

E-PRO[®]



*The Strength
to Deliver*



E-Pro® is an advanced metallurgical hypotube solution offering superior kink resistance over traditional '304 stainless steel', making navigation through tortuous anatomies safer. In thin-walled tube applications, E-Pro's® high kink resistance allows for larger internal diameters thus delivering reduced deflation times leading to a better product.

E-PRO® BENEFITS

Optimize For Procedure Safety

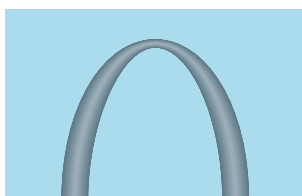
- Potential to reduce procedure time, contributing to patient safety
- High kink resistance reduces risk of failure
- Reduced inflation/deflation times

Improved Confidence

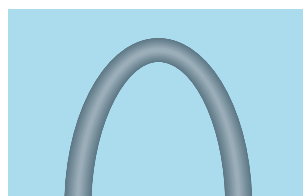
- Increased kink resistance makes navigation through tortuous anatomies safer and easier
- Allows physicians to use higher forces to deliver solution

Technical Data

- Medical grade stainless steel hypotube
- Greater kink resistance without compromising pushability, trackability and torqueability
- Enhanced kink resistance enables:
 - Increase in inner diameter for better inflation/deflation time
 - Thinner walls to maximise trackability
 - Greater push and torque forces for better manoeuvrability
- More flexibility improves the 'feel' of the hypotube
- Improved package set properties



Conventional 304 Hypotube



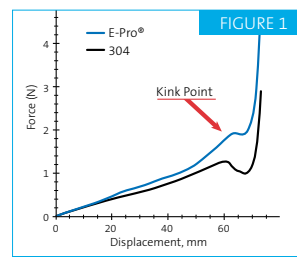
E-Pro® hypotube

Higher kink resistance allows for an increase in inner diameter improving inflation/deflation time.

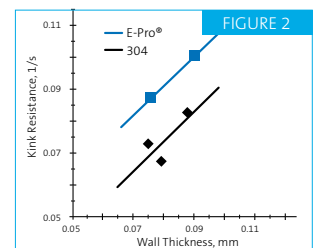
Do you have any questions?

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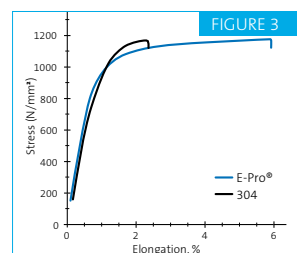
Force & displacement of E-Pro® material & conventional 304 material. The hypotubes had similar WT/OD ratios and comparable yield strengths.



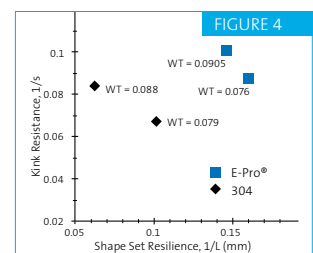
Kink resistance as a function of wall thickness. Wall thickness effects pushability, trackability, torqueability and kink resistance.

E-Pro® has higher kink point than 304 material allowing physicians to confidently use greater push and torque forces to progress the catheter.

The kink space, s , is the distance between the plates when the force drops significantly. $1/s$ represents the resistance of the hypotube material kinking.



Tensile strength & elongation of E-Pro® material & conventional 304 material. The hypotubes had similar WT/OD ratios and comparable yield strengths.



Shape set resilience & kink resistance of E-Pro® & conventional 304 material. L is the distance between a rule and the highest point of an arched hypotube after being stored for 2 hours in a 6 inch diameter coil.

E-Pro® exhibits higher elongation after yielding, preventing failure for longer so that the hypotube can be removed without undue trauma to the patient.

Improved resilience means E-Pro® is less likely to retain shape of storage coil than 304 material.