

REPORT

Contract no.	1567/2017 – HB	30.01.2018 HAA/KAA
Customer:	BF Project Limited 38 Yaroslaviv Val Street UA-01054 Kiev	
Subject:	Initial inspection and certification of the wood pellet production according to <ul style="list-style-type: none">• ENplus – Quality Certification Scheme For Wood Pellets at the production site UA-11501 Korosten, st. S. Kemslogo, 11-C, Zhitomirskaya reg.	
Date of contract:	18.12.2017	
Date of sample delivery:	18.01.2018, 24.01.2018	
Date of service:	11.01.2018	
Period of validity:	Until the next inspection, at the latest end 2019	
Pages:	10	
Enclosures:	--	

4. Laboratory test

4.1. Test methods

The laboratory tests for the proof of conformity of the pellet quality with the requirements of OENORM EN ISO 17225-2 were carried out at Holzforschung Austria (1), AT-1030 Vienna, at BEA Institut für Bioenergie GmbH (2), AT-1150 Vienna and at ESW Consulting Wruss ZT GmbH (3), 1120 Vienna.

OENORM EN ISO 16948 (C/H/N)²
 OENORM EN ISO 16968 (minor elements)³
 OENORM EN ISO 16994 (chlorine, sulfur)²
 OENORM EN ISO 17828 (bulk density)¹
 OENORM EN ISO 17829 (dimensions)¹
 OENORM EN ISO 17831-1 (mech. durability)¹

OENORM EN ISO 18122 (ash)¹
 OENORM EN ISO 18125 (net calorific value)¹
 OENORM EN ISO 18134-2 (moisture)¹
 OENORM EN ISO 18846 (fines)¹
 CEN/TS 15370-1 (ash melting behaviour)²

All the above-mentioned standards are applied in the current version.

4.2. Test results

Parameter	Unit	Reference state	Result	Requirements according to	
				ENplus A1	ENplus A2
Diameter, D	mm	ar	5,9	6 ± 1 (8 ± 1)	6 ± 1 (8 ± 1)
Length, L	mm	ar	16,2 (11 - 26)	3,15 < L ≤ 40	3,15 < L ≤ 40
Moisture, M	%	ar	5,7	≤ 10	≤ 10
Ash, A	%	d	0,2	≤ 0,7	≤ 1,2
Ash deformation temperature, DT	°C	d	1280	≥ 1200	≥ 1100
Mechanical durability, DU	%	ar	98,0	≥ 98,0	≥ 97,5
Fines F (< 3,15 mm) bagged pellets	%	ar	0,26 *	≤ 0,5	≤ 0,5
Net calorific value, Q	MJ/kg	ar	18,18	≥ 16,5	≥ 16,5
Net calorific value, Q	kWh/kg	ar	5,05	≥ 4,6	≥ 4,6
Bulk density, BD	kg/m ³	ar	660	600 ≤ BD ≤ 750	600 ≤ BD ≤ 750
Additives	%	d	1,5	≤ 2	≤ 2
Nitrogen, N	%	d	0,061	≤ 0,3	≤ 0,5
Sulfur, S	%	d	<0,005	≤ 0,04	≤ 0,05
Chlorine, Cl	%	d	<0,005	≤ 0,02	≤ 0,02
Arsenic, As	mg/kg	d	<0,50	≤ 1	≤ 1
Cadmium, Cd	mg/kg	d	0,11	≤ 0,5	≤ 0,5
Chromium, Cr	mg/kg	d	<1,0	≤ 10	≤ 10
Copper, Cu	mg/kg	d	0,84	≤ 10	≤ 10
Lead, Pb	mg/kg	d	<0,50	≤ 10	≤ 10
Mercury, Hg	mg/kg	d	<0,05	≤ 0,1	≤ 0,1
Nickel, Ni	mg/kg	d	<1,0	≤ 10	≤ 10
Zinc, Zn	mg/kg	d	7,3	≤ 100	≤ 100

ar ... as received

d ... dry basis

* ... result from additionally required sample (submitted on 24.01.2018)