

Thin or Soft Coatings Scratch & Wear Testing at Low Loads

- Coatings with antiseptic function or osteointegration
- Adhesion of coating/substrate is crucial



Soft coatings with antibacterial and antiseptic properties are of interest in the implant industry. Naturally, good adhesion of this coating to the implant substrate is important especially during insertion operation. Testing soft tissues is a difficult task because of creep or the material and because of contact load/pressure limitations. The low load microtribometer is ideal for characterising such coating through scratch tests. In the European framework project 'NEWBONE', Falex is developing new test procedures for quantifying adhesion of such bio- nanocomposite gels on polymer resin based substrates.

Soft Coatings must be tested at low loads

This is where the **Falex MUST Microtribometer** operates (Load range 30 μ N – 1 N)

A polymeric resin is coated with biocomposite gel. The gel exhibits stick-slip behavior unlike the uncoated substrate and remains intact up to 350 MPa contact pressure.

