Director Metrology service Ltd.



Bozhko Nataliia May 03rd 2018

PROFICIENCY TESTING PT.UA.1.4.2017 MILLING PRODUCTS (QUALITY) PROFICIENCY TESTING PROGRAMME – ROUND 3 (ENG)

1. INTRODUCTION

Given the key role of reliable test results that are needed during world flour trade and agriculture in general, requirements for the competence of laboratories that perform such tests should be confirmed.

The purpose of proficiency testing in corn testing is to determine the characteristics of the operation (as described in ISO\IEC 17043 [1]) and improve the reliability of test results.

This proficiency testing involves the use of inter-laboratory comparisons to confirm the performance of individual laboratories' abilities and/or identify areas of improvement.

2. DESCRIPTION

2.1. PARTICIPATION

- 2.1.1. Minimum methods for participation. Any organization, providing testing by at least one of methods in clause 2.2 may participate in this voluntary Program.
 - 2.1.2. Participant may provide results for all the methods according to clause 2.2.
- 2.1.3. Metrology service Ltd. assigns a unique identification number to each participant that is confidential and reported only to this participant.
- 2.1.4. Participation fee for participants from Ukraine is 4200.00 UAH without paying VAT. Participation fee for participants from outside of Ukraine is 180.00 USD.

2.2. METHODS

Participants can provide test results for the following methods:

	Parameter	Method	Note
1.	Moisture, %	ISO 712:2009/ДСТУ	
		ISO 712:2015	
2.	Crude protein content, %	ISO 20483:2013/ДСТУ	Expressed on dry matter, factor for
		ISO 20483:2016	converting nitrogen content to protein content - 5.7
3.	Ash yield,%	ISO 2171:2007/	Expressed on dry matter
		ДСТУ ISO 2171:2009	
_	Falling number,s	ISO 3093:2009/	
4.		ДСТУ ISO 3093:2009	
5.	Acidity of oil, mg KOH/100 g	ISO 7305:1998	
	Wet gluten content, %	ISO 21415-1:2006	
6.		/ДСТУ ISO 21415-	
		1:2009	
7	Wet gluten content, %	ISO 21415-2:2015/	
7.		ДСТУ ISO 21415-2:2009	
8.	Gluten index	ISO 21415-2:2015/	
8.		ДСТУ ISO 21415-2:2009	
9.	Dry gluten content, %	ISO 21415-3:2006	
10.	Dry gluten content, %	ISO 21415-4:2006	
	Alveograph properties of dough:		
11.	Deformation energy, W	ISO 27971:2015	

	Parameter	Method	Note
12.	Maximum pressure parameter, P	ISO 27971:2015	
13.	Mean abscissa at rupture, L	ISO 27971:2015	
14.	Index of swelling, G	ISO 27971:2015	
15.	Curve configuration ratio, P/L	ISO 27971:2015	
16.	Sedimentation index – Zeleni test, ml	ISO 5529:2007	
17.	Moisture content, %	ГОСТ 9404-88	
18.	Protein content, %	ГОСТ 10846-91	Expressed on dry matter, factor for converting nitrogen content to protein content - 5.7
19.	Ash content, %	ГОСТ 27494-87	Expressed on dry matter
20.	Falling number, s	ГОСТ 27676-88	
21.	Acid value of fat, mg KOH per 100 g of dry product	ДСТУ 4250:2003	
22.	Wet gluten content, %	ГОСТ 27839-88	
23.	Index of gluten deformation	ГОСТ 27839-88	
24.	Whiteness of flour, c.u.	ДСТУ 4870:2007	
	Alveograph properties of dough:		
25.	Deformation energy, W	ДСТУ 4111.4:2002	
26.	Maximum pressure parameter, P	ДСТУ 4111.4:2002	
27.	Mean abscissa at rupture, L	ДСТУ 4111.4:2002	
28.	Index of swelling, G	ДСТУ 4111.4:2002	
29.	Curve configuration ratio, P/L	ДСТУ 4111.4:2002	

2.3. SAMPLES

Metrology service Ltd. is using a validated procedure and appropriate technical experts and contractors for the selection, production, homogenization and division designs that is satisfactory for the purposes of this program. Tests, that are required to prove homogeneity and stability of samples are performed by competent contractors according to [3-7].

Metrology service Ltd .will send appropriately identified and packaged sample together with task sheet form for testing and reporting results via courier delivery service of Nova Poshta LLC or other delivery service chosen by participant.

Wheat flour is used as a sample in round 3 in an amount of approximately 3 kg for each participant.

2.4. SCHEME AND SCHEDULE

2.4.1. This proficiency testing program is a simultaneous participation schemesaccording to A.3 of appendix A ISO\IEC 17043[1]. Selected samples, prepared according to clause 2.3, from a source of material being distributed simultaneously to participants for concurrent testing. After completion of the testing, the results are returned to Metrology service Ltd. Task sheet form for testing and reporting results is distributed with the sample according to clause 2.3. Metrology use statistical methods to analyze results and provide report according to clause 2.5.

2.4.2. Round 3 schedule.

Participants registration	till 13-00 EET 29.03.2019
Sample shipment	01.04.2019
Reporting results for participants	till 13-00 EET 18.04.2019
Report publication	till 26.04.2019

2.5. REPORT AND PROCESSING RESULTS

- 2.5.1. Metrology service Ltd. processes and analyses results according to [1-6].
- 2.5.2. Metrology service Ltd. publishes the Proficiency testing report according to [1,2].
- 2.5.3. Proficiency testing report will be published in two languages English and Ukrainian. Basic (reference) language is English.

3. PARTICIPANT INFORMATION

Participants must provide the following information by **e-mail in any form**:

- 1. Full name (English and/or Ukrainian), Bank details, address, registration number, detail of person, who will sign a contract;
 - 2. Full name and address of laboratory (testing facility) if it is not equal to clause 1;
- 3. Address of shipment of samples or Nova Poshta LLC department number (with the choice of shipment type);
 - 4. Participant contact person full name;
- 5. Contact telephone number (e.g. mobile) and e-mail address of the participant contact person.

4. PROVIDER CONTACTS AND PROGRAM MANAGER

Metrology Service Ltd., Ukraine, 03022, Kyiv, 18 Lomonosova str., office 704.

Nataliia Bozhko

e-mail: pt.smetrology@gmail.com

tel.: +38(099)305-79-78

5. NORMATIVE REFERENCE

- 1. ISO/IEC 17043:2010 Conformity assessment -- General requirements for proficiency testing
- 2. ДСТУ EN ISO\IEC 17043:2017 Оцінка відповідності. Загальні вимоги до перевірки професійного рівня
- 3. ISO 13528:2015 Statistical methods for use in proficiency testing by interlaboratory comparisons
- 4. FOOD ANALYSIS PERFORMANCE ASSESSMENT SCHEME (FAPAS). Protocol for the organization and analysis of data, sixth edition, 2002
- 5. Fearn, T. and Thompson, M, A new test for 'sufficient homogeneity', Analyst, 2001, 126, 1414-1417
- 6. ISO Guide 35:2017 Reference materials -- General and statistical principles for certification
- 7. ILAC Discussion Paper on Homogeneity and Stability Testing, April 2008.

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