UTDesign® Testing Flexible Cables for Intraneural Devices

The current way to see if an intraneural device cable is stable in the body is to implant it into an animal and observe the outcome. We can change that. Through simultaneous mechanical and electrical accelerated ageing, we can test the stability of cables before implanting them in a living body.

- **Temperature Probe:** Featuring a feedback to the hot plate to regulate temperature
- **Stainless Steel Bath:** Thermal conductor of heat and rust resistant
- **Hot Plate:** Up to 400 degrees Celsius in increments of 1° C (increments of .1° C under 100° C)
- **Arduino and Mega Moto:** The brain of the apparatus, housing the code and regulating the testing period
- **Actuator:** Muscle of the apparatus, moving at a 50mm stroke reaching speeds of 22 mm/s
- **Stop Button:** For safety reasons
- **Waterproof Enclosure:** Using 3D printed parts and a heavy duty clamping system, wire connections are created to be waterproof.