

Dingo clamps care and use



Dingo clamps are made from grade 5 titanium, which is the best choice of material for this type of application. It is not only non-magnetic but is 50% lighter than stainless steel and has an ultimate strength, which is 30% greater than that of stainless steel. Titanium is also one of the most corrosion resistant materials available. These qualities of strength and excellent corrosion resistance make titanium ideally suited for medical applications.

Dingo clamps are calibrated to have a clamping pressure that will not cause endothelium damage. To ensure that this clamping pressure does not change with use, please observe the following recommendations.

Do not open the jaw of the Dingo by pulling the jaws apart.

Open only by pressing together the back of the dingo with your fingers or a haemostat.

Titanium does not work harden with repeated bending. Unlike stainless steel clamps the pressure will not change with use.

As a guide, the following dingo sizes should be used for the vessels size range indicated. Use two dingoes for veins, one on top of the other, and one for arteries.

VA079_06 0.4mm-1.0mm VA115_09 0.6mm-1.5mm VA240_18 1.5mm-3mm VA140_12 1mm-2mm VA300_24 2mm-4mm VA375_30 3mm-5mm

Titanium is also one of the most corrosion resistant materials available, exhibiting a resistance to corrosive attack comparable to glass and platinum. It simply will not corrode and no special care needs to be observed when sterilising Dingo clamps. You may use any cleaning and sterilising agent you prefer. Ultrasonic cleaning is recommended prior to sterilisation.

In time, with repeated sterilising, the colour of titanium will vary. The colour is not a coating but is a result of the refraction of light through the thin titanium oxide layer. The colours are called interference colours. There are no pigments or dyes involved. This film is transparent and has the strong refraction ratio.

The "fading" of the colour is the oxide layer becoming thicker (more protective) with each sterilisation.

Scratches caused by instrumentation used in the application of the clamps will not harm the clamps in any way.

Titanium will form a protective oxide layer instantaneously.

click here for a movie of the Dingo in action

- 1. Gertz SD. Renneis ML, Forbes MS. Endothelial cell damage by temporary arterial occlusion with surgical clip site by scanning and transmission electron microscopy. J. Neurosurg. 45:514, 1976.
- 2. Stamatopoulos C, Biemer E, Duspiva W. Microvascular damage caused by the application of surgical microclips: The effects of pressure and time. Internat. J. Microsurg. 2:81, 1980.
- 3. Yanase U, Uebe Y, Sudo Y. An experimental study on traumatic changes in microvessels produced by pressure clamping. Aust. NA J. Surg. 50:423, 1980
- 4. Thurston JB, Buncke JH, Chater NL, Weinstein PR. A scanning electron microscopy study of microarterial damage and repair. Plastic. Reconstr. Surg. 57:197, 1976.
- 5. Chow SP, Zhu JK, So YC. Effect of bipolar coagulation and occlusion clamping on the patency rate in microvascular anastomosis. J. Reconstr. Microsurg. 1:41, 1984.
- 7. Ikuta Y: Microvascular double clamp type A-11. Reconstr. Microsurg. 1:41, 1984.