MPa)  |               | 845                     |       |  |
|                                    | Modulus of elasticity (GPa)            |               | 190                     |       |  |
|                                    | Hardness (HV <sub>10</sub> )           |               | 280                     |       |  |
|                                    | Fracture elongation A <sub>5</sub> (%) |               |                         |       |  |
|                                    | Solidus T <sub>s</sub> (°C)            |               | 1320                    |       |  |
|                                    | Liquidus T <sub>I</sub> (°C)           |               | 1410<br>8,6             |       |  |
|                                    |  | Density g/cm³ |                         |       |  |
|                                    | CTE (25-500 °C) (K <sup>-1</sup> )     |               | 14,1 x 10 <sup>-6</sup> |       |  |
|                                    | Melting                                |               | +++                     |       |  |
|                                    | Casting                                |               | +++                     |       |  |
|                                    | Torch casting                          |               | +++                     |       |  |
|                                    | Finishing                              |               | +++                     |       |  |
|                                    | Milling characteristics                |               | +++                     |       |  |
|                                    | Ceramic bonding                        |               | +++                     |       |  |
|                                    | Polishing                              |               | +++                     |       |  |
|                                    | De-gas                                 |               | No                      |       |  |
|                                    | Laser weldir                           |               | +++                     |       |  |
|                                    | Soldering with                         |               | CoCr 102-306-00         |       |  |
|                                    | Investment material                    |               | Castorit® all           | speed |  |
|                                    |  |               | Trivest                 |       |  |
|                                    |  |               | Castorit® sup           | er C  |  |
|                                    | +++ = excellent ++ = very good         |               |                         |       |  |
| Test marking/patents/ CE 0483      |  |               |                         |       |  |
| certificates of quality:           | Medical Device Services Gilching       |               |                         |       |  |
| Units available to order           | 50 g Order-No. 102-621-00              |               |                         |       |  |
|                                    | 250 g Order-No. 102-622-00             |               |                         |       |  |
|                                    | 1000 g Order-No. 102-620-00            |               |                         |       |  |
| Date of information                | 04/04                                  |               |                         |       |  |
|                                    |  |               |                         |       |  |
|                                    |  |               | <b>F</b>                |       |  |