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INSTRUMENT

Product Field Reliability - MTBF Calculation

3 Nov 2008

Re: Model 3750 with MAT Transmitter

This document contains the Mean Time Before Failure (MTBF) analysis results for the low flow Metal Tube Purgemeter Model 3750 with MAT transmitter. MTBF describes the average time to failure of a meter once it has been shipped from our factory.

The analysis has been performed based on below criteria:

- Time-censored failure data method has been used in calculating the failure rate.
- The data used for the calculation was obtained from our Production and Field Service database for the period October 2002 to December 2007. The product failures reported within 18 months from the date of shipment have been used to determine the failure rate. The meters that were not reported as failed have been considered as operating satisfactorily.
- The average time a meter runs before failure occurs is a function of the failure rate. The failure rate (λ) has been determined by the general relationship:
  - λ = number of failures/ total test time.
- The calculated failure rate does not consider increase in failure rates over time during the wear-out-mode but it includes any low level infant mortality failures.

Below is the failure rate for the MT 3750:

Product Model	Failure Rate (λ)	MTBF
MT 3750 with MAT transmitter	0.000080 failures/day	35 years

Thank you for your interest in our company, and please feel free to contact me if you need further information.

Kevin Gallagher
Vice-President of Quality