Base Load Power Hub (BLPH)

FAT PROCEDURES

Document Number: 1724000791-QC-PRO-00008

Document Class: 2

03	28/11/2024	ACCEPTED FOR CONSTRUCTION (AFC)	Róbert Seres	Mária Poór	Zsanett Molnár
02	25/7/2024	ACCEPTED FOR CONSTRUCTION (AFC)	Róbert Seres	Mária Poór	Zsanett Molnár
01	6/6/2024	ACCEPTED FOR CONSTRUCTION (AFC)	Róbert Seres	Mária Poór	Zsanett Molnár
00	22/5/2024	ISSUE FOR REVIEW (IFR)	Róbert Seres	Mária Poór	Zsanett Molnár
Rev.	Date	Description	Prepared	Reviewed	Approved

BROOKS INSTRUMENT Beyond Measure

This document undergoes an issuance cycle within EDMS "Fusionlive".
Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

Table of Contents

SH.	DESCRIPTION	REVISIONS							
		00	01	02	03				
1	Cover	X	X	X	X				
2	Table of Contents	X	X	X	X				
3	Revision / Change Log	X	X	X	X				
4	FAT PROCEDURE	X	X	X	X				
11	VISUAL AND DIMENSIONAL INSPECTION OF COMPLETED INSTRUMENTS	X	X	X	X				

This document undergoes an issuance cycle within EDMS "Fusionlive".
Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

Revision / Change Log

Rev.	Description
00	ISSUE FOR REVIEW (IFR)
01	ACCEPTED FOR CONSTRUCTION (AFC)
02	ACCEPTED FOR CONSTRUCTION (AFC)
03	ACCEPTED FOR CONSTRUCTION (AFC)

HOLDS LIST

No.	Description
1.	
2.	
3.	
4.	

This document undergoes an issuance cycle within EDMS "Fusionlive".
Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

BROOKS® INSTRUMENT

Document Title: Factory Acceptance Test Procedure (FAT)

End User:		**PO NO:**	
Vendor:	ROSETTI MARINO S.p.A	**PO NO:**	1724000791
Sub-vendor Name:	Brooks Instrument	**Document No:**	
Project:	HOLLANDSE KUST NOORD WIND PARK Project		

INDEX

1 Introduction

2 TAG No. Details

3 Reference Documents

4 Tools and Test Equipment

5 Utility

6 FAT Procedure
A. Visual and Dimensional Inspection
B. Calibration Test
C. Pressure Test.
D. Documentation check

7 Punch List

8 Inspection Acceptance Record

BROOKS® INSTRUMENT

1. Introduction:

This section describes the procedure by which the individual equipment's or combined system shall be inspected and tested to assure its proper operation. A list of check items required shall be prepared (see attached FAT Report). The completed list with the results recorded, it's supporting data and documents shall be attached to form a part of the completed FAT Record.

2. TAG No. Details:

Sl. No.	Modelcode	Tag Number	Instrument	Remarks
1	3809GCA10AGBC3D2C0AC	25-FT-031	VA Flowmeter	
2	3809GCA10AGBC3D2C0AC	25-FT-032	VA Flowmeter	
3	3809GCA10AGBC3D2C0AC	25-FT-033	VA Flowmeter	
4	3809GCA10AGBC3D2C0AC	25-FT-034	VA Flowmeter	
5	3809GCA10AGBC3D2C0AC	25-FT-036	VA Flowmeter	
6	3809GCA10AGBC3D2C0AC	25-FT-038	VA Flowmeter	
7	3809GCC08BFBC9A0V0AC	64-FG-001	VA Flowmeter	

3. Reference Documents (Latest Revision):

Sl. No.	Document Number	Description
1	834P054	PRESSURE TEST FOR 38xxG SUPERFAMILY
2	834C118	Calibration procedure for MT3809G
3	ISP063	Visual and Dimensional Inspection of Completed Instruments

4. Tools and Test Equipment:

a Calibration Master Meter
b Pressure Test Bench.

5. Utility:

a Calibration Medium - Air

BROOKS® INSTRUMENT

6 FAT Procedure

Activities:

A. Visual / Dimensional Inspection:

The construction, quantities, dimensions of all equipment's shall conform to the customer's final approved drawings, BOM and project specifications. The visual and dimensional inspection shall be performed as per Brooks procedure ISP063.

a. Verify that all tagging was as per the approved drawings.

b. Check all Flow meter Flange to Flange distance inline as per approved drawings.

c. Use the referenced drawing & Bill of material to perform the check and highlight the respective item on the drawing & Bill of material to mark as checked and approved.

d. Results shall be recorded as shown below.

				Visual/ Dimensional Test
Sl. No.	Modelcode	Tagnumber	Visual / Dimension	Acceptance criteria
1	3809GCA10AGBC3D2C0AC	25-FT-031	Checked	Pass / Fail
2	3809GCA10AGBC3D2C0AC	25-FT-032	Checked	Pass / Fail
3	3809GCA10AGBC3D2C0AC	25-FT-033	Checked	Pass / Fail
4	3809GCA10AGBC3D2C0AC	25-FT-034	Checked	Pass / Fail
5	3809GCA10AGBC3D2C0AC	25-FT-036	Checked	Pass / Fail
6	3809GCA10AGBC3D2C0AC	25-FT-038	Checked	Pass / Fail
7	3809GCC08BFBC9A0V0AC	64-FG-001	Checked	Pass / Fail

e. Any defects found shall be recorded, rectified and re-checked. If immediate rectification of defect is not possible, that particular defect shall be logged on the Punch List record indicating the rectification and corrective action required by the responsible party or parties involved.

f. When the test is completed, have the customer's inspector sign off the marked drawing, indicating test is completed. The signed drawing shall be attached to and become part of the acceptance report.

B. Calibration Test Procedure.:

The calibration shall be performed as per Brooks calibration procedure 834P054.
Below is the details of the accuracy limits for the applicable Tags.

BROOKS® INSTRUMENT

			Calibration	
Modelcode	Tagnumber	Flange rating	Accuracy / Limits	Acceptance criteria
3809GCA10AGBC3D2C0AC	25-FT-031	1" 300Lbs RF	1% Full Scale	Pass / Fail as per accuracy limits
3809GCA10AGBC3D2C0AC	25-FT-032	1" 300Lbs RF	1% Full Scale	Pass / Fail as per accuracy limits
3809GCA10AGBC3D2C0AC	25-FT-033	1" 300Lbs RF	1% Full Scale	Pass / Fail as per accuracy limits
3809GCA10AGBC3D2C0AC	25-FT-034	1" 300Lbs RF	1% Full Scale	Pass / Fail as per accuracy limits
3809GCA10AGBC3D2C0AC	25-FT-036	1" 300Lbs RF	1% Full Scale	Pass / Fail as per accuracy limits
3809GCA10AGBC3D2C0AC	25-FT-038	1" 300Lbs RF	1% Full Scale	Pass / Fail as per accuracy limits
3809GCC08BFBC9A0V0AC	64-FG-001	1" 150 Lbs RF	1% Full Scale	Pass / Fail as per accuracy limits

a. Any defects found shall be recorded, rectified and re-checked. If immediate rectification of defect is not possible, that particular defect shall be logged on the Punch List record indicating the rectification and corrective action required by the responsible party or parties involved.

b. When the test is completed, have the customer's inspector sign off the Calibration certificate, indicating test is completed. The signed Certificates shall be attached to and become part of the acceptance report.

C. Pressure Test Procedure

The pressure Test shall be performed as per Brooks standard procedure 834C118.

Below are the details of the pressure test on all applicable Tags.

			Pressure test				
Modelcode	Tag	Connection size	Flange material	Pressure test duration (min)	Pressure test medium	Pressure value (bar)	Acceptance criteria
3809GCA10AGBC3D2C0AC	25-FT-031	1" 300 Lbs	316/316L	2	Water	75	No visual leakage
3809GCA10AGBC3D2C0AC	25-FT-032	1" 300 Lbs	316/316L	2	Water	75	No visual leakage
3809GCA10AGBC3D2C0AC	25-FT-033	1" 300 Lbs	316/316L	2	Water	75	No visual leakage
3809GCA10AGBC3D2C0AC	25-FT-034	1" 300 Lbs	316/316L	2	Water	75	No visual leakage
3809GCA10AGBC3D2C0AC	25-FT-036	1" 300 Lbs	316/316L	2	Water	75	No visual leakage
3809GCA10AGBC3D2C0AC	25-FT-038	1" 300 Lbs	316/316L	2	Water	75	No visual leakage
3809GCC08BFBC9A0V0AC	64-FG-001	1" 150 Lbs	316/316L	2	Water	29	No visual leakage

a. Any defects found shall be recorded, rectified and re-checked. If immediate rectification of defect is not possible, that particular defect shall be logged on the Punch List record indicating the rectification and corrective action required by the responsible party or parties involved.

b. When the test is completed, have the customer's inspector sign off the Pressure Test certificate, indicating test is completed. The signed Certificates shall be attached to and become part of the acceptance report

D. Documentation Review

a) Verification of Manufacturer's Functionality reports, Calibration reports, Certificate of Compliance.
b) Hazardous certificate if any as applicable.

End User:	
Vendor:	ROSETTI MARINO S.p.A
Sub-vendor Name:	Brooks Instrument
Project:	HOLLANDSE KUST NOORD WIND PARK Project

Item No	Detail Failure Description and Corrective Action	Tag No.	Area	Date	Completion Date / Signature		Action	Status
					Seller	Buyer		
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

8. INSPECTION ACCEPTANCE RECORD

End user Name:	**Sub-Vendor Name:**
	Brooks Instrument
Project title::	**Location:**
HOLLANDSE KUST NOORD WIND PARK Project	**Brooks Instrument Kft** Berenyi street 72-100. 8000 Székesfehérvár Hungary **Contact:**

DOCUMENT TITLE:

		Date:	
Sr. No.	**Item Description**	**Remarks**	**Customers / TPI**
1	Visual and Dimensional Check		
2	Calibration Test		
3	Pressure Test		
4	Documentation Review		

I,_____(TPI's Name) on behalf of _____ (Company's Name) do hereby, accept and provide notice that I have witnessed and inspected the items of the above-mentioned purchase order.

Date : _____ TPI's Signature : _____

Date : _____ Brooks Rep.'s Signature: _____

BROOKS INSTRUMENT	BROOKS PROCESS INSTRUCTION	**Number:** ISP063 **Rev:** *1* **Date:** *22 Sep 2016*

VISUAL AND DIMENSIONAL INSPECTION OF COMPLETED INSTRUMENTS

Approval Signatures

	Authorized Representative	Date
		23-09-2016
Prepared By:	Janos Strausz, Quality Engineer	
		23-09-2016
Approved By:	Attila Demeter, Quality Manager	
		23-09-2016
Approved By:	Machiel Mandersloot, Project Coordinator	

Company Confidential

The data contained herein is proprietary to the Brooks Instrument and shall not be disclosed in whole or in part for any purpose other than evaluation, provided that, if a contract is awarded to Brooks Instrument, as a result of or in connection with the submission of such data, the customer shall have the right to duplicate, use or disclose this data to the extent provided in the contract.

1.0 OBJECTIVE

This instruction details the visual and dimensional final inspection criteria related to customer demands.

2.0 SCOPE

Instruction is applicable for all Variable Area and Thermal Mass Flow devices in case customer orders contain a special request for creating a Visual and Dimensional Inspection Report.

3.0 TERMS, ACRONYMS AND ABBREVIATIONS

Term, Acronym or Abbreviation	Definition
N/A	

4.0 FORMS

ISP063-01 Visual and Dimensional Inspection Report

5.0 REFERENCES

N/A

6.0 REVISION HISTORY

Date	Revision	ECN Number (Copy Exact)	Description	Author
09/22/2016	1		*Release*	Janos Strausz

7.0 PROCEDURE

7.1 Visual inspection

Inspect the product considering the following aspects:

- metal surfaces of parts should not have marks, dents, scratches visible from 50cm at normal ambient light conditions. Marks, dents and scratches of flanges should be evaluated based on related flange standards.
- painted surfaces should not have damages, scratches, overflows visible from 50cm at normal ambient light conditions.
- labels should be positioned per prints, aesthetically acceptable.
- content of labels, plates, stickers and, if available, scales should be compared with customer orders.
- layout of the labels, plates and stickers should be compared with available instructions.
- check if connections are per customer requirements.
- check availability of all additional components as required by the customer order.

7.2 Dimensional inspection

The overall dimensions of the completed devices must be measured as per the released General Arrangement Drawings.

7.3 Reporting

Result of the visual and dimensional inspection should be recorded on the ISP063-01 form and should be saved within the final inspection records of the related serial number.

Visual and Dimensional Inspection Report

Project name :
Name of owner :
Purchase order nr. :
Reference nr. :
Subject :
Quantity :

Tag nr	Serial nr

Tag nr	Serial nr

Tag nr	Serial nr

Test	Result	Remarks
Visual		
Dimensional		

Date of inspection:
Inspection by (stamp):