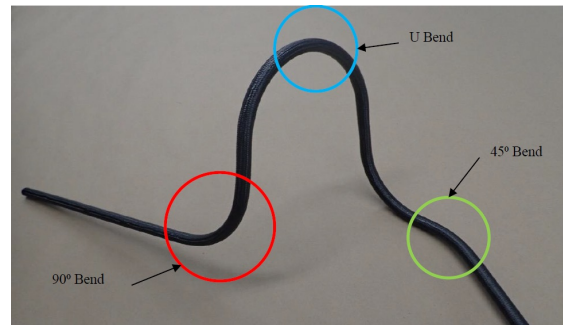
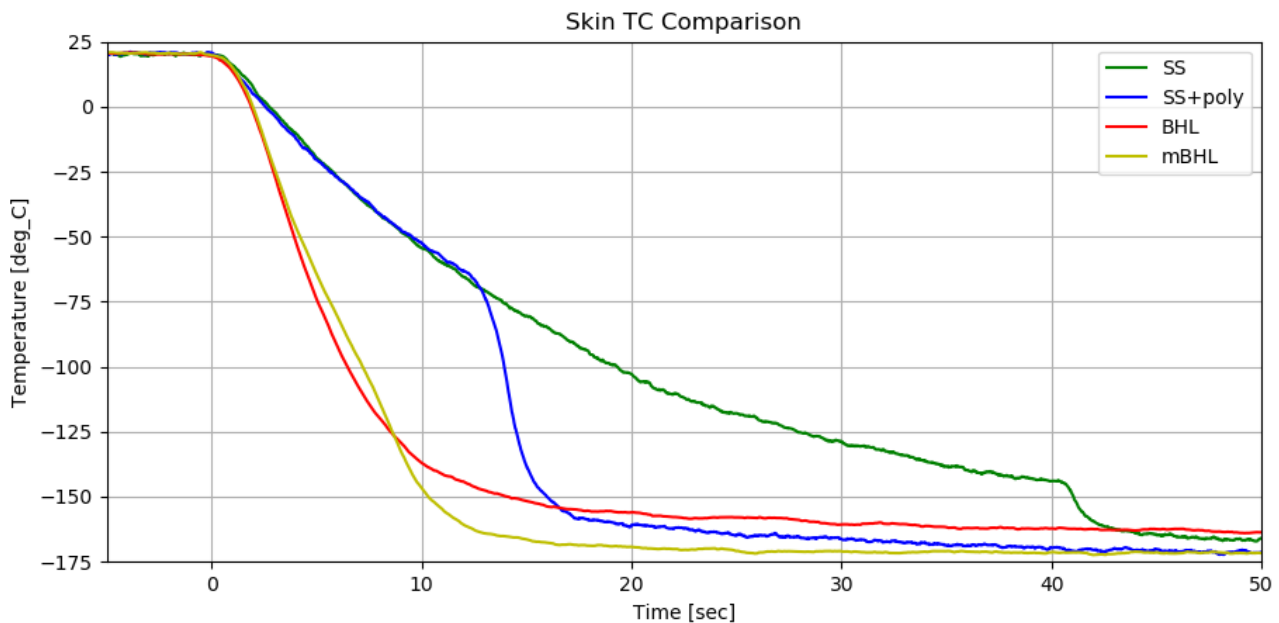


BHL™ Composite Tubing



- NASA-GRC Phase I/II SBIR demonstrated benefits of BHL tubing
 - >75% mass reduction vs. SS tubes
 - 5-7x less thermal mass vs. SS tubes
 - 10x less thermal mass vs. Al alloy
 - Rapid chill-down of tubes and tanks minimizes transient flow and propellant waste, and improves in space tank cryogenic filling



Significant change in cooling rate due to reduced heat capacity of BHL tube and polymer surface