Our warmest recommendation: home-made energy

28.08.2012

"We didn't think they would pour a bucket of water over the controls." Even if Heiko Sasse is exaggerating: the testing methods for the certification of his home energy systems tested his nerves over several months. Yet the Managing Director of the company intelli production prevailed, and in March 2012, his home energy systems went into batch production.

A total of 200 devices are set to be sold this year, with many more forecast for 2013. The goal appears to be realistic. Intelli is cooperating with the big regional energy suppliers, a supplier in the German state of Hesse has also signalled interest, in addition to wholesalers who work nationwide. Several residential homes which have been renovated and equipped with the energy system now display the company poster, in this way advertising for the power generating heating systems.

The intelli-Heimkraftwerke (home energy systems / iHKW) work on the basis of combined heat and power generation. The natural gas powered engine creates electricity and the resulting heat is used for heating and for service water. In this context it was important for engineer Heiko Sasse to align the power range of the iHKWs to the requirements of the market. "Energy is a valuable commodity and should ideally be produced where it is consumed - in the homes that use it. For this reason we are building micro home energy systems that are ideal for use in multi-family residential buildings or smaller industrial properties."

The customer enjoys many benefits: they can create their basic requirement for heat and electricity themselves and only need to buy energy from the suppliers at peak times. They can return any excess energy to the grid, earning money in the process, thanks to counters that run in two different directions. This not only makes people more independent of energy prices, they also make an active contribution to a cleaner environment, as the iHKWs work with an efficiency factor of 90 per cent.

"And if you use an electric car and you charge its batteries at night when almost no energy is being used in your home, it means you have almost zero losses, because you simply store the excess electricity that you produce in your car." Sasse is a visionary and he wants to make his own contribution to the energy revolution. The 51 year old explains that no state can exist with renewable energy alone. He explains how you also need natural gas, which is converted into energy through highly efficient, decentralised combined heat and power systems.

The fact that Sasse, a mechanical engineer, decided to develop his own home energy system ten years ago, was due to a sobering market analysis. Since 1994, the company had primarily worked for vehicle manufacturers, supporting them with the development of their engines. The know-how of this Barleben-based firm, which now employs 40 men and women, primarily focuses on the area of drive units for German car manufacturers such as Volkswagen and Porsche.

"We not only wanted to put our company on a broader footing, we also wanted to launch a plug-in product of our own onto the market" explains Sasse. As a developer of engines and in terms of the current debate on energy it was a logical step to build a home energy system that suits the requirements of a residential home - especially as in this specifically customised power range, Sasse explains that no home energy systems were previously available. Yet it was also a difficult step as it was necessary for the devices to satisfy huge requirements.

We aren't only talking safety requirements because of the natural gas, we're also talking the levels of noise and vibrations. This is because, explains Cornelia Kleinsorge, the device has been designed not only to be set up in cellars and basements, but also in home utility rooms. "An engine that drives a generator creates noise, but thanks to our design finesse and the casing, we have succeeded in reducing the noise levels to those of a washing machine." The manager of the energy machines has been working at intelli production for a year, and has been 100 per cent behind the product and its team of developers from the start. "I am very proud of having been able to accompany the market launch. Our customers and partners confirm that we have created something very special." A device, the 51 year old enthuses, that was developed in Saxony-Anhalt and built by the people who live in the region and who want to stay here, and using parts supplied - as far as possible - by manufacturers located in Saxony-Anhalt.

The marketing machine is running at full throttle and the company is doing everything it can to ensure that word is spread about its new product. Kleinsorge explains that every satisfied customer is an important advertisement. "We can't afford to disappoint." Kleinsorge appears to be a stroke of luck for intelli. She radiates so much positive energy it's almost as though she is running on the full power of an iHKW herself! Aged 50, she changed firms, moving to intelli production from a supplier of auto parts. And she is happy to work for an employer that not only values employees of every age but also values their ideas.

This is especially applicable to the further development of the iHKW. The Barleben firm is already working with future add-on modules for the energy generators, including one with an intelligent control system that not only monitors the habits of the home occupant and regulates itself accordingly, but also takes the weather forecast into account. And there is also a system which enables the iHKW to cool rooms, explains Sasse. Devices that communicate with each other, working more efficiently as a cluster, are also conceivable. "Those may still be a long way off, mind you" chips in Cornelia Kleinsorge. Yet she firmly believes that these visions form the basis of both the technical progress and future success of intelli production.

Author: Kathrin Wöhler

Contact:
intelli production GmbH
Steinfeldstraße 2
39179 Barleben
Tel.: 039203/ 958-0
E-Mail: info@intelli-eu.de

28.08.2012