



# Waste treatment, waste sorting or waste recycling plant

Are you engaged in designing, analysing or optimising your plant?

**USIMPAC** : a simulation tool for preliminary design  
and optimization of existing installations



# A powerful and unrivaled tool for process simulation in the waste business

## Process design

- Define the main treatment stages to reach a given objective
- Determine the forecasted material balance for each stream
- Size the main piece of equipment and define their settings
- Quickly assess various configurations
- Consider and test the process flexibility
- Estimate the investment and operating costs
- Contribute to the technical and economic feasibility studies

## Process monitoring and optimization

- Control the performances
- Conduct plant survey
- Identify bottlenecks
- Increase the process capacity
- Improve the final product quality
- Saving energy, water and reagents consumption
- Reduce pilot and industrial tests
- Evaluate and limit environmental impact
- Adapt the process to the raw material variability
- Increase reactivity, facing up to the market variations



# A wide range of applications



USIM PAC brings you **efficiency** and **performance** during your projects in the field of treatment, sorting and recycling of **household** and **industrial** waste (WEEE, metals, end-of-life vehicles).



A library of more than 150 mathematical models of equipment to simulate a wide range of **unit operations** such as crushing, grinding, sink and float, screening, optical sorting, magnetic

or eddy current separation, gravimetric separation and hydrometallurgical operations.

Parameters of Equipment #3

Number of the stream for v

Recovery [%]

Ore	ABS	SAN	Back
100 mm	8,88061	8,88664	
40 mm	9,36166	9,36832	
20 mm	6,81181	6,81665	
10 mm	4,4689	4,47203	
5 mm	0,874421	0,875111	0

Unit of Equipment Description

Unit of Equipment # 3

Name: Bande à alimentation

Model Name: (202-1) Separator (0)

# Key benefits

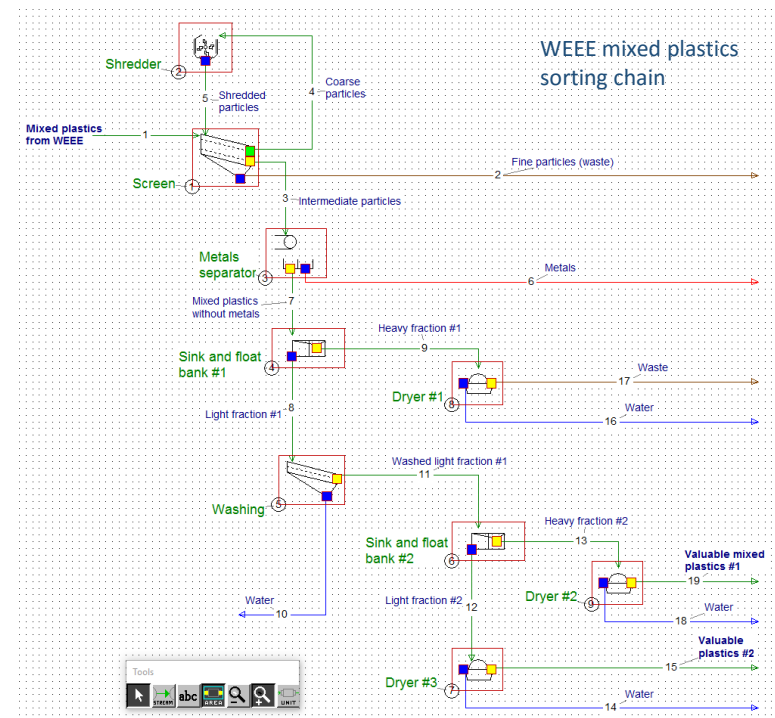


## Accuracy and reliability

- Coherent and reliable material balances thanks to a powerful data reconciliation algorithm.
- Physical, chemical and biological phenomena taken into account into the equipment units.
- Fine description of the material: waste category, composition, dry content, ash, size distribution.

## Time saving

- Immediate calculation results, including processes with numerous streams and recycling loops.
- Overview of the process, represented by a graphical flowsheet.





SCIENCES  
TO ENHANCE  
YOUR RESOURCES

3, avenue Claude Guillemin - BP 36009  
45060 Orléans Cedex 2 - FRANCE

+33 238 64 31 96  
info@caspeo.net

[www.caspeo.net](http://www.caspeo.net)

Do you **operate** a waste sorting or recycling plant?

Do you work in a **research unit** or an **engineering company**?

Do you want to optimize an **existing** installation?

Do you have any questions?

For more information

Simply contact us

Caspéo is also a software **publisher and distributor**



SCIENCES  
TO ENHANCE YOUR RESOURCES