



VOL-01

STEAM QUALITY TEST REPORT

Annex-01.01

Turn Over Package

FOR

WATER STATION PURE STEAM POINT OUT OF
DISTILLATION COLUMN

OF

JAMJOOM PHARMA

EL-BOUR CITY

CLIENT:



QUALIFICATION PROVIDER:



Package Content:

VOL-01 Steam Quality Test Report

Annex-01.01) Turn Over Package (Attachments)



VOL-01) STEAM QUALITY TEST REPORT

ANNEX 01.01.01
ATTACHMENTS

Content:

01.01.01.01	Site Sheet Reports
01.01.01.02	Devices References
01.01.01.03	Inspection Certificate



VOL-01) STEAM QUALITY TEST REPORT

ANNEX 01.01.01

ATTACHMENTS

ATTACHMENTS 01.01.01.01

Site Sheet Reports





SQ1 - DRYNESS VALUE TEST



Name Techno Air Gate (TAG)
Address 2311 Abdulsalam Amin St., 2nd District, 6th October, Giza, Egypt.
Email/Tel info@technoairgate.com

JAMJOOM PHARMA

Date Wednesday, June 18, 2025

Code NA

Water Station Pure Steam Point Out of Distillation Column

TEST

Cycle No

(M1) Total weight of flask pipes etc (kg)

(M2) Total weight of flask and 650ml of water (kg)

(M3) Total weight of flask + condensate (kg)

(T0) Initial temperature of water in flask (oC)

(T1) Final temperature of water and condensate (oC)

(Ts) Average temperature of steam delivered to sterilizer (°C)

(L) Latent heat of steam at average temperature, delivered to sterilizer (kJ/

Calculated Dryness Value

Requirements of EN 285

Notes:

1. The dryness value is not less than 0.90 (if metal loads are processed, the dryness value should not be below 0.95).

2. Throughout the operating cycle, the temperature measured in the steam service pipe is within 3 °C of that measured during the superheat test.

1

2

3

Average

0.593

1.238

1.308

20.30

77.10

137.10

2153.70

0.99

≥ 0.95





SQ1 - NON-CONDENSABLE GAS TEST



Name Techno Air Gate (TAG)
Address 2311 Abdulsalam Amin St., 2nd District, 6th October, Giza, Egypt.
Email/Tel info@technoairgate.com

Date Wednesday, June 18, 2025

JAMJOOM PHARMA

Site

Location / Sterilizer

Water Station Pure Steam Point Out of Distillation Column

Code NA

TEST

Cycle No	1	2	3	Average
Volume of gas at start of test (ml)	0.0			
Volume of gas at end of test (ml)	0.7			
Volume of condensate at start of test (ml)	0.0			
Volume of condensate at end of test (ml)	100.0			
Non-condensable gas level (%)	0.7%			

Requirements of EN 285 NMT 3.5%



SQ1 - SUPERHEAT TEST

Name Techno Air Gate (TAG)
 Address 2311 Abdulsalam Amin St, 2nd District, 6th October, Giza, Egypt.
 Email/Tel info@technoairgate.com

Date Wednesday, June 18, 2025

JAMJOOM PHARMA

Code NA

Water Station Pure Steam Point Out of Distillation Column

Site

Location / Sterilizer

TEST

Cycle No	1	2	3	Average
Temperature of Steam (°C)	1381.00	139.20	138.50	
Temperature in Expansion Tube (°C)	101.10	100.30	100.70	
Boiling point at local condition (°C)	99.50	99.50	99.50	
Superheat °C	1.6	0.8	1.2	1.2

Requirements of EN 285 ≤ 25°C



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ATTACHMENTS 01.01.01.02

Devices References



CALIBRATION CERTIFICATE



TAG LAB

On Site

Certificate No.:

001 - 001 - 002 - 2025

Customer Information

Customer: TAG LAB
Address: 6th of October City
Email/Tel: info@technoairgate.com

Instrument Under Calibration Information

Instrument Name:	Thermocouple Type-T with digital indicator		
Manufacture:	BENTECH	Resolution:	0.1 °C
Model:	GM1312	Accuracy:	NA
Code:	2835217/N.TC-31/4	Serial Number:	2835217/N.TC-31/4
Location:	TAG LAB	Range:	(-20 to 350) °C

Reference Instrument Information

Instrument Name:	Pt-100 with digital indicator	Resolution:	0.01 °C
Manufacture:	GMH	Range:	((-40) to 350) °C
Model:	GMH 3710	Serial Number:	32403245/117

Remarks

Calibration Method: Comparison method using Digital thermometer of accuracy $\pm 0.03^{\circ}\text{C}$ Full Range based on Calibration Method for Temperature sensor with indicator CM-T-001 based on EURMET Version 2.1 (10/2011), Version 3.0 (02/2019), Version 3.1 (02/2020).

Uncertainty: The reported expanded uncertainty is based on GUM Standard and the standard Uncertainty multiplied by coverage factor k_p value to give confidence level of 95%.

Traceability: The traceability of measurement results to the SI units calibrated by the National Standard maintained at NIS with Certificate No. (1459/32C002/161/1774/2024).

Notes:

-This document cannot be reproduced or duplicated by any mean without written permission from TAG.

Disclaimer:

- This Certificate is only related to the unit under Calibration during the Calibration period.

-**Decision Rule:** statement of conformity is based on that the deviation is within acceptance criteria.

F-7.8/06

This Certificate may be presented or copied as a whole document only

Head Quarter: 26 Al Israa St., Lebanon Sq., Mohandseen, Giza, Egypt

October Branch: 231 Abdulsalam Amin St., 2nd District, 6th October, Giza, Egypt

www.technoairgate.com

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+201023310802

+20233034440



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CALIBRATION CERTIFICATE



Certificate No.: 001 - 001 - 002 - 2025

Reading Information

Reference Reading ts °C	Reading tm °C	Correction $\Delta t = t_s - t_m$ °C	Uncertainty ($\pm$ °C)	Pass/Fail
-20.00	-20.3	0.3	0.16	Pass
25.00	24.6	0.4	0.16	Pass
100.00	99.5	0.5	0.16	Pass
150.00	150.6	-0.6	0.18	Pass
350.00	350.9	-0.9	0.28	Pass

Environmental Conditions During Calibration

Temperature: 23 ± 5 °C
Relative Humidity: 45 ± 15 %
Pressure: 1.013 bar

Calibration Results

Max. Reading Error: 0.9 °C
Acceptance Criteria: ± 2 °C
Uncertainty: ± 0.28 °C

Acceptance Criteria is According to Customer Requirement.

Received Date

05 Jan 2025

Issue Date

06 Jan 2025

Calibration Date

05 Jan 2025

Calibration Due

04 Jan 2026

Calibrated By

Name: Mohamed Gamal
Title: Calibration Specialist
Signature:
Date: 05 Jan 2025

Prepared by

Shimaa Badr
Technical Office Specialist
Signature:
Date: 06 Jan 2025

Reviewed & Approved By

Ahmed Tarek
Technical Manager
Signature:
Date: 06 Jan 2025

F-7.8/06

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CALIBRATION CERTIFICATE

TAG LAB ☒On Site ☐

Certificate No.:

001 - 001 - 001 - 2025

Customer Information

Customer: TAG LAB
Address: 6th of October City
Email/Tel: info@technoairgate.com

Instrument Under Calibration Information

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Manufacture:	BENTECH	Resolution:	0.1 °C
Model:	GM1312	Accuracy:	NA
Code:	2835217/N.TC-31/3	Serial Number:	2835217/N.TC-31/3
Location:	TAG LAB	Range:	(-20 to 350) °C

Reference Instrument Information

Instrument Name:	Pt-100 with digital indicator	Resolution:	0.01 °C
Manufacture:	GMH	Range:	((-40) to 350) °C
Model:	GMH 3710	Serial Number:	32403245/117

Remarks

Calibration Method: Comparison method using Digital thermometer of accuracy $\pm 0.03^{\circ}\text{C}$ Full Range based on Calibration Method for Temperature sensor with indicator CM-T-001 based on EURMET Version 2.1 (10/2011), Version 3.0 (02/2019), Version 3.1 (02/2020).

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CALIBRATION CERTIFICATE



Certificate No.: 001 - 001 - 001 - 2025

Reading Information

Reference Reading ts °C	Reading tm °C	Correction $\Delta t = t_s - t_m$ °C	Uncertainty ($\pm$ °C)	Pass/Fail
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25.00	24.7	0.3	0.16	Pass
100.00	99.6	0.4	0.16	Pass
150.00	149.5	0.5	0.18	Pass
350.00	349.3	0.7	0.28	Pass

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Relative Humidity: 45 ± 15 %
Pressure: 1.013 bar

Calibration Results

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Uncertainty: ± 0.28 °C

Acceptance Criteria is According to Customer Requirement.

Received Date

05 Jan 2025

Issue Date

06 Jan 2025

Calibration Date

05 Jan 2025

Calibration Due

04 Jan 2026

Calibrated By

Name: Mohamed Gamal
Title: Calibration Specialist
Signature:
Date: 05 Jan 2025

Prepared by

Shimaa Badr
Technical Office Specialist
Signature:
Date: 06 Jan 2025

Reviewed & Approved By

Ahmed Tarek
Technical Manager
Signature:
Date: 06 Jan 2025



F-7.8/06

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VOL-01) STEAM QUALITY TEST REPORT

ANNEX 01.01.01
ATTACHMENTS

ATTACHMENTS 01.01.01.03

Inspection Certificate



Certificate No.: SQ-002-2025

Certificate
of
Steam Quality Execution
for
Water Station Pure Steam Point Out of
Distillation Column
at JAMJOOM PHARMA
Executed By
Techno Air Gate Company (TAG)
Egypt

The inspection test was performed in compliance with the requirements of ISO/IEC 17020/2012, and this certificate confirms that SYSTEM-NAME fulfills the required acceptance criteria.

Inspection Date:
18/06/2025

Certificate Issue Date:
19/06/2025

This certificate relates to report no.:
SQR-V-00225

Prepared By

Mohamed Hassan



Head of Department

[Signature]

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F-7.4/02
Issue No.: 01.0
Ver. No.: 01

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Issue Date: 01 Oct., 2024