

Score Group companies have employed Acoustic Emission (AE) technology to find leaking valves for our customers around the globe for the past 25 years.

Midas Meter® employs a Score proprietary AE sensor, Score developed signal processing & electronics and Score proprietary leakage algorithms developed from Score's Patented leak rate calculation methodology. Midas Meter® was developed, and is exclusively manufactured, by Score Group ISO 9001:2015 certified companies. You can therefore be assured of excellent product support from Score personnel with detailed knowledge of MIDAS Meter® design, manufacture and application.

#### Case studies using MIDAS Meter® (AE) technology:

- 81 critical blowdown system valves surveyed in advance of a planned turnaround, found that 28 had detectable leaks. After all survey and maintenance completion costs were taken into account, savings of almost \$500,000 were achieved.
- Eight valves were identified as leaking excessively to flare, during a survey of 62 "suspect" valves. Annual losses to flare were calculated by the customer to be worth \$342,709. Using the results of the MIDAS Meter® survey, the client was able to target maintenance activities directly on the leaking valves, saving downtime and unnecessary "just-in-case" maintenance and delivering the best possible return on investment.
- One leaking valve was identified within 2 hours as the "bad actor" on an 11 valve pressure integrity boundary, which kept failing a critical "Appendix J" Local Leak Rate Test (LLRT), for regulatory compliance. The alternative procedure would have involved creating different boundary set ups which could have taken days, incurring production losses of around \$2m/day. The valve was consequently targeted for maintenance and the final LLRT test was successful.



#### Approvals

Certification acquired for the Midas Meter® is as follows:

##### Compliance Certification:

- ATEX II 1G Ex ia IIC T4 Ga
- IECEx Ex ia IIC T4 Ga
- CSA Class I, Division 1, A, B, C, D T4
- Class I, Zone 0, Ex ia IIC T4
- Class I, Zone 0, AEx ia IIC T4
- TR CU Ex ia IIC T4 X
- Hazardous Area Certified Zone 0, 1 & 2
- Intrinsic Safety Classification 'ia'
- R & TTE Directive: EMC Class A (Industrial)
- RoHS
- WEEE
- CE
- EAC TR CU 012/2011 & 020/2011

##### European Union



##### International/Australia



##### North America



For further information or to request a quotation, please contact us at: [midas.enquiries@score-group.com](mailto:midas.enquiries@score-group.com) or go to [www.midasvalvesdiagnostics.com](http://www.midasvalvesdiagnostics.com)



Give your Operations and Maintenance Technicians the MIDAS Touch™

# MIDAS METER®

An innovative step-change in valve leak detection from Score Group plc



## Give your Operators and Technicians the

# Midas Touch

**It is known that LEAKING VALVES represent a MAJOR SAFETY and ENVIRONMENTAL RISK and are a MAJOR SOURCE OF LOST PROFITS**

Find leaking valves with MIDAS Meter® long before detection by conventional methods. Avoid product losses to the flare and via fugitive emissions. Confidently prepare for maintenance outages and avoid excessive valve damage due to prolonged undetected leakage.

### Use MIDAS Meter® Acoustic Emission (AE) Leak Detector for Valves to:

- Quickly find leaking isolation valves, control valves, PSVs, Blow down Valves, ESDVs and steam traps
- Detect product losses to flare, vents and drains
- Detect leaks as low as 0.1 litre per minute
- Prioritise valves for maintenance
- Confirm valve performance during commissioning
- Provide leakage quantification in the following fluids: Oil, Gas, Condensate, Water, Steam, Compressed Air
- Provide data storage and analysis in the field via a PDA
- Report and trend valve leak rates over time

- Improve Safety - Improve Plant Efficiency -

- Find Damaged Valves - Decrease Emissions -

- Don't let valuable product escape to the flare -

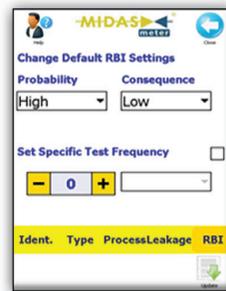
- Optimally Manage Valve Maintenance -

Give Operations and Maintenance personnel the tools they need to quickly and confidently find leaking valves, target the right valves for maintenance, pre-order known required spare parts and replacement valves ahead of outages and minimise shutdown durations.

Use MIDAS Meter® to increase your confidence levels in valve performance and measurement test programmes and to create evidence to support site Safety Case and Safety Integrity Level compliance requirements.

To support the very latest developments and strategies in Asset Integrity Management (AIM) and specifically Reliability Centred Maintenance (RCM), Score have enhanced MIDAS Meter® software to include a unique Risk Based Inspection (RBI) Calculator.

Simple built-in variable and selectable parameters such as "Probability" and "Consequence" of failure provide users guidance on setting valve criticalities and appropriate periods for when each valve in the installed population should be surveyed to optimally manage risk.

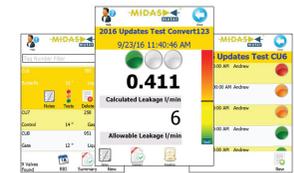


### MIDAS Meter® Features

- Completely portable and easy to use
- Non-intrusive to the process when used for in situ testing
- MIDAS Meter® is certified for use in hazardous areas
- MIDAS Meter® Ambient temperature range: -20°C to +50°C
- The sensor face temperature range is -50°C to +125°C
- Waveguides are supplied for use outwith sensor face temperature range
- Integral LCD display supports use without PDA
- Bluetooth communications from handset to PDA
- Hazardous Area Certified PDA for data logging and quantification / analysis of valve survey
- PC based Communicator™ software provided to enable:
  - o Upload of valve information to PDA
  - o Generation of standard reports on the valves surveyed
  - o Export of valve survey data
  - o Back up of PDA data
  - o Control of software licence and calibration



MIDAS Meter® PDA

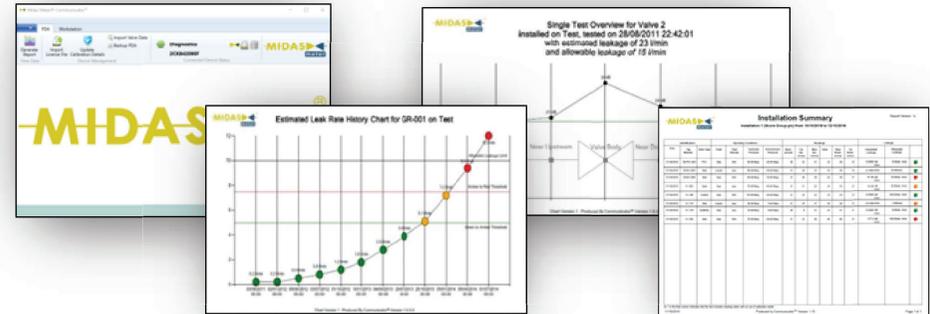


MIDAS Meter® PDA Software

### Latest Developments:

- MIDAS Meter® also offers an optional Radio Frequency Identification (RFID) reader capability to interface with RFID identification tags, making valve asset tracking and identification easier and valve surveying faster and more reliable.
- MIDAS Meter® Core and Communicator™ software now includes:
  - o Simple functionality and guidance on valve criticality identification
  - o Risk Based Inspection (RBI) calculator to guide valve inspection periods
  - o Reporting Functions guiding valve inspection / maintenance activities

MIDAS Meter® takes you from reactive to proactive maintenance by engaging you in condition monitoring and "predictive" maintenance activities well in advance of failures. MIDAS Meter® valve leak detection equipment therefore helps focus valve maintenance budget expenditure where the maximum benefits and returns on investment can be achieved.



MIDAS Meter® is best deployed as part of an Intelligent Valve Management™ programme.

