

Sampling Inspection

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The latest generation of the inotech test software includes the module sampling inspection.

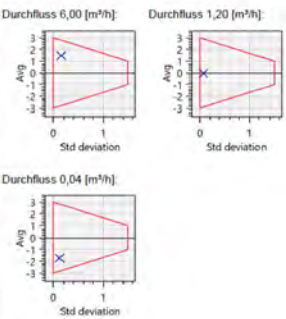
This supports the inspection body at the performance of the sampling inspection, what leads to an extension of the life cycle of domestic gas meters in the gas network.

The economic advantages for energy providers are on one hand at the low efforts to achieve the prolongation of the calibration interval (instead of an exchange in a regular cycle only the meters for the sampling inspection are to be removed) and on the other hand the investment in new meters can be rescheduled for several years.

The sampling inspection works according the german “administrative regulations legal metrology/process instructions for sampling procedures to prolong the calibration validity / GM-VA SPV / 20.03.2018”.

This supports the inspection body at the notification procedure by describing the meter lot and by the

Messabweichung [%]			
Prüfpunkt	Qmax	0,2Qmax	Qmin
Durchfluss [m³/h]	6,00	1,20	0,04
1. Messung	0,94	-0,24	-1,69
2. Messung	1,34	-0,14	-1,77
3. Messung	1,41	-0,12	-1,68
4. Messung	1,47	-0,11	-1,90
5. Messung	1,48	-0,10	-1,99
6. Messung	1,24	-0,08	-1,65
7. Messung	1,54	-0,03	-1,77
8. Messung	1,51	-0,04	-1,95
9. Messung	1,48	-0,05	-1,78
10. Messung	1,48	-0,04	-1,64
11. Messung	1,57	-0,01	-1,67
12. Messung	1,56	-0,01	-1,67
13. Messung	1,58	0,02	-1,69
14. Messung	1,60	0,00	-1,68
15. Messung	1,33	0,03	-1,56
16. Messung	1,54	0,02	-1,68
17. Messung	1,56	-0,01	-1,46
18. Messung	1,54	0,02	-1,76
19. Messung	1,55	0,03	-1,60
20. Messung	1,62	0,03	-1,70
Durchschnitt	1,47	-0,04	-1,72
Std. Abweichung	0,16	0,07	0,12



documentation of the data of the sampling inspection. The amount of the sample, the permissible maximum number of substitution meters stem from the amount of the lot and the permissible LQ-value.

Tabelle B, Teil 2

Nr.	Lot amount	LQ = 3,15				LQ = 3,64		
		n	Ac	E	Ex	n	Ac	E
8	10001 bis 35000	315	5	63	19	315	7	63
9	35001 bis 150000	500	10	100	30	500	13	100

LQ: quality level to be rejected
n: sampling test amount
Ac: maximum number of faulty measuring devices for the acceptance of the lot
E: maximum number of substitution measuring devices according section 8.4 full
Ex: maximum number of substitution measuring devices according section 8.4 a) to f) 1)*

After finishing the execution of the prescribed test procedure (pre flow, measuring point) of the determined meters according to the results the software gives a recommendation if replacement meters should be applied.

The result of the sampling inspection then is recorded for the transfer to the calibration authority and stored to the data base.

Additional the data are stored in a separate data base for an audit of the sampling inspection of the calibration authority and a repetition of the sampling inspection after prolongation of the calibration validity.

To pass the qualification procedure, the following conditions must be fulfilled:

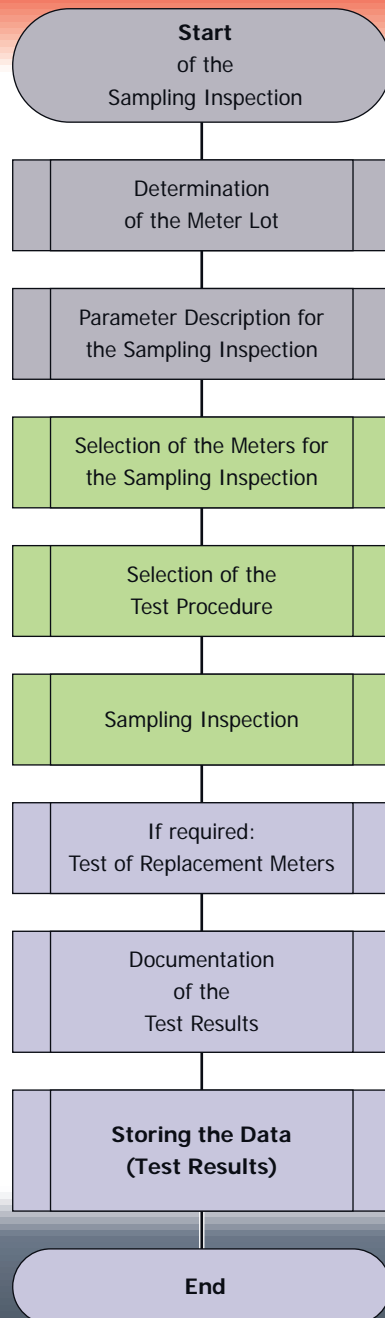
$$p_{1-i} = 0,05 \cdot \left(1 + \frac{T}{t_i - 1}\right)^{-1} \cdot 100\%$$

p_{1-i} = maximum permissible share faulty measuring devices of the lot in [%] at the time of the sampling test
T = prolongation of the calibration validity
t_i = sum of the calibration validity and all previous calibration validity prolongations 1)*

1)* Source: GM-VA SPV / 20.03.2018



Program Sequence Sampling Inspection



PRODUCT RANGE

- Low pressure test rigs for domestic and industrial gas meters
- High pressure test rigs for gas meters designed as closed-loop or as bypass
- Mobile gas meter test rigs
- Modernization of test rigs
- Test rigs for gas pressure regulators
- Test rigs for water meters and heat meters
- Purging units
- Leakage test units

SERVICE PROGRAM

- Remote support und service support
- Spare parts
- Maintenance contracts
- Preventive maintenance
- Update service
- System availability service
- System extension
- Software support with customized adaptations
- Standard and tailor-made trainings



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