Strategic Management Board

ACS. CMET2
SAFETY ASSESSMENT CRITERIA
INITIAL
EMERGENCY SERVICE PROVIDER AND GAS METER INSTALLER
DIAPHRAGM, RD AND TURBINE METER INSTALLATIONS
NATURAL GAS

CMET2	INITIAL

CMET2 Re-assessment is contained in CESP1; CMA1; CMA2LS (Part C).

Introduction

Tests gas safety competence to install, commission, service, maintain and exchange non-domestic diaphragm, RD and turbine meter installations.

Candidates holding CMET2 are also deemed to hold REGT2.

CBs and ACs may adopt Competence and Criteria numbering different to that used in this document.

CB and AC documentation may adopt wording for criteria different to that used in this document, provided the meaning is unaffected.

Range

Primary meter installations incorporating diaphragm, RD or turbine meters with and without by-pass at a pressure not exceeding 7 bar and not in the scope of IGEM/GM/6 Edition 2 (covered by CMET1).

Pre-requisites

COCN1 or CMA1 or CESP1 or COCNPI1LS
+ ICPN1 + TPCP1 + CMET1
or
QCF or S/NVQ.

Exclusions

Gas load assessment; measurement, installation and use of volume conversion systems and energy computation of gas meter readings to reference conditions; electrical or electronic connections to meters; construction or installation of meter boxes, compartments or housing; installation or replacement of ECVs, service valves or their operation; hydrostatic testing; meter removal from site and subsequent disposal; testing by OFGEM and theft of gas. Certification in this assessment does not of itself confer approval as an 'OAMI' registered gas meter installer.

References

MIs.

- HSL56
- IGE/GM/8
- IGEM/UP/2 Edition 3
- IGE/UP/1
- IGE/GM/7B
- GIUSP.

ACS.SMB.003.ACDND identifies Normative Documents that should be held by ACs.

Abbreviations

AC. Assessment centre
CB. Certification Body
ECV. Emergency control valve
GT. Gas transporter
I. Initial
MIP. Maximum incidental pressure
MOP. Maximum operating pressure
MIs. Manufacturer's/manufacturers' instructions

OP. Operating pressure
Ref. Reference
SSV. Slam-shut valve
STP. Strength test pressure.

PERFORMANCE CRITERIA		REF	I
0.	**complete pre-installation checks:**		
(i)	check service pressure		√
(ii)	check suitability of location and identify hazardous areas classification		√
(iii)	check ventilation and position of vents		√
(iv)	check system controls and determine operating pressure of load		√
(v)	obtain authorization of GT and sealing requirements		√
(vi)	determine zoning distances surrounding installation fittings and components		√
1.	check ECV operates correctly		√
2.	check meter and installation components are fit for use and purpose (pressure breaks, rating, adequate supports, termination of creep relief)		√
3.	isolate gas supply prior to work		√
4.	remove blind flange from ECV (on a new installation)		√
5.	assemble/install straight length of meter inlet/outlet connection, valve, regulator, safety devices, impulse lines, filter		√
6.	position turbine meter correctly		√
7.	assemble and install outlet pipework and MOV		√
8.	install test/purge points		√
9.	adequately support pipework		√
10.	install, level and support turbine meter		√
11.	lubricate turbine meter to MIs		√
12.	test for tightness and purge meter installation of air		√
13.	**commission meter installation (IGE/GM/8 Parts 3 & 4)**		
(i)	check all components function to MIs		√
(ii)	set and test safety system control pressures prior to regulator		√
(iii)	check regulator is operating in full control prior to opening outlet valves		√
(iv)	check set points of regulators under flow conditions (simulation can be used)		√
(v)	check all components function to MIs		√
14.	**set points – metering pressure** (**twin stream installation, IGE/GM/8 Part 1**)		
(i)	set active regulator at determined set point		√
(ii)	set monitor regulator at determined set point		√
(iii)	set SSV above relief valve set pressure (take into account accuracy of relief valve and SSV to ensure relief valve is not restricted)		√
(iv)	check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system		√
(v)	consider control accuracy at meter when accuracy classes for regulators were selected		√
15.	apply labelling		√
KNOWLEDGE AND UNDERSTANDING		**REF**	**I**
1.	commissioning reports		√
2.	gas flow straightening devices		√
3.	positioning of impulse line take offs		√
4.	sizing of impulse take off lines		√
5.	labelling		√
6.	cross bonding		√
7.	routine maintenance of turbine meters		√
8.	filtration for all types of meter of MOP ≤ 7 bar		√
9.	routine maintenance of filters and strainers		√
10.	recognition of meter faults		√
11.	safety requirements for removal of meters		√
12.	hydrostatic testing and precautions		√
13.	routine maintenance of relief valves and pressure protection devices		√
14.	determining OP of appliances		√