Studies on Fostac-Maximus

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Final Report

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1. Preface

In its July/August edition of 2009, the magazine "NET-Journal" published a report on a device called "Fostac-Maximus" by "Fostac-Technology AG". The report describes, that supposedly, it is possible to save up to 30% of energy with the help of "Fostac-Maximus". Concerning the device's functions it says:

"[D]as Gerät produziert alternative Energie auf höchstem Niveau aus dem permanenten Elektronenfluss der Natur, der sich ergibt aus der natürlichen Spannung zwischen Ionosphäre und Erde. Er reduziert den Stromverbrauch, erhöht den Stromertrag (...), harmonisiert Elektrosmog und erhöht die Lebensqualität." ¹

(Isele-Beck, Christa/Beck, Klaus M., 2009, S. 26 u. 27)

According to said article, the Fostac-Maximus' interior consists of copper-cores, which are wrapped with silicon-dioxide fibre glass tissue and additionally enclosed in a bromine alloyed glass casing. This system is meant to work like an antenna, which feeds the gained electrons into the joined circuit and thus, saves on electricity from the grid.

We decided to investigate this matter methodically and examine the Fostac-Maximus with regard to electricity savings.

2. Planned approach

At first, two completely identical test set-ups were fabricated (see fig. 1). A more detailed description of this set-up will follow under paragraph 3.

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¹ The device produces alternative energy on the highest level, drawing on the constant flow of electrons within nature, which results from the natural tension between ionosphere and the earth. It reduces the use of energy, increases the energy yield (...), harmonises electric smog and heightens the quality of life.

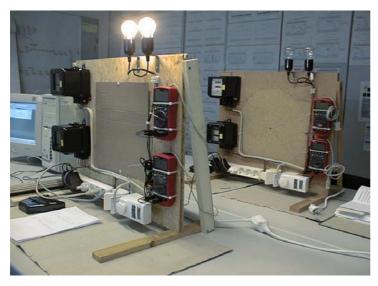


Fig. 1: two identical test set-ups (during construction phase)

These two test set-ups were operated daily and synchronously in our lab – without Fostac-Maximus – between October 30th 2009 and November 10th 2009 from 8am to 6pm. This was the first calibration, in order to identify production related tolerances. Next, one of the set-ups was brought into a one-family home, approximately 5 kilometres away from the lab (see fig. 2).



Fig. 2: test set-up (yet without Fostac-Maximus) in the one-family home

The second set-up remained in the lab. For a second calibration, both set-ups were operated synchronously, from 8am to 6pm daily. One set-up in the lab, the other one in the one-family home. All of this happened between November 11th and November 17th 2009.

This second calibration was necessary, in order to determine the differences between mains voltage and mains current in the lab and in the one-family home. There is never the exact same mains voltage in two different places within one electricity grid. After consultation with Fostac-Technologies AG, we decided to use the smallest version of the Fostac-Maximus, the system model P40. Note: so far, the Fostac-Maximus has not been in use. It was only installed into the set-up, which was located in the one-family home, on November 18th 2009 (see fig. 3).



Fig. 3: test set-up with Fostac-Maximus in the one-family home

In order to make no mistakes, we strictly observed the Fostac-Technologies AG's guidelines. Thus, the Fostac-Maximus was stored in a remote barn, until it was installed into the set-up in the one-family home. According to Fostac-Technologies AG this was necessary so the device would not charge itself in a place with a lot of electromagnetic fields and as a result become unusable due to oversaturation from these fields. This was also the reason why the test series with the Fostac-Maximus were carried out in the lab and not in the one-family home. According to Fostac-Technologies AG the danger of oversaturation does not present itself in the stand-alone one-family home. The results of the second calibration (without Fostac-Maximus) showed that the mains current as well as the mains voltage were higher in the one-family home, which was at 5 kilometres from the lab. Certainly, this had to be taken into account when comparing the two set-ups. To be very clear: the Fostac-Maximus was installed in the one-family home and not in our lab because – according to Fostac-Technologies AG – the larger electromagnetic fields in the lab might render the Fostac-Maximus unusable due to oversaturation.

3. Set-up of both test systems

The layout of both test set-ups is shown in fig. 4. Two light bulbs – 40W each, 80W in sum (per set-up) – served as power consuming devices. Current and voltage of the power consuming devices were captured with a measuring device and recorded by a measuring computer. The measuring interval for the measurements is one minute. A timer ensures that the lamps are switched on from 8am to 6pm daily. (Electric) meter 1 records the energy taken from the grid, (electric) meter 2 records the energy fed to the light bulbs.

a) test set-up without Fostac-Maximus

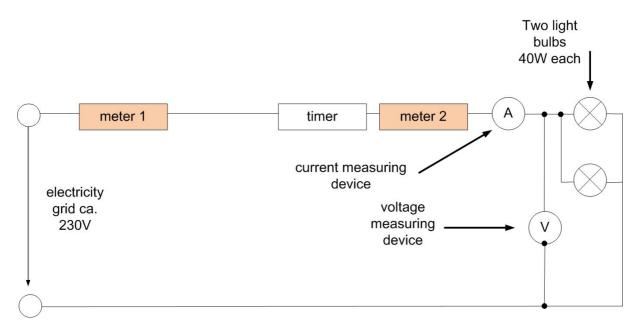


Fig. 4a: test set-up without Fostac-Maximus

b) test set-up with Fostac-Maximus

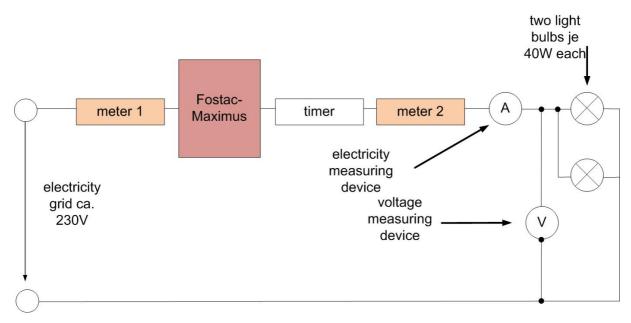


Fig. 4b: test set-up with Fostac-Maximus

All electric meters were calibrated by the officially recognized inspection authorities in Mindelheim (EB 17).

4. Measuring series and measuring results

4.1 First calibration

First calibration; both test set-ups are operated in the lab – without Fostac-Maximus.

Period: October 30th until November 10th 2009 between 8am and 6pm, daily.

Fig. 5 shows the respective electric energy consumption of the control system (without Fostac-Maximus).

Energy consumption of both systems [kWh], in the lab (without Fostac Maximus), first calibration period 10/30/2009 until 11/10/2009

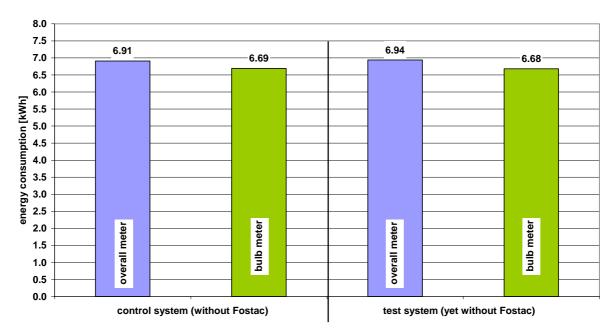


Fig. 5: first calibration, both systems in the lab, without Fostac-Maximus

Only slight differences between the overall meters (meter 1) of both systems are visible. Also, the comparison between both bulb meters (meter 2), shows only minimal differences. This illustrates, that the collective tolerances of both systems are extremely small in comparison.

If the control system is taken as a reference (meaning 100%), the consumption indicator of the future test system's overall meter displayed around 0.49% more than the control system. On the bulb meter, the (future) test system registered 0.15% below the control system.

Figures 6 and 7 show extracts from the current- and voltage trends of the (future) test- and control system.

future test system: bulb voltage, bulb current

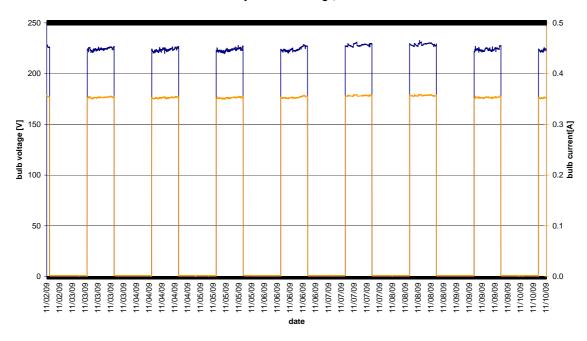
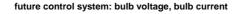


Fig. 6: bulb current, bulb voltage, future test system



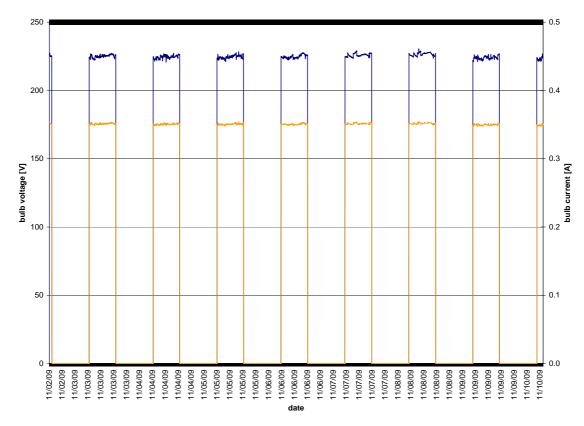
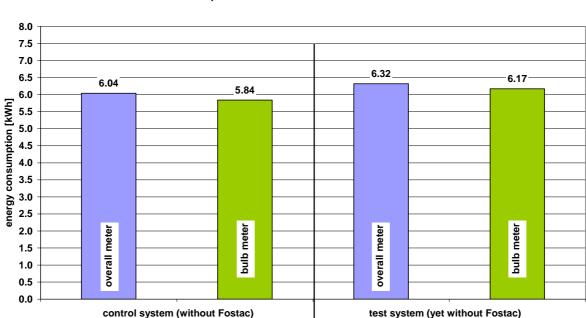


Fig.: 7 bulb current, bulb voltage, future control system

4.2 Second calibration

As stated above, the second calibration was necessary, in order to establish the differences within mains voltages and mains currents, as the (future) test system was mounted in the one-family home at a distance of 5 kilometres. The results of the second calibration are shown in fig. 8.



Energy consumption of both systems [kWh], second calibration, control system in the lab, test system (without Fostac Maximus) in the one-family home, period: 11/11/2009 until 11/17/2009

Fig. 8: second calibration, without Fostac-Maximus, test-system is located in the one-family home, control system is located in the lab

Fig. 8 shows clearly, that both meters of the (future) test system in the one-family home – yet without Fostac-Maximus – show higher energy consumption than the control system in the lab.

If the control system is taken as a reference (meaning 100%), the consumption indicator of the future test system's overall meter displays around 4.46% more than the control system. On the bulb meter, the (future) test system registers 5.65% above the control system. The reason for this shows in fig. 9 and 10.

Future test system: bulb voltage, bulb current

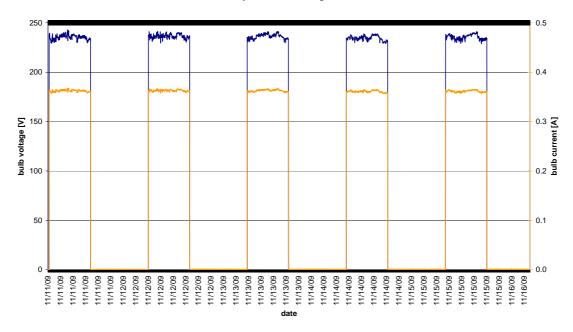


Fig. 9: bulb current, bulb voltage, future test system in the one-family home

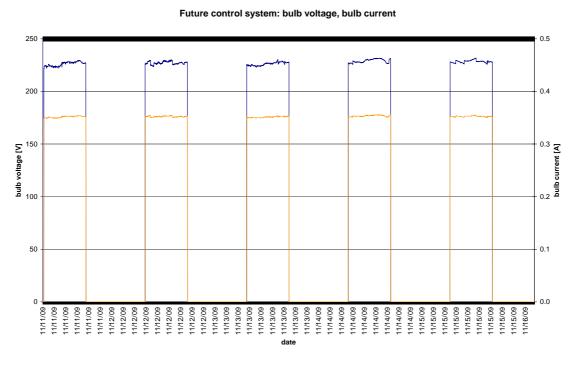


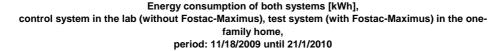
Fig. 10: bulb current, bulb voltage, future control system in the lab

The electricity grid, which feeds the one-family home and thus, the (future) test system, supplies a slightly higher mains voltage than the grid which feeds the lab and the control system. The higher mains voltage in the one-family home also results in a slightly higher mains currents, which again (following the electrical power equation

 $P=U \times I$) results in a higher electrical output and thus, in a higher consumption at the bulbs. This had to be taken into account, dealing with the later measuring series.

4.3 Measuring series with the Fostac-Maximus

On November 18th 2009 the Fostac-Maximus device was mounted into the set-up, which was located in the one-family home (test system) (see fig. 3). In doing this, we strictly observed Fostac-Technologies AG's guidelines. Fig. 11 shows the energy consumption of the control system (without Fostac-Maximus) and the test-system (with Fostac-Maximus) for the period between November 18th 2009 and January 21st 2010.



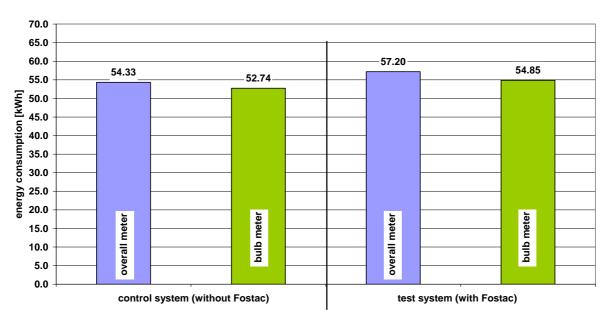
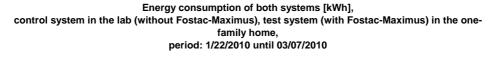


Fig. 11: control system, without Fostac-Maximus, test system with Fostac-Maximus, period: November 18th 2009 until January 21st 2010

In the first 10 weeks, during which the Fostac-Maximus was operated in the one-family home, energy consumption between test system and control system displayed as follows (reference 100%):

The overall meter of the test system registered 5.3% above the control system. The lamp meter of the test system registered 4.0% above its counterpart within the control system. Compared to the second calibration, only slight changes occurred. This was to be expected, as, according to Fostac-Technologies AG a noticeable energy-saving-effect was only going to occur after a few weeks. Thus, we carried on with our measurements.

The next measurement series lasted from the January 22nd until March 7th 2010, i.e. more than 6 weeks. The results are shown in fig. 12. In this case, the test system's overall meter showed an excess consumption of 7.04% compared to the overall meter of the control system. The test system's bulb meter registered 5.3% above the control system's bulb meter.



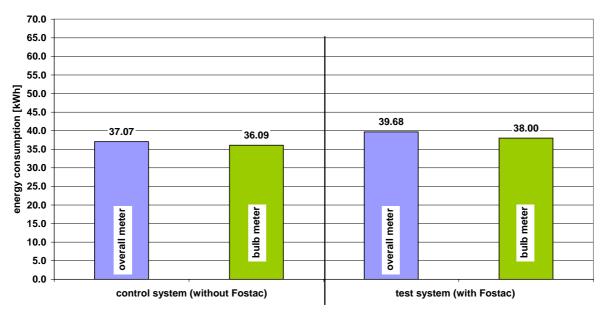


Fig. 12: control system without Fostac-Maximus, test system with Fostac-Maximus Period: January 22nd 2010 until March 7th 2010

Fig. 13 shows the results between March 8th and March 29th 2010, i.e. 3 weeks.

Energy consumption of both systems [kWh], control system in the lab (without Fostac-Maximus), test system (with Fostac-Maximus) in the onefamily home period: 03/08/2010 until 03/29/2010

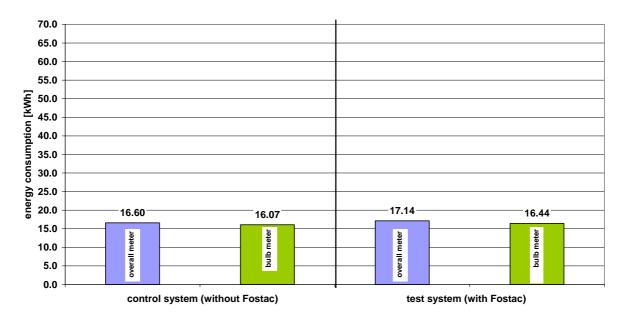


Fig. 13: Test system with Fostac-Maximus, control system without, period: 8th of March 2010 until 29th of March 2010-08-06

In this case, the test system's overall meter registered 3.25% above the control-system's overall meter; the test system's bulb meter registered 2.3% above the control system's bulb meter.

The following measuring series ran from March 30th until April 19th 2010 (approx. 3 weeks). Results, see fig. 14.

Energy consumption of both systems [kWh], control system in the lab (without Fostac-Maximus), test system (with Fostac-Maximus) in the one-family home period: 03/30/2010 until 04/19/2010

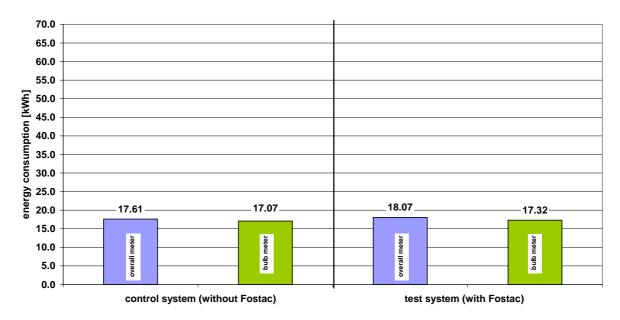


Fig. 14: test system with Fostac-Maximus, control system without, period: March 30th April 19th 2010

The test system's overall meter registered 2.6% above the control system's overall meter, the test system's bulb meter registered 1.4% above the control system's bulb meter.

Our last measuring series extended over 3 weeks as well, from April 20th until May 10th 2010.

Fig. 15 shows the results: the test-system's overall meter registered 7.4% above the control system's overall meter, the test system's bulb meter registered 6.6% above the control system's overall meter.

Energy consumption of both systems [kWh], control system in the lab (without Fostac-Maximus), test system (with Fostac-Maximus) in the one-family home period: 04/20/2010 until 05/10/2010

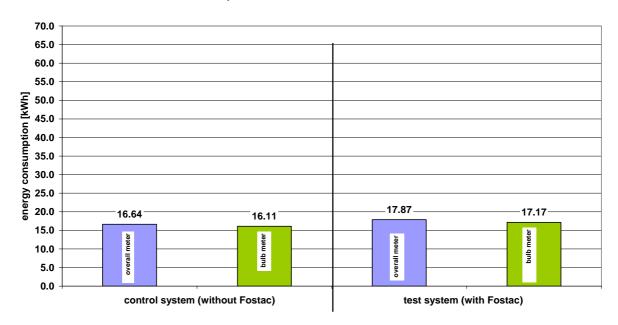


Fig. 15: test-system with Fostac-Maximus, control system without

Figures 16 and 17 show extracts from the current- and voltage trends of the (future) test- and control system. They did not change in comparison with the second calibration (see fig. 9 and 10) (within normal mains voltage fluctuation).

Test system with Fostac-Maximus: bulb voltage, bulb current

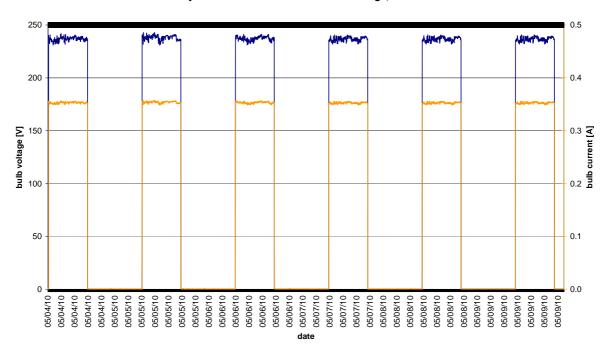


Fig. 16: bulb current, bulb voltage, test system with Fostac-Maximus, in the one-family home

Control system: bulb voltage, bulb current

0.5



250

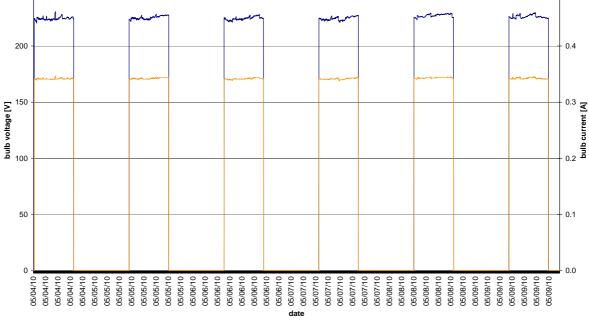


Fig. 17: bulb current, bulb voltage, control system without Fostac-Maximus, in the lab

The percentage deviation of the test system related to the control system is shown in fig. 18.

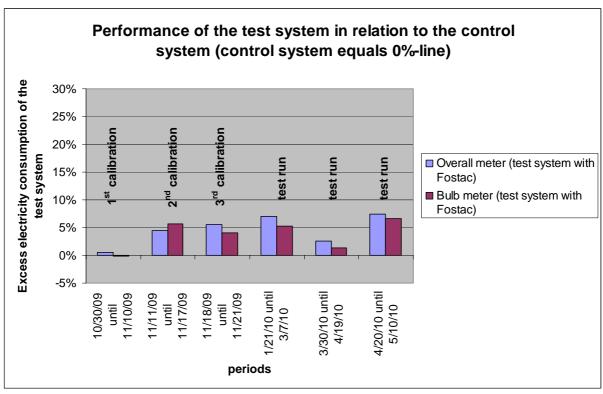


Fig. 18: Performance of the test system with Fostac-Maximus related to the control system without Fostac-Maximus

5. Conclusion

As fig. 17 shows, there are no energy savings after half a year, which could be due to the Fostac-Maximus. The minor percentage fluctuation among the different measuring series are all in line with normal mains fluctuation.

6. Equipment

Equipment	Тур	Hersteller/Lieferant
Fostac-Maximus	P40	Fostac Technologies AG
Digital multimeter	VC 820	Conrad-Elektronik
timer	EMT 799	Conrad-Elektronik
Electricity meter	J 16 G	AEG
Measuring computer	GX 260	Dell
Software	MS Visual Basic 6.0	Microsoft
Software	MS Excel 2003	Microsoft

7. Acknowledgements

We would like to thank the contractor of Fostac-Technologies AG Germany, qualified engineer Volker Blam for constantly providing us with all the necessary information.

8. Sources

Isele-Beck, Christa/Beck, Klaus M.: "Spannender Fostac-Maximus-Informationsabend." In: *NET-Journal*, Jahrgang Nr. 14, Heft Nr. 7/8, 2009.