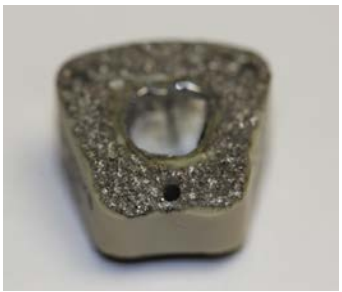
Hydrophilic Surface

Another innovation that Surface Modification Systems Inc. has recently accomplished is creation of a successful dry type hydrophilic surface. When titanium and its alloys absorb hydrocarbons (even exposure to air will do this), it starts displaying a hydrophobic behavior. This of course restricts blood plasmas from penetrating pores slowing integration. Currently, only expensive wet sealed implants could retain hydrophillicity.

SMS has demonstrated, normal packaging can be used with its new dry type hydrophilic surface greatly reducing cost and improving ease of insertion. Please see this innovation at work on our youtube video linked in this newsletter

Watch video

Additional SMS Process Capability



Watch Video

www.youtube.com/watch?v=-ml4ae0jX0M

SMS conducts a range of additional processes, not mentioned above, including vacuum and controlled atmospheric (CAPS) plasma spraying, porous titanium coatings on metallic and PEEK substrates, air plasma spraying of hydroxyapatite and ceramic oxides (titania, alumina), and plasma electrolytic oxidation (PEO). FDA approved masterfiles are available for these process.

Surface Modification Systems offers metallurgical laboratory services including X-Ray Diffraction, Scanning Electron Microscopy, Optical Microscopy, and standard sample mounting & polishing