

LabCast® Tape Casting/Coating Systems Ideal For Product Research and Development

Precision tape casting/coating development platform for applications requiring tolerances of 0.00127mm over widths of 10 to 35 cm. LabCast® is the best technology available for research and development whenever versatility, accuracy, and dependability are required. Easy to use, proven forming technique for developing thick films used in electronics, photonics, fuel cells, technical ceramics, pharmaceutical films and many other emerging technologies. Products developed using LabCast® can be quickly scaled to mass production with HED Procast® series casting machines.



MODEL: TC-71LC

The LabCast® system is available in five standard configurations. Optional features include polymer and steel belt web carriers, tandem doctor blade stations, coating fluid delivery systems, product drying controls and take-up spoolers.

Standard Features:

- Heavy duty aluminum construction for a spark resistant, solid, level work platform.
- Enclosed work chamber for control of process conditions.
- Glass windows for process viewing and maintenance access.
- Precise casting/coating surface (0.00762mm or better) with web carrier supports
- Variable frequency drive speed control of carrier from 5 to 50cm/minute.
- Easily adjustable, precisely set doctor blade gaps.
- Counter process air flow with manual damper controls for drying and exhaust.
- Microprocessor and SSR electronics for precise control of process temperatures.
- UL/FM electrical components.
- NFPA standards for laboratory equipment.
- Instruction manual included.

Optional Features

- Continuous stainless steel belt, 0.254mm thick, 0.3M width, #2B mill finish.
- Under-bed heating with PID temperature control.
- Process air heating with PID temperature control.
- Over-bed radiant heating with PID temperature control.
- Product discharge separator plate.
- Stand-alone product take-up with proximity sensor and motor.
- Secondary doctor blade station with interleaf dispenser.
- Casting/Coating material preparation, conditioning and delivery systems
- Teflon doctor blade fixture for adjustable tape widths.
- Interleaf Dispenser
- Stainless steel housing construction,.
- Inert gas injection inlet
- Discharge dust enclosure with inert gas injection inlet

Applications

- Fuel Cells
- Batteries
- Super-Capacitors
- Photo-Voltaics
- Piezoelectrics
- Nanocomposites
- LTCCs / HTCCs / MLCCs
- Drug Delivery Films

Specifications

LabCast		TC-LC Series Tape Casting Development Systems		
Model	Casting	Overall	Casting	Recommended Application
No.	Length	Length	Width	
TC-41LC	1.1M	1.86M	300mm	Cast tapes on carrier film - small footprint format
TC-71LC	2.1M	2.95M	300mm	Cast tapes on carrier film
TC-101SLC	3.0M	3.80M	300mm	Cast tapes on stainless steel
TC-101MLC	3.0M	3.80M	300mm	Cast tapes on mylar w/tandem dr.blades
TC-101SMLC	3.0M	3.80M	300mm	Cast tapes on stainless steel w/tandem dr.blades

*Specifications are approximate and subject to change without notice.



TC-101SLC/SMLC feature a stainless steel belt



TC-101MLC/SLMC feature tandem doctor blades