



**CALIBRATION WORKSHEET FOR WATER METER USING VOLUMETRIC METHOD**

JORF REFERENCE NO.: \_\_\_\_\_

Date Received: \_\_\_\_\_

Date Measured: \_\_\_\_\_

**MEASURAND DATA:**

Meter Brand: \_\_\_\_\_  
Meter Classification: \_\_\_\_\_  
Meter Size: \_\_\_\_\_

**TESTBENCH USED**

Small Test Bench \_\_\_\_\_  
 Large Test Bench \_\_\_\_\_

**MEASUREMENT METHOD:**

- CM-01 : Calibration of Water Meter ranging 13mm to 25mm using Volumetric Method
- CM-02 : Calibration of Water Meter ranging 32mm to 50mm using Volumetric Method

The combined uncertainty of measurement was calculated using a "Computation of Uncertainty Measurement Worksheet" based on " ISO GUM: 1995" (See attached uncertainty budget worksheet)

**MEASUREMENT RESULT : ( See next page)**

**ENVIRONMENTAL CONDITION**

Ambient Temperature : \_\_\_\_\_  
Relative Humidity : \_\_\_\_\_

MME USED	ID CODE	REFERENCE CERTIFICATE NO.
Reference Standard		
Thermometer		
Inlet		
Outlet		
Thermohygrometer		
Digital Timer		

**REMARKS**

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Measured by: \_\_\_\_\_

Checked by: \_\_\_\_\_

# MEASUREMENT RESULT

TESTING FLOWRATE : \_\_\_\_\_

JORF REFERENCE NO.: \_\_\_\_\_

TARGET VOLUME : \_\_\_\_\_

Time before measurement: \_\_\_\_\_ Temperature before measurement : \_\_\_\_\_

Relative Humidity : \_\_\_\_\_

METER NO.                      1                      2                      3                      4                      5                      6                      7                      8                      9                      10

<b>Meter Identification</b>																			
<b>Tagging No.</b>																			
1	Final																		
	Initial																		
	Difference																		
2	Final																		
	Initial																		
	Difference																		
3	Final																		
	Initial																		
	Difference																		
<b>Average</b>																			
<b>Relative Error, %ε</b>																			

METER NO.                      11                      12                      13                      14                      15                      16                      17                      18                      19                      20

<b>Meter Identification</b>																			
<b>Tagging No.</b>																			
1	Final																		
	Initial																		
	Difference																		
2	Final																		
	Initial																		
	Difference																		
3	Final																		
	Initial																		
	Difference																		
<b>Average</b>																			
<b>Relative Error, %ε</b>																			

Time after measurement: \_\_\_\_\_

\*Temperature after measurement : \_\_\_\_\_

\*Relative Humidity : \_\_\_\_\_

TRIAL	Filling Time, sec	Flowrate, m <sup>3</sup> /h	Average Flowrate	LOCATION	**Water Temp., °C	Pressure, psi
1				Upstream		
				Downstream		
2				Upstream		
				Downstream		
3				Upstream		
				Downstream		

\* During test, the temperature and relative humidity shall not vary by more than 5 °C or 10% respectively within the reference range, otherwise repeat the measurement process.

\*\* During a test, temperature of the water shall not change by more than 5 °C, otherwise repeat the measurement process

Measured by: \_\_\_\_\_

Checked by : \_\_\_\_\_

# MEASUREMENT RESULT

TESTING FLOWRATE : \_\_\_\_\_

JORF REFERENCE NO.: \_\_\_\_\_

TARGET VOLUME : \_\_\_\_\_

Time before measurement: \_\_\_\_\_

Temperature before measurement : \_\_\_\_\_

Relative Humidity : \_\_\_\_\_

METER NO.		1	2	3	4	5	6	7	8	9	10
1	Final										
	Initial										
	Difference										
2	Final										
	Initial										
	Difference										
3	Final										
	Initial										
	Difference										
<b>Average</b>											
<b>Relative Error, %E</b>											

METER NO.		11	12	13	14	15	16	17	18	19	20
1	Final										
	Initial										
	Difference										
2	Final										
	Initial										
	Difference										
3	Final										
	Initial										
	Difference										
<b>Average</b>											
<b>Relative Error, %E</b>											

Time after measurement: \_\_\_\_\_

\*Temperature after measurement : \_\_\_\_\_

\*Relative Humidity : \_\_\_\_\_

TRIAL	Filling Time, sec	Flowrate, m <sup>3</sup> /h	Average Flowrate	LOCATION	**Water Temp., °C	Pressure, psi
1				Upstream		
				Downstream		
2				Upstream		
				Downstream		
3				Upstream		
				Downstream		

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\*\* During a test, temperature of the water shall not change by more than 5 °C, otherwise repeat the measurement process

Measured by: \_\_\_\_\_

Checked by : \_\_\_\_\_

# MEASUREMENT RESULT

TESTING FLOWRATE : \_\_\_\_\_

JORF REFERENCE NO.: \_\_\_\_\_

TARGET VOLUME : \_\_\_\_\_

Time before measurement: \_\_\_\_\_

Temperature before measurement : \_\_\_\_\_

Relative Humidity : \_\_\_\_\_

METER NO.		1	2	3	4	5	6	7	8	9	10
1	Final										
	Initial										
	Difference										
2	Final										
	Initial										
	Difference										
3	Final										
	Initial										
	Difference										
<b>Average</b>											
<b>Relative Error, %E</b>											

METER NO.		11	12	13	14	15	16	17	18	19	20
1	Final										
	Initial										
	Difference										
2	Final										
	Initial										
	Difference										
3	Final										
	Initial										
	Difference										
<b>Average</b>											
<b>Relative Error, %E</b>											

Time after measurement: \_\_\_\_\_

\*Temperature after measurement : \_\_\_\_\_

\*Relative Humidity : \_\_\_\_\_

TRIAL	Filling Time, sec	Flowrate, m <sup>3</sup> /h	Average Flowrate	LOCATION	**Water Temp., °C	Pressure, psi
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				Downstream		
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				Downstream		

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Checked by : \_\_\_\_\_