



SWISS QUALITY – ALL THE WAY THROUGH

Your general contractor for **STATIONARY RECYCLING PLANTS FOR SECONDARY RAW MATERIALS**

Excavated material and demolition debris • Concrete and mixed rubble • Reclaimed asphalt •
Track excavation • Waste incineration slag • Service and maintenance • 24-hour emergency service •
Spare parts • Vulcanisation



New standards in the circular economy

CUSTOMER NEEDS SHAPE OUR FUTURE

Frei Fördertechnik AG is a leading company in the field of circular economy and resource efficiency within the processing technology sector. Our core expertise lies in the processing of recycled materials as well as primary and secondary raw materials. As a general contractor, we develop customised integrated solutions that are precisely tailored to your individual needs – and have been doing so for over 55 years.

Each system is unique

From project planning to turnkey systems, Frei Fördertechnik manages all project phases from a single source. The high standards we set for the quality of our products are also reflected in our commitment to after-sales service.

Following a thorough analysis and consultation, we – as a general contractor with many years of experience and extensive expertise – will work with you to develop a bespoke and efficient solution.

Customer needs

- Modification of the composition and properties to enable reuse
- Achievement of the desired end products
- Consistent quality and environmentally friendly processing
- Circular economy – saving primary raw materials, energy and costly landfill space (volume reduction)
- System service life >25 years

WHAT DOES THIS MEAN FOR YOU?

Our process engineers take the following four key points into account:



Selecting the location of systems in such a way that transport can be reduced



Choosing the process technology in such a way that the circular economy is implemented and resources are saved



Intelligent system planning to reduce the consumption of electricity and water



Innovative development of new process engineering methods

Mineral construction waste is turned into new, high-quality building



Excavated material and demolition debris



Concrete and mixed demolition material

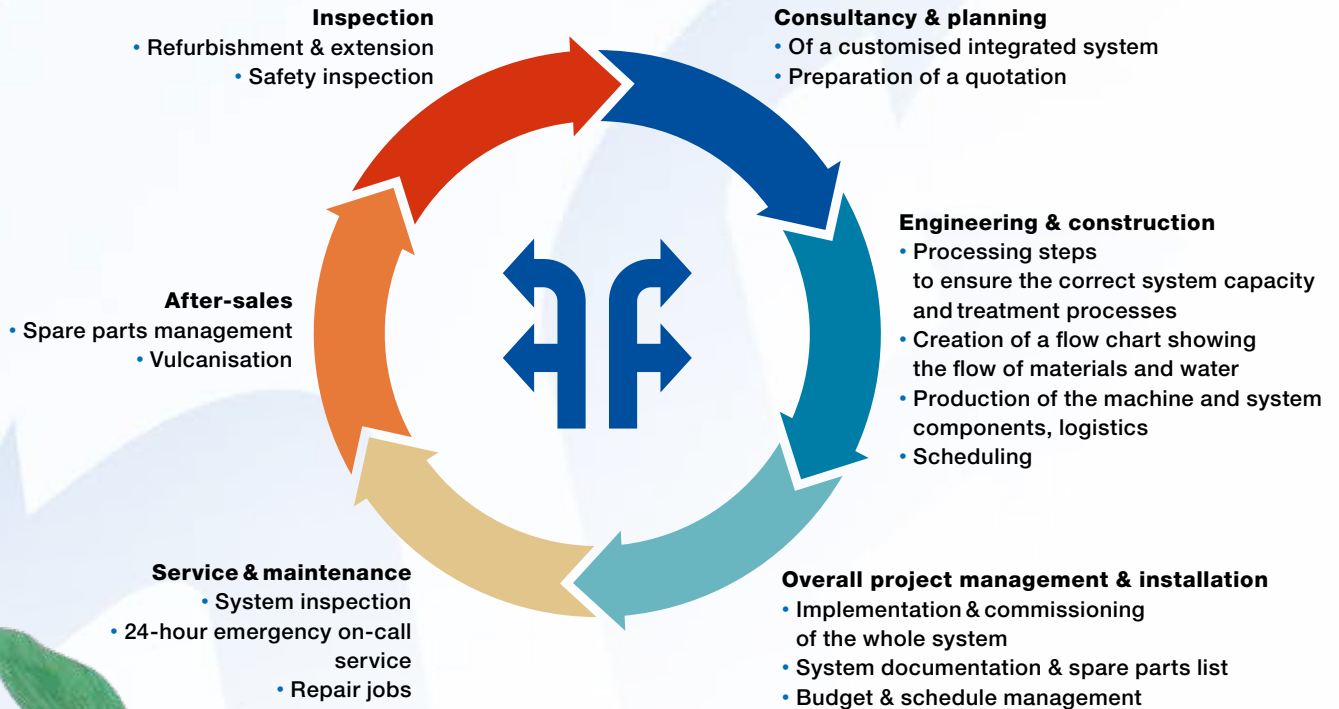


Reclaimed asphalt



Railway track excavation

WE CONVEY IDEAS



Tailor-made solutions, experience, expertise and meticulous planning are the cornerstones for the success of the projects. An accurate flow chart is drawn up for the planning of each system. In this step, all the customer's specifications are integrated, and machines and components are combined accordingly.

As a main contractor, we place great importance on close cooperation based on partnership, from the start of the project right through to the successful handover.



Your specialist for preparation and process engineering FOR A SUSTAINABLE CIRCULAR ECONOMY

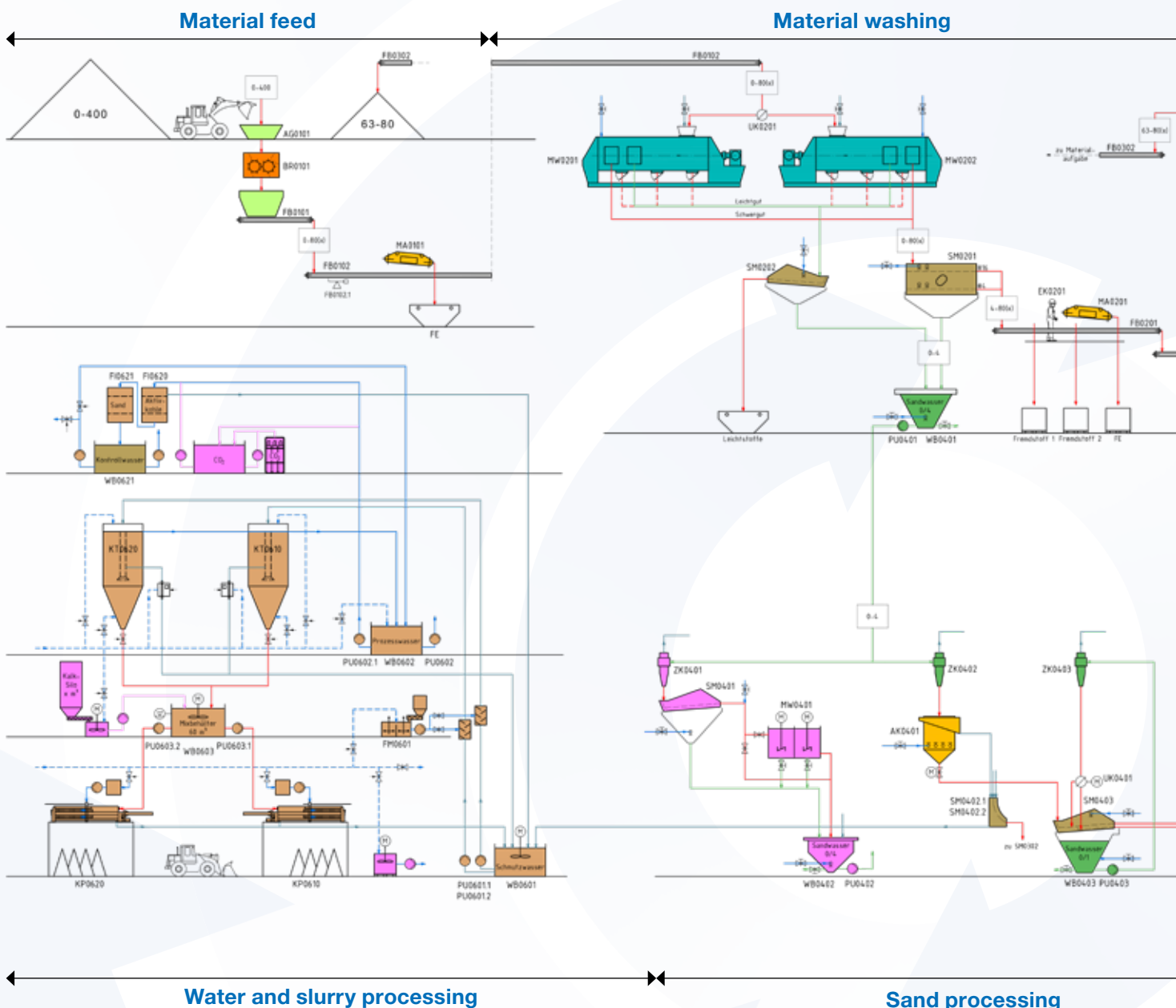
We offer you solutions to close raw material cycles and further advance the circular economy.

In a recycling plant, secondary raw materials are processed into high-quality products for concrete production in a wet-mechanical process.

This is achieved by a sequence of several successive processing steps, taking into account the optimum machine technology.

This processing method enables a significant increase in the value of the recycled material and sets new standards in the circular economy.

The determination of the process technology is tailored to the material to be processed and the quantity to be processed. In this way, your project becomes unique.



Our experienced process engineering specialists will support you with:

- Consultancy and planning of your system concept with process engineering
- System designs
- System modifications
- Selection of the right machines and clarification of technical details/coordination with machine suppliers
- Support during commissioning
- Examination of standards and regulations (technical challenges, consequences)
- Carrying out machine tests
- Cooperation with laboratories and universities (material analyses, tests for new processes)

Factors involved in selecting the machines

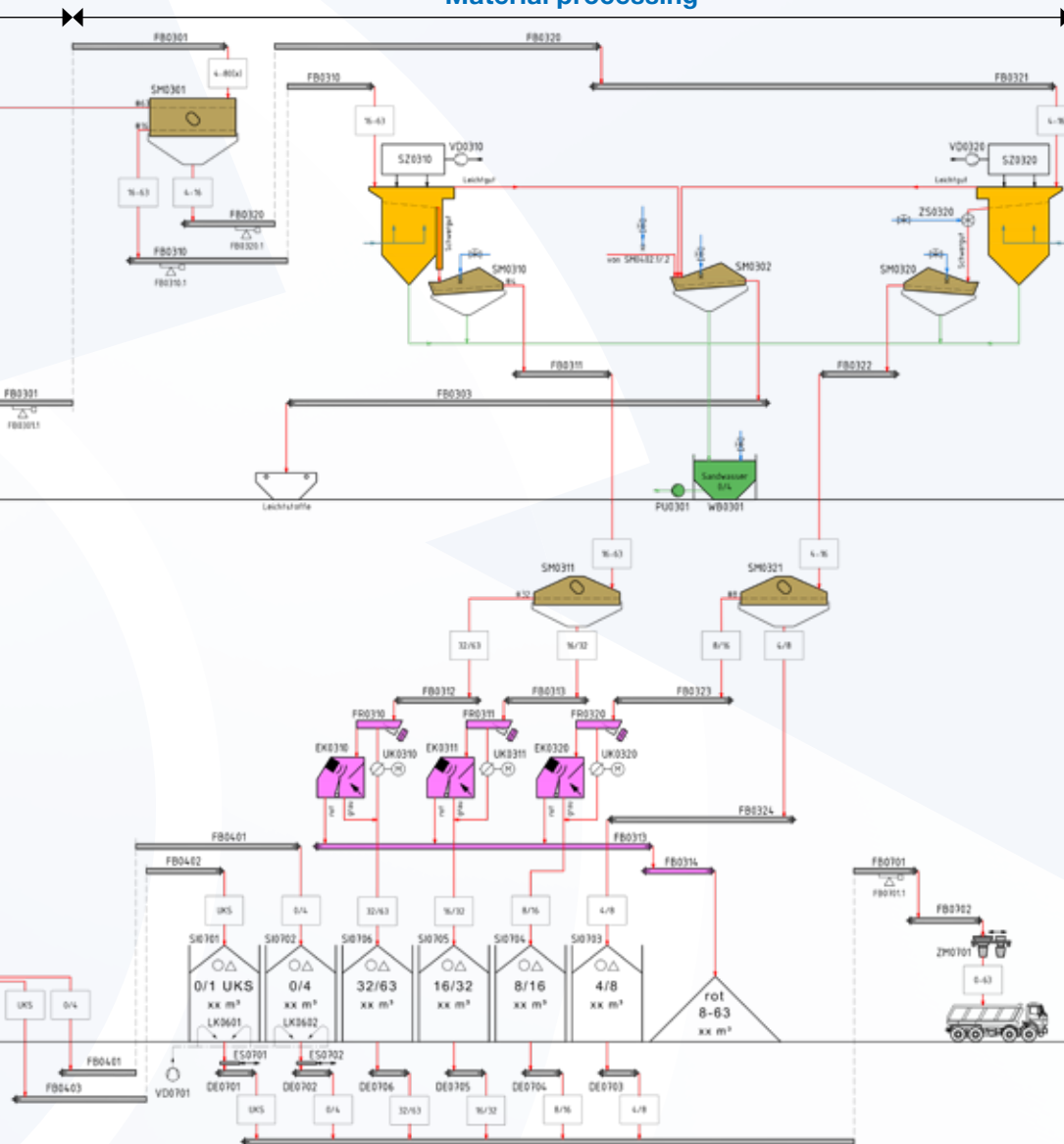
- Size of the largest grains and grain size distribution in the raw material (raw material curve)
- Sand and sludge content in the raw material (analysis of the raw sand)
- Contaminants in the raw material (wood, agglomerates, adhesive products, etc.)
- Uses of the end products (concrete, surfacing, special applications)



Please contact us to develop a cost-effective and sustainable operation that meets stringent regulatory requirements and enables an effective circular economy.

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Material processing



Processing steps

- Material collection
- Crushing
- Washing
- Sorting
- Screening / dewatering
- Water and sludge treatment
- Material transport
- System expansion

Batch feed & loading

We utilise cutting-edge technologies

COMPREHENSIVE SOLUTIONS TAILORED TO YOUR NEEDS

Stationary recycling plants are sustainable and have a long service life.

They are indispensable and play a crucial role in reducing construction waste, making them a key environmental measure that will benefit future generations.

A new era of circular construction – sustainable, value-preserving, resource-efficient and environmentally optimised processing and recycling facilities:

- Consultancy, engineering, planning, implementation, installation and commissioning
- Turnkey process system construction
- Delivery and temporary storage of materials
- Raw material feed and primary crushing
- Wet processing using washing units
- Gravel and crushed stone processing, crushed sand production
- Sand and sludge treatment system
- Conveyor belts, screening machines, bucket elevators, setting machines, etc.
- Wastewater treatment, water and sludge treatment
- Silo, feed and loading system with belt feeders and weighing belt
- Robotic sorting using artificial intelligence
- Removal of foreign matter/grading
- Dedusting system
- Pipework installation for the processing system
- Control system with visualisation and electrical installation
- Replacement parts and wear parts
- Building construction, steel and sheet metal constructions, catwalks and platforms

EXPERTISE AND EXCELLENCE



Responsible consultancy



Cost-conscious planning



Project consultancy by engineers and designers with longstanding experience



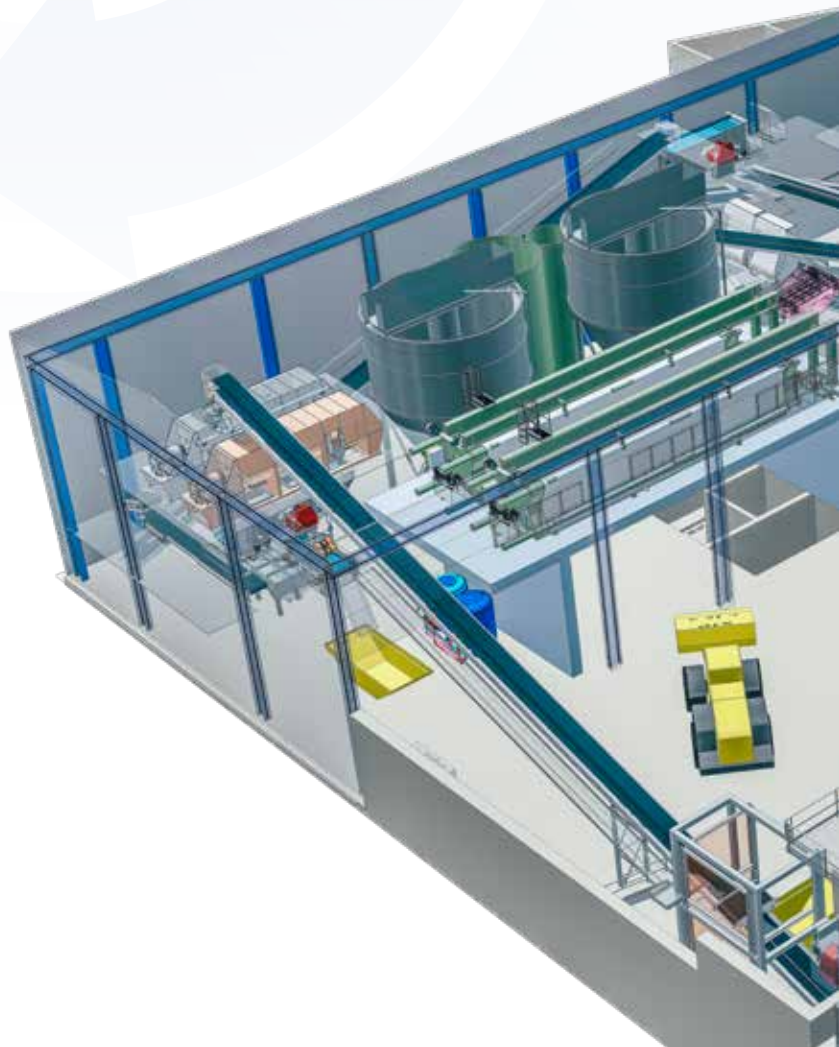
Production at our own factory in Rubigen, Switzerland.



Installation by trained teams



Service and maintenance by qualified personnel





“The declared input materials, such as concrete rubble, mixed rubble, loamy or gravelly excavated material, as well as lightly and heavily contaminated ballast from track dismantling, are delivered by lorry or rail. The batches, weighing between 1,000 and 10,000 tonnes, are then washed. **The state-of-the-art process engineering and processing system sorts, classifies and doses the various material components.** In addition, contaminants and foreign matter can be removed efficiently, ensuring significantly improved product quality.”

HANS BRUGGER

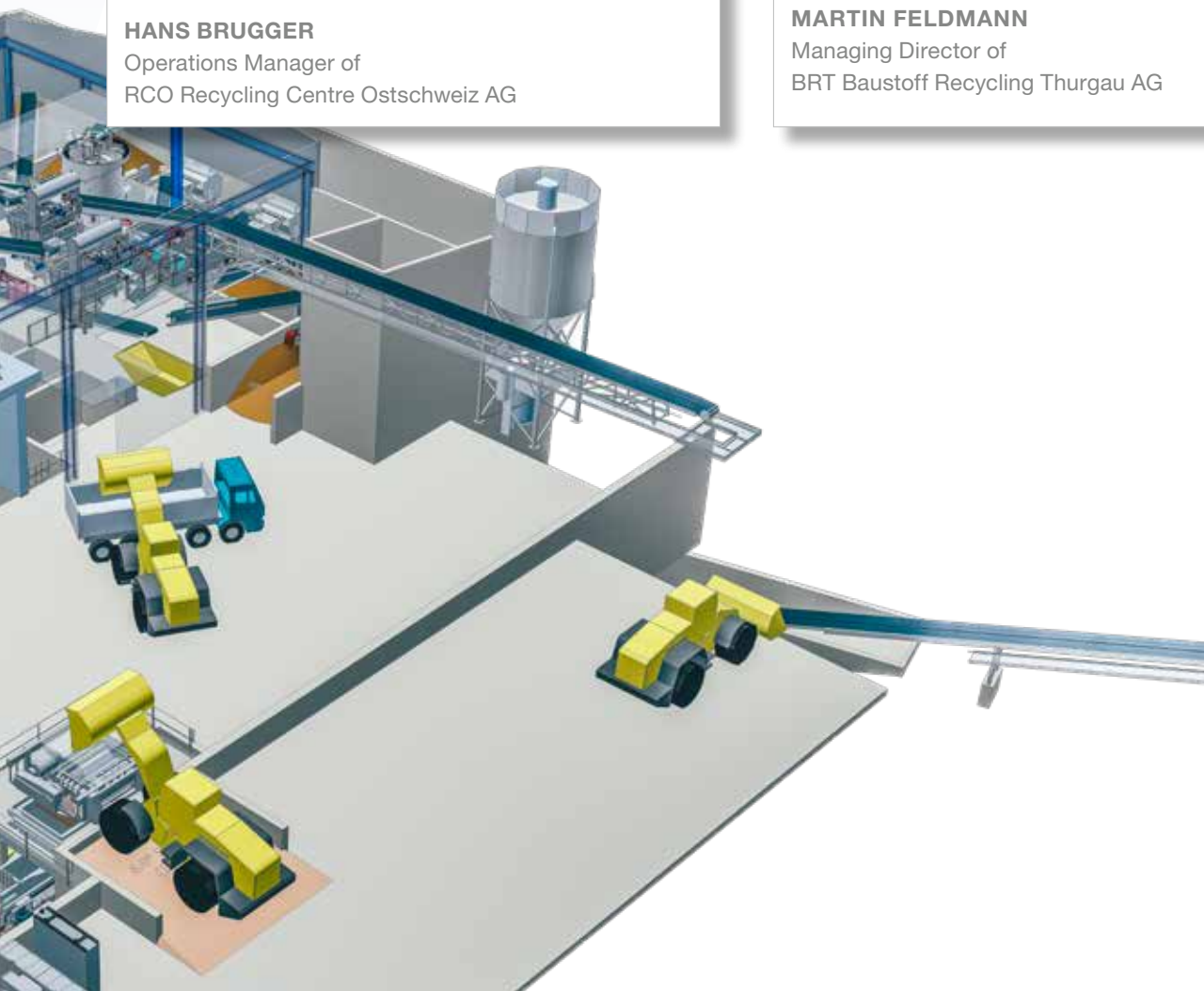
Operations Manager of
RCO Recycling Centre Ostschweiz AG



“The new processing technology results in much better quality recycled material. Fine particles, which previously reduced the quality and caused large fluctuations, can be efficiently removed with the wet-mechanical processing system. **By closing material cycles in this way, we are effectively combating the scarcity of resources.** The Swiss construction industry continues to grow – making it all the more important to utilise the available primary and secondary raw materials as efficiently as possible. We want to make our contribution to this.”

MARTIN FELDMANN

Managing Director of
BRT Baustoff Recycling Thurgau AG



We would be happy to show you more
OUR REFERENCE RECYCLING FACILITIES



Eberhard Bau AG, Oberglatt
EbiMIK processing centre



RCO Recycling Center Ostschweiz AG, Niederstetten
Construction waste recycling system



BRT Baustoff Recycling AG, Weinfelden
Wet mechanical processing system



Kieswerk Oldis AG, Haldenstein
Processing system



VITO Recycling AG, Péry-La Heutte
Soil washing system



H2M Exploitation SA, Vuflens-la-Ville
Washing and sorting system



Surer Kipper Transport AG, Pratteln
Excavation and RC processing system



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Connect with us!

