

“Recycling big amounts of plastics into urban furniture”

/ Région Sud - France



Description of the good practice

MP INDUSTRIES* is a French company specialized in the production of finished products made out of recycled plastic composite - mainly from HDPE -, for markets such as urban furniture, heavy products wedging for the metal industry, scaffolders or aquaculture.

MP Industries collects industrial, agricultural and household waste containing plastic composite. The raw materials come exclusively from waste produced in local area and are sorted, recycled, transformed and gathered in France. Those waste, which are usually incinerated, are grinded to obtain an exploitable granulate. Then, under pressure, this granulate is melted at high temperature (around 200°C), and extruded in compact top profiles with a thermo-coated aspect.

The company developed a very singular technique for plastic recycling, called the “continuous sequential compression” (CSC). This technique uses 96% of plastic (the 4% left are colorants) and compresses them in such a way that it creates a very dense material. The method shows another particularity: the machines function at a jerky rhythm, every 2 or 3 minutes, to improve the material compression.

The final material, called “Recyclène”, can be used as urban furniture, has a very good resistance to coastal climatic conditions, and can resist to marine environments.

Those characteristics make the products very interesting for public authorities, especially because they do not need any maintenance, allowing the reduction of the costs linked with public urban furniture's maintenance.

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**This company is member of the French regional network Éa éco-entreprises, which aim is to promote the emergence of innovative solutions and services to limit the impact of human activities on the environment.*



Results

- Recycling big amounts of plastic collected in France.
- Production of resistant products, endlessly recyclable.
- Reduction of maintenance costs for users and public authorities.

Ecological results of recycled plastic:

- Recycle industrial, agricultural and household waste.
- Low consumption of natural resources
- Produced in France, minimum transportation.

Mechanical and technological results:

- High-quality top profiles, extruded under high pressure.
- Thermo-coated surface aspect.
- Work of the material as the wood.

Type of waste

Industrial, agricultural and household plastic waste.

Location

Gardanne, Provence-Alpes-Côte d'Azur (South of France).

Volume treated

500 tons/year of finished products.

Further information

<http://www.mix-urbain.com/>

<http://www.mpdecheterie.com>

https://www.youtube.com/watch?time_continue=6&v=XZ6tm15_2fE