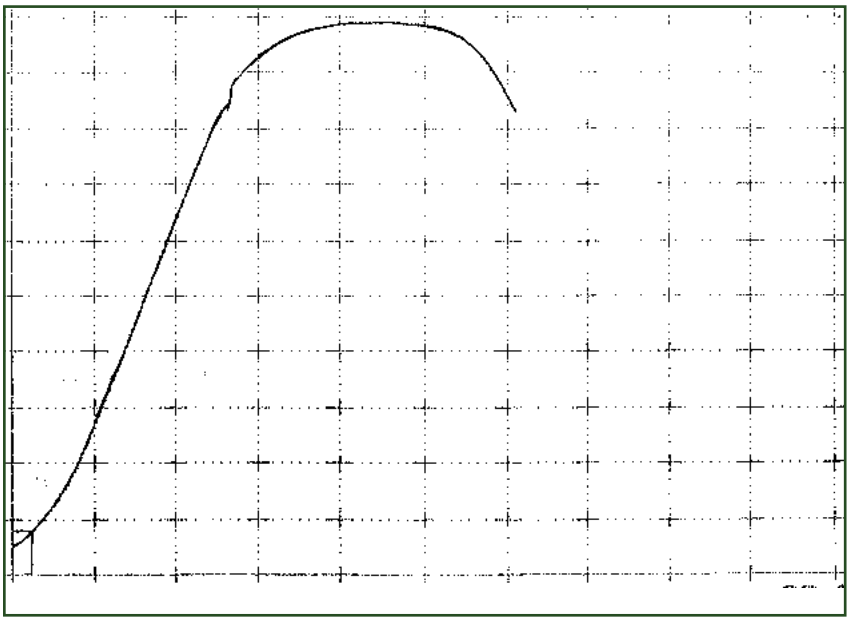
FORÉCREU
BUILDING CRITICAL PARTNERSHIPS

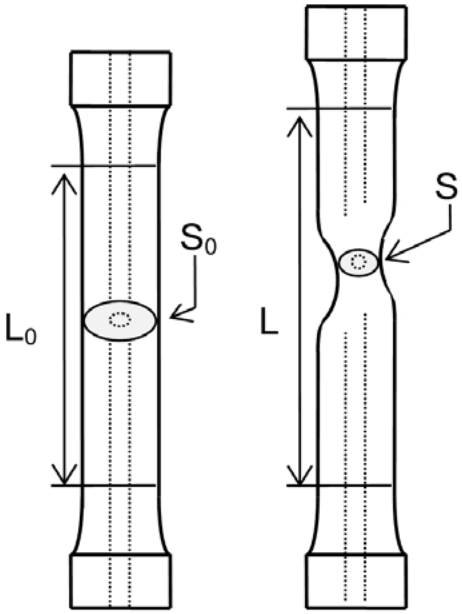
BTiM

MEDICAL
MECHANICAL TESTING FOR TITANIUM ALLOY CANNULATED BARS

TENSILE TEST

- Mechanical tests are performed according to ASTM E8M as specified in reference specification (ASTM and ISO).
- Tensile strength, yield strength, elongation, reduction of area, are tested for each and every batch in our laboratory with a 200 KN testing equipment.
- Typical test curve is following.





GENERAL FEATURES OF TITANIUM ALLOYS USED FOR MEDICAL IMPLANTS APPLICATIONS

	UTS MPa / (ksi) mini	UTS MPa / (ksi) typical	YS MPa / (ksi) mini	YS MPa / (ksi) typical	E % mini typical (5D)		RA % mini typical	
ASTM F136 ISO 5832-3 Ti6Al4VELI	860 (125)	990 (144)	795 (115)	835 (121)	10*	12	25	33
ASTM F1295 ISO 5832-11 Ti6Al7Nb	900 (131)	1000 (145)	800 (116)	830 (120)	10*	11	25	34

SAMPLING PROCEDURE

Each and every batch is sampled according to ANSI / ASQC Z1.4 1993.

Mise à jour : Juin 2022