

# **UWP<sup>®</sup>** **UNDERWATER** **PELLETIZING** **SYSTEM**



# INTRODUCTION

**CGC Technology International Ltd**, was established in 2010, is specialized in the development and manufacturing of **Underwater Pelletizers** and **Spare Parts** for machinery used in the plastics industry, offering customized and innovative solutions to meet any need in underwater granulation of plastic materials, such as compounding, masterbatch production, the production of virgin polymers, and the processing of recycled materials.

CGC has a certified quality system according to the ISO 9001-2015 standards and obtained the CE Certification.

Relying on its quality performance and competitive prices, CGC has become the official supplier of **Sinopec**, **China National Chemical Engineering Group** and **Wanhua Chemical Group**.

Our headquarter is located in Dongguan, China, with its branches in Shanghai, Hong Kong and Italy, CGC delivers efficient and profitable pelletizing solution to help our clients succeed all over the world.



10+  
High-tech products

15+  
Years of operations



20+  
R&D engineers



50+  
National patents

100+  
Employees

CGC currently has 50+ National Patents.

Our commitment to continuous improvement and technical development makes us a recognized innovation leader for pelletizing systems in China.

# UNDERWATER PELLETIZING SYSTEM

Underwater is characterized by polymer cutting with blades fully immersed in water, ensuring a homogeneous product, without agglomerates.



- Suitable for various polymer's pelletizing, throughputs are from 20-30,000 kg/h
- High quality and uniform pellets in variable sizes, even micro-pellets of 0.5mm
- Energy-efficient centrifugal drying system, with final pellets contain less than 2000 PPM moisture
- High-efficiency closed loop water system
- Excellent sound insulation <80 dBA
- Compact design, little space is required 8-12m<sup>2</sup>



# OUR PRODUCTS

UWP® B



Throughput: 500-30,000 kg/h

Dimension: 9m(L) X 2.8m(H) X 1.5m(W)

**PNEUMATIC BLADES FEEDING**

**AUTOMATED BLADES ADJUSTMENT**

**FULLY AUTOMATIC RE-SHARPENING**

**REMOTE INTELLIGENT CONTROL**

**AUTOMATIC WATER FILTRATION**

**ONE-TOUCH AUTO START**

**UWP® G5**

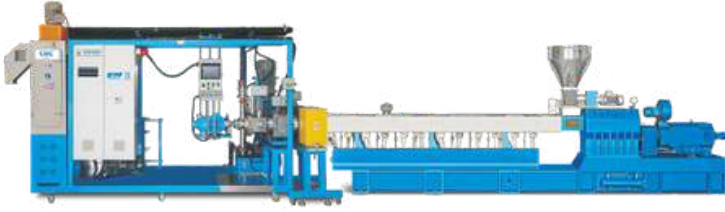
## HANGING LINE

**Throughput:**

200-1000 kg/h

**Dimension:**

4.5m(L) X 2.8m(H) X 1.5m(W)



**UWP® G12**

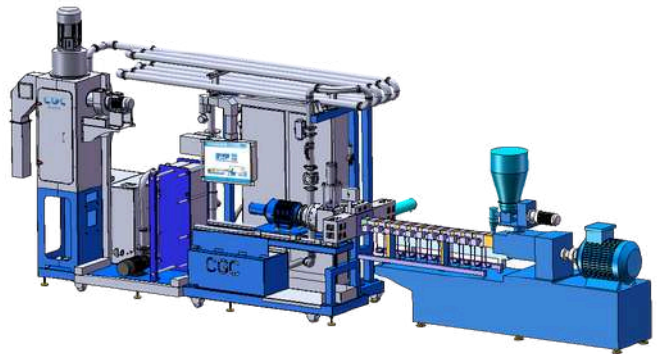
## ALL-IN-ONE LINE

**Throughput:**

200-1000 kg/h

**Dimension:**

4.5m(L) X 2.8m(H) X 1.5m(W)



**UWP® G6**

## LAB-LINE

**Throughput:**

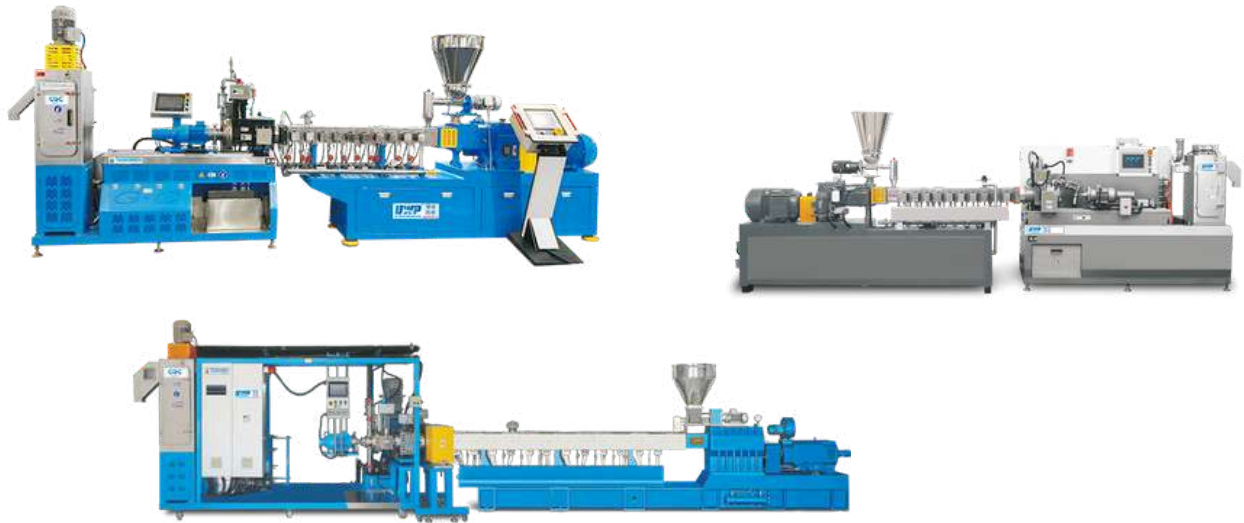
20-300 kg/h

**Dimension:**

2.5m(L) X 2.5m(H) X 1.5m(W)



# FEATURES & BENEFITS



## 1 Pneumatic Blades Feeding

➤ Improves blades and die-face life and minimal need for operator supervision

## 2 Automated Blades Adjustment

➤ Ensure perfect cut pellets even under changing process conditions and to minimize wear on die plates and blades

## 3 Fully Automatic Re-sharpening

➤ Guarantee the continuous operation and minimize downtimes and operator intervention

## 4 One-touch Auto Start

➤ Simple operation and easy maintenance

## 5 Automatic Water Filtration

➤ Offer 24/7 remote upgrade and maintenance service, without the restraint of time and space

## 6 Remote Intelligent Control

➤ Ensures continuous operation, even with a high degree of fines, keeping maintenance efforts low and pellet quality high

# SPARE PARTS

We offer a wide range of Spare Parts to meet the customer's request, all these products can be customized according to the customer's requirements.

## ➤ **Die-Plate**

The Die-plate is the heart of the underwater pelletizing system. With years of experience, we provide Die-plate designed according to the specified material and customer requirement.

Heating is provided by means of Electro-thermal tube or electromagnetic, or oil.



- Wear-proof material alloys
- 2-years quality warranty
- Outstanding thermal performance
- Quick and easy to change

## ➤ **Blades & Cutter hub**

Our specific cutter hub and blades have been designed to meet the requirements of our customers' applications.

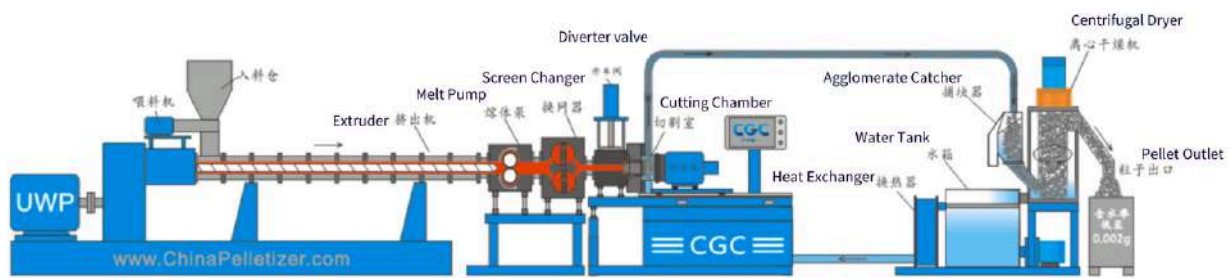


- Highly resistant
- Longer lifespan
- Excellent cutting performance
- Design available in straight or angled blades
- More stability, easy to change

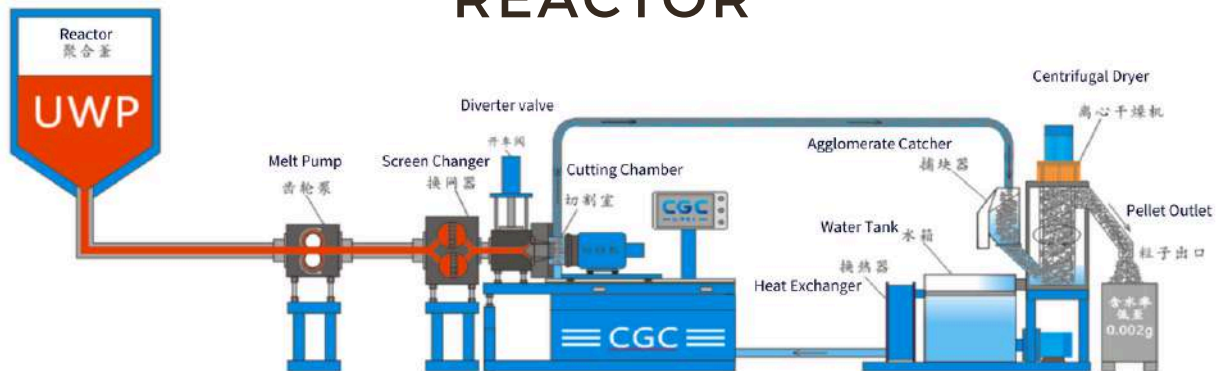


# PRODUCTION PROCESS

## EXTRUDER



## REACTOR



The plastic material is fed to the feeding inlet and it is melted and homogenized inside an **Extruder/Reactor** and with a **Melt Pump**(optional), which forces the molten polymer through a **Screen Changer**(optional), it reaches the **Diverter Valve**.

When the **Diverter Valve** is in action, the material passes through the die plate and once the polymer begins to exit the die, the pellets are cut by rotating blades and solidify in water inside the **Cutting Chamber**.

The process water transports the spherical pellets from the **Cutting Chamber** to an **Agglomerate Catcher** (which removes clumps of plastic) and then to a **Centrifugal Dryer**, where the water is removed and the dry pellets are discharged. The process water is contained in a closed loop so there is minimal water loss.

# APPLICATIONS

UWP® Underwater Pelletizing System is designed for a wide range of different processing methods, such as **Compounding, Masterbatch production, the production of Thermoplastic Elastomer, Engineering Plastics, Hot-melt Adhesives, Biodegradable Materials, Petrochemical** and the processing of **recycled materials**, such as:

TPU | PLA | PBAT | PBST | PP | PE | TPE | TPEE | TPV | EVA | PE | ABS | PS | PPS | PPO | PC | PCL | PMMA | PPSU | PET | PBT | POM | AS | ASA | PA | PSF | MASTERBATCH | PA6 | PA66 | PA610 | PA10 | AS | BS | MBS | HIPS | LDPE | MDPE | HDPE | LLDPE | UHMWPE | PVC | PEK | PEI | SAN | PPS | LCP



**ENGINEERING PLASTICS**



**MASTERBATCH**



**BIODEGRADABLE MATERIALS**



**PETROCHEMICAL**



**THERMOPLASTIC ELASTOMER**



**COMPOUNDING**

# OUR CUSTOMERS



**Lubrizol**



LyondellBasell



LG Chem



WANHUA

**ARKEMA**



家联科技  
HOME-LINK

Armstrong Flooring



AVIENT



浙江石油化工有限公司  
Zhejiang Petroleum & Chemical Co., Ltd.

**KINGFA**  
金发科技



中粮  
COFCO



H.B. Fuller

Connecting what matters.™

**huafon** 华峰



鸿基石化  
HONGJI  
PETROCHEMICAL



AUDIA  
ELASTOMERS  
An AUDIA Company



MIRACL L  
LUQING  
鲁清石化



**CHOEI**

**BIOBASE** 博科



BOSOM

↑topolymer



# REFERENCE LAYOUT



# SERVICES

As the leading manufacture of Underwater Pelletizer, in order to ensure that your equipment consistently efficient operation, we offer you top-class services from our trained specialist personnel:



## Installation & Commissioning

To ensure that your machines work optimally and in the long-term



## Training

Provide technical training to your operators to optimal operate and maintain the machines



## Maintenance

Provide 24/7 remote upgrade and maintenance service



## Testing

Our test laboratories are available to conduct trials to support you to develop new products

# STAY IN TOUCH WITH US



## Website

[en.chinapelletizer.com](http://en.chinapelletizer.com)



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