Project Full Name

WEiiMIAO

FAT (Factory Acceptance Test)

Document Title: Factory Acceptance Test (FAT) Checklist

Project Name: _____

Client Name: _____

Panel Serial No. / Tag No.: _____

Date: _____

Location: _____

1. General Information

Panel Type: (Main PLC Control Panel / Remote I/O Panel / VFD Panel / Auxiliary Panel)

PLC Brand & Model: _____

HMI Brand & Model: _____

Power Supply: _____V AC / _____V DC

Drawing Reference No.: _____

Witnessed by (Client): _____

Tested by (Supplier): _____

2. Documentation Check

Item	Description	Reference Document	Test Result Verified PASS FAIL N/A			Deviation Reference
2.1	Approved GA Drawing		☐	☐	☐	
2.2	Wiring Diagram / Schematics		☐	☐	☐	
2.3	Bill of Materials		☐	☐	☐	
2.4	Test Procedures		☐	☐	☐	
2.5	Operation & Maintenance Manual		☐	☐	☐	

3. Visual & Mechanical Inspection

Item	Description	Reference Document	Test Result PASS FAIL N/A			Deviation Reference
3.1	Panel dimensions as per drawing		☐	☐	☐	
3.2	Material & workmanship (paint, finish)		☐	☐	☐	
3.3	Cable entry locations		☐	☐	☐	
3.4	Labeling & tagging (wires, terminals, devices)		☐	☐	☐	
3.5	Earthing & grounding connections		☐	☐	☐	
3.6	Door locks, hinges, gasketing		☐	☐	☐	

4. Electrical Verification

Item	Description	Reference Document	Test Result PASS FAIL N/A			Deviation Reference
4.1	Power supply voltage check		☐	☐	☐	
4.2	Continuity test		☐	☐	☐	

Item	Description	Reference Document	PASS	FAIL	N/A	Deviation Reference
4.3	Insulation resistance test		☐	☐	☐	
4.4	Circuit protection devices (MCB, MCCB, fuses)		☐	☐	☐	
4.5	Control relays & contactors		☐	☐	☐	
4.6	Terminal tightness		☐	☐	☐	

5. PLC & HMI Verification

Item	Description	Reference Document	Test Result PASS	FAIL	N/A	Deviation Reference
5.1	PLC power-up and diagnostic LEDs		☐	☐	☐	
5.2	CPU model and firmware check		☐	☐	☐	
5.3	I/O modules type and quantity		☐	☐	☐	
5.4	I/O simulation test (digital inputs/outputs)		☐	☐	☐	
5.5	I/O simulation test (analog inputs/outputs)		☐	☐	☐	
5.6	Communication ports test (Ethernet, Profibus, Modbus, etc.)		☐	☐	☐	
5.7	HMI power-up and screen check		☐	☐	☐	
5.8	HMI communication with PLC		☐	☐	☐	
5.9	HMI navigation and alarm test		☐	☐	☐	

6. System Functional Tests

Item	Description	Reference Document	Test Result PASS	FAIL	N/A	Deviation Reference
6.1	Start/Stop sequence test		☐	☐	☐	
6.2	Interlocks verification		☐	☐	☐	
6.3	Emergency stop functionality		☐	☐	☐	
6.4	Alarm and fault simulation		☐	☐	☐	
6.5	Data logging / trending (if applicable)		☐	☐	☐	
6.6	Remote monitoring test (if applicable)		☐	☐	☐	

7. Final Checks

Item	Description	Reference Document	Test Result PASS	FAIL	N/A	Deviation Reference
7.1	FAT checklist completed		☐	☐	☐	
7.2	All deviations recorded		☐	☐	☐	
7.3	FAT report prepared		☐	☐	☐	
7.4	Client approval		☐	☐	☐	

8. Signatures

Supplier Test Engineer: _____ Date: _____

Client Witness / Representative: _____ Date: _____

QA/QC Engineer: _____ Date: _____