



RDF processing line achieves reliably high performance

Maximum benefit at high efficiency

RDF processing latest technology

Vecoplan has designed and installed a RDF processing line for Helmut Westarp GmbH & Co. KG at their waste management facility in Aschaffenburg provided with latest technology. The waste management facility had to be designed in such way that it achieves reliably high performance, but also high quality. The customer wants to use the marketing opportunities best possible. Subsequently he decided to produce different RDF qualities. Vecoplan convinced Westarp not only by the extensive engineering and by project experience in the implementation of RDF processing lines worldwide, but also because of the clear advantages of the high-tech shredders VVZ 250 as heavy duty pre shredder and the VEZ 2500 as re shredder.

The project requirements:

- An overall system based on high performance and state of the art technology
- The system achieves high profitability based on availability, output-capacity and quality and energy efficiency
- Production of high calorific fraction (disposal), medium calorific fraction (thermal utilization in waste incineration/ cement plants) and high calorific fraction (cement plants)

Input material

- Industrial waste
- Overproduction
- Bulky waste
- Large packaging
- Non-sorted industrial waste

Output material

- Medium caloric fraction
- High caloric fraction





Focus on quality and quantity

Vecoplan has proved how much a modern RDF processing plant is able to achieve, when it is provided with world-class technology. The waste management facility had to be designed in such way that it achieves reliably high performance, but also high quality.

Vecoplan performance in detail:

- Design a heavy duty system with high availability

Tasks on site

In the project Westarp Aschaffenburg the existing structural conditions had to be considered. The installation of the new RDF-line had to be carried out in an existing hall, where sorting systems were in operation – a particular challenge for the Vecoplan project management.



Variable output

Vecoplan has designed a waste management facility for RDF for Westarp GmbH & Co. KG, which offers the operator the opportunity to produce the output material in different fractions. The wind sifter as well as the screening technology are perfectly adjusted to the on site requirements. These components make the difference when it comes to classifying the factions. The plant can be adjusted easily via the operator panel.

The powerful pre shredder feeds two re shredding lines. The separation of ferrous and non-ferrous metals as well as the heavy fraction separation contribute to quality assurance. The complete conveying technology, pendulum distributor, drag chain conveyors, double-screw conveyor – everything out of one hand from Vecoplan.



Pre shredder VVZ

- Two shaft shredder with high capacity
- Pre shredding down to <200 mm
- Exchangeable cutters and counter knives for a homogenous particle size distribution
- Energy efficient HiTorc-Drive (2 x 155 kw)
- Two solid steel rotors grant a smooth machine operation and high power
- Easy to maintain by lateral maintenance doors



Conveyor belts VFB

- Through conveyor belts installed in the complete plant
- Robust design
- Modular design
- Adjustable conveying widths to different volumes
- Easy to clean due to modern scrapers



Overbelt magnet VÜB

- Reliable separation of ferrous metals after pre shredding
- Electro magnet can be switched off for maintenance
- Consequent reduction of tramp material increases the output material's quality



Wind sifter

- Separated the high and medium caloric fraction
- The fuel quality improves because the heavy fraction is separated
- Protects the re shredding from tramp material
- Reliable separation of fractions



Pendulum distributor

- Disposes the material to the two re shredders
- Safes conveyor belts for the feeding
- Closed, clean system



Re shredder VEZ

- Especially developed for the RDF production
- High efficiency cutting system for maximum throughput
- Homogenous particle size distribution
- Robust design and high availability
- Easy to maintain



Drag chain conveyor KKF

- Discharge conveyor of both re shredders type VEZ 2500 TT
- Transfers the RDF to the storage boxes
- Closed and clean system (closed through)
- Proven technology, reliable, trouble free and almost free from maintenance



Screen

- Reliable separation of oversized material from the target fraction
- Exchangeable screens
- Easy to maintain

VEZ 2500 TT – The maximum in RDF processing

The shredder developed by Vecoplan especially for RDF processing sets standards in the field of RDF. The system is designed for maximum throughput with a high performance cutting system. It offers the highest availability. It operates energy efficient and delivers high quality, homogeneous output.



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 knife 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

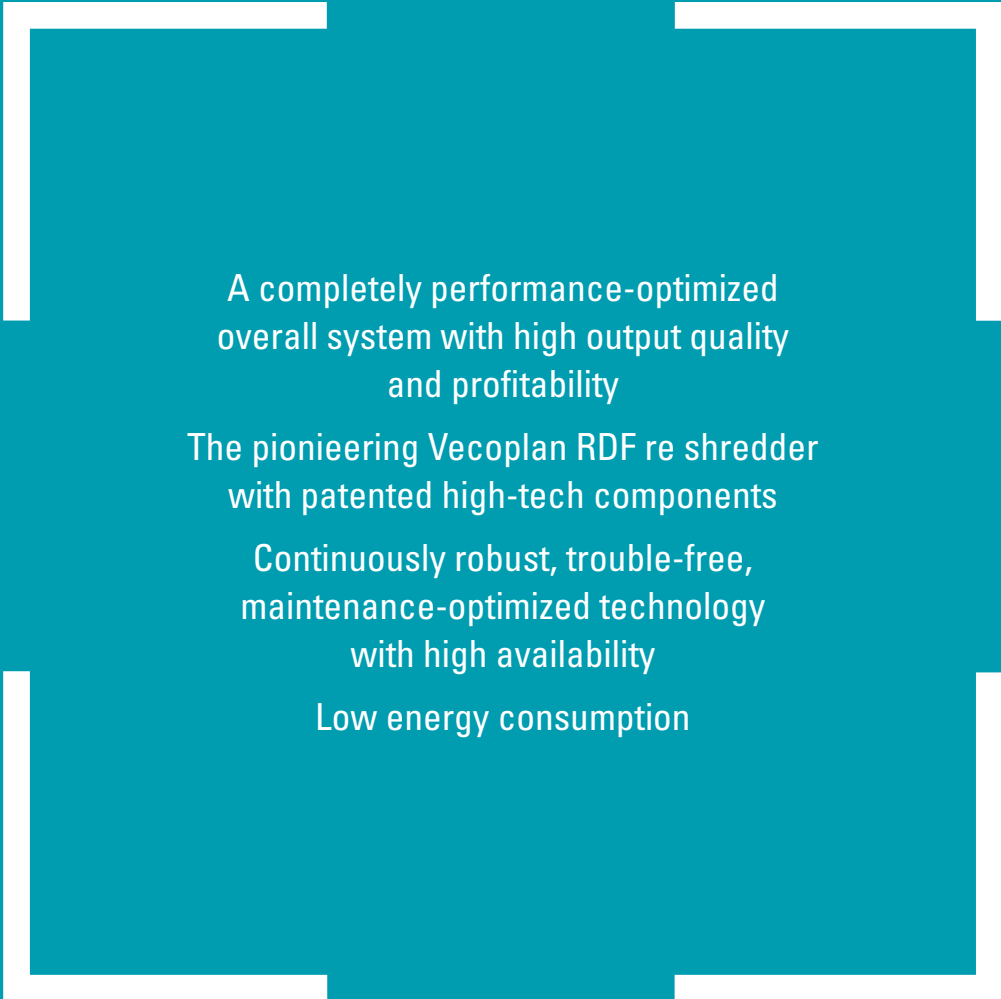


Simple, quick maintenance

- 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)

Engineering at its best!

Westarp GmbH & Co. KG received a RDF line with high-tech components. Due to customer's requirements Vecoplan started the installation in the same week when the order was placed. We realized the plant just in time and at highest level. Westarp benefit in the context of this project quite specifically by:



A completely performance-optimized
overall system with high output quality
and profitability

The pionieering Vecoplan RDF re shredder
with patented high-tech components

Continuously robust, trouble-free,
maintenance-optimized technology
with high availability

Low energy consumption

Vecoplan®

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