

# REDWAVE – your reliable partner



## Process Consultancy

- Definition of requirements
- Material and process flow diagrams
- Reference visits and in-house sorting test



## Project Development

- Plant performance and mass balance calculations
- Development of design concept
- Plant engineering
- Cost estimation



## Project Management

- Project coordination and milestone monitoring
- Cooperation with partner and subcontractors
- Coordination of supplies



## Manufacturing – Supply of equipment

- Technical specification of plant components
- Detailed manufacturing documentation
- Quality assurance



## Installation – Commissioning

- Site coordination
- Mechanical and electrical installation
- Commissioning and start-up
- Training of plant personnel



## Customer Service

- Remote access for support
- Service contracts
- Preventive services

# REDWAVE®



## Our projects

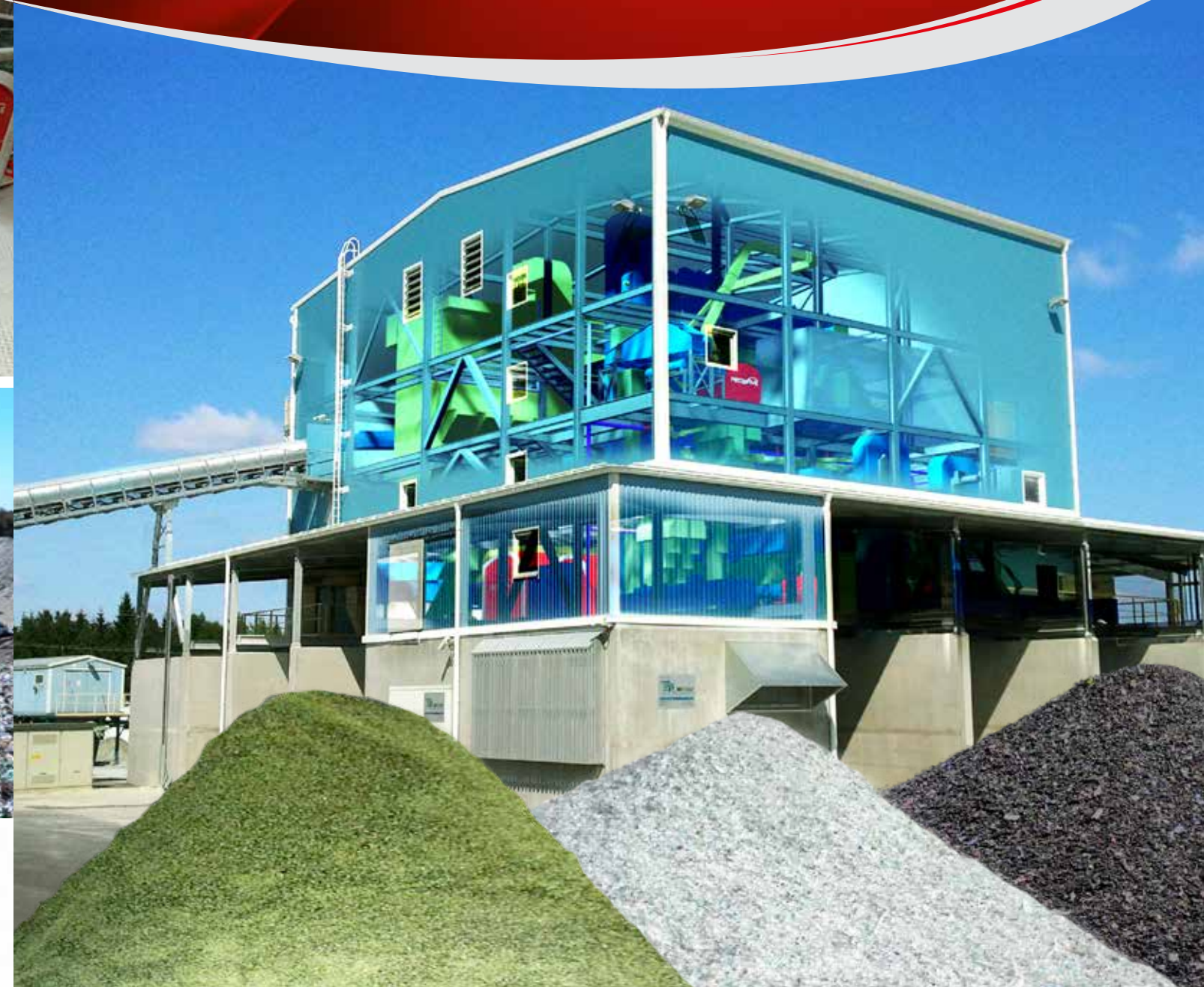
REDWAVE waste glass processing plants have been successfully installed in Austria, Finland, Russia, Italy, Germany, Great Britain, the Czech Republic, Spain, Poland, the Netherlands, Hungary, the USA, France, Tunisia, Ukraine, Sweden, etc.



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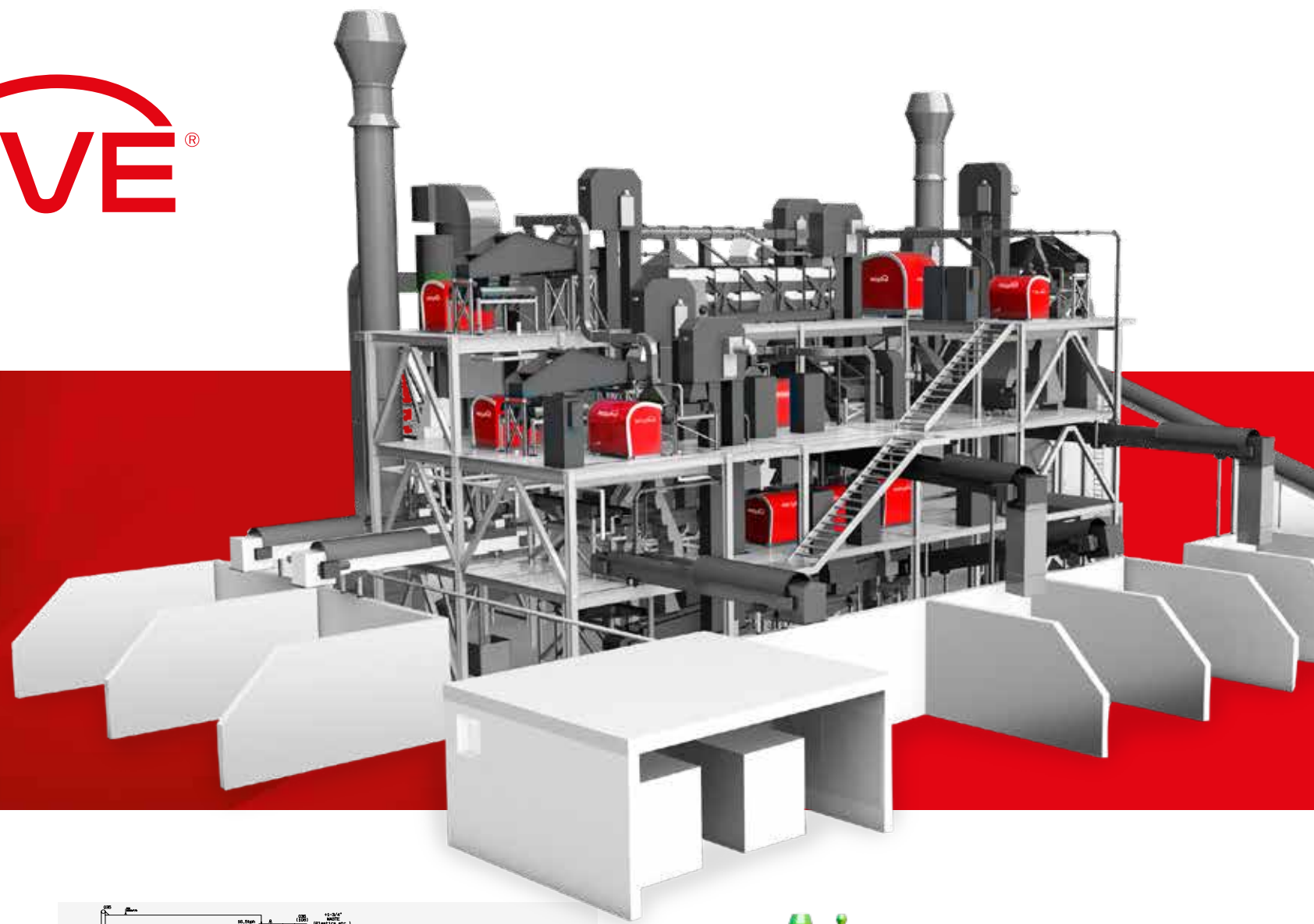
## WASTE GLASS PROCESSING





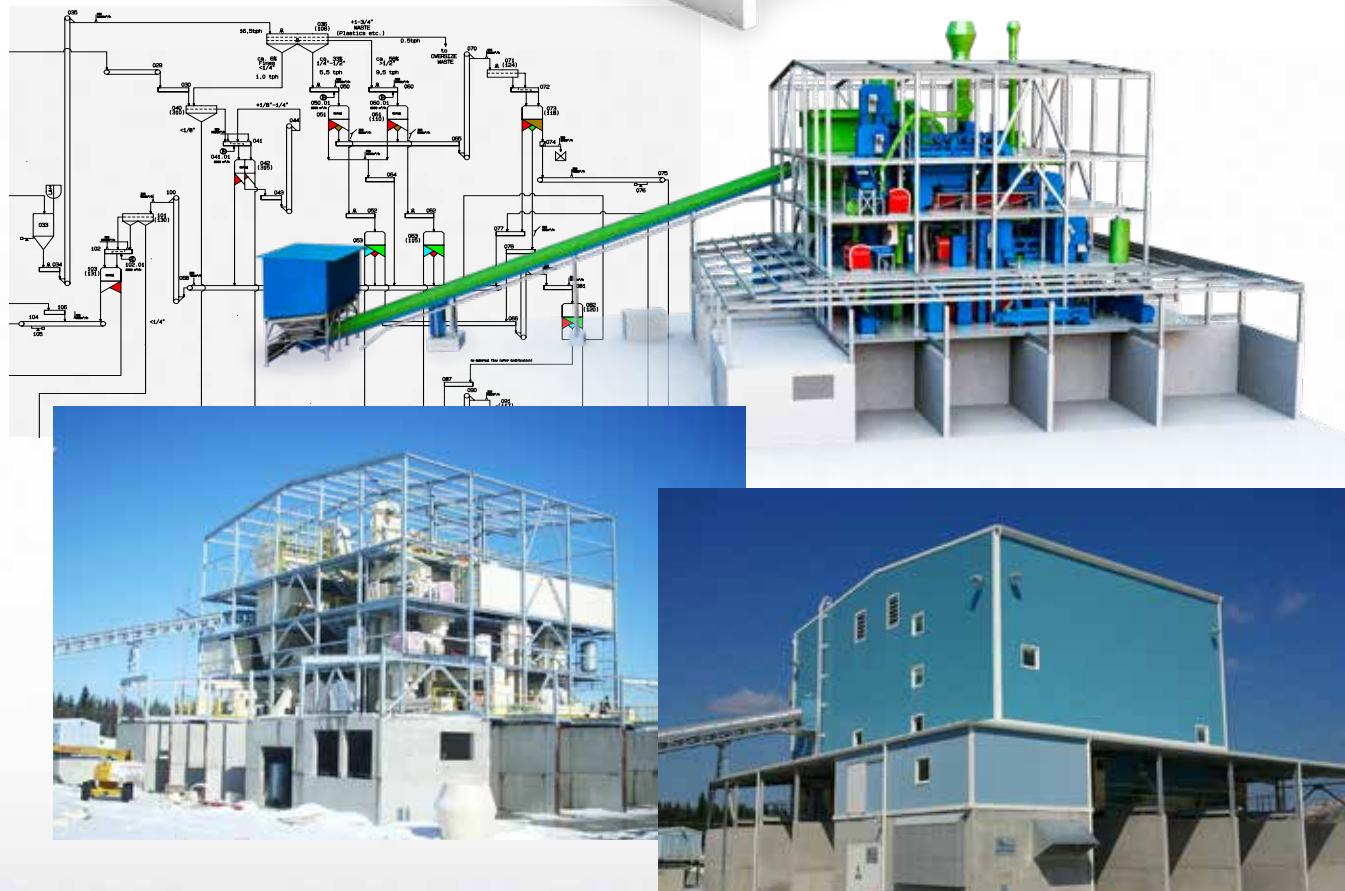
### Waste glass processing for cullet reuse:

- Container glass
- Float glass
- Insulation glass wool
- Foam glass
- Glass beads
- Others (aggregate, abrasives,...)



### REDWAVE glass recycling competence:

- ✓ Process consultancy
- ✓ Material and process flow diagrams
- ✓ Plant performance and mass balance calculations
- ✓ Plant layout design
- ✓ Supply of equipment
- ✓ Installation
- ✓ Electrical power supply and plant control system
- ✓ Commissioning
- ✓ Support of operation



## The REDWAVE waste glass sorting process

INPUT MATERIAL – glass from collection system

Separation of

PREPARATION

Crushing, drying, screening, manual QC check, metals separation, organics separation



Fines, metals, organics, moisture, coarse contaminants

SORTING STEP 1

Removal of lead glass, glass ceramics and plastics



Lead glass, glass ceramics, plastics

SORTING STEP 2

Removal of ceramics, porcelain, stones and metal



Ceramics, stones, porcelain, metals

SORTING STEP 3

Cullet colour sorting

Flint

Green

Amber



Glass ← GLASS RECOVERY

SORTING STEP 4

Cullet colour clean-up



Off colours, contaminants

QUALITY CONTROL

Flint

Green

Amber

### REDWAVE competences and technologies



#### Input material

- Material from kerbside collection
- Bottle bank material
- MRF glass material



#### Preparation

Crushing: Double roll crusher  
Drying: Fluidized bed dryer  
Rotary drum dryer  
Screening: Vibrating screens  
Flipflop screens  
Fine screens  
Metals separation: Cross belt magnets  
Drum magnets  
Eddy current separators  
Organics separation: Airknife separators  
Zig-zag separators  
Suction plants



#### Sorting step 1

Removal of lead glass and glass ceramics:  
• REDWAVE XRF-G  
Removal of plastics and paper:  
• REDWAVE NIR-G



#### Sorting step 2, 3, 4

Removal of ceramics and metals as well as colour sorting and colour clean-up:  
• REDWAVE CS  
• REDWAVE CX  
• REDWAVE CXF  
2-way (single eject) and 3-way (dual eject) sorters



#### Quality control

Process monitoring and control system:  
• REDWAVE PMCS  
Sample taking and analysing system:  
• REDWAVE SAS



#### Final product

- Remelting in container glass manufacturing
- Other use (construction industry, aggregates,...)