

# NEWeco-tec Verfahrenstechnik

Modular solutions for complex drying processes

**Compact. Competent. Drying.** 





**Dipl.-Ing. Christian Wenner**Managing director

After studying process and environmental engineering at the university of Munich, Christian Wenner spent 15 years designing and engineering drying technology systems for sludge treatment, anaerobic digestion and digestate processing. In 2008 Christian founded his own company – NEW eco-tec Verfahrenstechnik GmbH – with a vision to provide fast-track solutions to the environment, energy and process markets. A sustainable future for his new company.



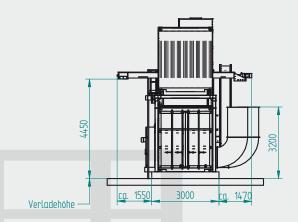
#### **NEWtainer® – the unique containerized belt dryer**

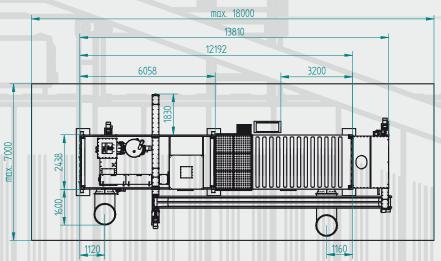
Producing renewable energy from anaerobic digestion via cogeneration (Combined Heat and Power) produces about 40% of the energy as electrical power while 60% can be lost as heat, unless it is properly harnessed. NEWtainer's patent pending technology meets this challenge by utilizing the CHP waste heat and other thermal processes to dry digestate and other materials for added value.

NEWtainer® uses state-of-the-art belt drying technology integrated into standard sea containers to dry biomass effectively and efficiently – thus providing a portable, weatherproof solution which is tested in factory prior to dispatch; with minimal assembly and commissioning on site. Due to its unique construction and special air ducting system NEWtainer® can dry various products such as digestate, wood-chips/shavings, cereals/oilseeds and brewers' grains. Industrial applica-

tions range from pellet production and preconditioning, AD digestate refinement, to industrial and municipal waste water treatments.NEWtainer® is designed and manufactured to withstand arduous, industrial in-service conditions and to operate continuously under high load.

"We use the robust and stable construction of sea containers to enhance high quality engineering components so that our products are truly durable and fit for purpose in challenging environments" Christian Wenner says. "Sea containers provide a strong framework allowing standardization and flexibility as well as robust, weatherproof housing which can be easily moved at any time.









## The manufacturing facility NEW eco-tec Verfahrenstechnik GmbH

NEW eco-tec Verfahrenstechnik GmbH is your competent partner when it comes to providing practical solutions to complex process operations. From planning and engineering design to manufacture and implementation you can trust our knowledge and experience will be working in partnership with you to realize the best outcome for your project.



#### **NEW eco-tec Verfahrenstechnik GmbH**

For anyone as valuable add-on to "pimp up" an ADplant: Dryers optimized for energy and space saving with minimal running costs – Made in Germany.

NEW eco-tec Verfahrenstechnik GmbH provides tailor made solutions for complex drying processes including ancillary handling and processing systems to support the NEWtainer® belt dryer.

Our experience and competence is supported by a network of specialists; from planning to manufacture, construction to implementation, whether planning a new plant or upgrading your existing one, our commitment will guarantee a continuous and transparent development of your project.







**Dirk F.** Schleswig/Holstein, Germany
One of over 100 proud owners (by 12 / 2011)
of a NEWtainer® belt dryer

"Our decision to install NEWtainer® belt dryer was easily justified. Short term delivery and easy commissioning saw it up and running quickly and continuously without any problems" report Dirk F. and his Partner Max H. from their AD-plant with 2 CHPs in Schleswig/Holstein in the north of Germany.

## applications

Due to its specialized unique engineering design and containerized construction the NEWtainer® compact belt dryer can be used in many industries:

- Agriculture and food industry AD/biogas plants –
   e.g. digestate drying
- Sewage Treatment e.g. sludge drying
- Renewable biomass processing plants –
   e.g. woodchip conditioning

- Nutrition and animal feed manufacture –
   e.g. grain and cereal drying
- Brewing and drink manufacture –
   e.g. processing of solids after dewatering









Utilizing waste heat from AD-plant cogeneration to dry products adds value and reduces environmental impact.

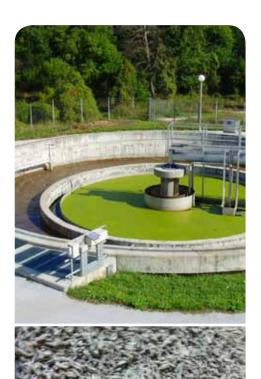
Bulk handling of digestate is significantly reduced with NEWtainer® belt dryers. Separated solids can be dried to produce recycled products such as cattle bedding and soil conditioner and even raw digestate can be converted to a valuable fertilizer using the unique Re-mixing process.



## wood products

Controlling humidity increases energy value.

By reducing the moisture content of combustible materials, such as sawdust, wood shavings, woodchip and bark NEWtainer® can increase gasification efficiency and reduce emissions.



## sewage sludge

Drying sludge waste can produce a valuable fuel resource.

Together with pre-treatment and conditioning NEW eco-tec can engineer economical solutions for NEWtainer® to treat municipal sludge.



## industry

Drying technologies are a viable solution for improving efficiencies in material recycling and handling.

Product quality can be improved and raw materials more efficiently used with NEWtainer® belt dryers

### our products

Our aim and success is down to quality, efficiency, experience and competence. Serving a wide range of industrial drying requirements we strive to constantly develop and innovate drying solutions for a wide variety of industries and drying processes.

NEWtainer® belt-dryers are a compact and portable drying solution which can be applied in many and various fields – uncompromisingly robust, high in performance and reliable in operation.

NEWtainer® series ST, WT und QX are single-belt-dryers while the DT series features a dual-belt-system.

NEWagara® has been developed as a spray dryer for condensing liquids. Model UT – the recirculation dryer for cereals, corn and oil seeds.

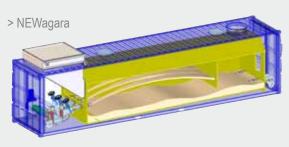
Ancillary equipment is available for pre-conditioning and conveying the product to be dried.

E.g. system MR for re-mixing of dried material or system RG for recovering exhaust gas heat.

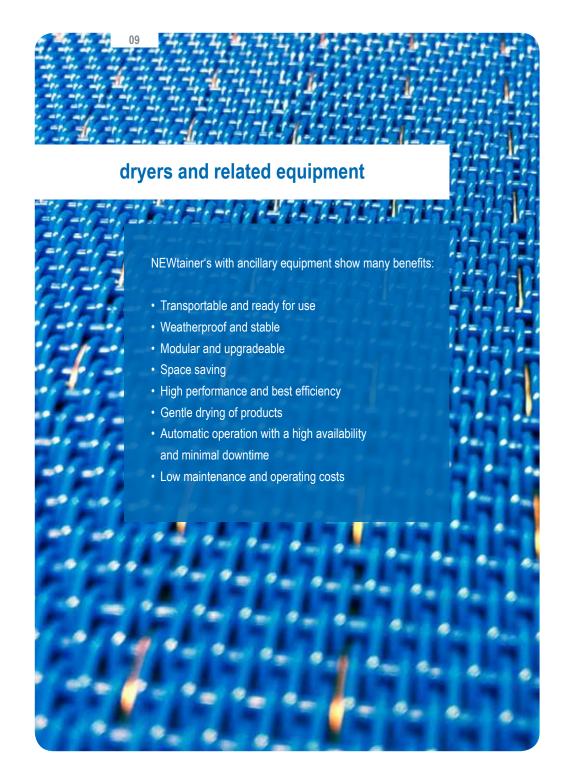
NEWcleaner® air scrubber can be 'bolted-on' for control of emissions and nutrient recovery.

The modular separation unit NEWparator® can be supplied in a top-mounted container to limit footprint or on a steel gantry.

















#### **Shared success in business**

Each and every member of our ambitious and highly skilled workforce are committed to the company's innovative goals and development so that we can fulfill the expectations of our customers.

#### selected references



WT 1.0 - Bayern



ST 1.0 – Baden-Württemberg



ST 1.0 – Schleswig-Holstein



ST 1.0 – Mecklenburg-Vorpommern DT MR 2 x 1.5 – Brandenburg





DT MR 1.25 – Niedersachsen



WT 0.5 – Hessen



ST MR 1.0 – Nordrhein-Westfalen



DT MR 1.0 – Bayern



WT 0.5 – Thüringen



