

# ACS.BMP1 SAFETY ASSESSMENT CRITERIA INITIAL & RE-ASSESSMENT NON-DOMESTIC NATURAL GAS GAS BOOSTERS

BMP1 INITIAL & RE-ASSESSMENT

## Introduction

Tests the gas safety competence of an operative in the work of assembly, install, commission, service, repair and break down of gas booster installations, associated controls and pipework up to 0.5 bar pressure.

These assessments do not include tightness testing and purging (see TPCP1A and TPCP1).

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

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

### Range

Gas boosters, associated controls and pipework (OP  $\leq 0.5$  bar)

### **Pre-requisites**

### Initial

Any of COCN1; COCNPI1LS; CCN1 with CoDNCO1 or QCF or S/NVQ + ICPN 1 if pipework diameter > 50 mm.

### Re-assessment

Generic non-domestic Core re-assessment Group 1 Part 1, CoCNNP1LS or Group 3 Part A + Part B CoCN1 or BMP1 or QCF or S/NVQ. + ICPN 1 if pipework diameter > 50 mm diameter.

### Exclusions

Building, penetrating or making good of walls, floors, roofs or ceilings, application of pipework protection, gas service pipes, welding of steel joints, main equipotential earth bonding, electrical, digging or filling of trenches, construction of solid bases, beds or platforms for mounting of boosters, gas work associated with pre-mix machines or compressors.

### **References and normative documents**

MIs.

All relevant documents as listed in the Legislative, Normative & Informative Document List (LINDL), inc.:

- HSL56
- GIUSP
- IGE/UP/1 Edition 2
- IGE/UP/2 Edition 3
- IGE/UP/4 Edition 3

ACS.SMB. 003.ACRND identifies Normative Documents that should be held by ACs. Issue 3.4 ©ACS.SMB January 2020

#### Abbreviations

AC. Assessment Centre CB. Certification Body GT. Gas transporter I. Initial MIs. Manufacturer's/manufacturers' instructions MIV. Meter inlet valve NRV. Non-return valve OP. Operating pressure R. Re-Assessment Ref. Reference.

	ORMANCE CRITERIA	REF	Ι	R
1a.	check location is suitable		✓	$\checkmark$
1b.	check ventilation for location		$\checkmark$	$\checkmark$
1.	check gas supply is of adequate size		$\checkmark$	$\checkmark$
2.	check site base/bed or platform meets requirements		$\checkmark$	$\checkmark$
3.	check booster pipework; flexible metallic hoses; fittings; controls are fit for use and		~	~
4	purpose	_	✓	<ul> <li>✓</li> </ul>
4.	check booster mounted on base, bed or platform, using anti-vibration mounts, if applicable		v	v
5.	isolate gas supply prior to work		$\checkmark$	✓
6.	join connecting pipework, align and adequately support independent of booster		$\checkmark$	✓
7.	assemble system controls and install in sequence		$\checkmark$	✓
8.	install small controlled by-pass and valve		$\checkmark$	✓
9.	install test and purge points, as required		$\checkmark$	$\checkmark$
10.	check work carried out is gas tight		$\checkmark$	✓
11.	purge and commission pipework/system controls to MIs		$\checkmark$	$\checkmark$
12.	check gas safety control devices are operating correctly and adjust where applicable		$\checkmark$	$\checkmark$
13.	dismantle and clean booster operational gas safety components, using appropriate		$\checkmark$	✓
	cleaning methods, agents and lubricants (e.g. booster motor drive belts, pressure			
	control and relief valves, NRVs, isolation valves, low pressure cut off devices,			
	modulating by-pass control valves)			
14.	complete necessary installation drawings		$\checkmark$	$\checkmark$
15.	position appropriate warning labels at MIV, near to booster and on installation		$\checkmark$	$\checkmark$
	WLEDGE & UNDERSTANDING			
1.	steel pipe and fittings for gas pipework; in particular flange categories		<ul> <li>✓</li> </ul>	$\checkmark$
2.	locations		<ul> <li>✓</li> </ul>	✓ ✓
3.	protection equipment. Statutory requirements		<ul> <li>✓</li> </ul>	$\checkmark$
4.	operation of system and gas safety control devices			
5. 6.	flex the second state of t	_	<ul> <li>✓</li> </ul>	
h	flexible metallic hose connections		~	✓
	jointing agents for steel pipe and fittings		✓ ✓	✓ ✓
7.	jointing agents for steel pipe and fittings types of pipe supports, clips and fixings for pipework		✓ ✓ ✓	✓ ✓ ✓
7. 8.	jointing agents for steel pipe and fittings types of pipe supports, clips and fixings for pipework types and selection of manual isolation valves			✓ ✓ ✓ ✓
7. 8. 9.	jointing agents for steel pipe and fittings types of pipe supports, clips and fixings for pipework types and selection of manual isolation valves positioning of manual isolation valves		✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓
7. 8. 9. 10.	jointing agents for steel pipe and fittings types of pipe supports, clips and fixings for pipework types and selection of manual isolation valves positioning of manual isolation valves pipe sizing to meet booster requirements – inc. theoretical exercise		✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓
7. 8. 9. 10. 11.	jointing agents for steel pipe and fittings types of pipe supports, clips and fixings for pipework types and selection of manual isolation valves positioning of manual isolation valves pipe sizing to meet booster requirements – inc. theoretical exercise concentric pipe size reducers		✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓
7. 8. 9. 10. 11. 11a.	jointing agents for steel pipe and fittings types of pipe supports, clips and fixings for pipework types and selection of manual isolation valves positioning of manual isolation valves pipe sizing to meet booster requirements – inc. theoretical exercise concentric pipe size reducers specific requirements for vents and breathers installed with controls		✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
7. 8. 9. 10. 11. 11a. 11b.	jointing agents for steel pipe and fittings types of pipe supports, clips and fixings for pipework types and selection of manual isolation valves positioning of manual isolation valves pipe sizing to meet booster requirements – inc. theoretical exercise concentric pipe size reducers specific requirements for vents and breathers installed with controls limitations for installation of fan-type boosters		✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
7. 8. 9. 10. 11. 11a. 11b. 12.	jointing agents for steel pipe and fittings types of pipe supports, clips and fixings for pipework types and selection of manual isolation valves positioning of manual isolation valves pipe sizing to meet booster requirements – inc. theoretical exercise concentric pipe size reducers specific requirements for vents and breathers installed with controls limitations for installation of fan-type boosters anti-vibration mountings		✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
7. 8. 9. 10. 11. 11a. 11b. 12. 13.	jointing agents for steel pipe and fittings types of pipe supports, clips and fixings for pipework types and selection of manual isolation valves positioning of manual isolation valves pipe sizing to meet booster requirements – inc. theoretical exercise concentric pipe size reducers specific requirements for vents and breathers installed with controls limitations for installation of fan-type boosters anti-vibration mountings colour coding, labelling		✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
7. 8. 9. 11. 11a. 11b. 12. 13. 14.	jointing agents for steel pipe and fittings types of pipe supports, clips and fixings for pipework types and selection of manual isolation valves positioning of manual isolation valves pipe sizing to meet booster requirements – inc. theoretical exercise concentric pipe size reducers specific requirements for vents and breathers installed with controls limitations for installation of fan-type boosters anti-vibration mountings colour coding, labelling operating data		✓           ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
7. 8. 9. 10. 11. 11a. 11b. 12. 13. 14. 15.	jointing agents for steel pipe and fittings types of pipe supports, clips and fixings for pipework types and selection of manual isolation valves positioning of manual isolation valves pipe sizing to meet booster requirements – inc. theoretical exercise concentric pipe size reducers specific requirements for vents and breathers installed with controls limitations for installation of fan-type boosters anti-vibration mountings colour coding, labelling operating data electrical connection		✓           ✓	✓       ✓
7. 8. 9. 10. 11. 11a. 11b. 12. 13. 14. 15. 16.	jointing agents for steel pipe and fittings types of pipe supports, clips and fixings for pipework types and selection of manual isolation valves positioning of manual isolation valves pipe sizing to meet booster requirements – inc. theoretical exercise concentric pipe size reducers specific requirements for vents and breathers installed with controls limitations for installation of fan-type boosters anti-vibration mountings colour coding, labelling operating data electrical connection ventilation for compartments containing boosters			✓       ✓
7. 8. 9. 10. 11. 11a. 11b. 12. 13. 14. 15.	jointing agents for steel pipe and fittings types of pipe supports, clips and fixings for pipework types and selection of manual isolation valves positioning of manual isolation valves pipe sizing to meet booster requirements – inc. theoretical exercise concentric pipe size reducers specific requirements for vents and breathers installed with controls limitations for installation of fan-type boosters anti-vibration mountings colour coding, labelling operating data electrical connection			·       · <t< td=""></t<>
7. 8. 9. 10. 11. 11a. 11b. 12. 13. 14. 15. 16.	jointing agents for steel pipe and fittings types of pipe supports, clips and fixings for pipework types and selection of manual isolation valves positioning of manual isolation valves pipe sizing to meet booster requirements – inc. theoretical exercise concentric pipe size reducers specific requirements for vents and breathers installed with controls limitations for installation of fan-type boosters anti-vibration mountings colour coding, labelling operating data electrical connection ventilation for compartments containing boosters			·       · <t< td=""></t<>