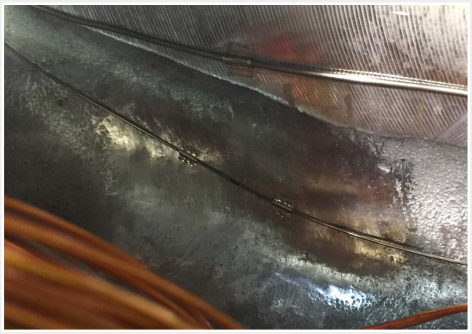
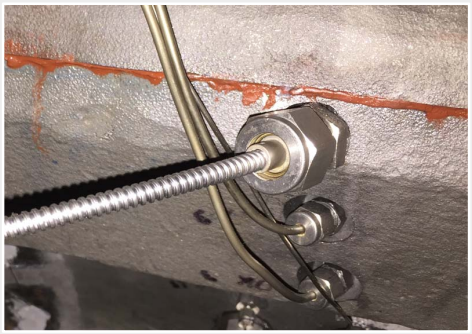
PROJECT AIM	Steam turbine temperature monitoring during standard operating conditions in order to optimize start-up, shut-down and load conditions phases, detect anomalous operating conditions, as well as to validate the thermal model used in the turbine design stage.
CUSTOMER	Under NDA
LOCATION	//
SENSORS	Casing Thickness: 3 x HT-Tube500 Top and bottom case surface: 2 x HT-Flex500 Total number of FBG sensors: 44
INTERROGATOR	Modular SmartScan
IMAGES	 
RESULTS	The temperature measurements obtained during the steam turbine standard operating conditions revealed useful information to better understand the temperature distribution on both the casing thickness and the turbine case surface. The figure shows the temperature gradient along ≈ 10 cm case thickness measured by 10 FBG within HT-Tube500 sensor. A linear approximation shows ≈ 9 °C/cm temperature gradient along the casing thickness.