

Scientific



Laboratory polymer processing machines manufactured by

Labtech Engineering

26 mm twin



Twin-Screw Extruders with Modular Barrels for Optimum Flexibility

Modular co-rotating twin-screw extruders available with clamshell barrels and our unique high tool steel barrel inserts. With screw diameters of 12, 16, 20 and 26 mm and L/D ratios up to 60. Suitable for laboratory, research and small batch productions.

Single elements mounted on hexagonal shafts of screws for optimum flexibility of screw configurations.

Available with both single and twin-screw hopper feeders, vacuum pump with multiple vent outlets on barrel, twin-screw side feeder, liquid feeders, quick screen changer and a multitude of screw element types and combinations.

High Output 26 mm Maxi Compounder with 22 kW drive and 1200 max screw RPM



Optional Gravimetric Feeders



New 12 mm twin



16 mm twin



For Twin 16 now with forced air cooling of all barrel zones and side feeder.

Available with manual as well as fully computerized touch screen controls. Possibility to download and process all data on a PC.

16 mm twin screw powder coating line



20 mm twin

New

The amazing
12.5 mm.
conical
extruder



Single Screw Extruders

Single-screw laboratory extruders with diameters from 12.5 to 45 mm, all with an L/D ratio of 30. The 12.5 and 20 mm extruder are available as a Table Top version. The 25, 30, 40 and 45 mm extruders are available both as vented or non-vented versions and with plain screws or equipped with Maddock mixing elements as well as a mixing section on the screw tip.



25 mm

C-clamp connection to extruder for fast and easy attachment of downstream equipment.



20 mm

Streamlined downstream water bath with strand suction and electronic water level control.



40 and 45 mm



The Amazing Sidecut Pelletizer
that cuts anything a pair of
scissors can and more



Pelletizing Systems

From Under Water to Strand Pelletizing systems

Our range of pelletizing systems are complete with the introduction of our new Under Water pelletizing system which are suitable for our 20 and 26 mm twins as well as our 45 mm single screw extruders.

Strand Pelletizers from our smallest bench top size to our largest version with a capacity of 400 kg/hr. And the unique SideCut Pelletizer which can cut anything a pair of scissors can, from the softest TPE to the most rigid engineering polymers. Available in many sizes up to 900 kg/hr.



**World's first Ultra Micro
Blow Film line**

Available with
optional motorized
height adjustment
of film tower.



Single and Multi Layers Film Blowing Lines

Single and multi layer film blowing lines for film lay-flat widths of up to 300 mm. With many features such as twin channel air cooling ring, variable speed haul-off and nip-rolls, etc.

CO-EX film blowing
lines with MDO.



Compact film blowing
line with 20 mm
extruder for max 200
mm lay-flat film.



**Also available with in-line or off-line
MDO film stretching attachment**

Co-Ex Film Blowing Lines With up to 9 layers

Seven-layers blown film line using three 30 mm and four 25 mm extruder 30 L/D



Seven-layer blown film line using five 25 mm, 30 L/D extruders with adjustable height



Multi-row Teflon roller film bubble guide



Pancake type die

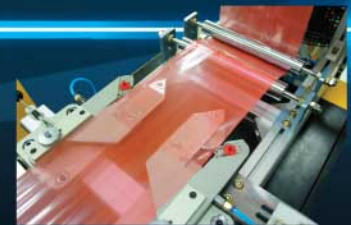


A-frame with carbon fiber rollers



High cooling efficiency air ring

Splitting Knives



**World's first Ultra
Micro Cast Film
and Sheet line**



Table top version connected to our 20 mm, 30 L/D extruder with gel counter.

Single Layer Line Flat Film and Sheet Chill Roll Lines



We offer a large range of floor versions, connected to our 25, 30, 40 and 45 mm, 30 L/D single or twin-screw extruders of sizes 16, 20 and 26 mm

Available with unwinds for laminations and coatings. Wind ups in single or two station versions and with manual or automatic tensioning controls

All chill rolls are made from high grade tool steel with hard chroming and mirror polish surface. The rolls are cored with spiral channels for water cooling and heating. Polishing top roll with pneumatic as well as hydraulic high pressure lay-on to chill roll.

Flat dies with adjustable lips and with widths of up to 150 mm for bench top version and up to 550 mm for the floor versions. Standard die versions can be used for producing films down to 10 microns and sheets up to around 1.5 mm thickness



Large Chill Roll & Calendaring line

With three large rolls of 175 mm diameter and with heavy duty hydraulic lay on of both lower and upper roll against the center roll. Available with various roll widths up to 600 mm. Individual tempering for each roll. Motorized tilting mechanism for the roll stack so it can be placed in any position from horizontal to vertical. Individual servo motor drives for each roll.

**Co-Extrusion feed block and
Cast Film Die**



Co-Ex Chill Roll Lines With up to 9 Layers



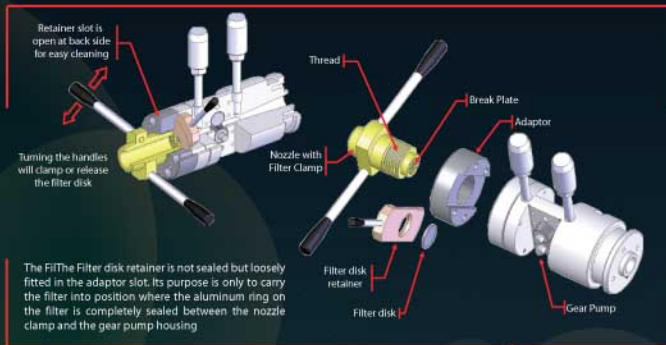
The Feed Block supplied with our co-extrusion line is made for up to 9 layers where each layer thickness can be adjusted individually from outside the die. The Feed Block is also equipped with valves which enable to either shut off a specific layer or to divide the flow from the extruder to two layers

Picture show the MDO unit in line with a co-ex cast film line which is equipped with two edge cutting stations, one before the MDO unit and the other at the wind up station



**From 2 to 7
layers
Available with a
large range of
chill rolls with
die sizes from
100 to 550 mm
and extruder
sizes from 12.5
to 45 mm**

**Also available with in-line or off-line
MDO film stretching attachment**



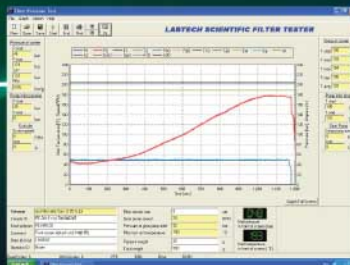
Filter tester with gear pump for accurate quality testing and standardization of masterbatches and compounds.

Standard filter sizes from 40 down to 5 microns, as well as DIN sizes.

Available with both 20 and 25 mm extruders.



New fully computerized version with on board PC and practical keyboard and mouse for easy entering of all test data. This version automatically calculates the filter test value.



Filter Testers in full Conformity to the DIN Norm EN-13900-5

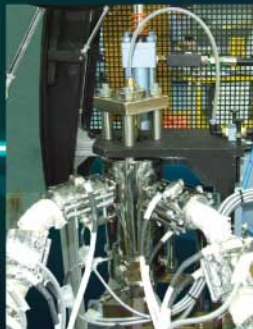
Bottle Blow Moulding Lines Single as well as Multi Layer Co-Ex Versions

Fully hydraulic, automatic bottle blow moulding attachment which can be attached to our 20 and 25 mm single screw extruders.

Producing single layer or multilayer bottles of up to 125 ml size.

With hot wire parison cutter.

Can produce bottles in almost all resin types that can be blown using this type of machine.



The co-ex line uses a streamlined die for optimum colour dispersion. A minimum amount of purging is needed for colour change over.





**Benchtop
mini mill.**



**User-friendly
colour LCD touch
screen controls
on all computer-
ized mills.**

Two-Roll Polymer & Rubber Mills



Polymer mills available with roll diameters 100, 110, 150 and 200 mm. Roll heating system with TRUE 3-Zone electric system of oil heating and cooling as well as electric heating and water cooling.

From manual versions to fully automatic hands-free computerized mills used for colour matching, quality control and research.



Rubber mills with water cooled or oil heated and cooled rolls. With variable speed heavy-duty direct drives to the rolls.



**20 MT Mini Press with
platen sizes 200x200 or
300x300 mm.**



Hydraulic Presses



Fully Computerized ASTM Presses



Manual and computerized 5 and 10 liter high speed fluid mixers with optional matching cooling mixers for high power mixing of powders, dry blends and wax+pigment concentrates.



Benchtop 10, 5 and 1.5 liter mini high speed mixers with infinitely variable speed impeller drive and easy-to-clean mixing bowl.

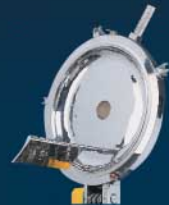


High Speed Mixers

EXIT	SET	SET	SET	SAVE
CONF	VALUE	SPEED	PROGRAM	
STEP1	1234 RPM	DISCHARGE	1234 RPM	
STEP2	1234 RPM	7	8	DEL
STEP3	1234 RPM	4	5	DEL
STEP4	1234 RPM	1	2	DEL
STEP5	1234 RPM	0	1	DEL
STEP6	1234 RPM	0	1	DEL
STEP7	1234 RPM	0	1	DEL



25 and 75 liter pilot plant high-speed fluid mixers with infinitely variable impeller speeds, automatic mixing cycles and optional water cooling of the impeller.





Our machines are built in our new ultra modern factory and are designed from scratch by our engineers. They are built in air-conditioned clean room facilities with the state of the art tooling machines. Every single machine manufactured undergoes a very rigorous quality control program that can take up to a week to perform; this involves testing each machine using various types of polymers.

Scientific

Our laboratory machines are produced in Thailand under Swedish management.

They are made with the latest technologies and with the highest possible quality standard as well as fully conforming to European and other world safety standards.

Almost all the machines we produce are being exported to customers all over the world.

Since our start 27 years ago we have achieved a leading position in the world as the #1 choice for laboratory plastic and rubber processing machines.



In early 2008 we moved into our 5,000 square meter ultra modern factory with state-of-the-art production facilities

Labtech Engineering Co., Ltd

Bangpoo Industrial Estate, 818 Moo 4, Soi 14B,
Sukhumvit Road, Praksa, Muang, Samutprakarn
10280, Thailand

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

E-mail: labtech@ksc.th.com

Website: www.labtechengineering.com