

Training Plastics Recycling



Proper operation in plastic recycling environments requires good training. The training modules of Triple Benefit are based on 20 years experience in plastics recycling industry. They have an applied and practical content, but do not lack proficiency. They can be conducted on the shopfloor or in a classroom setting and are supported with practical examples.

Module A: Fundamentals of polymers and their properties

The objective of this module is to understand why and how plastics can be recognized.

Topics that are addressed are:

- What are plastics?
- Typical behaviour of plastics
- Plastic properties during use
- How to recognize plastic types?



Module B: Fundamentals of polymer recycling

The objective of this module is to understand how recycling works from a mechanical perspective. The module addresses the following topics:

- Circular models
- Plastics behaviour during processing
- Manufacturing methods of plastics recycling
- Products from recyclates



Module C: Advanced polymer properties

The objective of this module is to have a more in-depth understanding of the relationship between material behaviour and its molecular building blocks from a chemical perspective. These topics include a.o.:

- Molecular composition of polymers
- Polymer groups and characteristics
- Rheologic properties
- Visco elastic behaviour
- Fracture mechanics



Module D: Machine operation and HSE

Objective of this module is to instruct machine operation on the shopfloor. For that reason this module is usually customized to the equipment that is present on site. Contents comprises:

- Standard Operating Procedures (SOP)
- Operating material conditioning machines
- Operating product manufacturing machines
- Post processing
- Generic risks
- Personal Protective Equipment
- Machine safety measures
- Maintenance



Module E: Business case and valorisation

Objective is to understand how to make business with plastics recycling. It contains:

- Material sourcing
- OPEX
- Product sales and revenues
- Return On Investment
- Business model canvas

