Find Out Your Solution

Polyolefin Pelletizing
Jumbo Extruder
Underwater Pelletizer

Polymer Compounding
Color/filler and functional MB
Engineering plastic reinforcement
TPE/TPR/TPV
Cable compounding

Under-water Pelletizing System
Huge capacity: 1–50 tons/hr
Micro–beads
Elastomer and hot melt pelletizing
Foam beads: EPS/EPLA/XPET

Polymer Foam Extrusion
CO2 foam XPS board
Graphite EPS beads pelletizing
PET Foam Core
PLA Foam Beads pelletizing
XPE Foam Sheet

Direct Extrusion
EVA/POE solar film
UHMWPE battery separator film
BOPET/BOPA/BOPP film extrusion
Steel pipe coating

PET Recycling & Extrusion
Bottle flakes recycling (BTB)
PET fiber/film recycling
Undried PET sheet extrusion
PSF/POY direct extrusion

Walk The Talk

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Plastic Recycling System

High-Efficient Extrusion Systems
Enable Green Recycling

Physical / Chemical Recycling

Useon Technology Limited

Factory address: 16 Yuanqi Rd
Jurong, Zhenjiang, Jiangsu, China.
Post Code: 212400
Mobile: 0086 138 1401 7007
Tel: 0086 511 8077 9688
Fax: 0086 511 8077 9673
Email: info@useon.com
www.useon.com

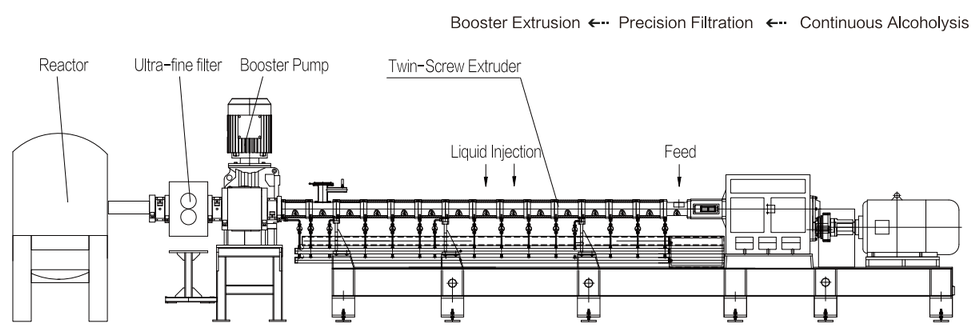
Twin-screw extruders for physical and chemical recycling of plastics

High Quality · High Efficiency · Energy Saving

We focus on providing high-performance twin-screw extrusion solutions for the plastic recycling industry, suitable for both physical and chemical recycling processes. Our specialized equipment designs, high processing efficiency, and energy-saving systems help achieve truly sustainable recycling in plastics.

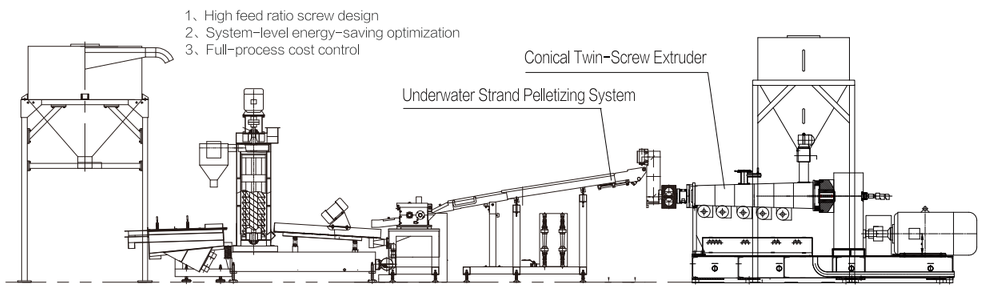
Polycondensation Polymers **PET / PA / PU / PC, etc.**
Continuous Alcoholysis with Twin-Screw Extrusion

USEON's latest reactive twin-screw extruder:Flexible EG injection ratio, enhanced mixing and homogenization, and expanded melt space enable a convenient and efficient continuous alcoholysis process for ester-based polymers.



The Layout of The Continuous Alcoholysis Extrusion Process

PET Physical Recycling

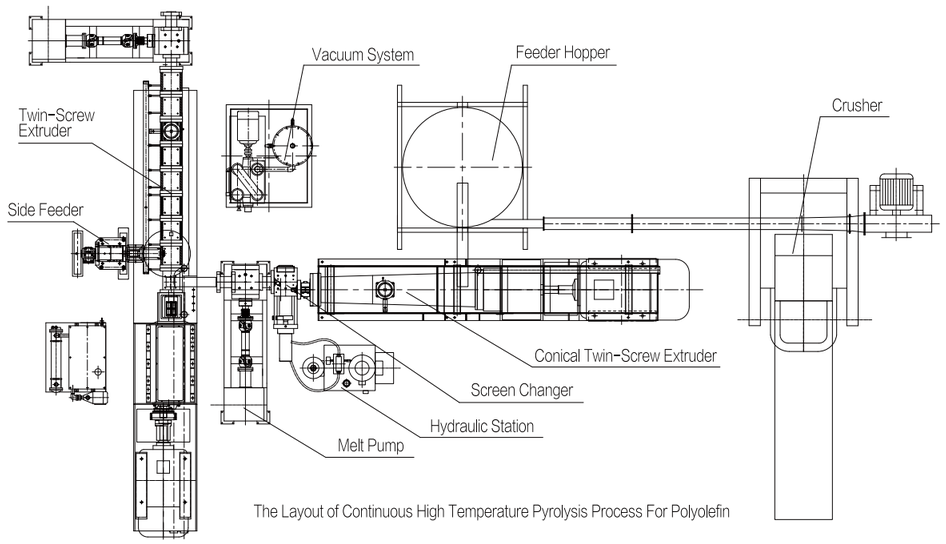


The Layout of The Pet Physical Recycling Process

Model	TDZ 150	TDZ 190	TDZ 220
Throughput kg/h	600-800	1200-1500	2000-2500
Motor kW	160	315	500

Polyolefins **PE / PP / PS / PVC, etc.**
Continuous High-Temperature Pyrolysis

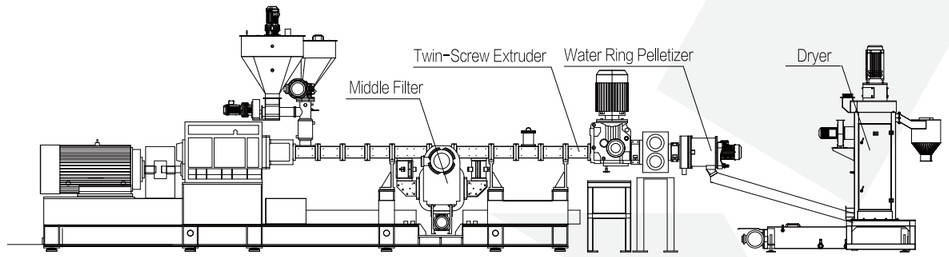
A one-step process to continuously melt, dechlorinate, filter, and boost low bulk density materials such as flakes, films, filaments, and fabrics; followed by efficient heating up to 500° C for continuous deoiling, degassing, and residue discharging—more energy-efficient and safer.



The Layout of Continuous High Temperature Pyrolysis Process For Polyolefin

Food-Grade Polyolefin Recycling **HDPE / PP**

Deodorization Design: Melt devolatilization + Hot air drying
Efficient Impurity Filtration: Center-mounted screenless filter + ultra-fine filter
Gentle Shear Plasticization: Minimize melt index fluctuation



The Layout of The Food-grade Polyolefin Recycling Process

Model	SAT 75	SAT 95
Throughput kg/h	600-700	1000-1200
Motor kW	200	355
Speed kW	400	400