

# viscoZERO

Melt phase decontamination reactor to produce recyclate according to food grade standards from PE, PP, PS and PET. Increase of intrinsic viscosity of polyester.



## BENEFITS

- Superclean post-consumer PE, PP, PS and PET
- iV increase for PET
- Odor removal
- Spin finish removal

viscotec  
foodgrade without compromise

# viscoZERO



## Deep intrinsic cleaning

**Odors** are removed with a lasting effect.

**Superior cleaning efficiency** of volatile and non-volatile substances result in a wide range of applications for contact sensitive and/or food contact packaging products.

**Fastest iV increase** due to continuous melt surface exposure.

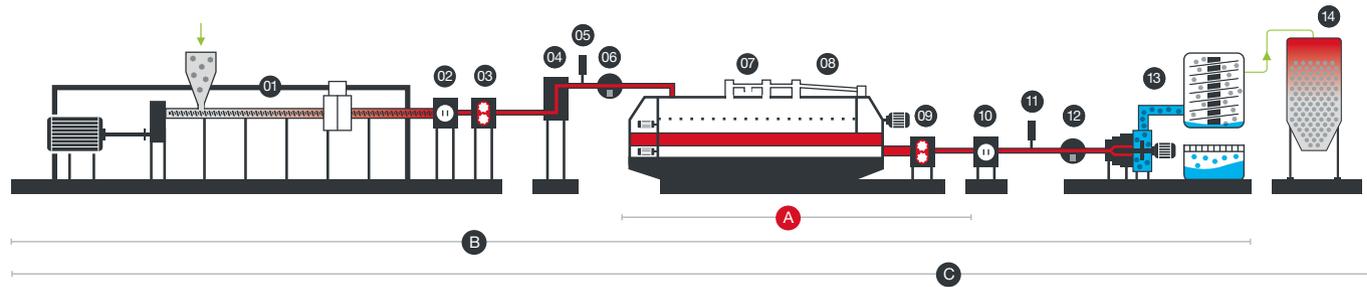
**Excellent homogenization** results in first class surface and optical quality.

## Process

The melted polymer is exposed in a vacuum reactor under continuous mixing and new surface generation. The design of the viscoZERO melt phase reactor guarantees a defined residence time and a first-in-first-out process.

## Application

<b>High iV</b>	<b>Odour free &amp; food grade</b>
Fibre	Granulate
Strapping	Sheet



#### Available as

- A** stand alone (in combination with existing extruder)
- B** in combination with recycling extruder
- C** in combination with pelletizer and post treatment unit

#### Components

- 01** recycling extruder
- 02** filtration
- 03** melt pump (optional)
- 04** compensator (optional)
- 05** viscometer (optional)
- 06** start valve
- 07** viscoZERO
- 08** vacuum system / degassing
- 09** melt pump
- 10** filtration (optional)
- 11** viscometer (optional)
- 12** start valve
- 13** pelletizer
- 14** post treatment (optional)

### Specifications

Model		600	1500
Max. output <sup>1,2</sup>	[kg/h]	400-800	800-1600
Residence times from/to <sup>2</sup>	[min]	10-40	15-40
Net volume of reactor	[dm <sup>3</sup> ]	600	1500
Equipment height	[m]	2.2	2.2
Floorspace	[m]	5 x 3	6 x 4
High-vacuum system	[mbar]	≤ 10	
Energy consumption	[kWh/kg]	0.03-0.05	
IV increase PET <sup>3</sup>	[dl/g/min]	0.004-0.007	
Food grade according to		EFSA / FDA pending	

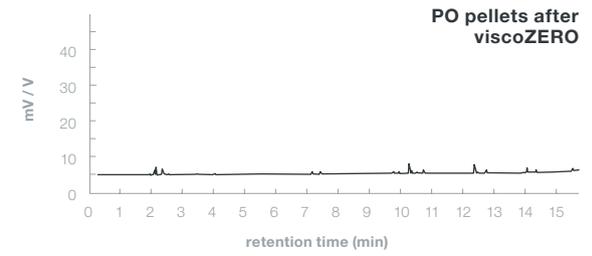
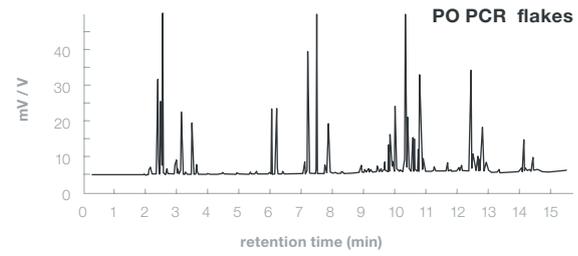
The table represents general data and average values. We reserve the right of technical modifications.

<sup>1</sup> depending on material (PE, PP, PS and PET) and residence time

<sup>2</sup> depending on material viscosity

<sup>3</sup> IV increase equals 0.08 - 0.15 dl/g per 20 minutes

**viscoZERO Gas Chromatography**  
**Polyolefin**



**viscoZERO Gas Chromatography**  
**Polystyrene**

