



## Sellafield Limited Approve Kurz Thermal Mass Flow Meters for SIL 1 Application in Safety Instrumented Systems in UK Nuclear Facilities

Kurz Instruments models 454FTB, 504FTB and 534FTB thermal mass flow meters, with specific hardware and firmware build, have been assessed under the EMPHASIS project to satisfy the requirements of the UK Nuclear Industries Inspectorate (NII) for these instruments to be used at SIL 1. The assessment was conducted by Sellafield Limited and 'peer reviewed' by British Energy (EDF), included third party functional testing by SP Laboratories in Sweden, and independent hardware and firmware evaluation. As of March 2011 Sellafield has 40 of these instruments in service, with 26 of them in safety applications.

Typical Kurz model 454FTB Insertion Type Thermal Mass Flowmeter:



## About EMPHASIS:

EMPHASIS was developed by the Control & Instrumentation Nuclear Industry Forum (CINIF) for the British Nuclear Industry with input from the Nuclear Installations Inspectorate (NII) to assess SMART Instruments to IEC61508 under a common framework. EMPHASIS is based upon a lifecycle approach as specified in IEC61508, and provides an evidence gathering tool in the form of a comprehensive set of questions covering all aspects of both the company and the assessed instruments. EMPHASIS has been adopted by the Nuclear Industry Smart Instrument Working Group (NISIWG). NISIWG members include Sellafield Ltd, British-Energy (EDF), Atomic Weapons Establishment, Rolls-Royce Naval Marine, Westinghouse, and other key players in the nuclear industry.

It is anticipated other European nuclear utilities will adopt EMPHASIS in due course.

If you would like more information please feel free to contact Howard Feather, Nuclear Sector Sales Manager @ Kurz UK distributor, Fluidic Limited. howard.feather@fluidic-ltd.co.uk