



New Research Recycling Pilot Plant At Fraunhofer IKTS.



RECYCLING. TAF hands over pyrolysis plant for plastics recycling.

FREIBERG. TAF Thermische Apparate Freiberg GmbH (TAF), a company of the Pörner Group, received an order from the Fraunhofer Institute for Ceramic Technologies and Systems IKTS for a newly designed pilot plant for the pyrolysis of plastics. The pilot plant was successfully commissioned in July 2023. TAF was responsible for the planning, engineering, construction, delivery, commissioning, and documentation of the pyrolysis plant.

The Pyrolysis Process: From Waste to Resource

In the pyrolysis reactor, a wide variety of feedstocks and mixtures of plastics and residual materials are pyrolyzed at throughputs of up to 100 kg/h and max. 2.0 t/d at temperatures around 500 degrees. The resulting products, such as

pyrolysis coke, pyrolysis gas, and condensates, must be sampled and safely disposed of per licensing regulations and technical requirements. In addition to residual materials, household plastic waste (e.g., the “yellow bag”), shredder light fraction from car disposal, composite materials, or even torrefied biomass can be thermally processed. With the pilot plant, the Fraunhofer IKTS is gaining essential knowledge for research and up-scaling to industrial scale.

TAF Managing Director Daniel Ullmann is pleased to be able to contribute to the sustainable use of plastics: “The research results will help to convert more residual materials into recyclable materials. For example, processing plastic waste from the oceans will be possible. It is great that, together with Fraunhofer IKTS, we have

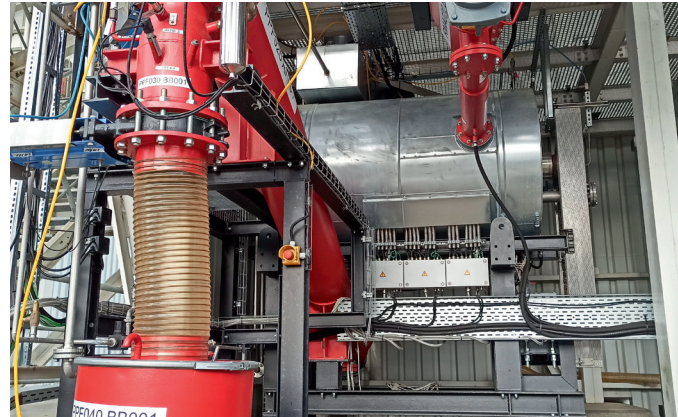


Pilot plant construction is our specialty!

Daniel Ullmann
Managing Director TAF



contributed to more sustainability in the use of plastics.” ■



▲ ► The new pilot plant of Fraunhofer IKTS.

