

TEST REPORT

Model	AQFM-1020
Manufacture by	AQUA
Test Category	Hydraulic performance & quality analysis

DIRECTIONS

Product: Regenerative Media Filter

Place of Testing: Aqua Quality Control Center

PRODUCT DETAILS

Inspection Item	Details
Vessel Material	316L Stainless Steel
Gasket	Silicon / Rubber
Working Pressure	0.35 MPa
Working temperature	0-40°C
Filtration Accuracy	1 Micron
Communication protocol	Modbus RTU/TCP

MATERIAL VERIFICATION

Inspection Item	Acceptance	Result
Material Certificate	Stainless steel 316L	PASS
Surface Finish	No scratch/corrosion	PASS
Flanges	Correct size	PASS
Connections	As drawing	PASS
Name Plate	Legible	PASS
No damage or missing parts on the surface of the equipment	Clear surface	PASS
All electrical components securely installed	Confirmed by a certified technician	PASS
All the bolts and nuts tightened	Confirmed by a certified technician	PASS
HMI securely installed	Confirmed by a certified technician	PASS
Dimensional Inspection	As mentioned in the datasheet	PASS

INTERNAL INSPECTION

Inspection Item	Result
Check if all cables are effectively connected	VERIFIED
Check if all cables are secure	VERIFIED
Check if all metals are effectively grounded	VERIFIED
Check if the wiring terminals are secure	VERIFIED
Check if the waterproof plug is loose	VERIFIED

POWER ON TEST

Inspection Item	Result
Check electric leakage situation	VERIFIED
Check voltage, current	VERIFIED
Check isolation switch	VERIFIED
Check the output voltage of each terminal	VERIFIED
Test analog signal	VERIFIED
Check HMI power on and off	VERIFIED
Check various functions of HMI	VERIFIED
Check various functions of regenerative media filter controller	VERIFIED
Check RFID card reader function	VERIFIED
Check tower light	VERIFIED
Check E-STOP button	VERIFIED
Check fans	VERIFIED
Check the heat dissipation air conditioning	VERIFIED
Check temperature sensor	VERIFIED

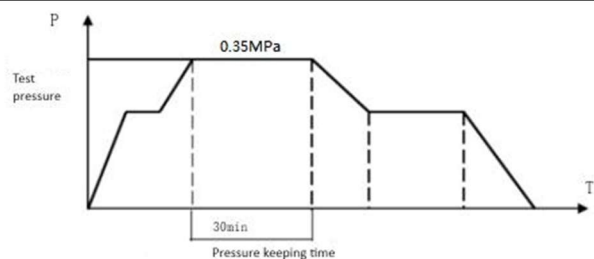
WELDING INSPECTION

Inspection Item	Acceptance	Result
Circumferential Weld	Uniform	PASS
Longitudinal Weld	No crack	PASS
Porosity	None	PASS
Undercut	None	PASS
Passivation	Completed	PASS

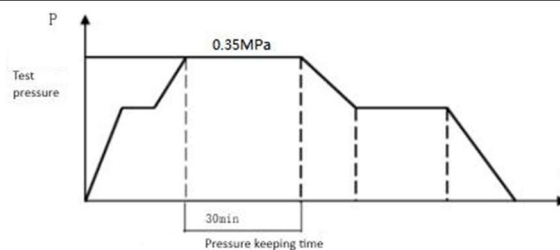
PRESSURE TEST RECORD

Test Item	Requirement	Actual	Result
Pressure	0.35 MPa	0.35 MPa	PASS
Holding Time	30 min	30 min	PASS
Leakage	No leakage	None	PASS
Deformation	None	None	PASS
Noise	Normal	Normal	PASS

Design requirement pressure test curve



Actual pressure test curve



CONTROLLER FUNCTIONAL TEST

Inspection Item	Result
HMI	PASS
RFID Reader	PASS
Tower Light	PASS
Emergency Stop	PASS
Temperature Sensor	PASS
RS485 Communication	PASS
Fans	PASS
Analog Signals	PASS

PUMP CONTROLLER TEST

Inspection Item	Result
Voltage	PASS
Current	PASS
Isolation Switch	PASS
Leakage Protection	PASS
Grounding	PASS
Pump Start	PASS
Pump Running	PASS

FINAL FACTORY ACCEPTANCE

Category	Result
Material Verification	PASS
Internal Inspection	PASS
Power on Test	PASS
Welding Inspection	PASS
Pressure Test Record	PASS
Controller Functional Test	PASS
Pump Controller Test	PASS
Overall Status	QUALIFIED

Conclusion: The proposed Regenerative Media Filter System has successfully completed all required visual, dimensional, material, pressure, electrical (where applicable), and functional inspections in accordance with the manufacturer's quality control procedures.

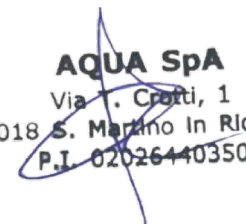
The unit was hydrostatically tested at a pressure of 0.35 MPa. During the test, no leakage, no visible deformation, no abnormal vibration, and no abnormal noise were observed. The equipment operated satisfactorily throughout the test period.

Based on the inspection and test results, the proposed Regenerative Media Filter System complies with the applicable manufacturing and quality requirements and is considered acceptable for release and dispatch.

Result: **PASS.**

Authorized Signature and Company Stamp

AQUA SpA
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A handwritten signature in blue ink is written over the company stamp.