

### *Linz-Unkel wastewater treatment plant*

Innovative sewage sludge utilisation with recovery of phosphorous



#### Project aims

- Realisation of the first large scale mineralisation plant with PYREG® in Germany
- Reduction of the amount of sewage sludge and truck transport up to 90%
- Economic conversion of the waste material sewage sludge into a fertiliser raw material containing phosphorous available to plants
- Sanitisation of the sewage sludge

#### Solutions

- New Ishigaki-screw press for the dewatering of the digested sewage sludge
- EloDry® low-temperature belt dryer with extremely low demand for thermal energy
- Tailor-made heat recovery and utilisation concept
- PYREG®-plant for the decentralised recycling of sewage sludge and production of a phosphorous-containing carbonisate
- Destruction of pathogens, drug residues, micro plastics, etc. caused by process-temperatures of approx. 600 °C
- Cleaning of the waste air according to German regulations
- Complete plant is capable of being approved in compliance with the strict limiting values of the 17<sup>th</sup> Federal Emission Protection Act

#### Technical data of the wastewater treatment plant

Upgrade size:	30,000 PE
Amount of sewage sludge:	Approx. 18,000 m <sup>3</sup> /a (3-4 % DS) Approx. 2,800 t/a dewatered digested sludge

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**Start**  
May 2015

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**Completion**  
March 2016

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**Total project value**  
Approx. 1.4 million Euro

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<sup>\*)</sup> ELIQUO STULZ is the partner of the PYREG GmbH