

# NEWSLETTER

AUGUST 2023

**NEW**

## Mini Scientific Underwater Pelletizing Line LMUP



Introducing Labtech Engineering's latest addition to the Mini Scientific Series Lines - the Mini Underwater Pelletizing Line. Designed for cost-effective market sampling and laboratory work, it produces raw materials, blends, and masterbatch while saving floor space. The system is controlled from a PLC control panel for an easy and operator-friendly operation.

This Mini Underwater Pelletizing Line is suitable for hydrophobic polymers with medium to high melt flow index such as PE, PP, TPU, etc. It efficiently cuts these pellets while they are fully submerged in water, resulting in the production of nice-shaped clear-cut pellets.

With a focus on energy efficiency and reduced environmental impact, the Mini Underwater Pelletizing Machine is engineered for minimal energy consumption and a smaller carbon footprint.

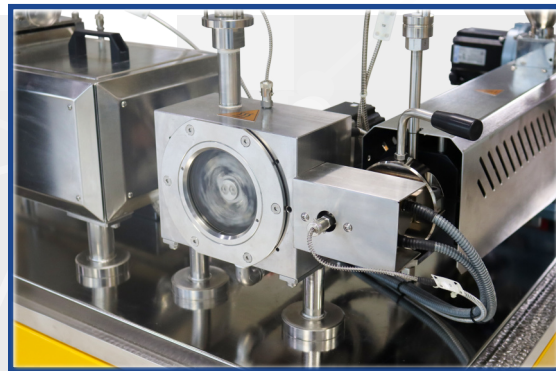
# Labtech Engineering Mini Underwater Pelletizing Line

The Mini Underwater Pelletizing Line is designed to be connected to either a single or a twin screw extruder. With a system that is easy and simple to operate, it can pelletize practically all types of compounds.

## 16 mm Single-Screw Extruder LME16-30

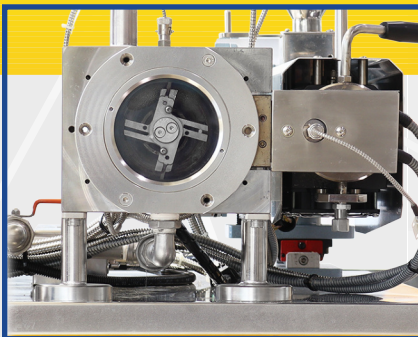


This single-screw extruder can process almost all thermoplastic types and do a simple mixing and compounding.



The extruder C-Clamp is connected to the L-shaped adapter leading directly to the pelletizing chamber.

## Underwater Pelletizer



During discharge, the molten plastic is precisely cut by high-speed rotating knives attached to the die head and then rapidly cooled by the water within the pelletizing chamber.

- Self-adjusting cutting knives
- Closed-loop cooling water system
- Consistent pellet shape and size



The water and plastic pellets are drawn upwards through a pipe towards the centrifugal dryer where the pellets get separated from the water.

## Tempering Water Tank

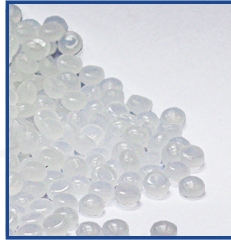


The water removed from pellets undergoes mesh filtration and enters the closed-loop circulating system of the tempering water tank, which includes thermostatically controlled heaters.



# Centrifugal Dryer and Cyclone

Examples of common resins pelletized with this line:



PE



TPU



PP  
Masterbatch

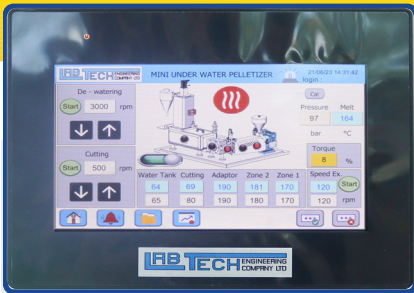


The centrifugal dryer has a high-speed spinning center cylinder with a multitude of blades that will sling the pellets against the perforated wall, removing the water and transporting them to the cyclone.

The cyclone separates the pellets from the air.



## Computerized Control Panel



The user-friendly interface allows easy adjustment and monitoring of all parameters for optimal operation.


### Technical Data

Approximate Capacity (Single-Screw Extruder)	1 to 2 kg/hr
Knife Rotating Speed	10-3000 RPM
Die Plate	1 hole, Ø 3 mm
Max Extruder Heating Temperature	300°C
Max Centrifugal Impeller Speed	4000 RPM
Dimensions (L x W x H)	1.3 m x 1.2 m x 1.8 m

**LAB TECH** ENGINEERING COMPANY LTD

Facebook: [facebook.com/labtechengineering](https://facebook.com/labtechengineering) 

Instagram: [Instagram.com/labtechengineering](https://Instagram.com/labtechengineering) 

YouTube: [youtube.com/@labtechengineeringpreview](https://youtube.com/@labtechengineeringpreview) 

LinkedIn: [linkedin.com/company/labtech-engineering](https://linkedin.com/company/labtech-engineering) 

**LABTECH ENGINEERING CO., LTD.**

Bangpoo Industrial Estate, 818 Moo 4 Soi 14B, Sukhumvit Road

Prakasa, Muang, Samutpakan, 10280 Thailand

Tel.: 66-2-709 6959 | Fax: 66-2-710 6488 and 89

Email: [labtech@labtechengineering.com](mailto:labtech@labtechengineering.com)

Website: [www.labtechengineering.com](http://www.labtechengineering.com)

