

DBL 보유 장비 안내



메가테스트



부유미생물측정기



Sound Meter



온도분포 Validator



온습도 측정기



Particle Counter



Decade Resistance Box



Velometer



Valometer



Vibration meter



3-Phase Energy Analyzer



DC V/A Standard



Clamp meter



Lightmeter



Mano meter



Multimeter



Tachometer



RTD Sensor Calibrator



Aerosol Photometer



DOP Generator

실험시설 유지관리 필수 항목

HVAC System & Commissioning

- Hydronic Balance Testing
- Sound Measurement Testing
- Vibration Testing
- Alarms and Interlocks Testing
- Air flow rate testing in ductwork
- Air Volume Supply and Return, testing and balancing
- Fan RPM and Amperage
- Temperature, humidity (coil duties) and static pressure testing (duct leakage)
- Loop Checks
- Verification of the proper operation of air coils, air handling units, fans and air filters, including test sequence, shut-down, and start-up
- P&ID walkdown, resulting in an “as-built” P&ID
- Utilities Check
- Instrument Calibration
- Electrical Power Tests
- Lubrication checks
- Isometric Drawing checks
- Safety Checks

IQ (Incoming Quality)

- 1) Verification of critical Instrument calibration
- 2) TAB check
- 3) P & ID check
- 4) Critical instrument installation check
- 5) Equipment / Instrument check
- 6) Filter check
- 7) Material and lubricant check
- 8) Utilities check
- 9) Review of supporting engineering documentation
 - Mechanical / Electrical construction
 - Commissioning
 - Proper Labeling on facilities, equipment, instrument, valves and etc.
 - Engineering diagram or drawing
 - Manual for operation and preventive maintenance

OQ (Outgoing Quality)

- 1) Prerequisites for commencement of OQ execution
 - IQ report review
 - Cleaning
 - SOP's (operation, maintenance, etc.) draft
- 2) Verification of critical instrument calibration
- 3) Operational tests
 - Room air volume (supply & exhaust air volume) test or air exchange test
 - HEPA filter integrity test (DOP test)
 - Monitoring of room differential pressure
 - Monitoring of room temperature and RH
 - Power ; fail and recovery test
 - Unmanned airborne particle monitoring
 - Airborne particle removal test
 - Unmanned microbial level checks
 - Test completion verification