

HOW CAN I VERIFY I HAVE OVERPRESSURED MY IRON?

A large pressure pumping end user came to us recently concerned that they had exceeded the rated pressure range of their iron while pressure pumping. They asked if we could analyze the data storage registers in the Model 511 hammer union pressure transmitter to see if their concerns were valid. The Model 511 has the ability to store up to (4) peak pressures up to 140% of the pressure range as well as when the peak pressure occurred relative to the time the unit has been powered on. It has a resolution of 1 hour so that more than a single event can be captured. Below are the values extracted from a 20,000 PSI ranged transmitter operating on 1502 iron.

PART NUMBER	DATE OF MANUFACTURE	FIRMWARE REVISION	SENSOR RANGE (PSI)	PEAK (PSI)	HOURS ON WHEN PEAK OCCURED	TOTAL TIME ON
511BQS	4/17/2018	D	20,000	20,035	3,415	5,370
				20,035	3,415	
				14,553	5,169	
				16,757	5,352	

Duplicated peak pressures over 20k psi

Two peak data values show up twice as the unit likely was powered down upon seeing the event and upon restart the 1 hour increment started over and overwrote the lowest value in memory when it rebooted. The data shows that indeed that the pressure exceeded 15K PSI twice while the unit has been powered on providing our customer with valuable information to maintain safety and reliability.

If you find this feature of our model 511 hammer union useful and would like to find out more, please don't hesitate to contact us as we would like to discuss your application and how we can provide more useful information.

