

NEW

LABTECH ENGINEERING
COMPANY LTD

MEET LABTECH'S TWIN-SCREW COMPOUNDING LINES

SPECIAL

Professional
Quality at
Affordable
Prices

MARK II SERIES



**FASTER
DELIVERY
TIMES**

MODERN
**LEAN
DESIGN**

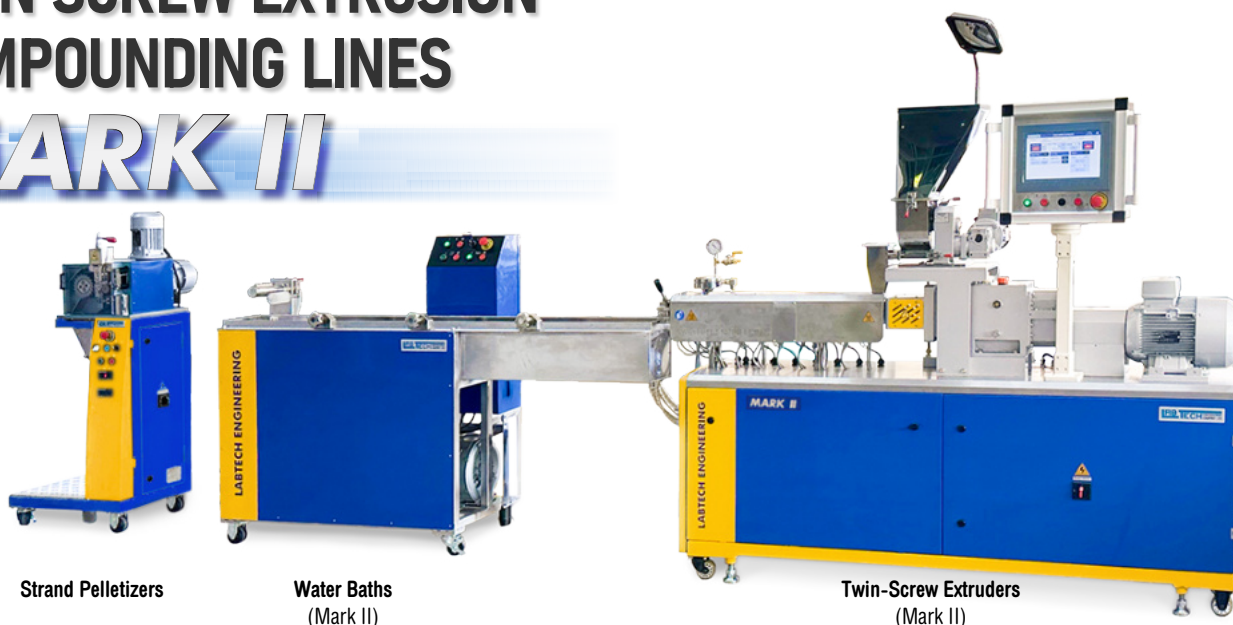
**FULL
WARRANTY
INCLUDED**

NEWSLETTER

JUNE 2025

NEW LABORATORY SCIENTIFIC

TWIN SCREW EXTRUSION COMPOUNDING LINES MARK II



Strand Pelletizers

Water Baths
(Mark II)

Twin-Screw Extruders
(Mark II)

We're beyond excited to introduce our Mark II Compounding Lines, featuring brand new 22 mm and 30 mm Twin-Screw Extruders. These aren't just another upgrade – they're the missing pieces you've been waiting for. The Mark II bridges the gap in our existing lineup (20 mm, 26 mm, and 36 mm), offering you more flexibility and precision to meet diverse production requirements. It delivers impressive performance at an affordable price, making it stand out among the famous brands of Twin-Screw Extruder, including those European brands manufactured in China.

Where Affordability Meets Uncompromising Performance!

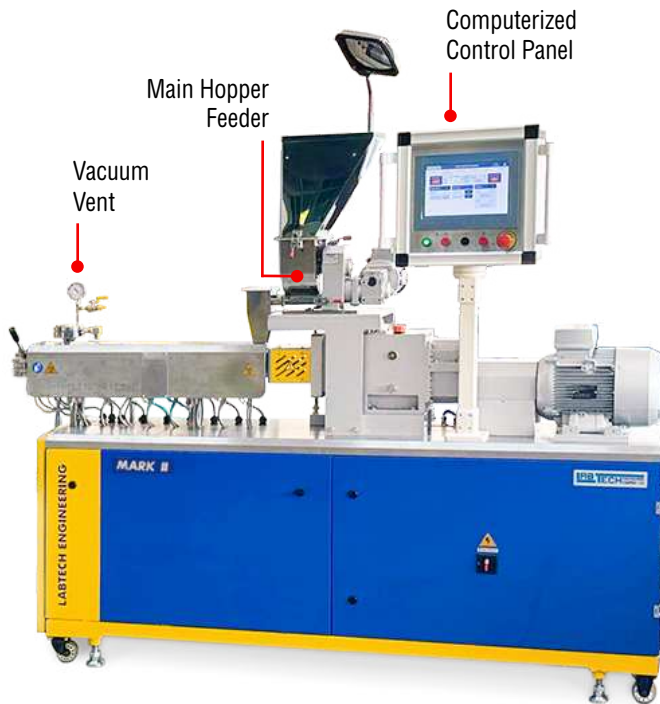
- Pleasant Design
- Affordable Price
- Production Versatility
- Closed Barrel System
- Ease of Installation
- Computerized Control Panel

The Mark II Compounding Line features a redesigned twin-screw extruder unit with a closed barrel system, aligning with our existing 36 mm model. It integrates seamlessly with a water bath and pelletizer. Designed for startup and growing businesses aiming for long-run plastic production consistency without frequent material changes, the much more affordable Mark II extrusion lines are energy-efficient with a high-torque gearbox for superior drive to the screws. In addition, the compact size of the new Mark II lines minimizes material waste during cleaning, offering a cost-effective solution compared to larger production machines.

Much affordability without compromise! The Mark II is engineered to handle a broad spectrum of standard thermoplastics, blend & composite materials covering the vast majority of commodity plastic applications, including materials like PP, PS, and Nylon.



TWIN-SCREW EXTRUDERS MARK II TYPES LTCX22-40/MARK II AND LTCX30-40/MARK II



The Mark II is designed with the capability to incorporate a single volumetric side feeder as an optional feature. This addition allows for the controlled introduction of additives, fillers, or other polymers into the processing stream, enhancing the system's versatility for diverse production needs.

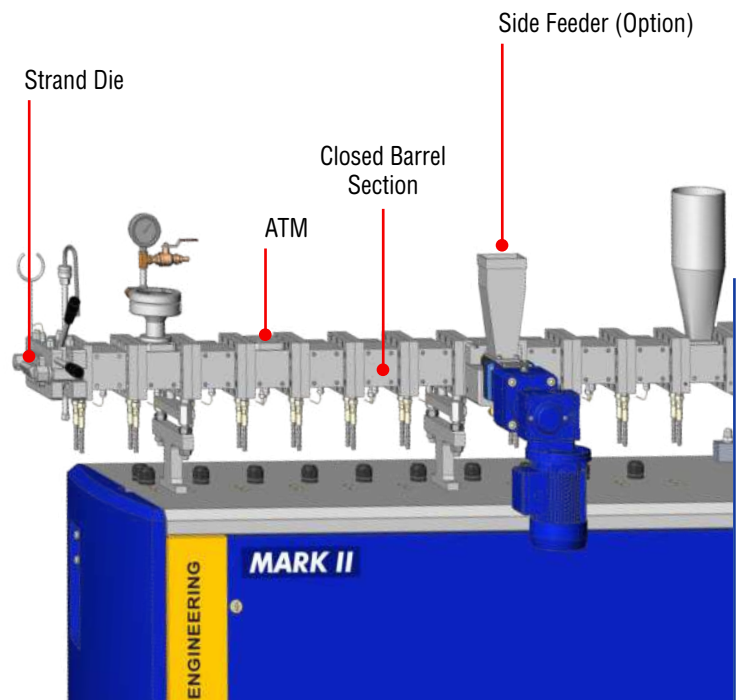
The Mark II features a Closed Barrel System, ensuring stable pressure and optimal heat transfer. This design also offers several key advantages:

- **Effortless Consistency:** Ideal for consistent use with a single material, the Mark II minimizes the impact of material changes, avoiding any interruptions.
- **Seamless Scale-Up:** Developed for mass production, the Mark II is perfect for processes where conditions are already optimized during testing, translating to consistent quality and efficiency when scaling up.

The Mark II features hardened steel as the standard material for barrels and screws, providing durability and reliability for your processing needs. This engineering choice ensures consistent performance when working with a wide range of materials.

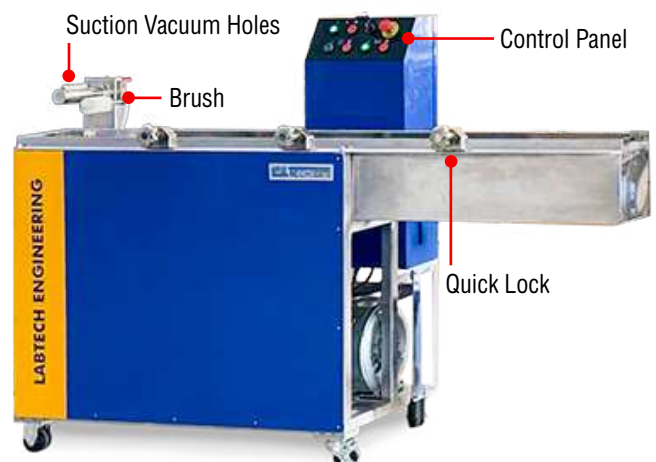
The spline shaft design guarantees superior performance at elevated speeds, offering enhanced stability and minimizing the risk of system failure.

The new design incorporates a high-torque gearbox variant, boosting its efficiency in handling demanding materials.



WATER BATHS MARK II TYPES LWX-100/MARK II AND LWX-150/MARK II

The redesigned water bath features a durable steel construction for optimal cooling efficiency. Available in two sizes - 1.5 meters and 2.4 meters - to accommodate different LTE models. The control panel is strategically positioned behind the water bath, protecting electrical components from water exposure while remaining at a comfortable hand-level height. This thoughtful placement allows operators to easily monitor and adjust strand positions while accessing control functions, enhancing both safety and operational convenience.



The extruded strand is submerged in the water bath which incorporates three independently adjustable filament guide rollers. These rollers are mounted on tiltable arm supports equipped with quick-locks for easy positioning along the water. This provides versatile filament routing according to immersion depth or residence time within the water bath, catering to the various drying requirements of the filament materials sufficient for uniform cooling of the filament. This process ensures superior product quality and consistency with every run.

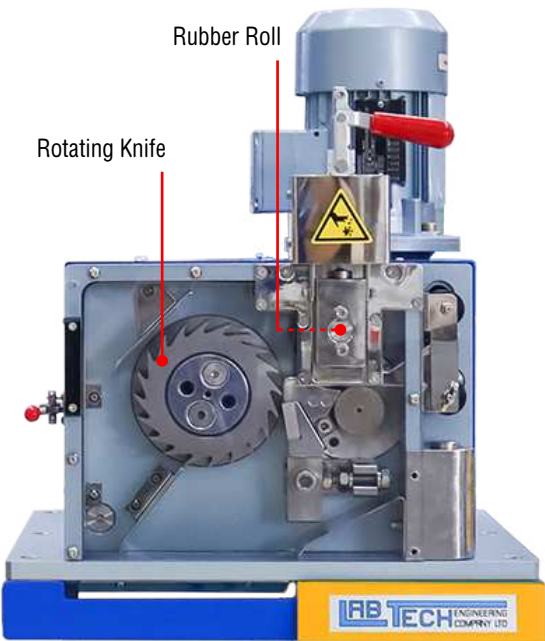
Additionally, an integrated brush and a built-in high-suction vacuum blower actively remove any residual water droplets, providing a final drying touch and guaranteeing a smooth, consistent product.

STANDARD STRAND PELLETTIZERS TYPES LZ-120 AND LZ-200

The pelletizer, connected to the water bath, features a modern design with a full steel body and platform. An adjustable front platform accommodates discharge bags or containers, with the flexibility to modify its height to create additional space as needed.

The heart of the pelletizer is a rotating knife made from high-grade super hard carbon steel, available in two configurations. The LZ 120 model features 20 cutting blades, while the larger LZ 200 model uses 32 blades for increased throughput. Both designs ensure precise and uniform pellet cutting for soft and hard strands. Working with this cutting mechanism, a spring-loaded upper neoprene roll ensures smooth and even strand pulling during operation. This integration enhances the efficiency and consistency of the pelletizing process, delivering reliable performance across various material applications.

Optionally, the pelletizer can also be equipped with a variable infeed speed drive for the feed roll which can cut pellets at desired length from mini pellets of 1 mm length up to 6 mm.



TECHNICAL SPECIFICATIONS

TWIN-SCREW EXTRUDERS MARK II	LTCX22-40/MARK II	LTCX30-40/MARK II
Diameter of Screws	22 mm	30 mm
Available L/D Ratio	40-48	40-48
Barrel Type	Closed Barrel	Closed Barrel
Screw Rotation Speed for Co-Rotating	800 RPM	1,000 RPM
Maximum Barrel Temperature	400 °C	400 °C
WATER BATHS MARK II	LWX-100/MARK II	LWX-150/MARK II
Water Tank Length	1.5 m	2.4 m
Water pump	0.37 kW	0.37 kW
STANDARD STRAND PELLETTIZERS	LZ-120	LZ-200
Number of Rotary Knives	20	32
Cutting Motor Power	1.1 kW	4 kW
Feeding motor power (Variable Speed “VS” Option)	0.37 kW	0.75 kW
Strand Feeding Speed	10-59 m/min	20-80 m/min
	10-72 m/min (VS Option)	20-95 m/min (VS Option)
Maximum number of strands (3 mm)	8	24