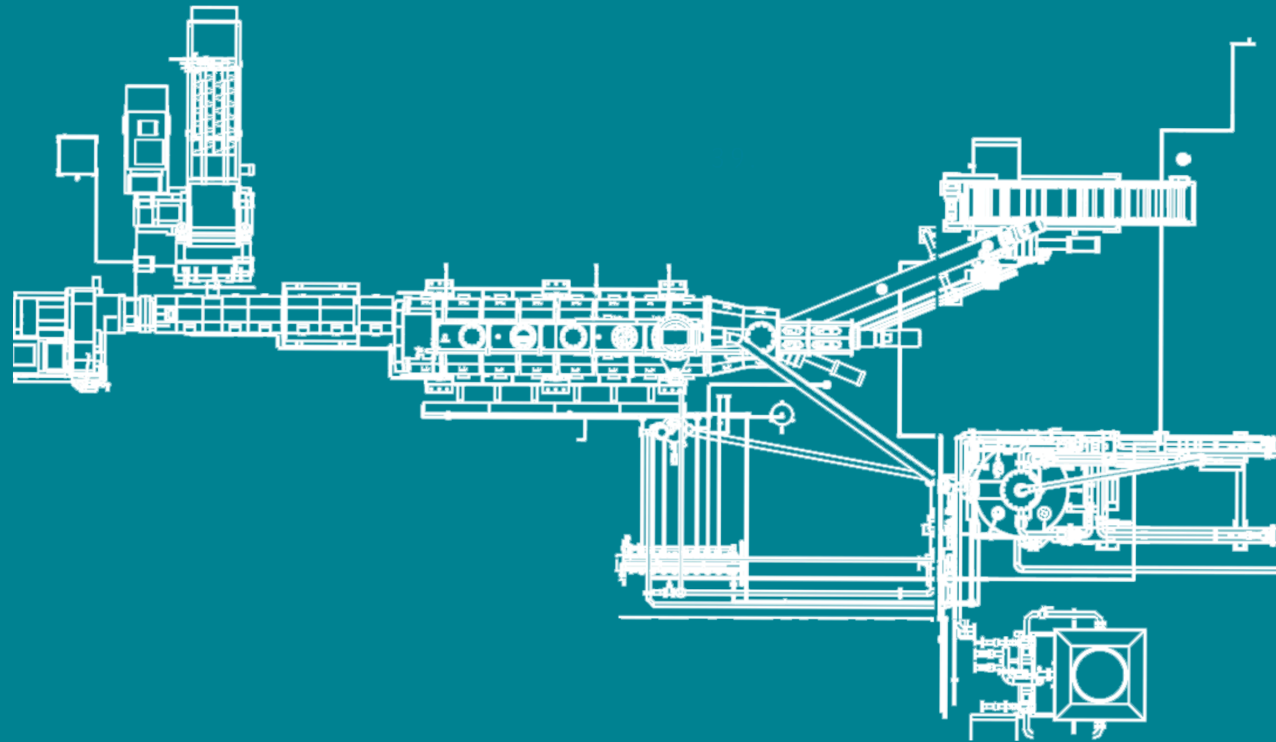


CHEMICAL RECYCLING



CHEMICAL RECYCLING IS A PROMISING TECHNOLOGY THAT WILL BE A KEY FACTOR TO THE REDUCTION OF THE ENVIRONMENTAL IMPACT OF WASTE AND IT IS A REMARKABLE SOLUTION IN THE TRANSITION TO A CIRCULAR ECONOMY

Chemical Recycling recycles plastics again and again, with no deterioration of quality. Plastic waste is returned to its original molecular vapor form allowing for the cleaning of all impurities.

Once the impurities are removed a condensation process returns vapor to a liquid state and then finally to a solid state that allows for the production of virgin-like quality pellets that can be used for new high quality products. Unlike mechanical recycling Chemical Recycling removes 100% of all impurities from the waste plastics. As the new high-quality resin is produced through the Chemical Recycling process the use of fossil resources are reduced. The product produced from the waste plastic can be used as a direct re- placement for the fossil resources extracted from the earth. The reduction of CO2 emissions is an important part of the impact Chemical Recycling has on the environment.

The PROMECO® CHEMICAL RECYCLING PLANT is a merging of process and equipment that have been designed and produced over the last 28 years by Promeco.

At the beginning, 13 years ago, PROMECO® CHEMICAL RECYCLING PLANT was labelled as catalytic conversion of plastics into fuel, and it was definitely pioneering.

Today the producers of virgin polymers are under intense pressure from all stakeholders to find ways to recycle plastics, maximize efficiency to provide a solution that is both sustainable and profitable. The reduction of polymers from natural resources as well as in increase in reusing current plastic waste, is currently key goal of all stakeholders.

“Plastics back to plastics” has a higher significance, both from business and sustainability points of view, if compared to the mere waste plastic recycling and to the use of the products out from the plant as raw fuels, to be used internally in the plants or to be sold outside for similar uses (i.e. for vessels’ engines as happened for the plants supplied to a Singaporean company in 2010).

Promeco chemical recycling plant transforms materials that can be re-used to produce new chemicals to re-create new valuable plastic material. This will also lead to a significant decrease of the use of fossil fuels.

INPUT MATERIAL

- Post industrial plastic waste
- Mixed plastic
- Hard-to-recycle plastics

OUTPUT MATERIAL

- Hydrocarbon fuel
- Gas
- Coke
- Green naphtha to regenerate plastics

CAPACITY

- 10.000 ton/year

