

ECON

PELLETIZING
IS IN OUR
DNA



✓ **WORLDWIDE TECHNOLOGICAL LEADER**

✓ **TRUSTED DEVELOPMENT PARTNER**



ISO 9001 certified

ECON PET-EDITION

**ENERGY-SAVING SOLUTION
FOR rPET/PET**

www.econ.eu

ECON PET-EDITION

When it comes to pelletizing of PET, an energy-saving process and a certain degree of crystallization is very important. For this reason, **ECON** as the trusted development partner designed an underwater pelletizing system especially adapted to those requirements. The result is the **ECON** PET-Edition for processing of rPET/PET.

With the help of the **ECON** patented Thermal Insulation Technology, a safe start-up process is obtained. By eliminating heat transfer from the die plate unit into the process water, not only is the freezing of die holes prevented, but a considerable amount of energy is saved. In addition, special attention has been paid to an appropriate insulation of the water tank and the piping in order to achieve an end temperature of the pellets of at least 140 °C (284 °F).

Not only the pelletizer is engineered to operate with minimum energy consumption, but also the downstream equipment ECS (**ECON** Crystallization System for PET). This process is one of the most efficient methods of crystallizing PET, as it uses the intrinsic heat of the pellets. The system is designed to keep the PET pellets at a constant temperature and to achieve a degree of crystallization of 30 – 40 %. In the crystallization channel, the pellets are conveyed by gentle vibration and mixed to prevent sticking during crystallization. The high degree of crystallization enables less pre-drying of the pellets before further processing (e.g. injection molding), which saves a considerable amount of time and energy.

- pelletizing, drying and crystallizing in only one production step
- high-quality pellets
- high throughput – little space requirements
- high process stability – consistent pellet quality
- simple and safe start-up process

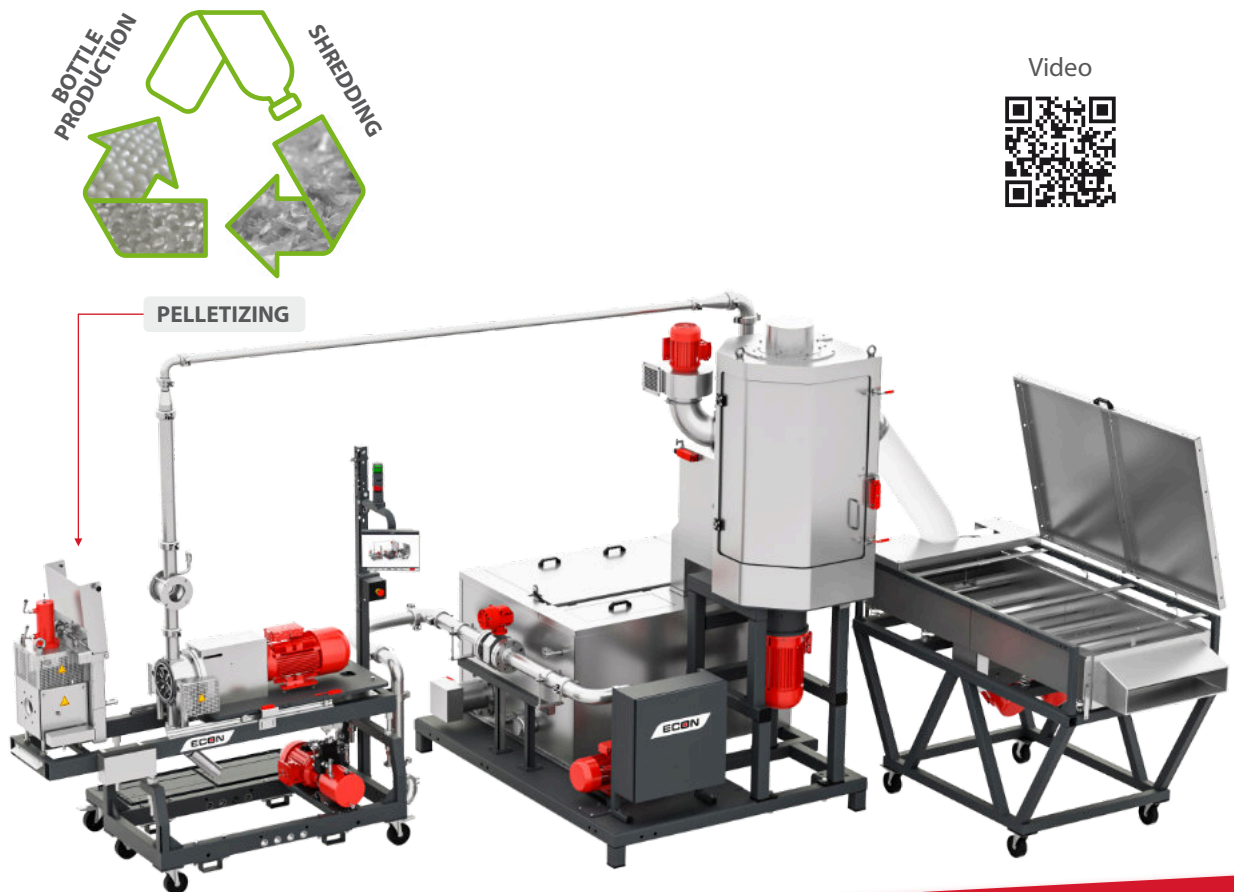
Underwater Pelletizer	Throughput capacity*
EUP 10	1 to max. 30 kg/h (2 to 60 lbs/h)
EUP 50	20 to max. 150 kg/h (44 to 330 lbs/h)
EUP 150	100 to max. 450 kg/h (220 to 1,000 lbs/h)
EUP 400	300 to max. 800 kg/h (660 to 1,700 lbs/h)
EUP 1000	700 to max. 1,800 kg/h (1,500 to 4,000 lbs/h)
EUP 1500	800 to max. 2,500 kg/h (1,700 to 5,500 lbs/h)
EUP 3000	1,800 to max. 3,500 kg/h (4,000 to 8,000 lbs/h)
EUP 6000	3,000 to max. 8,000 kg/h (6,000 to 18,000 lbs/h)
EUP 8000	8,000 to max. 15,000 kg/h (18,000 to 35,000 lbs/h)

*The listed areas are guideline values and apply to standard pellets. The throughput capacities always depend on the material properties and pellet size and can also deviate in individual cases. With micro-pellet compounds, the throughputs are generally lower.

RECYCLING OF PET

In the food sector, a low acetaldehyde content of recycled PET is required to meet the legal guidelines. **ECON**'s goal in the development of the **ECON** PET-Edition was to achieve a significantly improved value in comparison to conventional pelletizing systems. Together with a customer, **ECON** worked intensively on an efficient solution. By reducing the pressure build-up at the die plate by 40 %, a lower acetaldehyde content of 30 - 40 % was achieved directly after pelletizing. This reduced acetaldehyde content reduces the energy consumption at the following process steps.

The **ECON** PET-Edition is a very energy-efficient solution for pelletizing of rPET/PET and contributes significantly to an economic circular economy. When it comes to recycling of PET, the kW/t of recycled material has a significant impact on the profitability of the production line. This means that using the **ECON** Technology results in a significant competitive advantage. **ECON** always focuses on tailor-made solutions, based on the individual requirements of their customers.



30% to 40% degree of crystallization

30% to 40% lower acetaldehyde content



FOR ALL THERMOPLASTICS AND SPECIAL APPLICATIONS



PATENTED THERMAL INSULATION TECHNOLOGY



EASY AND SAFE OPERATION



ENERGY-EFFICIENT SOLUTIONS



TAILOR-MADE SOLUTIONS



TRAINING OF YOUR STAFF



PREMIUM SERVICE

- **service quality** for your success
- **flexible service solutions** - for your individual requirements



QUALITY PROOFED ORIGINAL SPARE PARTS

- ECON certified
- locally stocked

96% in stock



PROFESSIONAL REMOTE MAINTENANCE



PREVENTIVE MAINTENANCE

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