



Use of leading-edge technology

**Highest efficiency for an hourly
output of 35 tonnes**

RDF processing with the latest technology

The Turkish waste recycler and RDF specialist RDF Kontamine has a clear vision and mission: Using the latest waste reprocessing methods and technologies, RDF Kontamine wants to offer its customers maximum benefits and the highest level of sustainability, especially in RDF processing.

After signing a long-term RDF supply agreement with a cement works in Adana, RDF Kontamine needed to find the right processing system. They chose Vecoplan. Aside Vecoplan's extensive engineering and project experience, decisive factors included in particular the clear advantages of the high-tech solution VEZ 2500 TT for re-shredding.

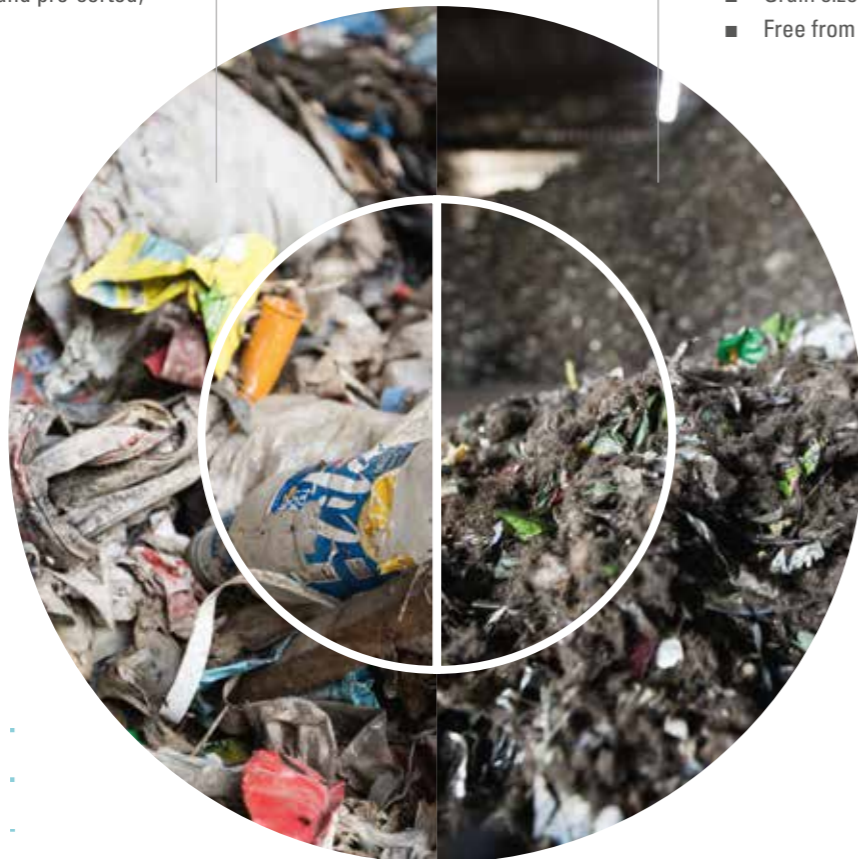
The project required:

- A highly productive, complete system based on the latest technology
- Implementation of the performance parameters defined in the supply contract with the cement works in Adana.
- High profitability of the complete system for RDF Kontamine, based on availability, output capacity, energy efficiency and output quality.



INPUT-Material

- Reprocessed domestic waste (screened and pre-sorted)



OUTPUT-Material

- Optimal fuel quality
- Grain size 95% < 50mm
- Free from extraneous materials

Strengths fully played out

With the RDF Kontamine project, Vecoplan showed what a modern RDF processing plant can do with cutting-edge technology. In close cooperation and coordination with the customer, the primary aim was to design a system that provided a continuously reliable level of high performance in terms of quality and quantity. The Vecoplan services included:

- Design of the robust, high availability, high performance complete system

Challenges on site

Implementing complete concepts requires a high degree of flexibility and competence in finding solutions. In the RDF Kontamine project, structural requirements had to be taken into account as well as the nature of the ground, and the customer's own internal input was incorporated through an intensive project management concept:

- Coordination of the customer's own input in the areas of steel construction, hoppers, transition points and electric installations
- Development of solutions for the best possible use of the available building structures and the challenging characteristics of the ground.

Continuous high performance

The Vecoplan complete system produces 35 tonnes of EBS as high-quality, homogeneous fuel every hour for RDF Kontamine. A high-performance pre-shredder feeds two re-shredder lines. On the side, FE and heavy fraction separation provide quality assurance. The conveyor technology – trough conveyor belts, pendulum distributor, scraper chain conveyor, double-shaft screw conveyor - all comes from Vecoplan too.



Pre-shredder VVZ

- Double-shaft shredder with high throughput rate
- Pre-shredding to < 300 mm
- Interchangeable knives and counter-knife for even and consistent grain distribution
- Energy efficient HiTorc drive (2 x 155 kW)
- Two solid steel rotors for quiet machine running and high cut-through power
- Good accessibility for maintenance thanks to side maintenance doors



Conveyor belts VFB

- Trough conveyor belts in the complete system
- Very robust design
- Modular structure
- Adaptation of conveyor widths to different volume streams
- Low cleaning thanks to modern scraper technology



Overbelt magnetic separator VÜB

- Safe metal separation after pre-shredding
- Electromagnet can be deactivated for maintenance work
- Consistent extraneous material reduction, increase in output quality



Air separator

- Separates out extraneous materials and the heavy fraction with low calorific value
- Optimisation of fuel quality by separating out the heavy fraction
- Protects the re-shredder from extraneous materials
- Good, reliable separation of fractions

VEZ 2500 TT – Non plus ultra in RDF shredding

Vecoplan's specially developed RDF processing shredder sets international standards when it comes to RDF. The system is designed for maximum throughput thanks to its high-performance cutting unit, offers high availability, is very energy efficient and delivers high-quality, homogeneous output.



Pendulum distributor

- Divides the material stream into two lines before re-shredding
- Saves on conveyor belts in the feed system
- Closed, clean system



Re-shredder VEZ

- Re-shredder specially developed for RDF processing
- High-performance cutting unit for maximum throughput
- Homogeneous grain distribution
- Very robust design with high availability
- Good accessibility for maintenance



Scraper chain conveyor KKF

- Discharge conveyors for the two VEZ 2500 TT
- Delivers RDF output to a double-shaft screw conveyor
- Clean, closed system (closed trough)
- Proven technology, reliable, fault-free, low maintenance



Double-shaft screw conveyor DFS

- Continuous, quick truck loading
- Cleaner, simpler, more compact and robust design
- Solid, warp-resistant steel construction



Patented W-rotor

- Maximum cutting performance
- 288 concave knives (60 x 60 mm) in 8 rows – each knife can be used up to 4 times
- Homogeneous grain distribution
- Quick blade change
- Long service lives, low costs



2 x 6 counter-knives

- Quicker, easier change – each can be used up to 4 times
- Individually adjustable from the outside – optimised cutting performance with narrow cutting gap



Patented HiTorc drive

- Frequency-controlled high torque motor, in this case each with 2 x 247 kW
- Run-up possible
- Energy savings of up to 20-30% compared to conventional drives
- Virtually maintenance- and noise-free with filled machine



Simple, quick maintenance

- Hydraulic maintenance flap (rear) and maintenance doors (front)
- Fastest extraneous material removal
- Time and cost-optimised work on knife, counter-knife and screen (replacing, switching or adjustment work)

Optimally implemented!

RDF Kontamine had high demands for this project. When it came to throughput, availability, energy efficiency, output quality and ultimately profitability, only the best would do. Vecoplan very much succeeded in this task. RDF Kontamine specifically benefits from this project in terms of:

A complete, performance-optimised system with high output quality and profitability

A groundbreaking RDF re-shredder from Vecoplan – with patented high-tech components

Consistently robust technology with a high level of availability and which can handle extraneous materials

Low energy consumption



„We are happy with the overall result on every level. What fascinates us is the combination of reliability and performance. Vecoplan implemented a very stable high-tech solution for us, which has paid off.“

Abdullah Yalcin, Manager assistant / Environmental Engineer

„From the start, we were able to work with Vecoplan very closely, constructively and in search of the best possible solution. The work and input we provided ourselves were brought together seamlessly thanks to good project management.“

Berrin Rabia ANDI, Plant Manager & Environmental Manager



Vecoplan®

Vecoplan AG
Vor der Bitz 10
56470 Bad Marienberg | Germany
phone +49 2661 62 67-0
fax +49 2661 62 67-70
welcome@vecoplan.de
www.vecoplan.com