



The IuT Group

# Mechanical Treatment of Solid Waste





## SOLID WASTE MANAGEMENT

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### THE COMPANY:

The IuT Group and its worldwide network of companies have more than 25 of years experience in developing solid waste management and treatment technologies for municipalities, urban areas and entire regions.

As an environmental technology services company we operate in a highly sensitive environment. Natural resources are limited and their sustainable use is one of the obligations we have towards future generations.

Our approach to solid waste management relies primarily on waste reduction, reuse, recycling and recovery, depending on our clients' actual needs.

For our clients we design cost-effective and environmentally friendly solid waste treatment facilities based on solutions representing a well-balanced mix of waste reduction, reuse, recycling, and recovery.



### THE IUT GROUP'S PRODUCTS AND SERVICES:

#### Landfill technology

- Landfill design and construction
- LFG plants with cogeneration
- Sustainable landfill remediation & mining
- Landfill aeration with SMELL WELL System

#### Processing technology

- Separation technology
- Sorting technology
- RDF production

#### Biological treatment

- Aerobic treatment
- Anaerobic treatment



## OUR AIM IS TO PROVIDE SOLUTIONS:

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### ARE YOU PLANNING TO BUILD A NEW MECHANICAL TREATMENT CENTRE?

We offer solutions for: Construction and demolition waste (CDW), mixed municipal solid waste (MSW), industrial and commercial waste, source-separated waste

### DO YOU HAVE A WASTE MANAGEMENT PROBLEM?

Our solution: Development and implementation of a waste management plan

### DO EMISSIONS FROM YOUR WASTE TREATMENT PLANT OR YOUR LANDFILL EXCEED STATUTORY THRESHOLDS?

Our solution: Careful treatment of materials to comply with statutory thresholds and minimise the impact on the environment and neighbours

### DO YOU WANT TO MODERNISE YOUR EXISTING PLANT?

Our solution: Update your existing plant to the state of the art

### DO YOU WANT TO RAISE THE EFFICIENCY OF YOUR EXISTING PLANT?

Our solution: Extract more value from waste streams





## HOW IUT TECHNOLOGY WORKS:

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### Many components are combined to create one unit

The IuT Group provides a modular system for mechanical treatment.

### More efficiency

The basic configuration with manual sorting can be upgraded to make operations more efficient.

More technical equipment means a higher initial investment but lower operating costs

### A wide range of options:

Once the basis has been defined, a variety of options can be implemented using IuT technology:

- Recycling: Recovery of marketable products from MSW, separately collected waste, CDW, organics, etc.
- Automatic sorting: Larger quantity and better quality of recovered fractions
- RDF production: Refuse-derived fuel for the cement industry
- Pre-treatment: For anaerobic digestion or composting in plants  
MBA process: Waste-to-renewable-energy plants
- Upgrade recycling: Recovered plastic is used to produce granulate

## THE BASIS FOR YOUR SUCCESS:



In modern waste management, the aim today is not only waste disposal but the recognition of waste as a source of secondary raw materials, their classification and their recovery and recycling. Careful treatment and sorting is the basis for the recycling of materials, waste-to-energy processes or any other utilisation of waste.

The IuT Group has the know-how. The large number of mechanical treatment centres built for a wide range of different types of waste, including mixed residential waste, source-separated waste from trade and industry, construction and demolition waste, etc., are our best references.





## THE SCOPE OF OUR SERVICES :



Working with local partners world-wide, the luT Group is able to offer waste management solutions that are customised to meet each client's special requirements. Regional considerations and needs are given absolute priority and serve as the benchmark against which goal achievement is measured.

The luT Group is the specialist offering environmentally friendly solutions to waste management problems. It uses advanced sorting and treatment technology to process waste streams and to recover marketable raw materials from them.

Treatment plants that are designed individually for every application turn waste into secondary raw materials. Hazardous substances are removed and the calorific value of combustible fractions is optimised. Materials that can be recovered and recycled and organic waste are treated to make them fit for further use.

- General contractor services
- Studies / consulting / design
- Procurement and transport of equipment
- Installation / start-up / commissioning
- Optimisation of economic efficiency
- Staff training
- Facility operation
- Trade in recyclables





## EXAMPLE: SEMI AUTOMATIC TREATMENT PLANT

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The sorting plants supplied by luT (semi-automatic plant as shown in the diagram below) are designed individually to meet client needs. The degree of automation may range from manual to fully automated. The same applies to the RDF plant. The plant shown as an example generates a high-quality RDF product in a fully automated process. The technical specifications of each plant are agreed with the client in the bidding phase with due regard to the market environment to achieve the best output in the most cost-effective manner.

### ONE OF OUR PRODUCTS:

Semi-automatic MSW treatment plant with RDF production



## PRODUCTS (STANDARD CONFIGURATION):

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### ORGANIC FRACTION

- **Shape:** bulk
- **Further treatment:** can be treated in an aerobic or an anaerobic digestion plant  
Anaerobic Digestion of Organic Slurry = ADOS
- **New products:**  
Renewable energy (electricity and thermal energy), compost/fertilizer

### PLASTIC (PET, HDPE, LDPE, LLDPE, PP)

- **Shape:** bales
- **Further use:**
  - sold as post consumer quality
  - treated in the recycling plant to produce granulates as secondary raw material



### PAPER / CARDBOARD

- **Shape:** bales
- **Further treatment:** in paper mills, for sale in international paper market

### METALS, FE & NF

- **Shape:** bales or bulk
- **Further use:** sold to scrap dealers

### RESIDUES

- **Shape:** bales or bulk
- **Further treatment:** Feedstock for RDF (Refuse Derived Fuel) for use as secondary fuel in incineration plants, cement factories, ect.

## CONTACT THE IUT GROUP

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