

Process GCs and CVDDs

Custody transfer of natural gas is increasingly based on delivered energy. MID and new recommendations provide new and more flexible certification possibilities for process gas chromatographs (GC) and calorific value determining devices (CVDD).

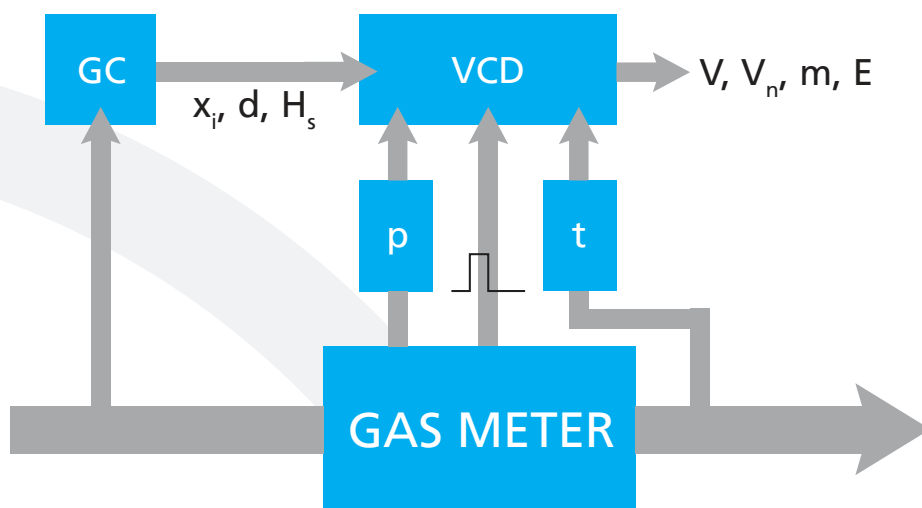
CERTIFICATION OPTIONS FOR PROCESS GCs

For process GCs the market requires OIML R 140. In addition there may be requirements due to customer specifications and national legislation. NMi will integrate all the requirements into one test plan, thus saving time and money.

A great advantage for manufacturers is that the process GC – if measuring and transmitting gas compositions – can be manufactured and placed on the market under MID.

HARMONIZED

In the past years much effort has been put into the development of recommendations and standards. As a result, OIML R 137-1 is now applicable to gas meters. OIML R 140 can be applied to certify GCs and calorific value determining devices (CVDDs). Additional national legislation and client specific requirements may be applicable, which NMi will include in the certification process upon request.



CERTIFICATION UNDER MID

Although energy is not part of MI-002 it is still possible to certify a GC under MID. This is shown in the figure above where a process GC is configured as a peripheral for a Volume Conversion Device (VCD) or flow computer. The process GC continuously reports the current composition of the gas to the VCD in order to calculate the compressibility of the natural gas. This type of certification can be done under MID and the instrument will get an "evaluation certificate", just like pressure and temperature transducers associated with a VCD.

CLARITY IN ADVANCE!

NMi always informs you about the project steps in advance. We are happy to work, with prior agreement, on investments, test programs and time schedules. Before starting tests, we can issue a draft Type Approval Certificate that is based on your documentation. This means that you already know what the certificate will look like if your measuring instrument complies with the requirements.

WHERE WILL YOUR MID APPROVAL BE VALID?

EU countries

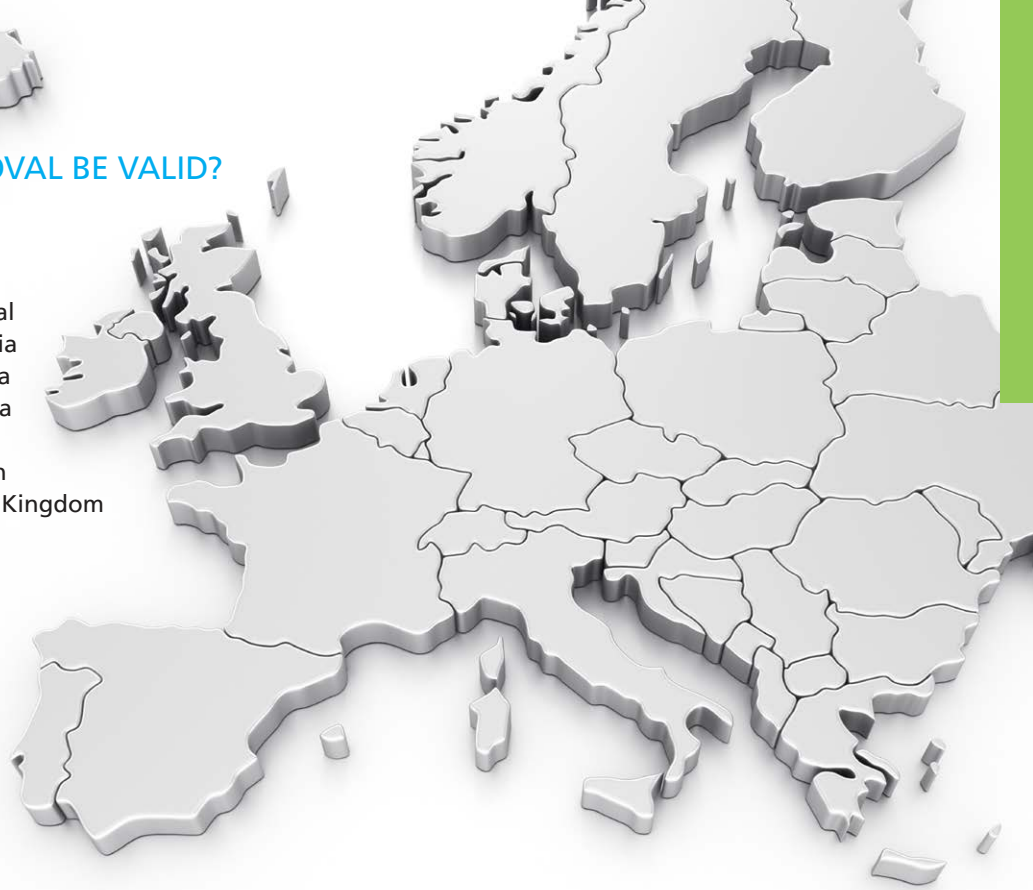
Austria	Germany	Poland
Belgium	Greece	Portugal
Bulgaria	Hungary	Romania
Croatia	Ireland	Slovakia
Cyprus	Italy	Slovenia
Czech Republic	Latvia	Spain
Denmark	Lithuania	Sweden
Estonia	Luxembourg	United Kingdom
Finland	Malta	
France	The Netherlands	

EFTA countries

Iceland
Liechtenstein
Norway
Switzerland

Other

Turkey



STEEC

NMi uses Standard Type Examination & Evaluation Certificates (STEEC) as a method to provide structure in your approval documents. This method gives you a clear view on the consequences of a product modification. STEEC defines three levels:

Essential Parts:

If an essential part has to be modified, revision of your certificate is needed as these modifications have an impact on the metrological aspects of your product.

Conditional Parts:

The conditions under which this part can be used or attached are mentioned in your certificate. Changes to these conditions could lead to small revisions of your certificate.

Non-Essential Parts:

Modifications in non-essential parts have no consequences for your certificates. You are free to modify these parts. The modification has no effect on the metrology aspects of the product.



NMi THINKS AHEAD

In order to achieve a minimum time to market, it is vital that your design already complies with the legal requirements in the target countries. NMi provides support in different phases of product development, helping you avoid expensive and time-consuming modifications later on. You can take into account the requirements relating to your meter during the very earliest stages of product development. This enables you to reduce development costs as well as the time between design and final product according to the requirements. The result is fewer failures and therefore less retesting during certification.

WHAT NMi OFFERS YOU

In the field of process GCs and CVDDs, NMi offers you the following services:

- MID Evaluation Certificates
- MID Test Reports
- OIML Test Reports
- Type Approval Management
- STEEC
- Training
- Consultancy
- Calibration gases, e.g. synthetic natural gases
- GC calibrations, e.g. multipoint calibrations

