



## UNDERWATER PELLETIZING

### HIGHEST PELLETIZING QUALITY FOR ALL THERMOPLASTIC MATERIALS

ECON offers the leading technology in underwater pelletizing with thermal insulation. With this unique development the ECON system die plate is fixed on heat insulated support body resulting in low energy losses into the process water. The heat insulation prevents „freezing“ of the melt in the outlet holes. As a consequence ECON underwater pelletizing systems are insensitive in fluctuations of the throughput; the process is therefore extremely reliable and guarantees high efficiency.

## FUTURE SYSTEMS

**OPERATIONAL SEQUENCE (EUP)**

The underwater pelletizing system consists of diverter valve, pelletizing unit, process water treatment system and electrical control unit. The housing of the pelletizing system is closed for starting. The start-up process occurs fully automatically. Once a constant melt flow has been reached, the melt is guided to the pelletizing head (die plate) the design of which defines the throughput rate.

The emerging melt strands are pelletized under water. Depending on the throughput and the form of the granules, the number of knives will vary. The knife pressing pressure can be controlled electronically. The pellets are conveyed with the process water to the water separation, where they are dried and output for further transportation. The process water is in closed circulation and purified by means of fine filters.

Due to the special design of the die plate (thermal insulation) there is no by-pass required for the process water circulation. This simplifies the start-up procedure. The special design of the die plate ensures optimal thermal insulation, thus preventing any freezing of the pelletizing head, which reduces the consumption of heat energy by up to 90 %.

On request we will be happy to arrange a visit to one of our customers, additionally a test run with your material in ECON's technical centre is also possible.

ECON-Model	Throughput rate	Material
EUP 100	5 to 120 kg/h	The system is suitable for processing all thermoplastic and elastomeric materials, hot-melt-type adhesives, natural resins, silicones, wood composites, etc.
EUP 200	100 to 500 kg/h	
EUP 600	400 to 1.000 kg/h	
EUP 1500	800 to 2.000 kg/h	
EUP 3000	1.800 to 3.200 kg/h	
EUP 6000	3.000 to 6.500 kg/h	

*Special sizes are available on request. The specified output rates depend on the processed materials, the technical layout by the supplier and a test run at ECON's technical centre.*

**Processability of all thermoplastic materials – even PET, PA and PP**

**Push button start up – automatic, quick and sure**

**No “FREEZING” - due to excellent thermal insulation on the die**

**Gentle material processing – due to low pressure build-up**

**Uniform pellet shape – less over and undersize granules**

**Minute pellets possible down to micro pellets**

**Compact unit – simple operation, little space required**

**Low expenditure for staff and maintenance**

