

INTEGRATED ENVIRONMENTAL SOLUTIONS



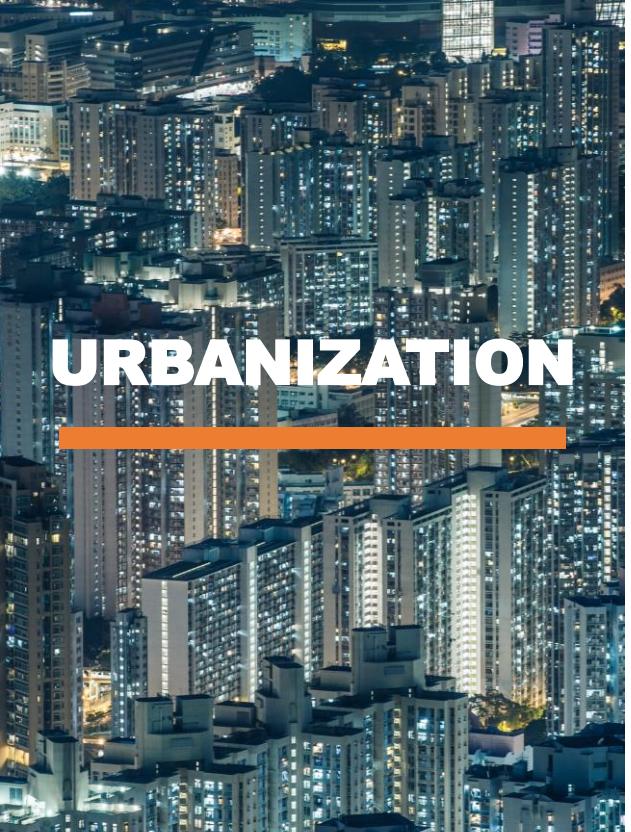
uni-recycling

**SOLE AUTHORIZED DOPPSTADT & ALLRECO DEALER
in ROMANIA & MIDDLE EAST**

COMMITMENT TO SUSTAINABLE DEVELOPMENT

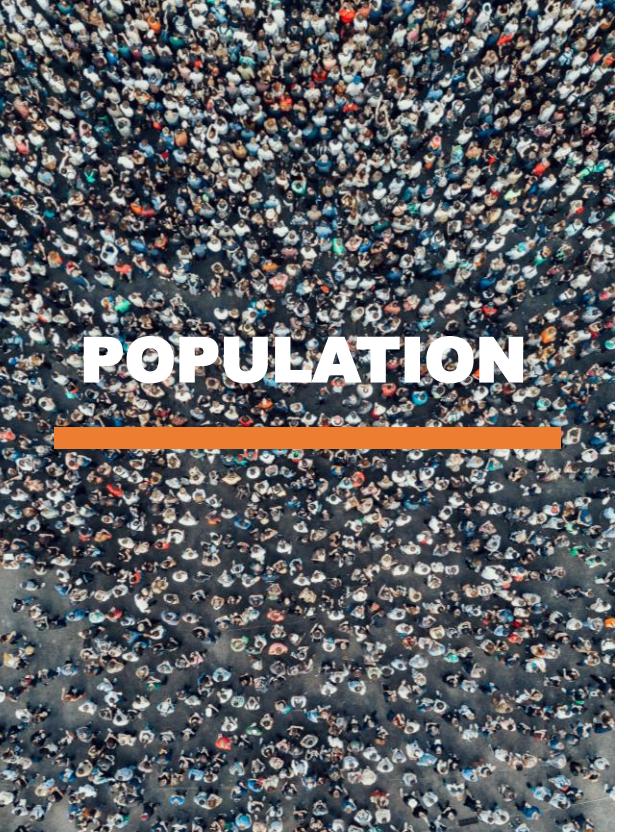
ECOLOGICAL CHALLENGES IN THE 21ST CENTURY





URBANIZATION

Sharply increasing



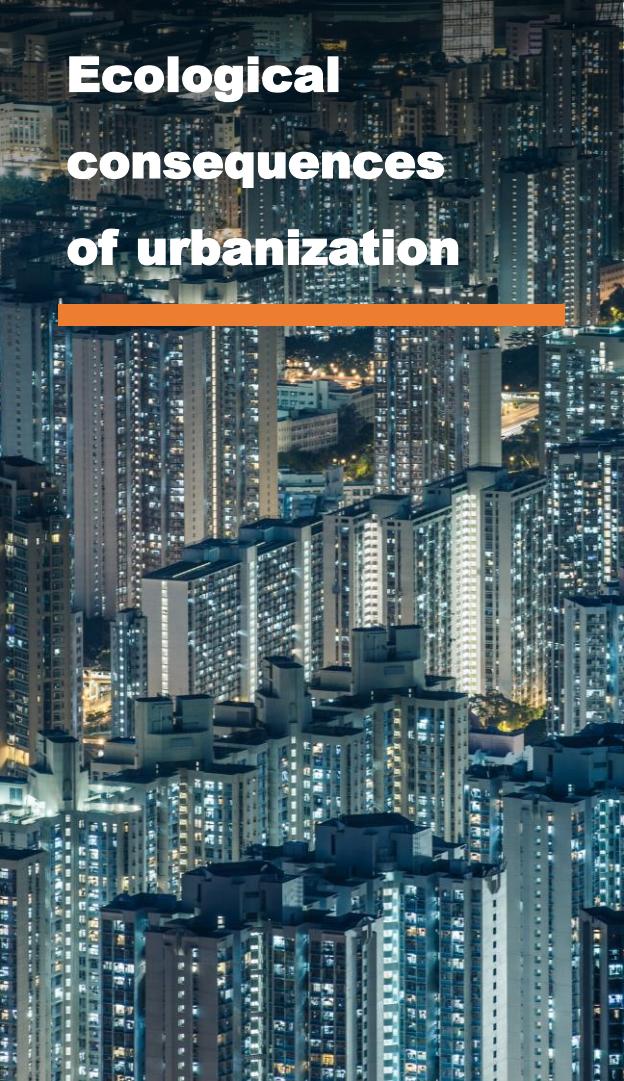
POPULATION

Still growing



RESOURCES

Constantly decreasing



Ecological consequences of urbanization

MORE LANDFILLS

With cities expanding, the need for disposal opportunities is increasing

MORE CONSTRUCTION WASTE

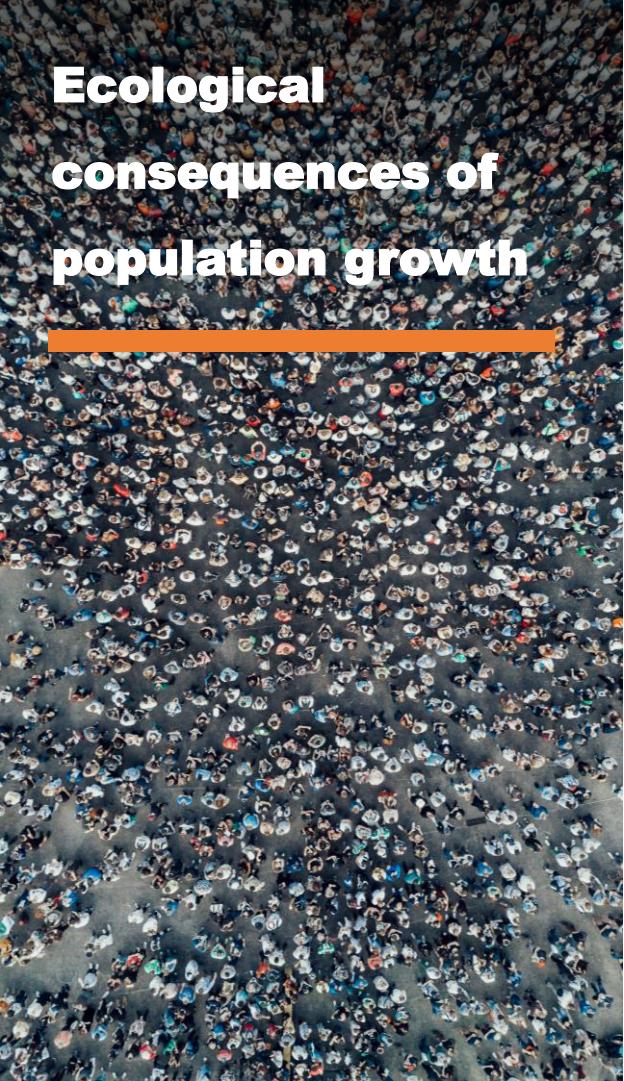
As building, remodelling and demolition measures continue to increase, the mountains of construction waste that needs to be processed are growing

GREATER NEED FOR BUILDING MATERIALS

The expansion of our cities requires large amounts of the remaining resources

MORE MINING OF LANDFILLS

Growth requires space that is still landfill today



Ecological consequences of population growth

MORE HOUSEHOLD WASTE

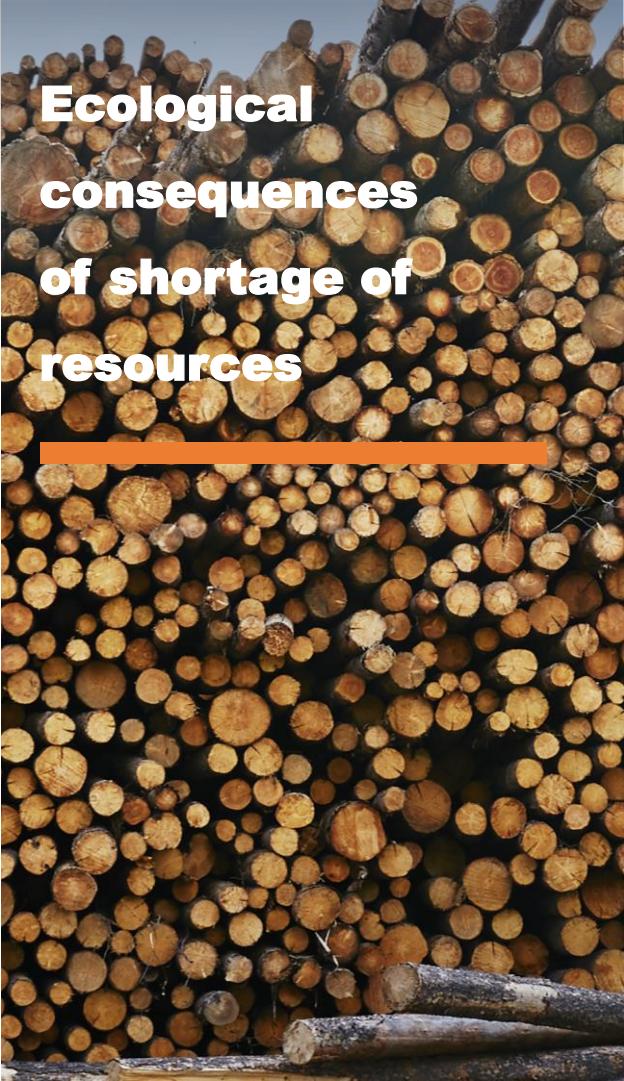
The growing population produces more and more household waste

MORE COMMERCIAL WASTE

With more people, more goods are needed, resulting in more commercial waste during the production process

GREATER NEED FOR HOUSING

Urbanization will continue to advance in order to provide people with space to live



Ecological consequences of shortage of resources

STRUGGLE FOR RESERVES

The struggle for the last available raw materials will have dramatic social and economic consequences

STAGNATING DEVELOPMENT

With a lack of raw materials, development processes will slow down and come to a standstill

LOSS OF LIVELIHOODS

Once all resources are used up, the consequences for all life on earth will be catastrophically.

INCREASING RECYCLING DEMAND

The lack of resources calls for alternative solutions for efficiently recovering valuable resources

Circular Economy

A MAJOR TREND FOR THE MECHANICAL AND PLANT ENGINEERING INDUSTRY

The amount of waste generated globally is increasing, resources are dwindling and the climate assessment poses an alarm signal. That is why the concept of the circular economy is becoming more and more important — both for society and politics as well as for companies of all industries.



UNI-RECYCLING - DOPPSTADT SOLUTIONS:

SHREDDING / CRUSHING - SEPARATING - RECYCLING - RECIRCULATING



LANDFILL
MINING



CONSTRUC-
TION WASTE



COMMERCIAL
WASTE



SUBSTITUTE
FUELS



WASTE
WOOD



SOURCE
SEPARATED
ORGANIC
WASTE



COMPOST

SYSTEM SOLUTION LANDFILL MINING

CLASSIFYING BY MEANS
SPIRAL SHAFT TECHNOLOGY,
SCREENING, AIR
SEPARATION



- By renaturizing or remediating soil and groundwater, it is possible to reclaim, e.g., land again for future use
- By extracting useful fractions, the volume is reduced, thus increasing a landfill's capacity to accommodate more waste
- The useful fractions are used as substitute energy/heat source (alternative fuel) based on coarse grain or lightweight fractions
- Secondary raw materials (FE metals, NF metals) are recycled

SYSTEM SOLUTION CONSTRUCTION WASTE

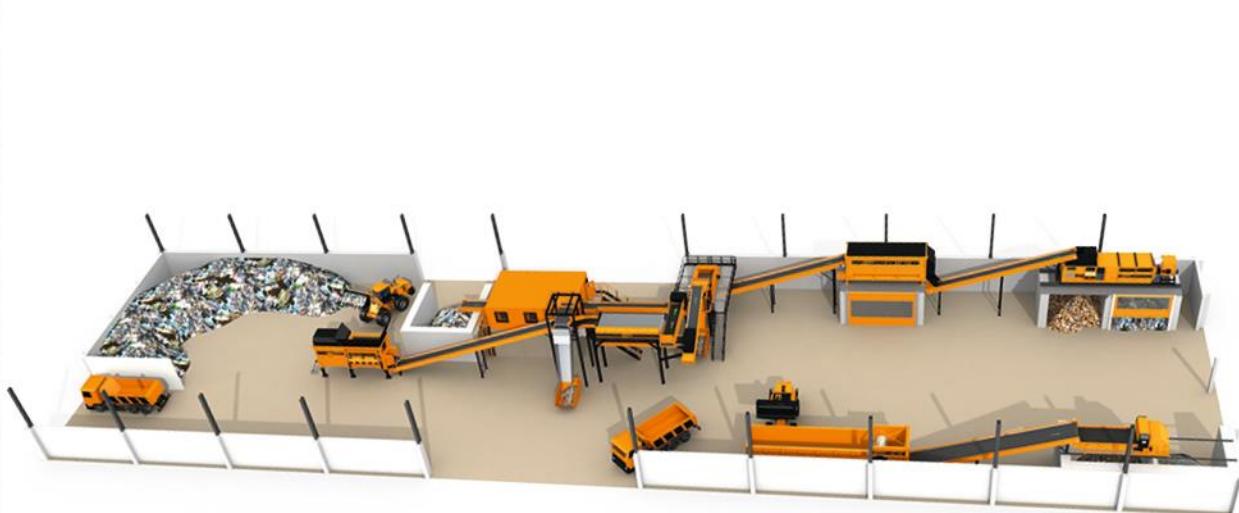
SEPARATING MIXED MATERIALS BY DENSITY



- Separated materials can be individually recycled, landfilled or incinerated
- Plastics, wood, stones, soil, and metals are separated into combustible and inert components
- Disposal costs are reduced
- Mineral waste is broken and processed into recycled gravel

SYSTEM SOLUTION COMMERCIAL WASTE

SHREDDING, SCREENING,
AIR SEPARATION



- Plastics, wood, stones, soil, metals and are separated into combustible and inert components
- Substitute fuels are obtained from air-separated lightweight fraction
- Halogenated plastics are recycled
- Metal is recycled by separating Fe metals and NF metals

SYSTEM SOLUTION SUBSTITUTE FUELS

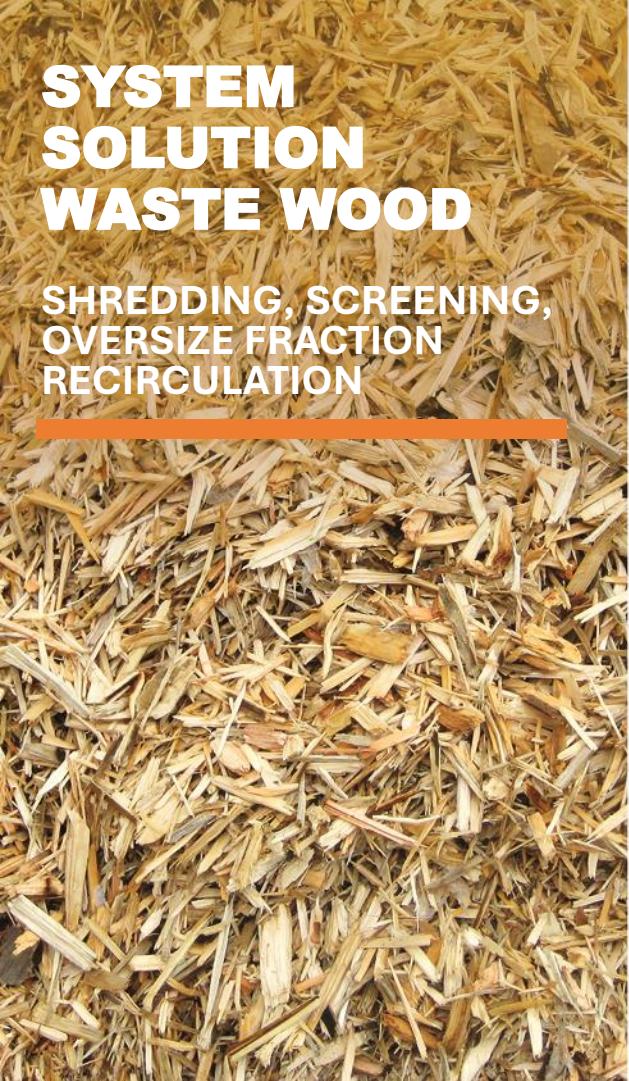
SHREDDING, SCREENING,
AIR SEPARATION,
SECONDARY SHREDDING



- Household waste, oversize bulky waste, residual waste from industry and business, household-like commercial waste, product-specific commercial waste, construction site waste, waste from sorting processes, etc. are recirculated for use
- Waste is separated into high-energy waste streams, fractions and recyclable material streams
- The desired end product (FLUFF) is generated by subsequent secondary crushing

SYSTEM SOLUTION WASTE WOOD

SHREDDING, SCREENING,
OVERSIZE FRACTION
RECIRCULATION



- Waste wood materials (oversize bulky waste, industrial waste wood, waste from wood processing, wood packaging, construction and demolition wood, doors/windows, railway sleepers) are recirculated for use in four quality categories
- The processed waste wood is used as an energy source (in biomass power plants), as material (in wood processing industry) and for composting and as base mulch product.

SYSTEM SOLUTION SOURCE SEPARATED ORGANIC WASTE

OBTAINING A LIQUID
BIOGAS SUBSTRATE FROM
SOURCE
SEPARATED ORGANIC
WASTE



- The screw press is used for the solid-liquid separation of expired foodstuff prior to fermentation in order to remove packaging material and other solids.
- In this case, there is less than 0.5% plastic contamination in the fermentation substrate, with neither pre-shredding nor sorting needed.
- In the case of a dry fermenter, for example, fed with green and biowaste, the press can remove liquid from the digestate for any subsequent rotting, which reduces the rotting time enormously.

SYSTEM SOLUTION COMPOST

FINE SHREDDING,
TURNING, SCREENING,
AIR SEPARATION



- Biogenic waste (green waste, bio-waste) is recycled into high-quality compost for use in producing soil/potting soil, in gardening/horticulture/soil stabilization and in agriculture
- The compost is used as precursor in the final rotting process
- The overflow is used for producing homogeneous secondary raw materials for thermal utilization

PROCESSES AND PRODUCT LINES

PROCESSES

SMART SHREDDING

SMART SCREENING

SMART TURNING

SMART SIFTING + SMART WASHING

SMART FC (FEEDING & CONVEYING)

PRODUCT LINES

- SLOW SPEED SHREDDER LINE
- MID SPEED SHREDDER LINE
- KOMBI SHREDDER LINE
- GRINDER LINE

- TROMMEL LINE
- SPLITTER LINE
- FLATFLEX LINE

- SIDE TURNER LINE

- WINDSIFTER LINE
- WASH-TROMMEL LINE

- HEAVY DUTY PULLEY LINE
- FEEDER LINE

SLOW SPEED SHREDDER LINE



Innovative technology; maximum efficiency
The shredders come in both mobile and stationary versions.

SLOW SPEED SHREDDER LINE



Versatility and wide range of applications
The shredders come in both diesel and electric engines.

KOMBI SHREDDER LINE



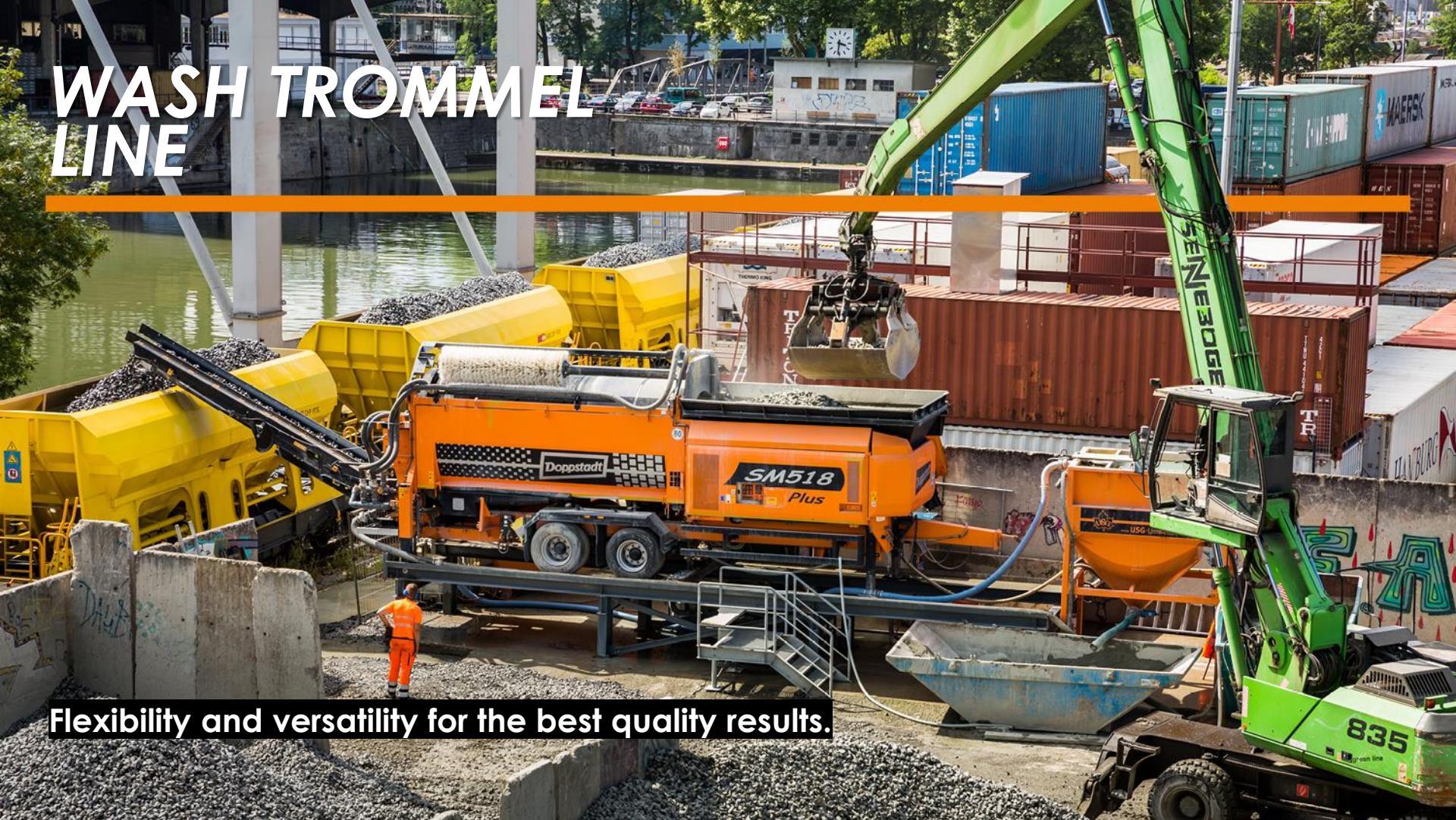
**The efficiency of primary shredders and the precision of secondary grinders in one machine.
Available in both diesel or electric.**

TROMMEL LINE



Mobile or stationary, with interchangeable drums, on wheels or on tracks, in a wide range of dimensions for a large range of applications.

WASH TROMMEL LINE



Flexibility and versatility for the best quality results.

SLOW SPEED SHREDDER LINE



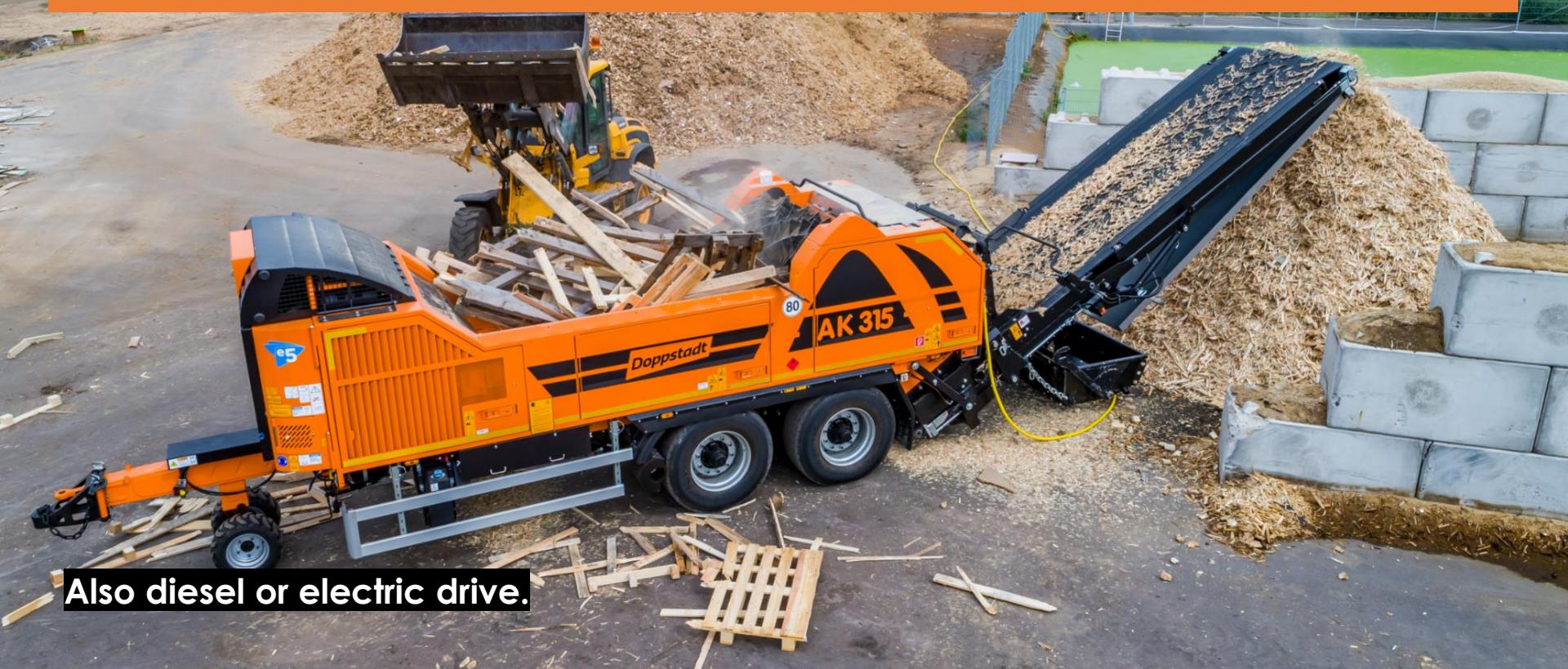
Available on wheels or tracks for a wide range of needs.

GRINDER LINE



Available on wheels or tracks, mobile or stationary.

GRINDER LINE



Also diesel or electric drive.

MID SPEED SHREDDER LINE



GRINDER LINE



FLATFLEX LINE



WINDSIFTER LINE



SIDE TURNER LINE



SIDE TURNER LINE



Doppstadt After Sales

Replacement parts and logistics



DOPPSTADT / ALLRECO ORIGINAL REPLACEMENT PARTS

- Replacement parts carefully matched to application and machine type and with maximum availability- direct from our stocks in Romania and Germany
- Predictable wear and tear costs and minimum downtime
- Maximum effectiveness thanks to carefully matched components

STATE-OF-THE-ART REPLACEMENT PARTS LOGISTICS

- Order processing kept to shortest time possible
- Reliability in delivery
- Minimal downtime, hardly any production losses

After Sales Service

- Fully focused on customers
- Professional and efficient troubleshooting
- Just-in-time delivery



YOUR PARTNER FOR ENVIRONMENTAL PROTECTION



uni-recycling

WWW.UNI-RECYCLING.RO

OFFICE@UNI-RECYCLING.RO