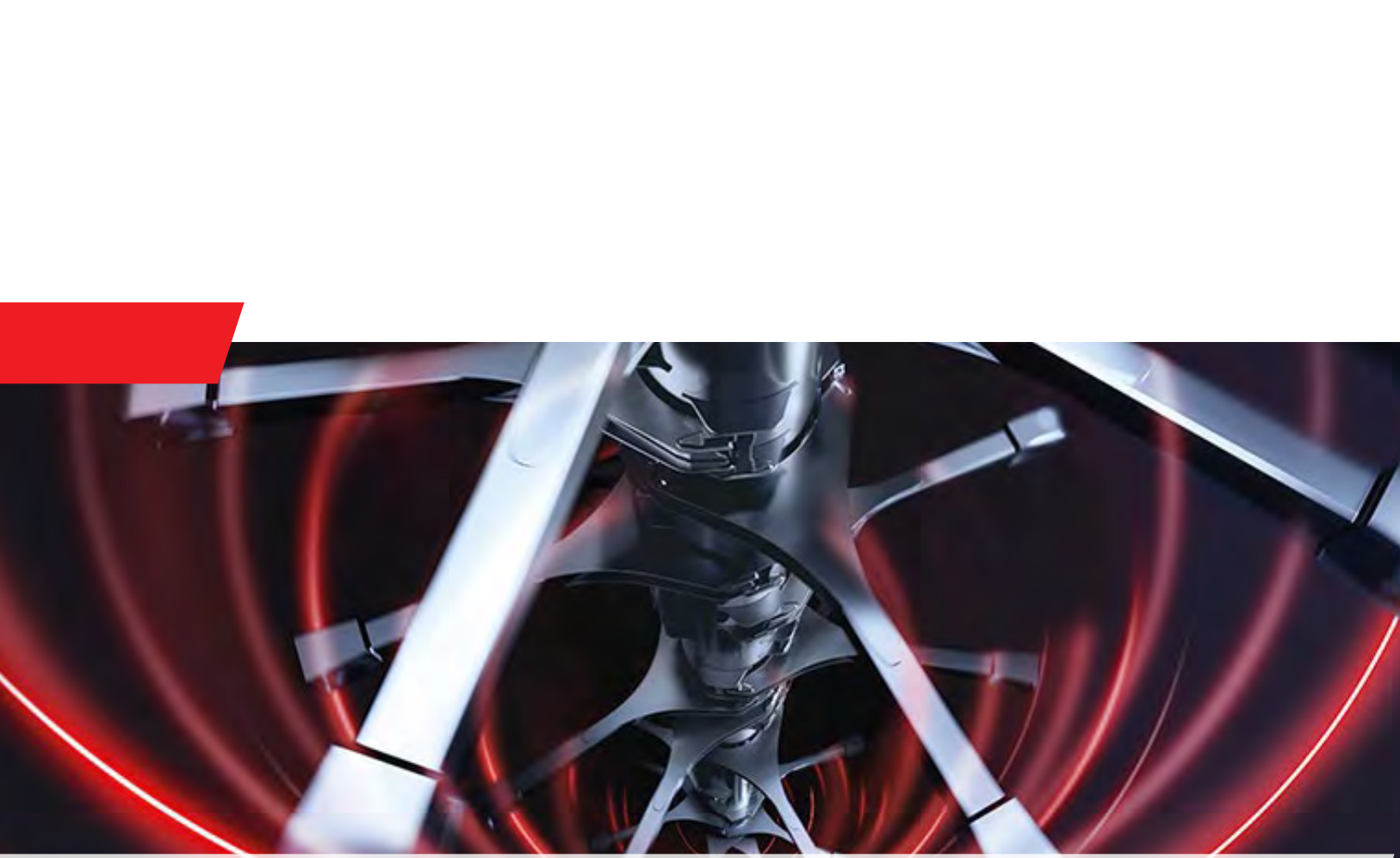




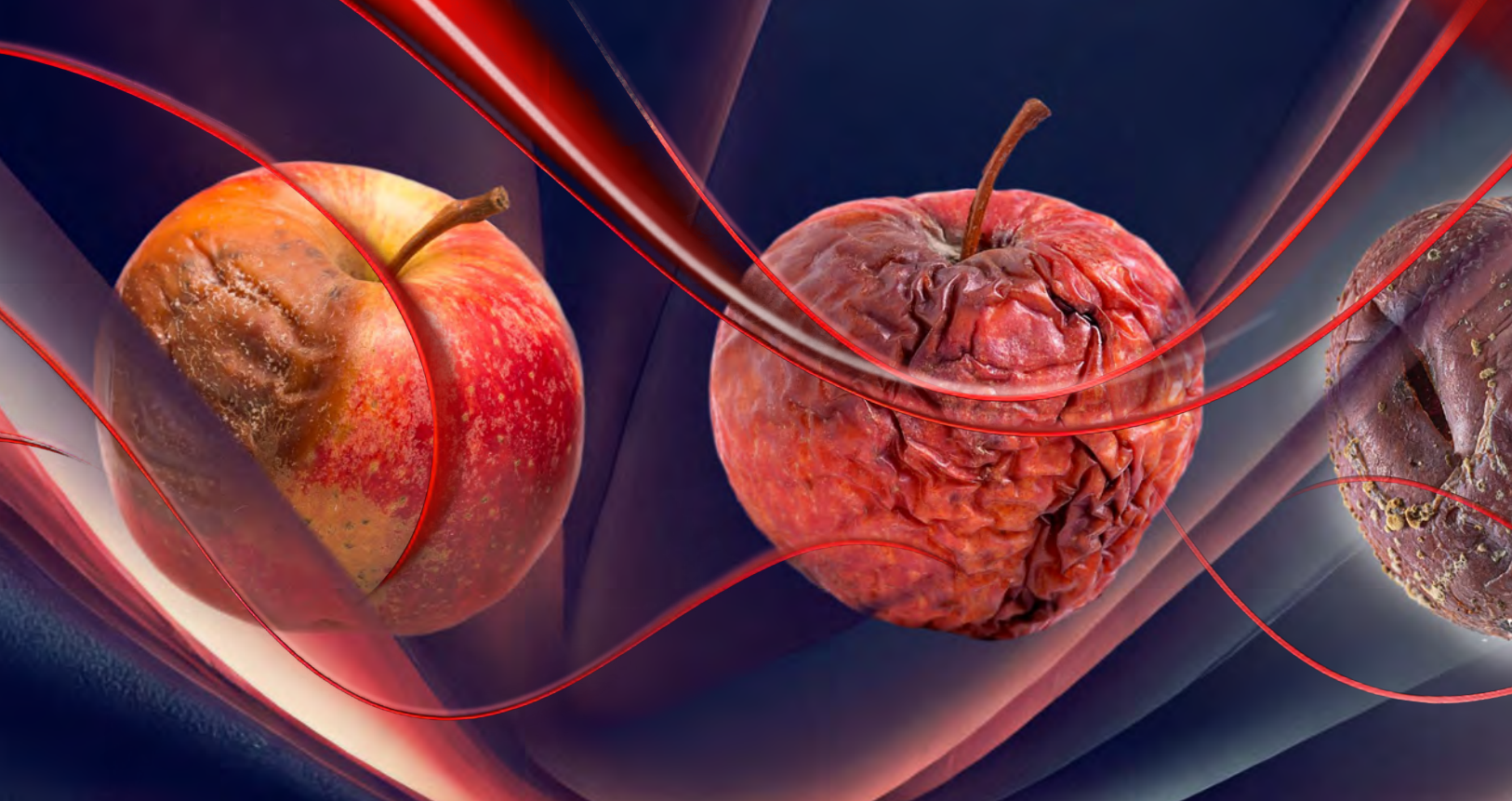
TTV HIGH SOLIDS ANAEROBIC DIGESTION (cHSAD)

THÖNI SUSTAINABLE SOLUTIONS

SMART BIOGAS TECHNOLOGY



- Robust design and tolerance to impurities
- High-performance mixing technology
- Throughput of up to 60,000 tonnes per year with just one digester
- Stable process conditions with high gas yields
- Modular and scalable system concept
- Digester capacities ranging from 1,050 m³ to 3,850 m³



WASTE TURNS TO ENERGY

CLOSING THE LOOP

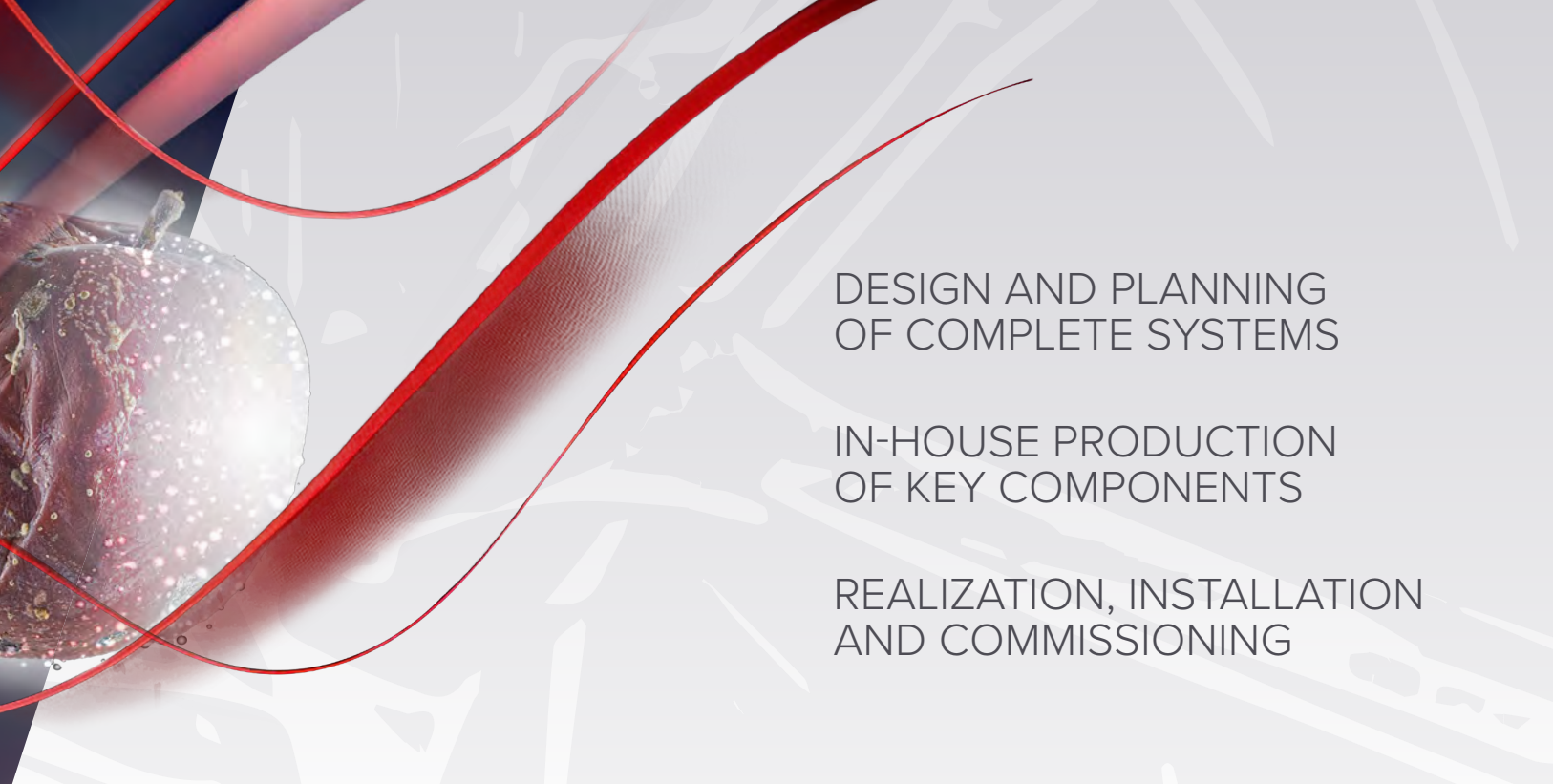
Biogas from waste is an established part of the modern circular economy and contributes to climate targets in the energy and mobility sectors.

This is exactly where we come in: The focus of Thoeni plant concepts is on maximizing the power and energy potential of organic waste as well as returning the products generated from anaerobic digestion back into to the ecological cycle.

THOENI TTV DIGESTER

The centrepiece of the Thoeni High Solids AD process is the TTV plug-flow digester. This is particularly suitable for dry organic waste with a high impurity content. Core components such as the walkable corridor, conceptual heated digester, and the robust and high-performance paddle agitator are patented.

The TTV paddle shaft is particularly characterized by its ability to handle non-homogeneous substrates evenly and consistently. The input substrate is homogenised by the slowly rotating shaft-mixer and thus enables high biogas yields. The special design of the paddles reduces sedimentation and transports sediments safely to the digester outlet.



DESIGN AND PLANNING
OF COMPLETE SYSTEMS

IN-HOUSE PRODUCTION
OF KEY COMPONENTS

REALIZATION, INSTALLATION
AND COMMISSIONING

TREATMENT OF DIGESTATE

Digestate with varying dry matter contents leaves the digester and can be dewatered using Thoeni screw presses. This results in a high-quality liquid fertilizer suitable for agricultural use, as well as a compostable solid fraction.

The solid digestate can subsequently be processed into further products in Thoeni digestate processing facility.

END-TO-END SOLUTIONS

Thoeni's expertise extends beyond anaerobic digestion: Thoeni system solutions are based on over 35 years of experience in design, planning, construction and operation. As a full-service provider, Thoeni also supplies turnkey plants covering the entire process chain, from waste treatment to biogas utilization.

An experienced team of experts advises and supports customers from project development through to successful plant commissioning.

WE ALSO OFFER
SOLUTIONS FOR
WASTEWATER-FREE
OPERATION



Abstract



THÖNI ENVIRONMENTAL ENGINEERING

We have been developing, realising and operating waste treatment plants since 1991. We design system solutions worldwide to utilise organic waste and renewable raw materials as a source of renewable energy. Our team supports you from concept through to successful commissioning of the biogas plant.

35 YEARS OF EXPERIENCE IN THE DESIGN OF
WASTE TREATMENT PLANTS



INDEPENDENT, FAMILY-
OWNED BUSINESS



MORE THAN 170 PLANTS
IN OVER 20 COUNTRIES



IN-HOUSE PRODUCTION OF
KEY COMPONENTS



TEAM OF HIGHLY
QUALIFIED SPECIALISTS



END-TO-END SERVICE
FROM CONCEPTION TO
COMMISSIONING



THÖNI CARE FOR
RELIABLE
PLANT OPERATION



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Technical and performance data are indicative and subject to project-specific conditions. Actual results may vary.
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