



HEALTH HOLDING

HAFER ALBATIN HEALTH
CLUSTER
MATERNITY AND
CHILDREN HOSPITAL

Department:	Facility Management and Safety		
Document:	Internal Policy and Procedure		
Title:	Medical Gas – Commissioning & Testing New Branch		
Applies To:	Medical Gas Staff		
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1. PURPOSE:

- 1.1 Primary purpose of this plan is to ensure the provision of safe and variable Medical Gas System and their efficient operation and use.
- 1.2 To comply and clarify procedures related to effective Medical Gas System in Commissioning and Testing New Branching / Modifications within MCH.

2. DEFINITONS:

- 2.1 HTM 02-01 : Health Technical Memorandum is an international standard for Health institutions.

3. POLICY:

- 3.1 All documents such as Built Plan, filled-up Forms of Commissioning and Testing must be signed by both company representatives and to be submitted to the MCH office.
- 3.2 The testing of Medical Gas Plant , the Mechanical load and Electrical load are in accordance with the manufacturer / supplier standards.
- 3.3 All the Medical Gas Equipment must be connected with the Emergency Power Supply.
- 3.4 The capacity / volume (Liters /min. or m³/min.) of each meet the desired required in Medical Gas System.
- 3.5 The safety features of attachments makes the equipment and the personnel in safe conditions.
- 3.6 The Control System must be in accordance with the Electrical Standard:
 - 3.6.1 The Equipment performance producing Medical air , Medical Vacuum Pump, Anesthetic Gas Scavenging System or any Medical Gas System Installed.
 - 3.6.2 The Equipment foundations meet the standard safety required.
 - 3.6.3 The cut in - cut out during loading and unloading performance.
 - 3.6.4 The air dryer humidity (Dew point) meets the standard in Medical purity.
- 3.7 Air receiver tanks maximum pressure capacity and the materials must be in accordance with the Medical Gas Standard with Pressure Testing Certificate from the producer.
- 3.8 Air dryers Filters and Vacuum Pump filters must be accordance with the Medical Gas Standard Specifications.
- 3.9 The Piping Design and Materials use must be in accordance with the HTM Standards:
 - 3.9.1 Piping should clear from obstruction.
 - 3.9.2 The Main Pipe diameter and going to branches must in accordance the HTM 02-01 as required the rate of Flow.
 - 3.9.3 The Pipe Materials and Joint Brazing / Soldering use in accordance with HTM 02-01
 - 3.9.4 The Pipe Sleeve and support in between distance in accordance with HTM 02-01.
 - 3.9.5 The Leakage and the Cross – connection Test.
 - 3.9.6 In Labeling and marking are visual and in accordance with the HTM length an size.
 - 3.9.7 The System Leakage test, the Vacuum Leakage, the AVSUs (AREA VALVE SERVICE UNITS) – Closure and Zoning test.
 - 3.9.8 The LVAs (LINE VALVE AREAS) – Closure and Zoning test, the cross connection test.

- 3.9.9 The Functional test of Terminal Units, the design flow performance Test and Functional test of supply system.
- 3.9.10 The Pressure Safety Valves, the Warning System, the verifications of drawings, the purging and filling, the Quality and gas identifications.
- 3.10 A certificate of Completion is issued during the Commissioning and Testing of all Medical Gas System.
- 3.11 Review / Approval after the Commissioning and testing of all medical gas system:
 - 3.11.1 Supply Medical Gas Engineer
 - 3.11.2 Head of Medical Gas operation Section
 - 3.11.3 Chairperson of Maintenance Department
 - 3.11.4 Chairperson of Operation Department

4. PROCEDURE:

- 4.1 Conduct to review the medical gas as built before commissioning.
- 4.2 Installation and inspection in accordance the HTM (Health Technical Memorandum) and the Safety standards before testing
- 4.3 Assist the contactor during reviewing the medical gas as built plan before Commissioning and installation inspection in accordance the HTM (Health Technical Memorandum) and the safety standards.
- 4.4 Turnover of Commissioning and Testing documents for acceptance approval and filing to Project Administration.

5. MATERIALS AND EQUIPMENT:

N/A

6. RESPONSIBILITIES:

- 6.1 MCH Maintenance Engineer

7. APPENDICES:

- 7.1 N/A

8. REFERENCES:

- 8.1 The Health Technical Memorandum 02-01(HTM 02-01) an International Standard for Health Institutions.

9. APPROVALS:

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