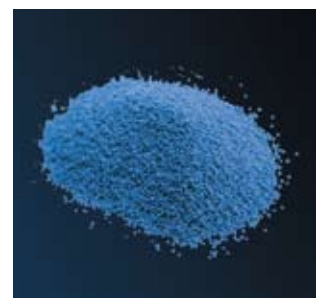


NEWS



PROFILE- AND COPY ROASTING • MASTEROAST • DRUM ROASTER • ENLARGEMENT • PAULIG • VIETNAM
GREEN COFFEE IN NORWAY • PARTICLE TECHNOLOGY • ULTRAFINE GRINDING • SUNFLOWER SEEDS

PROFILE- AND COPY ROASTING

ROASTING WITHOUT REGULATION

To bring the optimum aroma out of every coffee bean - this is what every roasting company aims at with its experience, know-how and technique.

To move a large step closer to this goal, *Neuhaus Neotec* provide all their roasting machines optionally with two control instruments, with the help of which the optimum taste can be squeezed out of each bean - the Neuhaus Neotec Profile-Roasting and the Neuhaus Neotec Copy-Roasting or Neuhaus Neotec Slider-Roasting.

Neuhaus Neotec Profile-Roasting - Each coffee bean is different! Each coffee blend requires a special roasting process for developing its optimum aroma. Only if roasting degree and time as well as heat introduction into the bean perfectly match, the ideal roasting profile for each individual blend will be reached. With the Neuhaus Neotec Profile-Roasting up to 21 different temperature and air quantities can be determined at random within the roasting process. As a result, each coffee bean will receive the right heat quantity at the right time.

Neuhaus Neotec Copy-Roasting - As coffee is a natural product, it is subject to natural fluctuations, as far as bean moisture, temperature and bulk density are concerned. For compensating these variations in quality, *Neuhaus Neotec* on demand equip each one of their roasting systems with a Copy-Roasting unit. An intelligent algorithm in the control system automatically detects deviations from the ideal roasting profile and counteracts them by adjusting temperature and air quantity.

Neuhaus Neotec Slider-Roasting - As a special feature *Neuhaus Neotec* developed a control specially for the RFB S which is able to roast any profile the operator wishes! This means it allows the customer to create a roasting profile via sliders without regulations! You can choose the profile by yourself with setting the sliders and the roaster will follow you.

You will find surprising tastes for your coffee!



MASTEROAST

FLEXIBILITY FOR THE FUTURE

Neuhaus Neotec is proud to have installed a roasting plant with a capacity of 1.000 kg/h and a green coffee plant with a storage capacity of 80 t at the well-known speciality roaster *Masteroast Coffee Company* in Peterborough, England. "With this extremely flexible roaster I can roast, in a very short time, the whole range of different coffees which all meet the challenging demands of our customers. On top of that, the RFB is also energy-saving and makes low maintenance demands. It exceeds our already high expectations by far!" said Andy Fawkes, MD at *Masteroast*.

In November 2009, *Neuhaus Neotec* successfully held a Coffee Roasting Forum at *Masteroast*, along with other customers, to discuss advanced technologies in the coffee sector. Customers from Great Britain, Norway, the Netherlands, and Ireland were joining the seminar.



DRUM ROASTER

DRUM ROASTERS IN OPERATION!

In order to meet the increasing demand for drumroasters on the coffee market, *Neuhaus Neotec* developed and manufactured the CTR 3000 as previously reported. Now, this roaster has been installed and commissioned in the plant of a renowned German coffee roaster and broadens his range of products. The first coffee came out of the roaster beginning of May. Now the roaster is running for three shifts the whole week.



ENLARGEMENT

ENLARGEMENT OF PREMISES

In the middle of August 2009, the first construction works started, and the two-level annexe building with a surface of about 1,000 m² was completed in April 2010. The annexe not only provides more working space for the 105 employees of the machine and plant construction company *Neuhaus Neotec* but also a new pilot plant for the two major fields of activity - coffee processing and particle technology.

Apart from a new generous entrance area, the ground floor of the annexe building mainly accommodates the central part, i.e. the new pilot plant with a surface of about 400 m². Enough space for the research and development department where plants and installations are tested according to the customers' demands and adapted to the customers' products.

These customers are mainly companies from the food and semi-luxury items industry and the chemical and pharmaceutical industry. In the 500 m² upper floor, there is room for the new office surface and modern conference rooms.

Thanks to the the seven-digit investment in the annexe building the managing director Mr. Gustav Lührs considers the location Ganderkesee to be well prepared for future orders and project. Should *Neuhaus Neotec* ever be running out of space in the industrial area Hoykenkamp (Ganderkesee), the foundation for a further extension will already have been laid – as the construction of another storey is possible at any time.



NORWAY

BULK RECEIVING AND SILOS

The long story of Green Coffee Lines delivered and built by *Neuhaus Neotec* goes on.

Neuhaus Neotec will supply another 2,000 t silo including bulk receiving, cleaning, weighing and transport to the roaster to a well-known customer in Norway. *NN* is happy that this customer will trust once more in the technology and experience of *NN* after the installation of the automatic Bag - emptying - line years ago.



PAULIG

A REAL CHALLENGE

In summer 2009, one of the largest newly built coffee roasting plants in the world started operation in Helsinki, Finland. Neuhaus Neotec supplied almost the complete coffee process and technology for the new roasting plant of Gustav Paulig Ltd.

In summer 2009, the largest roasting plant that had been built worldwide in this year, started operation. The coffee roasting plant is located in the Vuosaari Harbour in the Finnish capital Helsinki and produces up to 15 tons of roast coffee per hour. This was a giant project which required not only the construction of one of the largest roasting plants in the world but also the integration of individual packaging lines of the former Paulig roasting plant in Finland. The coffee process as well as the silo building was planned and constructed by *Neuhaus Neotec*, which supplied the entire technology with the exception of roasting and grinding facilities and the packing lines. Until the end of September 2009, the new roasting plant already exceeded the production capacity of the former Paulig roasting plant in Finland.

Four *Neuhaus Neotec* planners were involved in each project phase. That was due to the fact that the major part of the components of *Neuhaus Neotec's* scope of supply was designed and manufactured in the *Neuhaus Neotec* factory

at Ganderkesee, near Bremen. Assembly on site in Helsinki was carried out together with German partner companies and was permanently supervised by *Neuhaus Neotec* staff.

The test operation in June was carried out without any major problems and now the new factory approaches the intended output of more than a 100 million (100 000 000) coffee packages a year. (Cover photo)



VIETNAM

RFB 350-ROASTER FOR VIETNAM

Vietnam's best known coffee roasting company, the Trung Nguyen Coffee Company, started the modernization of its roasted coffee plant in Boun Ma Thuot City in 2009. The plant is to go on line in the middle of 2010 to produce roasted coffee representing state-of-the-art technology.

The core of the 40 million US dollar investment is an RFB-350 roaster. With the RFB-350 up to 4,000 kg coffee per hour can be roasted.

Manufacturing plants for roasted and instant coffee as well as tea belong to the biggest and best known roasting company. Furthermore Trung Nguyen runs more than 1,000 coffee shops on a franchise basis in Vietnam and further eight coffee shops in countries like China, Japan and Thailand.

In the course of its national and international expansion strategy the enterprise founded in 1996 also invests approx. 40 million US dollars in a new roasted coffee plant in the first stage of extension with a capacity of approx. 4 t/h.



PARTICLE TECHNOLOGY

THE BRAND "HEINEN DRYING"

WILL BE CONTINUED IN NEUHAUS NEOTEC!

We are pleased to inform you that the know-how of the former business area "Heinen Drying" contained in all documents, drawings and other media as well as all rights to industrial property rights have been transferred to *Neuhaus Neotec Maschinen- und Anlagenbau GmbH*.

Thus we shall continue the brand "Heinen Drying" which has been established for 25 years. Thanks to the long experience of our employees at "Heinen Drying" as well as the business area particle technology of *Neuhaus Neotec Maschinen- und Anlagenbau GmbH* within the fast-growing Kahl Group, we are able to offer you top-quality supplies and services in the field of fluidized bed and belt drying technologies.

In addition, we offer the proven batch fluidized bed plants minibatch and mobatch in a more advanced version for the laboratory and development sector.

Neuhaus Neotec takes over the service and spare parts supply for all plants and machines

supplied by "Heinen Drying" and supports you in all questions concerning your processes. We look forward to a successful cooperation with you.



SUNFLOWER SEEDS

ROASTERS FOR SUNFLOWER SEEDS

In Eastern Europe, roasted sunflower seeds are a popular "in between" snack. With the RG roasters of *Neuhaus Neotec* these treats can be processed without problems.

Flexibility and simple operation are two characteristics that define the RG specialty roasters of *Neuhaus Neotec*. But these attributes do not only relate to the roasting of coffee beans. Also other products, such as sunflower seeds, can excellently be processed with the innovative and flexible hot-air roasting technology of the *Neuhaus Neotec* roasters. We are about to complete the fourth order for an RG roaster for sunflower seeds in Eastern Europe. The RG 100 and RG 150 roasting machines are designed to roast 100 or 150 kg per batch.



ULTRAFINE GRINDING

ULTRAFINE GRINDING

With more than 40 years experience in grinding coffee – *Neuhaus Neotec* is a leading manufacturer of state of the art grinding technology. It was *Neuhaus Neotec* who served the market with many innovative solutions. The typical design features of *Neuhaus Neotec* roll grinders:

- High precision gap control
 - Special surface hardened rolls
 - High efficient roll cooling
- are essential to achieve the so called ultrafine grind. The Turkish mocha grind is powdered almost like flour; the roll gap is less than 10

microns. The average particle size is around 50 µm. Independent motor drives and special dynamic scraper system allows to achieve the typical Turkish product.

Cooling of the grinder rolls is of higher importance the finer the coffee is ground. The reason is the bigger surface which is growing exponential. This means faster oxidization (Arrhenius-Rule) and higher loss of volatiles. It is known that the particle shape (beside of the distribution) is of importance for the organoleptic impression. The analogue requirements exist for the capsules and pod market. It is necessary to avoid sharp



particles and round them off. With the right design of the rolls and enhanced homogenizer this goal will be achieved. Visit us in our works and see our innovative solutions for ultrafine grinding – always one step ahead!

