



Abstract

A German research institute has developed a method for separation of polymer mixtures and a device for carrying out said method, of application to separation of polymer mixtures on processing thermoplastic plastics. The potential partner should join the product development on basis of a small functional model.

Description

According to the invention, a polymer mixture for separation is fused or plastified in a shear gap of a shear element with annular flow channels of varying diameters, whereby fractions of the polymer mixture are led off from the screw gap in at least two locations, which have annular flow paths of varying diameters. The device comprises a separating chamber with conical inner walls, in the middle of which a rotating mixing rotor with an outer conical form is mounted to form a shear gap, whereby the device is provided with one introduction channel and at least two outlet channels.

Innovations and advantages of the offer

The method for separation of polymer mixtures can be used with materially homogeneous plastic components, which differ in the structure of the polymers.

- Simple solution, in particular if the standard methods of mechanical separation e.g. on the basis of different melting points are not applicable
- Separation of impurities from valuable polymer mixtures

For further information (including IPR status) please contact:

Susanna Chericoni
Phone: 39 050 931620
Fax: 39 050 931640
Email: s.chericoni@cpr.it