

WeAre **REDWAVE**

Together for a livable
TOMORROW

REDWAVE[®]



”
*What we do today, determines what the
world will look like tomorrow.*

Marie von Ebner-Eschenbach

We take

RES PON SIBI LITY



As a technological company that has been providing solutions for the recycling industry for decades, we have a very close relationship with the topic of sustainability and the circular economy. Recycling and environmental protection are more important than ever. The global shortage of raw materials and climate-related changes challenge us to continuously develop the most modern sorting technologies, to get the most out of recyclables to gain valuable materials. We also see it as our responsibility to work for a sustainable corporate management along

the entire value chain and to practice this together with our team. For our customers, for our environment, for our society, for ourselves and for our future generations!

We thank you for the trust you have placed in our performance and we invite you to get to know our company a little bit better over the next few pages and look forward to a journey together into a sustainable future.

Silvia Schweiger-Fuchs

Manfred Hödl

Managing directors



Our industry vision

ZERO WASTE

Together with industry partners, we have embarked on the path of finding solutions for "zero waste" in recent years. For us, realizing this vision means making all materials recyclable, i.e. processing them at the end of their life cycle in a way that higher proportions of the original material can be recycled and thus fed into an (almost infinite) cycle. Our research and development department is based on this guiding principle in order to ensure a continuous increase and improvement in material recycling.

Our MISSION STATEMENT



The REDWAVE team is united by passion and the courage to shape the future of sorting technology in the recycling, waste and minerals sector and to create unique and efficient solutions for our customers.

How do we implement our vision? Knowledge and many years of experience in plant and mechanical engineering, joy and courage in innovating, trust and the freedom to allow creativity. And of course keeping close relationships with our customers in order to keep our finger on the pulse of new challenges. This is the only way our ground-breaking solutions can mature for our customers and our environment.



VISION

We provide profitable solutions for waste treatment to use and reuse resources. We help our customers to be pioneers in the recycling industry and take responsibility for an efficient circular economy. For a future worth living and for our children!



MISSION

Our mission as an innovative provider of intelligent sorting solutions is to make our customers' daily recycling routine as efficient and easy as possible through cutting-edge technologies, expert knowledge, and partnership-based cooperation before, during and after project implementation.

We achieve all of this based on our sustainable corporate management, in which, ideally, economic, ecological and social endeavours are the focus of our work.



Our LOCATION

The REDWAVE brand, representing the recycling and waste processing division and associated sensor-based sorting technology of BT-Wolfgang Binder GmbH (founded 1997), was established in the green heart of Austria in 2004. That was when company founder Mr. Heinrich Fuchs decided to expand the company beyond its original portfolio of plant solutions for the mineral and conveying industries.

During the last 20 years, sorting technology has emerged as the heart of the company, and REDWAVE has developed into a well-known, international company and reliable, innovative partner in the recycling industry.

REDWAVE operates worldwide and, in addition to its headquarters in Austria, has further subsidiaries in the USA, Germany, China and Singapore. When constructing our new company building, we oriented ourselves towards a modern and sustainable construction method and took current energy-saving potential into account as well as possible.

REDWAVE is part of the BT-Group Holding GmbH.

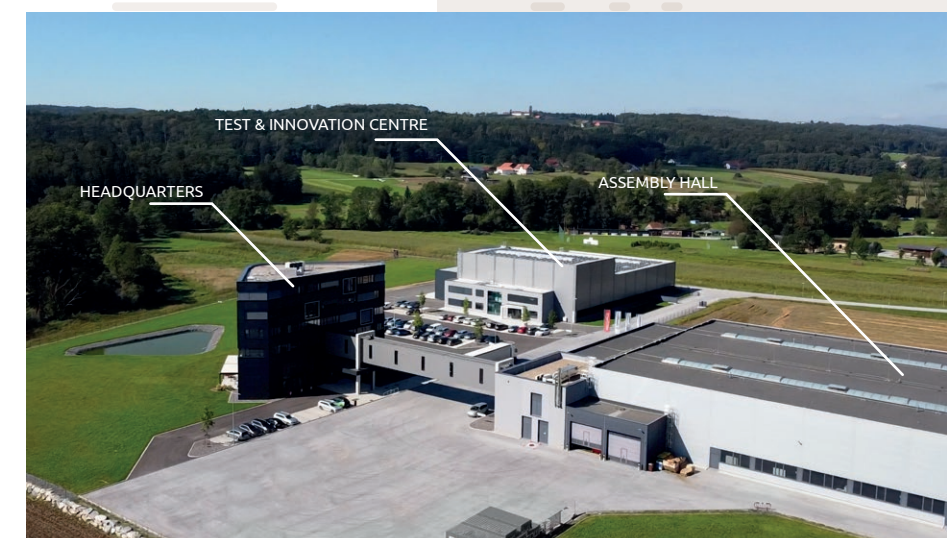


Company founder Heinrich Fuchs

REDWAVE

a division of
BT-Wolfgang Binder GmbH

Wolfgang Binder Str. 4
8200 Eggersdorf bei Graz, Austria

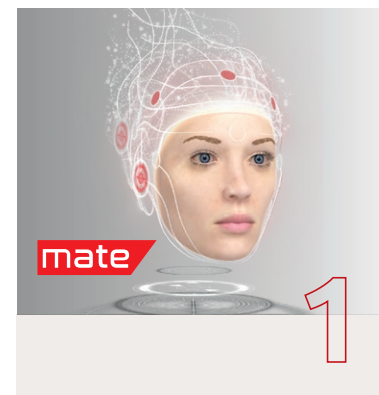




Our TECHNOLOGICAL CONTRIBUTION

REDWAVE supplies profitable recycling sorting systems of the latest generation as well as turnkey waste treatment systems. In addition, the company is a leading manufacturer of sensor-based sorting machines with a robust industrial design. REDWAVE does not stop at the sensor level but supplies the entire sorting machine system, including the intelligent overall control system and thus takes full responsibility for the sorting result.

Our know-how in the field of software and hardware as well as the systems and conveyor belt technology specially tailored to the recycling industry are combined under one roof at REDWAVE. This allows us to always be able to offer our customers innovative, flexible and market-compliant solutions.



1

TECHNOLOGIES

REDWAVE mate – artificial intelligence & digitisation for monitoring and optimising the entire recycling plant

2

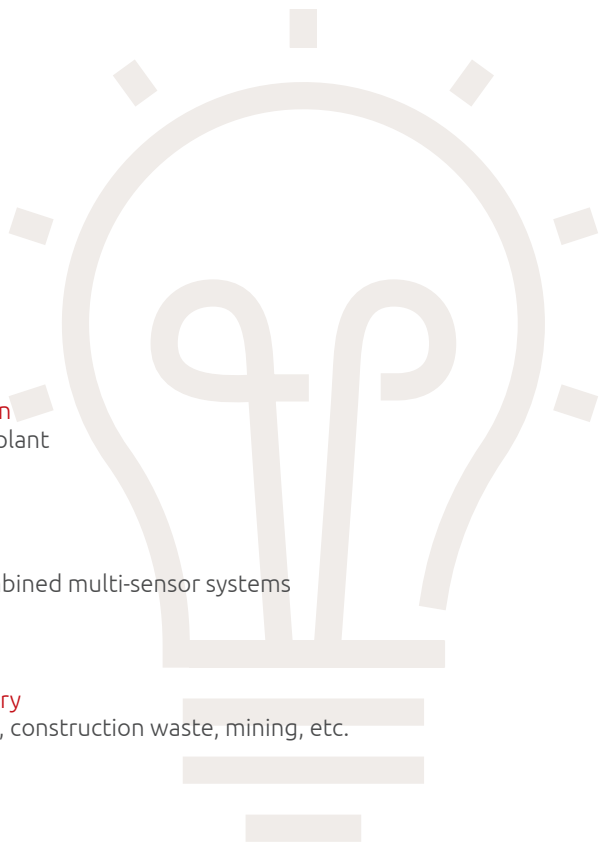
REDWAVE sensor-based SORTING MACHINES
near infrared, camera system, XRF technology, combined multi-sensor systems

3

Turnkey SORTING SYSTEMS for the recycling industry
glass, paper, metal, plastic, mixed household waste, construction waste, mining, etc.

4

MECHANICAL-BIOLOGICAL treatment
Turnkey waste processing plant



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*Passion for intelligent technologies
 for our mother earth.*

Our COMPANY STRATEGY

Sustainable corporate management

Our sustainable corporate management is based on the principles of “corporate social responsibility”. Within the individual fields of action, goals are set, actions are coordinated and the achievement of the goals is measured. We are continuously striving for improvement in all areas.



Collect data ▶ measure & analyse ▶ generate knowledge and gain technical expertise!

The 4 FIELDS OF ACTION

of our sustainable corporate management



CUSTOMER

We create highly flexible, innovative solutions for our customers in the waste and recycling industry. Through partnership, trust and the latest technologies, we support our customers in being pioneers in the recycling industry.



OUR TEAM

It is the passion for the latest technology and the love for mother nature that unites us every day. Trust, flat hierarchies, team spirit, fairness and respectful interaction with one another characterize our company and create a balance between work and life.



ENVIRONMENT

With our machines, systems and solutions, we enable the processing and return of raw materials to the circular economy. With the highest possible material recovery, we protect our environment in particular with regard to CO₂ savings, energy savings and primary resources.



SOCIETY

We also see our responsibility in creating awareness for a resource-saving approach in public and in getting society excited about the topic of environmental protection.

With the aid project BT-Group Help we also support children and environmental campaigns in the poorest regions of the world.





FIELD OF ACTION

OUR CUSTOMERS



Highly flexible, innovative solutions combined with digital services create significant added value for our customers today. Professional advice and cooperation based on partnership are just as much a part of this, as is excellent quality assurance and environmental management based on today's standards. In the interests of our customers, we take it for granted that our industrial partners and suppliers are responsible for sustainable business.

Examples of this field of action

INCREASED EFFICIENCY THROUGH FLEXIBILITY

The proximity to our customers enables us to keep our finger on the pulse and provide innovative solutions for changing market requirements. Often resources can be used better through individual solutions than it would be possible with standard solutions. A recently established plastic sorting plant was built at the customer's request, for example, to be extremely flexible in the event of the changing composition of the waste, varying market conditions or changing legal framework conditions. The main advantage of this system compared to standard systems is the ability to process two different types of waste - on the one hand light packaging (yellow sack) and on the other hand commercial waste. In addition to flexibility, an important goal was to significantly improve the sorting depth.



INDUSTRY COLLABORATIONS

Together with industry partners, customers and research institutions, we are currently working on intelligent digital solutions for the control of future processing plants. These results are the solutions and standards of tomorrow's industry.



SUPPORT

24/7 availability, a customer hotline and electronic order processing are just as much a part of our service as electronic remote maintenance, „remote commissioning“ and „assisted viewing“. In addition, the entire sorting system can be equipped with REDWAVE mate - the artificial, intelligent support within the sorting system - to support the operation and optimisation of the recycling system! 24 hours a day, 7 days a week, 100%!



We developed the artificially intelligent REDWAVE mate to monitor and optimise the entire sorting process and commercialised it together with our customers. Depending on the application, this has the following advantages:



Reduction of energy consumption per ton of material produced

Increased output over the entire life cycle

Extension of the life cycle: optimised utilisation of the machine and the system increases the life cycle of the entire system

Reduction in the production of rejects / faulty production: higher quality of the secondary materials obtained

Increase in added value: through process optimisation and lowering of operating costs



FIELD OF ACTION

OUR ENVIRONMENT



Our machines, systems and solutions enable our customers in the waste and recycling industry to significantly protect the environment. This happens in particular through the maximum possible reuse of valuable materials in the circular economy, the avoidance of CO₂ emissions and a reduced use of energy for the downstream generation of primary raw materials. We attach great importance to the constant improvement of our CO₂ balance in our product development and value creation processes.

Examples of this field of action

SORTING MACHINES

The REDWAVE sorting machines delivered in the last three years offer our customers worldwide the opportunity to reduce CO₂ emissions by around 4 million tons per year. In order to sustainably save 1 ton of CO₂, one would have to plant around 80 trees today, for example.



COMPANY BUILDING

Our manufacturing and office properties are “state-of-the-art” today. With the move into the new company building in 2019, the foundation for energy savings was laid. The result was energy savings of up to 70% compared to the „standards” twenty years ago. In the interior, the work area “recycling” is reflected in the room design and illustrates that waste is something valuable.



MOBILITY

The use of the most modern communication tools such as video conferencing, avoiding unnecessary business trips, setting up car pools, subsidizing bicycles and public transport as well as initiating a “Climate Impact Day” in the company are just a few steps with which we protect our environment.



SAVINGS IN CO2 EMISSIONS BY USING:

1 paper, cardboard, cardboard boxes	reduction of approx. 360 kg CO₂ emissions
1 t glass	reduction of approx. 270 kg CO₂ emissions
1 t metal	reduction of approx. 1.800 kg CO₂ emissions
1 t mixed plastics	reduction of approx. 500 kg CO₂ emissions

Source: Fraunhofer UMSICHT „Resources saved by recycling”, Studie für die ALBA Group 2019

REDWAVE sorting machines create several tons of throughput per hour, depending on the sorting task, system conditions and operational management.



OUR TEAM

FIELD OF ACTION OUR TEAM



WeAreREDWAVE - With the RT4F (REDWAVE Team for / 4 Future) program, we challenge and promote personal and professional qualities in every individual. A balance between work and life should provide a good basis for an attractive working environment for our high-performance team. Employee and manager development was the focus of our personnel management 2020.

Examples of this field of action



EVALUATIONS

The actual situation is recorded regularly and systematically through employee surveys and evaluations of the workload. This serves as the basis for deriving improvement measures.



TRAININGS

A variety of face-to-face and online training courses for employees are also on the program, as are special management training courses and 360-degree feedback. The development of our future managers with special support programs and assignments to our subsidiaries around the world are worth mentioning here.



TOGETHER

Regular employee information, company celebrations, health care by our company doctor, the „healthy apple“, a discounted canteen offer, joint excursions or sporting events are just a part of our varied offer for our REDWAVE team.



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SO CIETY

FIELD OF ACTION OUR SOCIETY



In addition to economic and resource-saving solutions that we offer for the waste and recycling management, we also see our responsibility in creating awareness for resource-saving treatment to the public and getting society excited about the topic of environmental protection. This is done online, via social media, but also through lectures, articles in expert journals and the generally accessible media, communities and committees. In addition, we support environmental, monetary and non-monetary projects for children in the poorest regions of the world every chance we get.

Examples of this field of action:



RAISING AWARENESS

We organize events for children, young people and adults from the region in which the recycling topic is brought closer. For example, it shows how waste sorting works. Visitors can experience sorting demonstrations live.



AID PROJECT

With our BT-Group-Help initiative (www.bt-grouphelp.at) we pursue the goal of supporting people in poor regions of the world locally and giving them some responsibility for their future. With help for self-help. For this reason, we invest part of our income in projects for people, especially children and their future. A playground and sports field project were already implemented in 2020 and tuition of around 100 socially disadvantaged children was taken over.



PUBLIC RELATIONS

As winners of the coveted Austrian environmental prizes "Energy Globe Austria Award" and the Styrian environmental prize of the same name, we achieved recognition on a national and state-wide level and present a solution to the process optimisation of recycling plants to increase the efficiency of material resources to the public.

In addition, in 2020 we further expanded our communication channels in the social media area in order to address the topic of recycling on a broader scale. Our homepage has also been completely revised. With environmental and research project articles, we appeared in many regional and international print media in 2020.





TODAY FOR THE FUTURE

PERFORMANCES QUALITY STANDARDS COOPERATIONS



CERTIFICATES

- QUALITY MANAGEMENT SYSTEM EN ISO 9001: 2015
- MANAGEMENT SYSTEM ACCORDING TO SCC **: 2011
- CONFORMITY OF THE FACTORY PRODUCTION CONTROL (WPK) EN 1090-1: 2012
- ENVIRONMENTAL MANAGEMENT ISO 14001 - completion planned (2021)



AWARDS

- **ENERGY GLOBE AUSTRIAN AWARD:**
Sustainable Plastics: Process optimisation of recycling plants to increase the efficiency of material resources
- **ENERGY GLOBE STYRIA AWARD:**
Worldwide: process optimisation of recycling plants



ONGOING RESEARCH PROJECTS

with industry partners



MEMBERSHIPS AND COOPERATIONS

various industry partnerships, networking partners and cooperation for sustainability



Together we will shape the circular economy of the future.

follow us on    



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