

Questions about Market Consultation Gas Chromatographs NV Nederlandse Gasunie

Nr.	Question	Answer
1	To reduce emissions Gasunie will need to include the sampling system in the scope of supply as this is typically where reductions are made and not the GC itself. (e.g. removal or reduction in fast loop volumes). Can you confirm if Gasunie would replace sample probes and consider field mount devices close to sample point are an option for future tender.	To be discussed during consultation meeting. Is a nice option and to be considered for locations where possible. Depends on the proposed solution of tenderer.
2	Please clarify temperature requirements, most IEC/ATEX certificates will cover down to -20°C, additional protection mechanisms would be required below this.	These figures are derived from ISO-60654. But may be reconsidered.
3	Based on experience the required temperature test of four cycles over 24hours will not prove temperature stability as the instrument would never get to the ambient set point long enough to validate performance. A more representative test would be a minimum of 4-6 hours at each extremity. Any adjustments made should result in a restart of performance test. Please confirm if this test has to be made on every unit of prove on a sample only.	There is no need for performing this test on every unit.
4	Please confirm what ATEX requirements are mandatory for the installation at site. If Hydrogen is being considered as a carrier gas is IIB+H2 or IIC a requirement?	Both IIB+H2 or IIC are allowed.
5	Does the software package have to come from the same vendor as the GC ?	Not necessary. But the software has to be delivered by tenderer. Tenderer is responsible for the working of the software.
6	With respect to metrology approvals are Gasunie looking only for instruments that have European metrology approvals? Is OIMLR140 approval a requirement?	No, the requirements and relevant standards are in the specification
7	Cycle time <15 has been specified, does Gasunie consider any benefit for faster analysis times?	No.
8	Confirm the Argon value is correct at 5%, very high.	Confirmed.
9	Can Gasunie give an indication of the expected quantities between variant 1, 2 & 3	Not yet known.
10	With respect to the minimum qualification requirements / quantity of units delivered. Confirm if this must be with gas transmission or distribution network used in a metering/metrology application. What is the minimum time the references have to be installed for (1, 2 years or longer)	No restrictions to delivery time nor to gas distribution networks.
11	With regards to 4.6.1 Analysis : In below list in this mail, helium seems to be missing, if helium were to be measured by the GC, would it be a direct or an indirect component?	He is direct component.
12	“These components will be related to a bridge component (selectable) with relative response factors. For each variant (see table 2) of GC there shall be one uniform set of relative response factors for the complete range of concentrations.” What is meant by a uniform list? When is a list to be considered uniform and when not? Maybe an example can be given?	To be determined later. Exemplified will be provided in tender documents.

13	With regards to 4.6.3.2 Fixed (not measured) components. "A possibility for a fixed component correction shall be provided for helium, argon, hydrogen, carbon monoxide and oxygen. It shall be possible to choose if these components are fixed or analyzed by the GC." We assume that it is only valid for variant 1 and 2 as in Variant 3 all components are measured	Correct.
14	Who will design, make and install the system around the GC (bottles, sample conditioning, etc). Is that another tender or is that part of this tender? Can only a GC be offered? Should Gasunie be trained to do support or should the GC supplier do/arrange that?	Tenderer delivers GC. Bottles etc. is depending of proposed solution. Installation is in scope of GU. Training of Gasunie employees will be specified in tender documents but is surely in scope.
15	Is this tender only meant for European suppliers?	The tender will be open to suppliers in countries which are members of the Government Procurement Agreement. These include the EU countries, the United States, Canada, Japan, South Korea, Israel, Norway and Switzerland.
16	We probably will carry out a new temperature cycle test, until when can this be provided?	See answer to question 2.
17	4.1.1: Our instrument is certified from -020 to +55 C, why is -33 C required in the Netherlands? And why is the maximum outdoor temperature lower than the maximum indoor temperature?	See answer to question 2.
18	4.1.2 Our standard gas connections are VICI CALCO 1/16". Is that a problem? Of course converters can be used, but that will add to the price.	Specifications are leading.
19	4.2.1 Our instrument needs to be powered by 24 V (20 to 28V), do you really want us to supply a 220V power supply?	Specifications are leading. 230V is available at GU location.
20	4.3.1 The serial number is indicated on the instrument but not the year of manufacturing. Is that really important?	No. But the year must be known/related to serial number
21	4.5.2.1 How is a 'GC module' defined? Is het per column oven (Our instruments has up to 4 column ovens). Note also that we will need 2 carrier gases in case of also measuring hydrogen, Helium or Argon. In case with a 'module' is an instrument meant, is the requirement of max 25 ml/minute then valid per carrier gas?	Confirmed: max 25ml/minute per carrier gas.
22	4.5.2.2 Calibration gas and process gas: The sample gas consumption is not controlled by GC and depends on the supply pressure. The mentioned supply pressure of maximum 1 bar would be OK for the GC but will result most likely sample flow rate greater than 50 ml/min. Therefore, would it be possible to decrease the sample pressure?	Yes, this is possible.
23	4.5.3.3. Why are (2) analogue outputs required, what is the purpose of this?	May be reconsidered. This will be specified in tender documents.
24	4.6.2.3 How shall be the temperature change cycled over a period of month?	Will be based on normal weather conditions.