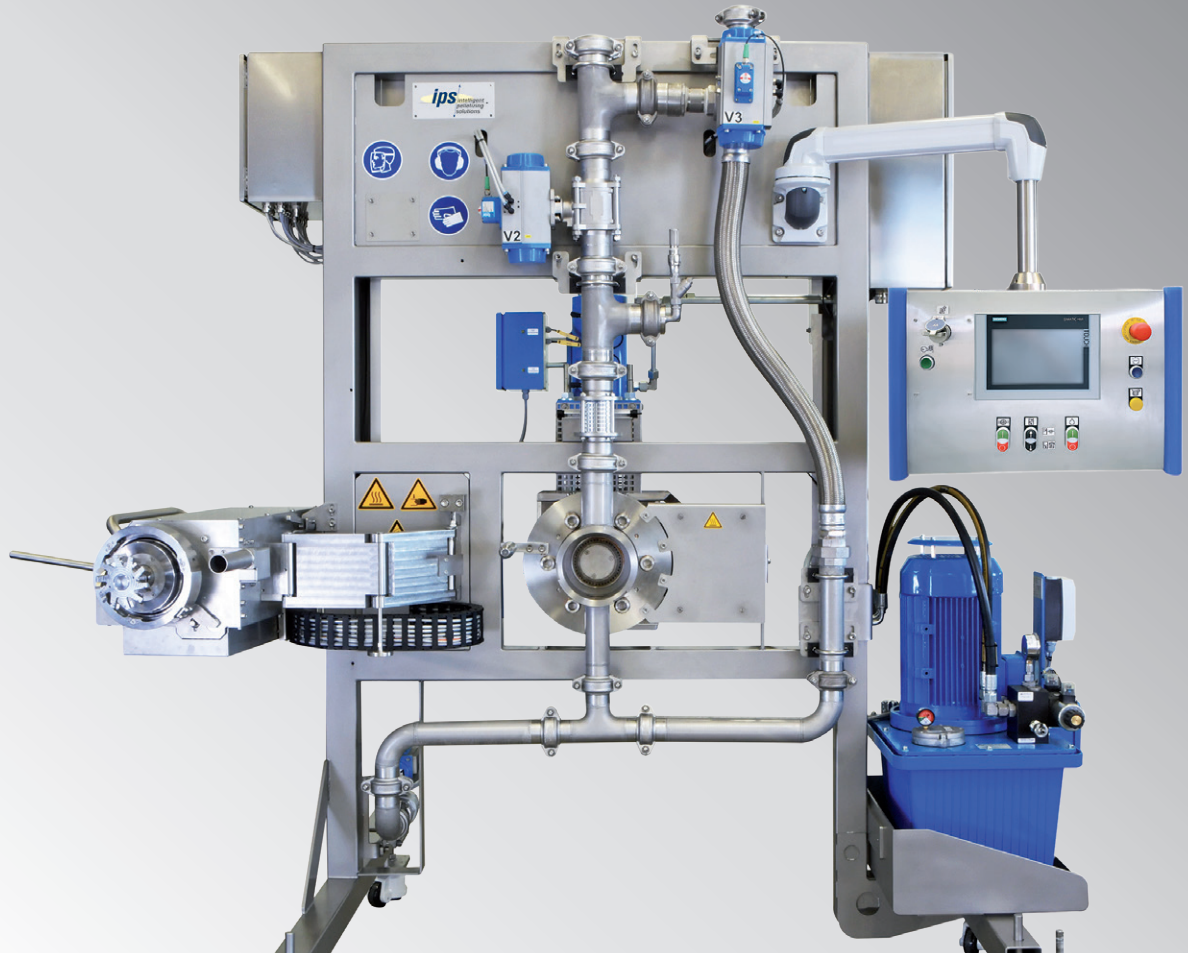


# Underwater Pelletizing System

## ips-UWG S



Gentle on material. Efficient. Flexible.

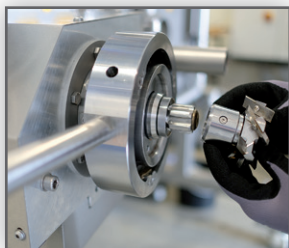
- Simple operation with high system safety
- Swivelling pelletizing unit for outstanding accessibility
- Single-hand locking of the cutting chamber with automatic locking and safety monitoring
- Automatic starting and stopping of the entire system at the push of a button
- Ergonomic operator guidance via graphic touch-user interface
- Process monitoring with automatic shutdown to avoid time-consuming cleaning and maintenance work
- Throughputs from 180 – 6000 kg/h

# Underwater Pelletizing System ips-UWG S

The underwater pelletizing system ips-UWG S was developed especially for processing thermoplastic materials and produces spheric pellets.

The flexible design of the ips-UWG S allows it to be used in the compounding, masterbatch and recycling industries.

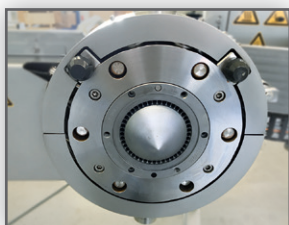
## Design Details



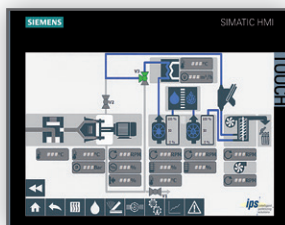
Single-hand locking  
Simple cutter hub replacement



Ergonomic layout of the control panel with push-button operation of the most important process functions



Optimum access to the die plate for fast die plate replacement



Modern process visualization control via graphic touch-user interface



Polymer diverter valve and hydraulic unit integrated on the machine base frame  
Compact design of all components



Pneumatic and electric terminal boxes made of stainless steel

## Further design details

- Operation of the system from the left/right can be freely chosen
- Pneumatic knife contact pressure with adjustable grinding intervals
- Complete machine base frame can be moved on wheels and height-adjusted
  - Fast changeover between strand- and underwater pelletizing possible
- Mass pressure/mass temperature monitoring upstream of the die plate
- Trend diagrams of the most important process parameters
- Remote control connection for maintenance, remote diagnostics and customer support

## Options

- Heating cartridge monitoring with position detection
- Torque monitoring of the pelletizer drive
- Knife wear monitoring
- Pellet flow monitoring at the bypass-piping system incl. lighting
- Grinding device for the die plate
- Wear-protected version

## Process water system ips-PWS

The process water system ips-PWS has been matched especially to the requirements of the underwater pelletizing system ips-UWG S. Thanks to its flexible design, the ips-PWS can be tailored to the customer's needs and requires only a small footprint due to its compact design.

### Design Details



Compact design on a joint machine base frame  
All parts in contact with water are made of stainless steel



Curved screen unit with additional drawer filter *(optional)*



Process water tank with integrated drawer filter



Band filter unit *(optional)*



Agglomerate catcher with a pneumatically operated gate valve (seal without sealing material) and automatic ejection *(optional)*  
Pellet dryer ips-GT/3 with automatic cleaning system *(optional)*



Double filter unit *(optional)*

### Further design details

- Constant process water temperature control using bolted plate heat exchanger
- Process water level control in the process water tank with automatic water refill
- Frequency-controlled drive motor of the pellet dryer with adjustable speed

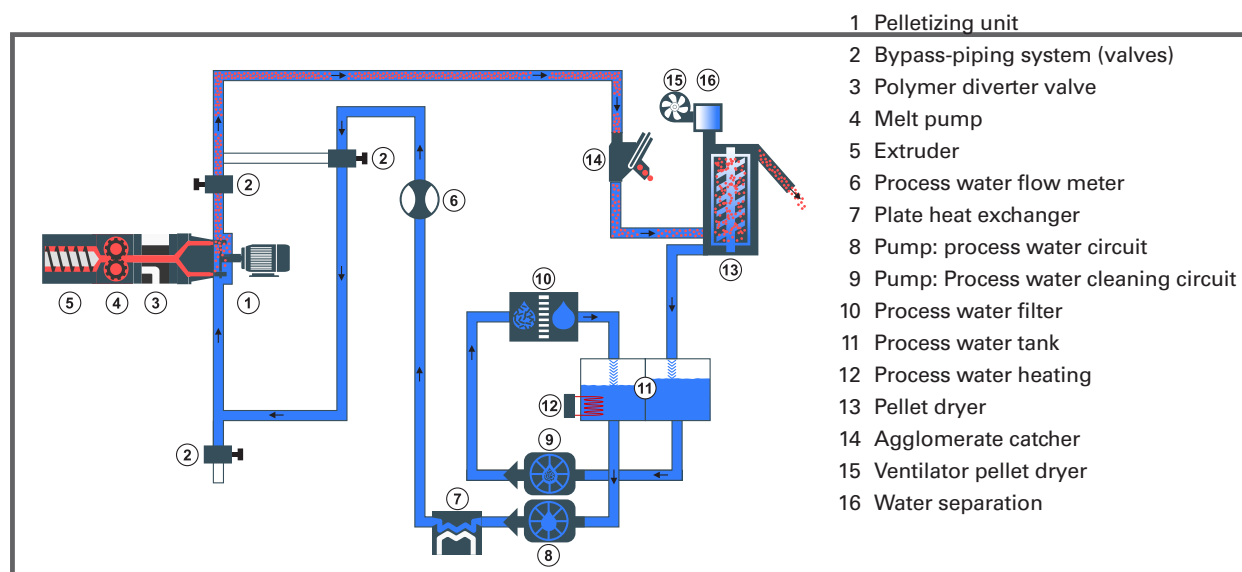
### Options

- Process water heating
- Digital measurement of the process water volume flow
- Setting of the process water volume flow via control panel incl. process monitoring
- Process water cleaning circuit with double filter unit, curved screen unit or band filter unit
- Rotation monitoring of the pellet dryer
- Frequency-controlled fan for exhaust air flow at the pellet dryer
- Water separation with recirculation at the exhaust air outlet of the pellet dryer
- Agglomerate catcher with automatic discharge and water recirculation
- Pellet switch at the pellet dryer outlet
- Wear-protected version of the pellet dryer
- Sound-insulated design of the pellet dryer
- Hot water version with thermally insulated process water tank, pellet dryer, anti-slip devices for the water hoses, splash protection at the pellet flow monitoring, etc.
- Rotary tube ips-DR/K for controlled PET crystallization without external energy supply being necessary

## Technical Data

Throughput rate (kg/h)	180 – 720	500 – 3000	1500 – 6000
Polymer diverter valve			
Heating power (kW)	5,0	6,4	6,4
Drive power hydraulic system (kW)	7,5	7,5	7,5
Pelletizing			
Drive power (kW)	3,0	5,5	11,0
Speed range (min <sup>-1</sup> )	500 – 5500	500 – 4500	500 – 3500
Die plate			
Heating power (kW)	5,4	5,4	5,4
Max. number of holes	24 (single row)	90 (double row)	180 (double row)
Pellet dryer	ips-GT 500/3	ips-GT 1500/3	ips-GT 3000/3
	(ips-GT 1500/3)	(ips-GT 3000/3)	(ips-GT 6000/3)
Drive power pellet dryer (kW)	1,1 (5,5)	5,5 (7,5)	7,5 (7,5)
Drive power ventilator (kW)	0,1 (0,55)	0,55 (1,1)	1,1 (1,1)
Process water system			
Process water volume flow rate (m <sup>3</sup> /h)	20,0	40,0	100,0
Pump process water cycle (kW)	4,0	7,5	11,0
Pump process water cleaning (kW)	2,2	4,0	4,0
Process water heating (option) heating power (kW)	2 x 13,5	2 x 13,5	2 x 13,5
Process water cleaning standard	Drawer filter	Drawer filter	Drawer filter
Process water cleaning options	Double filter unit, curved screen unit or band filter unit	Double filter unit, curved screen unit or band filter unit	Double filter unit, curved screen unit or band filter unit

## Process diagram



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