MedGenz | HTM 02-01 Medical Gas Pipeline System Checklist

A practical inspection, testing, commissioning and handover checklist for Medical Gas Pipeline Systems (MGPS).

Prepared by	MedGenz India Private Limited	**Document Type**	MGPS Compliance / Commissioning Checklist
Reference	HTM 02-01 — Medical gas pipeline systems	**Revision**	23 September 2026

1. Design, Drawings and Scope

Sr.	Checklist Item	Verification / Evidence	Status	Remarks
1	Approved MGPS layout, schematic and pipe routing drawings are available and match the installed system.	Approved drawings / as-built drawing.	Yes No N/A	
2	Gas types, terminal outlet locations, quantities and identification are confirmed against the approved room and equipment schedule.	Approved outlet schedule and room data.	Yes No N/A	
3	Pipe sizes, materials, jointing method and zoning arrangements are documented for the installed system.	Design specification / material records.	Yes No N/A	
4	Source equipment, manifolds, banks, plant connections and emergency supply arrangements are identified.	P&ID; / source equipment schedule.	Yes No N/A	
5	Zone valve units and isolation arrangements are located as shown on approved drawings and remain accessible.	Approved layout and site inspection.	Yes No N/A	

2. Pipework Installation and Identification

Sr.	Checklist Item	Verification / Evidence	Status	Remarks
1	Medical gas pipeline materials are approved for the intended medical gas service and installation environment.	Material certificates / manufacturer documentation.	Yes No N/A	
2	Pipework is installed with correct routing, support, protection and access for inspection and maintenance.	Visual inspection and installation records.	Yes No N/A	
3	Pipework is clean internally and protected from contamination during storage and installation.	Installation / cleanliness records.	Yes No N/A	
4	Joints, brazed connections and fittings are completed using the specified approved method.	Jointing records and inspection.	Yes No N/A	
5	Pipework is clearly identified by gas service and flow direction at appropriate intervals and near valves/outlets.	Visual inspection and identification schedule.	Yes No N/A	
6	Penetrations through walls, ceilings and panels are properly sealed and finished.	Visual inspection / snag closure.	Yes No N/A	

3. Zone Valves, Area Valve Service Units and Labels

Sr.	Checklist Item	Verification / Evidence	Status	Remarks
1	Each zone valve service unit is correctly identified for the area and gas services controlled.	Visual inspection and approved zoning schedule.	Yes No N/A	

Sr.	Checklist Item	Verification / Evidence	Status	Remarks
2	Valve boxes are accessible, clearly labelled and protected from unauthorised operation.	Visual inspection.	Yes No N/A	
3	Isolation valves operate correctly and valve positions can be positively identified.	Functional test.	Yes No N/A	
4	Emergency isolation arrangements are clearly identified and accessible to authorised staff.	Site inspection / emergency isolation test.	Yes No N/A	
5	Labels identify gas type, served area and valve/zone designation without ambiguity.	Label inspection.	Yes No N/A	

4. Terminal Units / Medical Gas Outlets

Sr.	Checklist Item	Verification / Evidence	Status	Remarks
1	Medical gas terminal units are installed at approved locations and are securely fixed.	Approved layout and visual inspection.	Yes No N/A	
2	Each outlet is correctly identified for gas type and cannot be readily connected to an incompatible gas service.	Outlet identification and functional verification.	Yes No N/A	
3	Outlet operation, connection and disconnection are tested for correct function.	Functional test record.	Yes No N/A	
4	Outlets are clean, protected and free from visible damage or contamination.	Visual inspection.	Yes No N/A	
5	Outlet quantity and service type match the approved room/equipment schedule.	Outlet schedule reconciliation.	Yes No N/A	

5. Pressure, Leak and Strength Testing

Sr.	Checklist Item	Verification / Evidence	Status	Remarks
1	Pipeline pressure/strength testing has been completed using the specified test procedure for the installed system.	Pressure test certificate / test record.	Yes No N/A	
2	Leak testing has been completed and results are within the specified acceptance criteria.	Leak test record.	Yes No N/A	
3	Individual gas services have been tested and correctly identified before connection to operational supply.	Commissioning test record.	Yes No N/A	
4	Test instruments are suitable, calibrated and traceable to current calibration records.	Calibration certificates.	Yes No N/A	
5	Test results, test pressures, duration, locations and acceptance status are documented.	Completed test sheets.	Yes No N/A	

6. Purging, Cleanliness and Gas Quality

Sr.	Checklist Item	Verification / Evidence	Status	Remarks
1	Pipework has been purged using the specified procedure before being placed into service.	Purging record.	Yes No N/A	
2	Internal cleanliness and protection against oil, grease, dust and other contaminants have been maintained.	Installation/cleanliness records.	Yes No N/A	

Sr.	Checklist Item	Verification / Evidence	Status	Remarks
3	Gas quality / purity checks are completed where required by the project specification and applicable standard.	Gas quality test certificate.	Yes No N/A	
4	No unacceptable contamination or debris is present at terminal outlets.	Inspection / test record.	Yes No N/A	

7. Alarm, Monitoring and Emergency Provisions

Sr.	Checklist Item	Verification / Evidence	Status	Remarks
1	Area alarm / master alarm panels are installed where required and correctly identified.	Approved alarm schedule / visual inspection.	Yes No N/A	
2	Alarm indications correspond to the correct gas service and zone.	Functional alarm test.	Yes No N/A	
3	Pressure or vacuum monitoring points/sensors are installed as designed and display correctly.	Functional test / calibration.	Yes No N/A	
4	Alarm signal transmission and audible/visual indications are tested.	Alarm commissioning record.	Yes No N/A	
5	Emergency procedures and isolation information are available to relevant hospital staff.	SOP / training record.	Yes No N/A	

8. Source Equipment and Supply Resilience

Sr.	Checklist Item	Verification / Evidence	Status	Remarks
1	Medical gas source equipment, manifold connections and supply arrangements are installed as approved.	Source equipment inspection.	Yes No N/A	
2	Primary, secondary and reserve supply arrangements are identified where applicable.	System schematic / source schedule.	Yes No N/A	
3	Automatic or manual changeover functions operate as designed where provided.	Functional commissioning test.	Yes No N/A	
4	Source equipment alarms and indication systems are tested.	Functional test record.	Yes No N/A	
5	Emergency/reserve supply arrangements are available and documented for the served areas.	Emergency supply plan.	Yes No N/A	

9. Testing, Commissioning and Handover Documentation

Sr.	Checklist Item	Verification / Evidence	Status	Remarks
1	All commissioning tests are completed and signed by the responsible competent person/agency.	Signed commissioning records.	Yes No N/A	
2	As-built drawings reflect the final installed MGPS configuration.	Approved as-built drawings.	Yes No N/A	
3	Valve schedules, outlet schedules, test certificates and gas identification records are included in the handover pack.	Handover document index.	Yes No N/A	
4	Operation, maintenance and emergency procedures are handed over to the hospital.	O&M; manuals / SOPs.	Yes No N/A	

Sr.	Checklist Item	Verification / Evidence	Status	Remarks
5	Open snags are documented with responsible person and closure date.	Snag register and closure report.	Yes No N/A	
6	Relevant staff receive training on isolation, alarms, emergency response and routine checks.	Training attendance / competency record.	Yes No N/A	

Final Commissioning and Handover Sign-off

Area / Responsibility	Name	Signature	Date
Hospital Representative	____	____	____
MGPS Testing / Commissioning Agency	____	____	____
Quality / NABH Coordinator	____	____	____
MedGenz Project Representative	____	____	____

Reference Notes

1.HTM 02-01isused asthe reference framework for medical gas pipeline system design, installation, testing, commissioning and operational safety requirements. Project-specific requirements and the edition applicable to the project should be verified before final approval.

2. This checklist is intended for practical project inspection, commissioning and handover support. It does not replace the applicable HTM 02-01 requirements, statutory approvals, hospital policies, competent-person testing, or other applicable standards/regulations.

3. Acceptance criteria, test pressures, gas purity requirements and commissioning procedures should be completed in accordance with the applicable project specification and current governing requirements.

MedGenz India Private Limited | Medical Gas Pipeline System (MGPS)