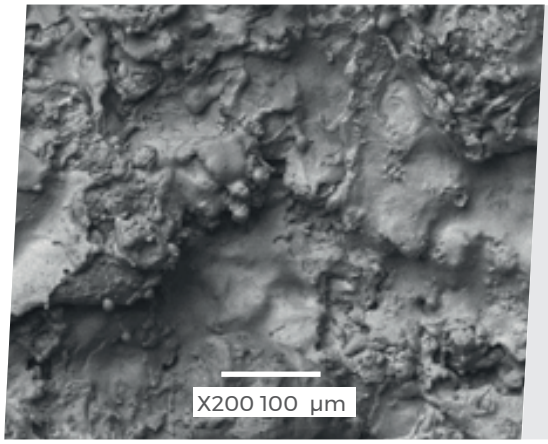
Lincotek
Medical

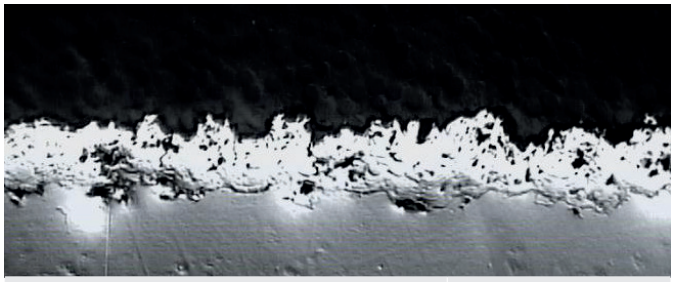
大气等离子喷涂钛涂层



大气等离子喷涂钛涂层具有不同的厚度和粗糙度，适用于多种医疗植入物。
低粗糙度的钛涂层通常用于齿科种植体和脊柱植入物，而高粗糙度钛涂层常用于关节产品植入物。

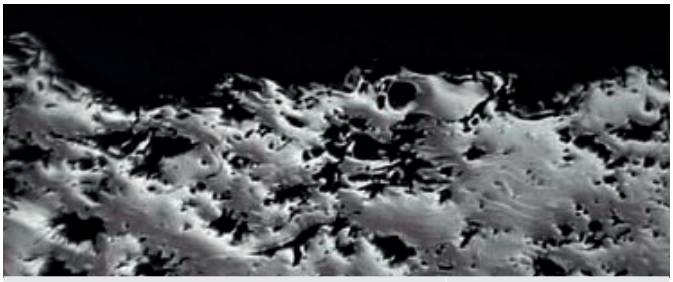
大气等离子喷涂钛涂层

Y371



建议厚度	20 -100 µm
粘结强度	≥ 45 MPa
孔隙率	4 -7 %
粗糙度 (Rt)	40 - 80 µm

Y367

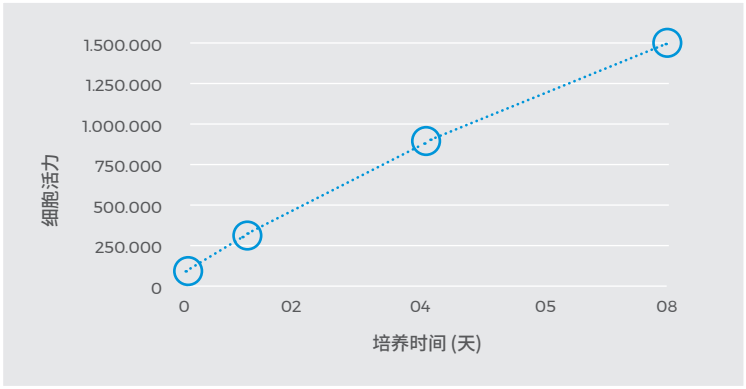


建议厚度	150 - 350 µm
粘结强度	≥ 30 MPa
孔隙率	20 - 40 %
粗糙度 (Rt)	90 -170 µm

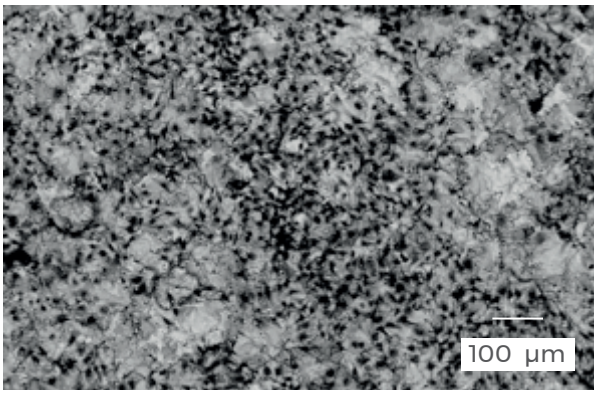
通过对涂层的体外和体内特性的研究，发现两种涂层都具有良好的生物相容性。[1,2,3,4]

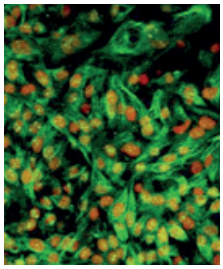
Y371

MTT测试 - Y371钛涂层上的SAOS-2

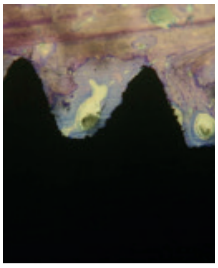


成骨细胞生长增殖趋势[1]

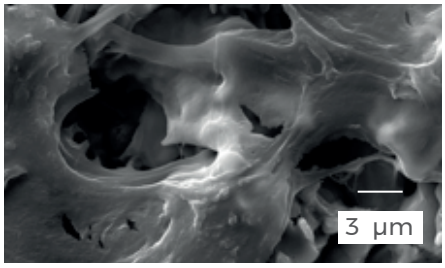




细胞培植8天后，激光共聚焦扫描显微镜：碱性磷酸酶标志物为绿色，细胞核是红色。[1]



等离子喷涂Y371的皮质骨植入物植入羊体内12周后的组织切片。[2]



细胞培植8天后的扫描电镜图像(1000倍和3000倍放大倍率)：细胞展开并附着于涂层表面。[1]

Y371和Y367钛涂层拥有数十年的医疗植入物相关临床应用的成功案例。所有案例的基本要求始终保持一致，利用骨整合技术使涂层与宿主骨组织更好的结合。

1. In vitro assay performed by Prof. L. Visai, Pavia University, Italy
2. In vivo test and histology performed by A. Rebaudi, P. Trisi, BIOCRA – Pescara – Italy;
3. Proceedings eCM XIII 2012 - In vivo evaluation of titanium macro-porous structures manufactured through an innovative powder metallurgy approach - R. Ferro de Godoy, G.Blunn, M. Coathup, A.Goodship;
4. Proceedings 9th World Biomaterial Congress 2012 - In-vivo assessment of the ingrowth potential of engineered surface topographies produced by Fast Plasma Sintering - A. Goodship, G. Blunn, E. Preve, L. Facchini, F. Bucciotti and P. Robotti;