

One step coating of nitinol with CoBlast

Shape memory and superelasticity preserved

Dry, ambient temperature, ambient pressure

Thin, flexible coatings

Fatigue durable

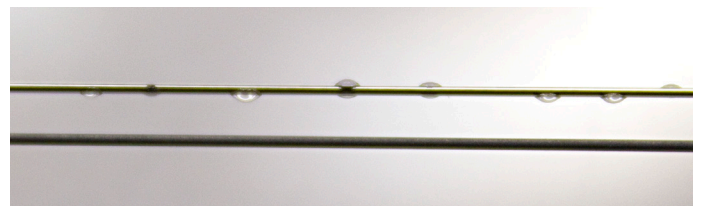
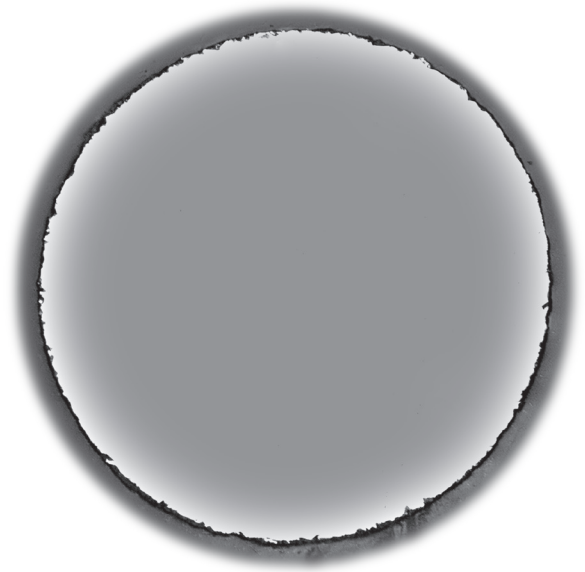
CoBlast Skins offer unique possibilities for the coating of nitinol. The ambient process conditions ensure that the shape memory and superelastic properties of the nitinol are maintained after coating, and the thin, well integrated Skins are flexible and resistant to delamination even after millions of cycles.

Nitinol plates and stents have been coated with calcium phosphates including hydroxyapatite, producing consistent coatings with the potential to be used for biocompatibility or drug delivery purposes. Medical guidewires coated with PTFE have demonstrated reduced friction, and stainless steel plates with similar coatings have demonstrated greatly increased wear resistance. PTFE coatings are also ultrahydrophobic.

CoBlast has been applied to complex 3D geometries of other materials and to sections as thin as 25 microns, and similar capabilities can be expected on nitinol. As this substrate is under active development, please contact us for up to date information or to discuss potential applications.

#### CoBlast

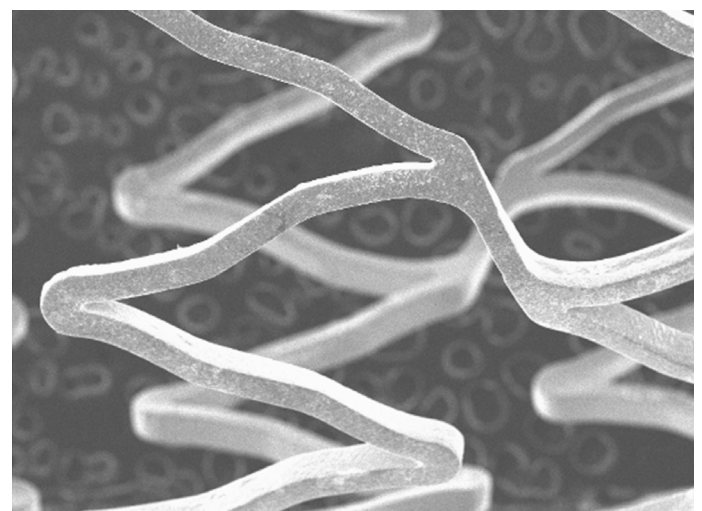
Enbio's CoBlast process replaces the oxide layer of metals with a thin, customised, and mechanochemically bonded Skin. The process is clean and simple, requiring no thermal input and no wet chemistry. The CoBlast Skin is integrated with the substrate to a level beyond the capabilities of traditional coatings, providing a new interface through which the metal can interact with, and be protected from, its environment.



Water is shed from PTFE coated wire



Hydroxyapatite coating on nitinol plate



1mm

Hydroxyapatite coated stent

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