

Vulkam

For durable miniature components

29 June 2021, 11:00 h | Vulkam

Vulkam launches a range of new metals

Trends and innovations/Materials

Whether in the field of implantology, minimally invasive surgery or dentistry: according to the manufacturer (Vulkam), the newly developed metal alloys, so-called Vulkalloys, are characterised by a high mechanical strength of up to 3,000 MPa, an elastic deformation capacity of 2%, a hardness of up to 797 HV and a possible friction coefficient of less than 0.1. These are metals that are said to exceed titanium alloys such as TA6V by 40%, particularly in terms of specific strength. They are expected to allow a reduction in component weight of around 40% and a reduction in size of up to 50%.

The metal alloys are characterised by a dual elasticity effect and high hardness, which improves the longevity of medical components. A range of Vulkalloys has been specifically developed to meet the highest requirements in terms of mechanical and physical properties as well as biocompatibility.

Vulkam is a French company specialising in amorphous metal alloys. The technology used consists of modifying the atomic structure of metals to obtain the particular mechanical properties of the components manufactured. The component manufacturing process has been specially developed for Vulkalloys and adapted to the production of miniature components. In two patented phases, components or preforms of different shapes are produced and the geometry is optimised.