Exhibit 11

E-CAT COP Evaluation test

Da: fabiopenon@iol.it (fabiopenon@iol.it) **05 mag 2013 - 21:13**

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Allegati

Test facility diagram.pdf (28.1 KB)

ECAT MW1 COP TEST.pdf (38.3 KB)

Dear Sirs,

attached you can find the report on the first evaluation test of the COP of the E-CAT MW1

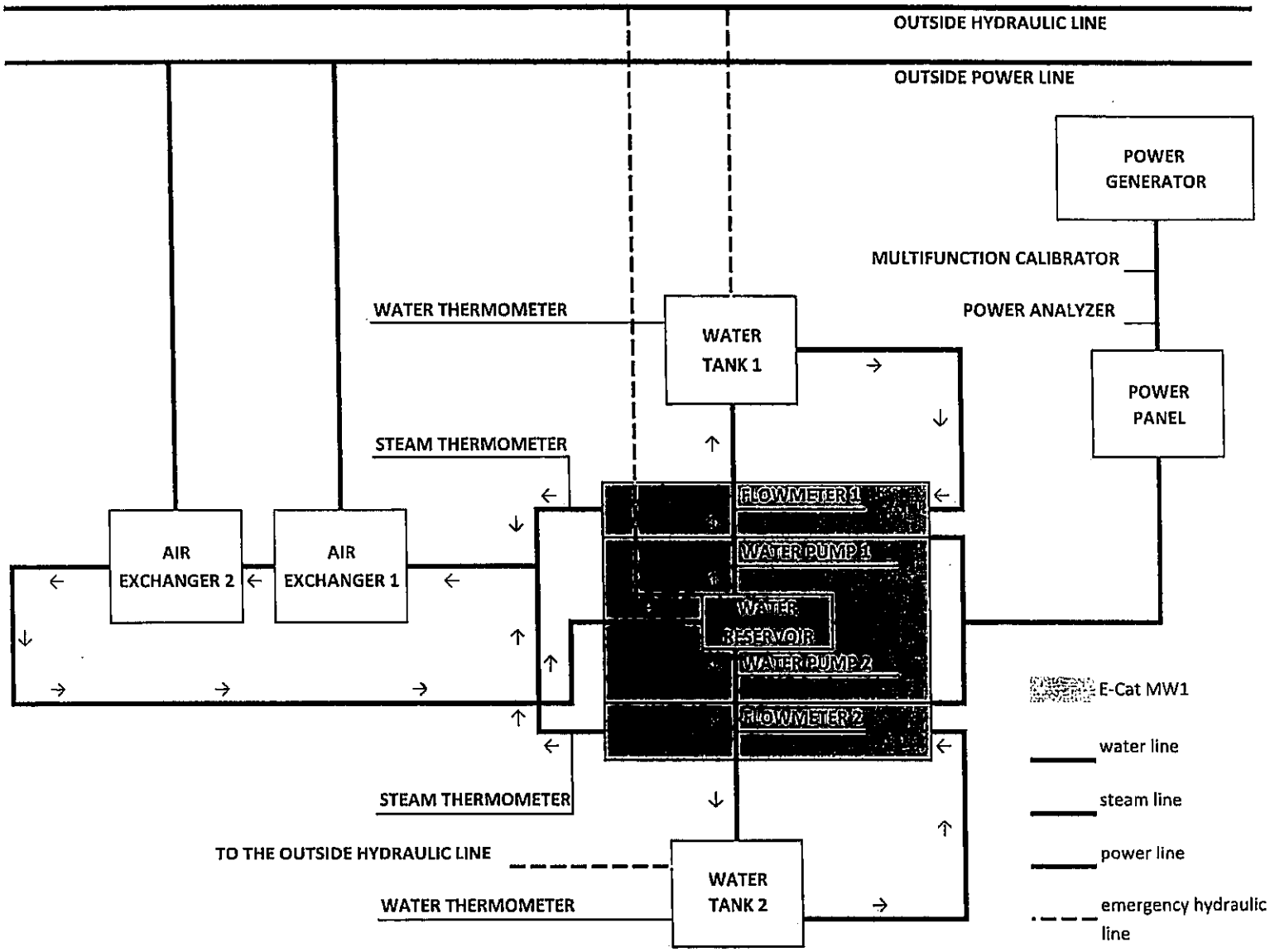
Thank you for your willingness and cooperation.

I remain at your disposal for any further information

Sincerely

Fabio Penon

DIAGRAM TEST FACILITY



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E-CAT MW1 ENERGY PLANT
COEFFICIENT OF PERFORMANCE (COP) EVALUATION TEST

The following report illustrates the results of the COP evaluation tests on the E-CAT MW1 ENERGY PLANT

1. Foreword

On 30 April 2013, in Ferrara, in Via del Commercio 34/36, have been carried out tests for assessing the COP of the E-CAT MW1 ENERGY PLANT, designed by the company Leonardo Corporation, 1331 Lincoln road, S.te #601, Beach Miami, Florida (USA)

They take part in the tests:

for Industrial Heat
Mr T. Barker Dameron
Mr J. Compton
Mr T. Darden
Mr J. Vaughn

for Leonardo Corporation
Mr F. Fabiani
Mr A. Rossi

Mr F. Penon ERV

2. Device

The system under test consists of 107 units, each of which absorbs a power of about 1.1 kW
Each unit consists of a reaction chamber, where the nickel powder reacts with the hydrogen in the presence of a catalyst, covered by industrial secret.
The electric heaters, fed by the current generator and the power of which is regulated by the power panel, heat the reaction chamber and trigger the reaction between nickel and hydrogen.
The energy produced is removed by the cooling fluid, water, sent to inside of the module from the pump (model Prominent Gamma for the units on the roof of the container, model Prominent Concept plus for the other units), associated to the unit itself
The control of the reaction is performed by means of probes, which detect the temperature of water in entry of the plant and the steam to output
The flow rate of the cooling fluid is manually set to start of operations

3. Test set up

3.1 List of components

n. 1 Generator	(300 Kw)
n. 2 Water pump	(model EEM, Tellarini pompe, 0,37 Kw)
n. 107 E-Cat units	
n. 24 Water pump	(model Prominent Gamma, 23 w,)
n. 56 Water pump	(model Prominent Concept plus, 15w)
n. 2 Heat sinks	
n.2 Water tank	(1 cubic meter capacity each)

3.2 Measurement instrumentation

n. 2 Flowmeter

n.1 Manometer

n. 4 Instrument with probe / sensor for temperature measurement by immersion

n. 1 Multifunction Calibrator

n. 1 Power analyzer

4. Operation of the test device

The water contained in the two tanks, placed at the sides of the shenker, is conveyed by pumps in the units E-Cat, where it is heated to vaporize. The steam is collected in the two tubes of the steam line, which convey it to the outside of the shelter, where flow together in a single tube.
The vapor is then passed through two heat sinks to its condensation
The water thus obtained is conveyed into the reservoir, positioned inside of the shelter and from here conveyed to the two external tanks by the two pumps on the sides of the reservoir, (See also diagram in Annex 1)

The generator powers the heating elements of the E-Cat units, the pumps for the water, the internal services to the shelter and the control panel. Heat sinks (fans) are connected to the public electric grid

5. History of the test

In order to comply with the Italian law the trial was conducted by activating only 18 E-Cat units

30/04/2013

h 12.25	Activation of the generator
h 12.57	Start recording automatically exit temperatures of steam and temperatures of water in tank 1
h 13.30	Beginning of the test

01/05/2013

h 13.00	End of the test Activate shutdown procedure
h 13.16	End of the temperature recording

6. Calculation of COP

$$COP = \frac{\text{energy produced } (E_P)}{\text{energy absorbed } (E_A)}$$

6.1 Calculation of the energy produced (E_P)

The energy produced by 18 reactors is given by the sum of the heat of heating of water, heat of vaporization of water and heat of superheating the steam.

$E_p = E_R + E_v + E_s$

E_R (energy of heating of water up to100 °C) =

$M_{w1} \times C_{sw} \times (T_{ev} - T_{iw1}) + M_{w2} \times C_{sw} \times (T_{ev} - T_{iw2})$

M_{w1} = mass of water vaporized during the whole test, coming from tank 1

T_{iw1} = inlet temperature of the water, coming from tank 2
M_{w2} = mass of water vaporized during the whole test, coming from tank 2
T_{w2} = inlet temperature of the water, coming from tank 2
C_{sw}= specific heat of water = 1,14 Wh/(kg°K)
T_{vw} = vaporization temperature of the water = 100 °C

Ev = (energy of vaporization of water) = λ x ($M_{w1} + M_{w2}$)
λ = (latent energy of vaporization) = 627,5 Wh/kg
Es (heating energy of steam) = M_s x C_{ps} x ($T_{os} - T_{vw}$)
M_s = mass of steam produced during the whole test
C_{ps} =specific heat of steam at constant pressure = 0,542 Wh/kg
T_{os} = outlet temperature of the steam
T_{vw} = vaporization temperature of the water

Note: Throughout the test the temperatures of steam measured by the two probes have always been the same or very similar to each other.
Throughout the test the pressure of the steam was always equal to atmospheric pressure

In order to be conservative:
- it has not been taken into account the heating energy of steam
- the temperature of the inlet water has always been considered equal to the maximum value of the same measured during the whole test
- the uncertainty of measurement of the mass of water heated all were considered against. Consequently, the total mass of water transited during the trial period has been reduced by 10%.

6.2 Calculation of the energy absorbed (E_a)

The absorbed energy is generated by the generator set
In order to be conservative:
- all the energy, produced by the generator, is supposed to be absorbed by the 18 reactors
In reality a part of this energy feeds the pumps, which convey the water from the internal reservoir to the two external tanks and pumps, which convey the water from the tanks external to the reactors. This energy then would not have gone to feed the reactors
- all the energy produced by the generator since its activation has been taken into account in the context of the test

6.3 Calculation of the COP

The COP has been considered only during the period, in which the E-Cat was operating, namely when the temperature of the steam at ambient pressure was higher than 101 °C
The COP has not been considered during the phases of activation and de-activation

At the beginning of the test, the following values were measured:

M_{w1b} = 1050 kg
M_{w2b} = 2100 kg
T_{iw1} = 21.6 °C
T_{iw2} = 22.4 °C
T_{os} = 121,3 °C
Energy produced by generator set = 8.98 KWh
At the end of the operational period, the following values were measured:

M_{w1e} = 1750 kg
M_{w2e} = 3900 kg
T_{iw1} = 54.4 °C
T_{iw2} = 46.8 °C
T_{os} = 139,7 °C
Energy produced by generator set = 140,7 KWh

$$E_R = M_{w1} \times C_{sw} \times (T_{ev} - T_{iw1}) + M_{w2} \times C_{sw} \times (T_{ev} - T_{iw2})$$

$M_{w1} = (M_{w1e} - M_{w1b}) = 1750 - 1050 = 700$ kg
$M_{w2} = (M_{w2e} - M_{w2b}) = 3900 - 2050 = 1850$ kg

and reducing by 10%
M_{w1} = 630 kg
M_{w2} = 1665 kg

During the test the highest value of T_{iw1} is equal to 54,9 °C, the highest value of T_{iw2} is equal to 55,2 °C
Substituting the values we get then

$E_R = 630 \times 1.14 \times (100-54,9) + 1665 \times 1.14 \times (100-55,2) = 32391 + 85035 = 117426$ wh

$E_v = \lambda \times (M_{w1} + M_{w2}) = 627,5 \times (630 + 1665) = 627,5 \times 2295 = 1440113$ wh

$E_S = M_s \times C_{ps} \times (T_{os} - T_{vw})$ = not taken into account

$E_a = 140.70 - 8,98 = 131,72$ Kwh

We take into account

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E_a = 140.70 kwh = 140700 wh

$$COP = \frac{(117426 + 1440113)}{140700} = \frac{1557539}{140700} = 11{,}07$$

Throughout the test the temperature of the outlet steam was always significantly higher than 100 °C

Abano Terme, 04/05/2013

Fabio Penon M. Eng.

Annex 1. Test facility diagram