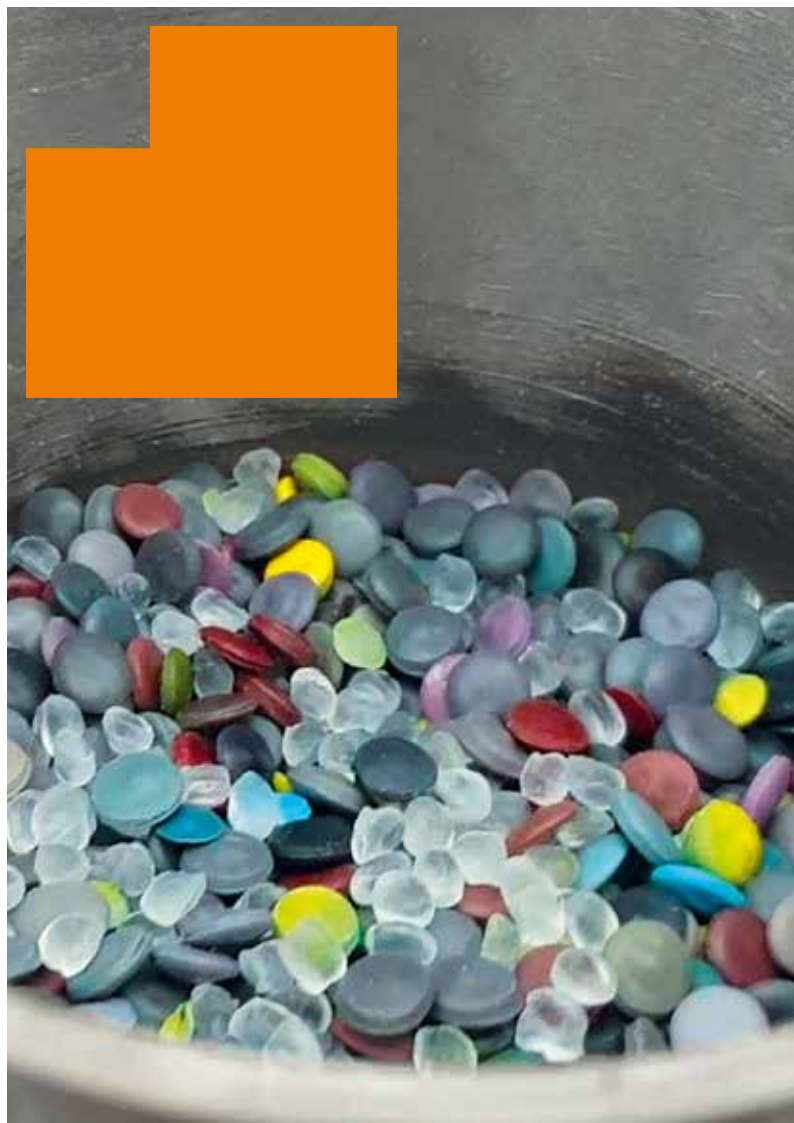
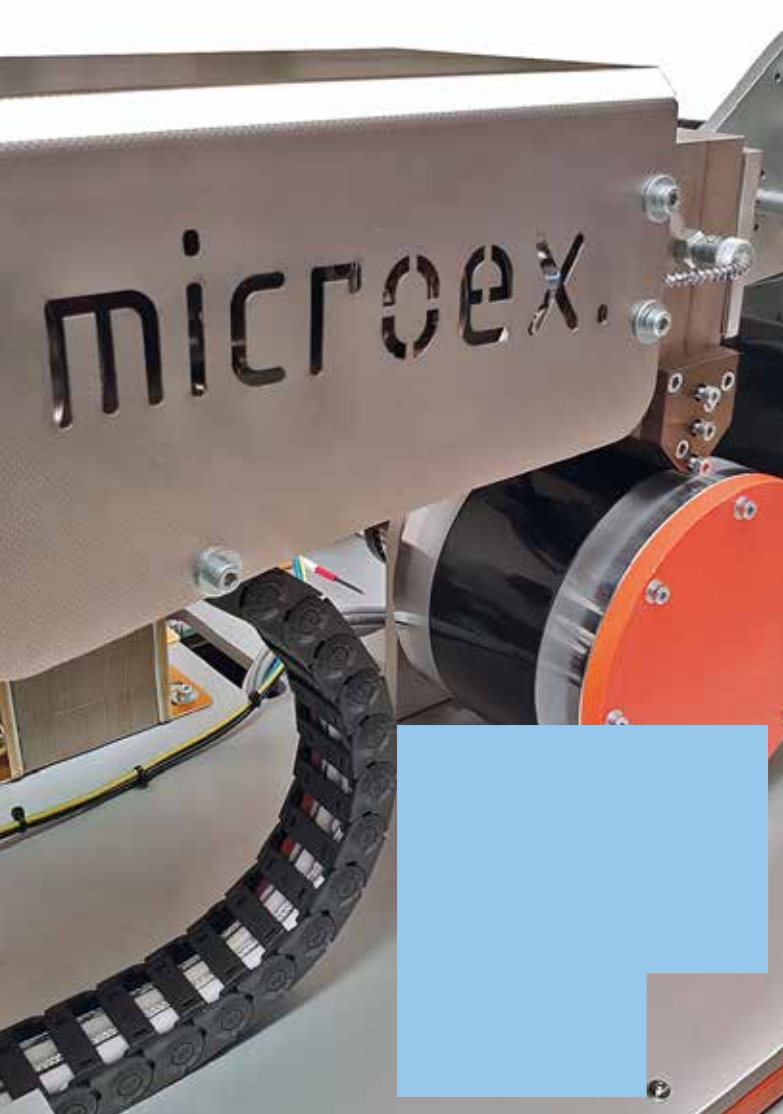


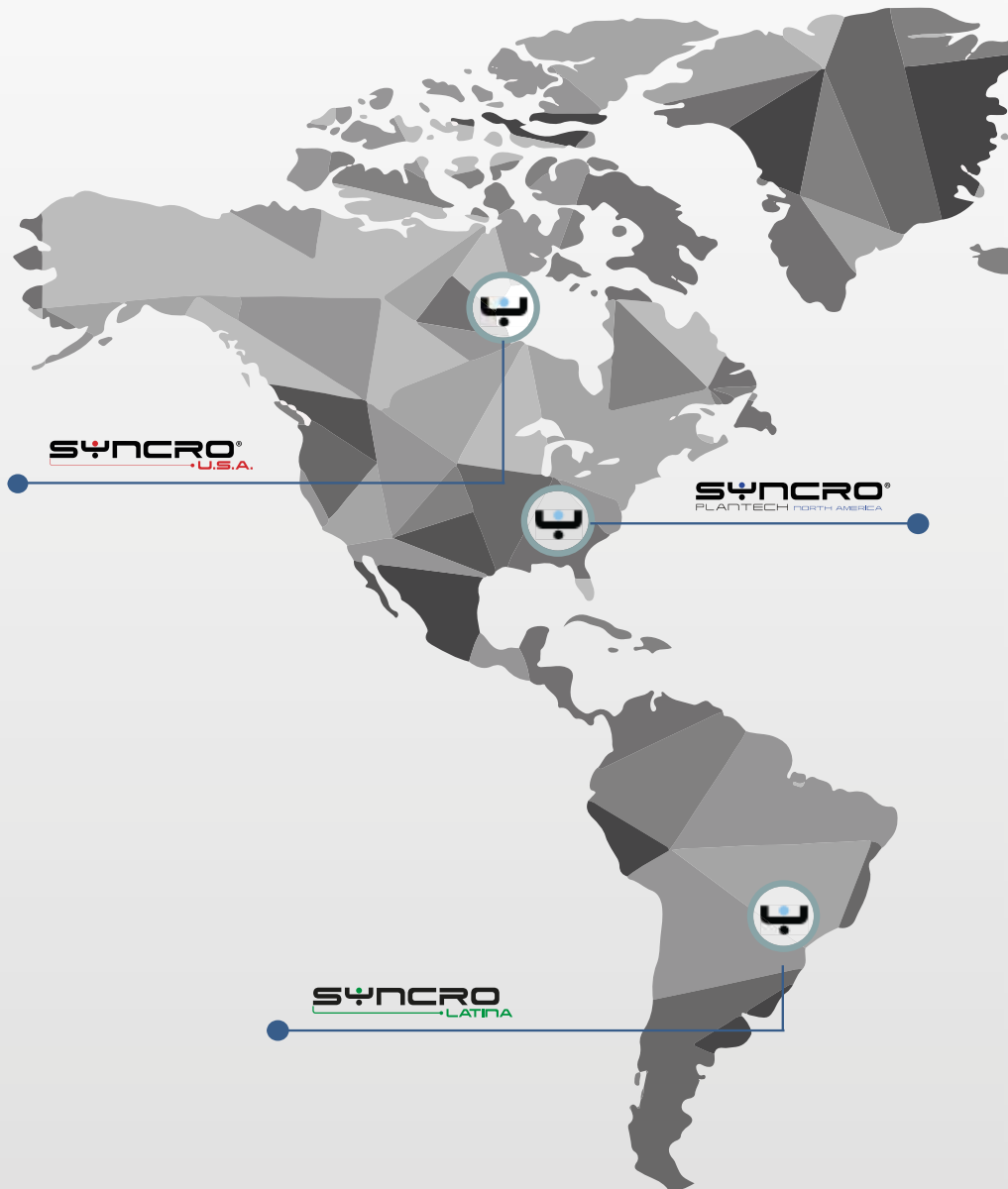
**OEUR.EX.MA**  
LAB & PILOT TECHNOLOGY — SYNCRO GROUP



**PRODUCT CATALOGUE**



<b>Syncro Group</b>	<b>6</b>
<b>EUR.EX.MA. About Us</b>	<b>7</b>
<b>BLOWN FILM LINES</b>	
<b>Microex Blown</b> .....	<b>8</b>
<b>MiniBlown</b> .....	<b>9</b>
<b>PilotBlown</b> .....	<b>10/11</b>
<b>CAST FILM LINES</b>	
<b>Microex Cast</b> .....	<b>12</b>
<b>MiniCast</b> .....	<b>13</b>
<b>FOIL/SHEET LINES</b>	
<b>MiniFoil</b> .....	<b>14/15</b>
<b>COMPOUND LINES</b>	
<b>Microex CP / CP TWIN</b> .....	<b>16</b>
<b>X-TR / X-TWIN</b> .....	<b>17</b>
<b>3D PRINTING FILAMENT LINES</b>	
<b>Microex 3D</b> .....	<b>18</b>
<b>Mini3D</b> .....	<b>19</b>
<b>MELT SPINNING LINE</b>	
<b>Microex SP</b> .....	<b>20</b>
<b>INJECTION MOULDING LINE</b>	
<b>Microex MD</b> .....	<b>21</b>
<b>NONWOVEN</b>	
<b>SpunBond / MeltBlown 300</b> .....	<b>22</b>
<b>STANDALONE EQUIPMENT</b>	
<b>Mix DR1 e MIX10</b> .....	<b>23</b>
<b>HP Press 150/400</b> .....	<b>23</b>
<b>EUR.EX.LAB</b>	
<b>Welcome to our Test Center</b> .....	<b>24/25</b>



# SYNCR0 GROUP

SYNCR0 srl  
Viale dell'Industria, 19  
21052 Busto Arsizio (VA)  
Phone +39.0331.677716  
Fax +39.0331.326581  
Web [www.syncro-group.com](http://www.syncro-group.com)  
E-mail [info@syncro-group.com](mailto:info@syncro-group.com)

## PLASMAC<sup>®</sup> MEMBER OF EREMA GROUP & SYNCR0 GROUP

PLASMAC srl  
Viale dell'Industria, 42  
21052 Busto Arsizio (VA)  
Phone +39.0331.341813  
Web [www.plasmac.it](http://www.plasmac.it)  
E-mail [info@plasmac.it](mailto:info@plasmac.it)

## SBDRY<sup>®</sup> SYNCR0 GROUP

SB-DRY srl  
Via R. Colpi 38 – 35010 Limena (PD), Italy  
Phone +39.0498.843047  
Web [www.sbplastics.it](http://www.sbplastics.it)  
E-mail [sales@sbplastics.it](mailto:sales@sbplastics.it)

## ACELABS<sup>®</sup> SYNCR0 GROUP

ACELABS srl  
Via Enrico Fermi 30, 20019  
Settimo Milanese (MI), Italy  
Phone +39 02 45506488  
Web [www.ancelabs.it](http://www.ancelabs.it)  
E-mail [info@ancelabs.it](mailto:info@ancelabs.it)

## SYNCR0<sup>®</sup> LATINA

SYNCR0 LATINA, LTDA  
Rua Paranapanema N° 248, Taboao,  
DiademaCP.09930-450, Sao Paulo-Brasil  
Phone +55.11.99625-3385  
Web [www.syncro-group.com](http://www.syncro-group.com)  
E-mail [latina@syncro-group.com](mailto:latina@syncro-group.com)

## SYNCR0<sup>®</sup> PLANTECH NORTH AMERICA

SYNCR0 NORTH AMERICA  
2450 Abutment Road Suite 4A  
Dalton, Georgia 30721  
Phone +1 706.618.1707  
Web [www.syncro-group.com](http://www.syncro-group.com)  
E-mail [paolo.gasparotto@syncro-group.com](mailto:paolo.gasparotto@syncro-group.com)

## SYNCR0<sup>®</sup> U.S.A.

SYNCR0 USA, LLC  
223 W. Depot Street Antioch, IL 60002  
Phone +1.888.778.9804  
Fax +1.847.556.6099  
Web [www.syncrousa.net](http://www.syncrousa.net)  
E-mail [sales@syncrousa.net](mailto:sales@syncrousa.net)



**PLANTECH·CST**  
SYNCRO GROUP

PLANTECH srl  
Via Luigi Einaudi, 25  
41032 Cavezzo (MO)  
Phone +39.0535.88214  
Web [www.syncro-group.com](http://www.syncro-group.com)

**EUR.EX.MA**  
LAB & PILOT TECHNOLOGY — SYNCRO GROUP

EUR.EX.MA srl  
Via Salvador Allende, 7. 21049  
Tradate (VA) - ITALIA  
Phone +39.0331.827633  
Web [www.eurexma.com](http://www.eurexma.com)  
E-mail [info@eurexma.com](mailto:info@eurexma.com)

**SYNCRO**  
PLANTECH INDIA

SYNCRPLANTECH INDIA PRIVATE LIMITED  
108, B Wing, Neminath -III, Ostwal empire, Boisar,  
401501, Dist Palghar, State - Maharashtra, INDIA  
Phone +91.937.230.1728  
Email [devendra@syncro-group.com](mailto:devendra@syncro-group.com)  
Web [www.syncro-group.com](http://www.syncro-group.com)

**SYNCRO**  
ASIA

SHINI-SYNCRO Extrusion control, INC  
No.1, Shini Road, Shixia, Dalang, Dongguan,  
Guangdong - China  
Phone +86.769.8267.7669  
Fax +86.769.8267.7663  
Web [www.shini-syncro.com](http://www.shini-syncro.com)  
E-mail [info@shini-syncro.com](mailto:info@shini-syncro.com)

**SYNCRO**  
ASIA

SYNCRO ASIA CO. LTD  
Room.01, 21/f, Prosper Commercial Building 9  
Yin Chong Street, Kowloon, Hongkong  
Web [www.syncroasia.com](http://www.syncroasia.com)  
E-mail [sales@syncroasia.com](mailto:sales@syncroasia.com)  
Phone +852-8120-9905  
Fax +852-8120-9912

**SYNCRO**  
JAPAN

SYNCRO JAPAN CO. LTD  
1-6-16-104 Iizuka Kawaguchi-shi  
Saitama-ken Japan  
Phone +81 048-212-2284  
Web [www.syncro.jp](http://www.syncro.jp)  
E-mail [info@syncro.jp](mailto:info@syncro.jp)



## ZERO WASTE MYSSION

The ambitious project of the group, which started a few years ago, is now identified with a clear message and a corporate mission called "ZERO WASTE MYSSION".

All the machines and systems developed by Syncro Group have the common objective to reduce industrial waste; going forward the new generation of products from Syncro Group will be identified with the "PLANET APPROVED" brand.

Intelligent management of raw materials, analysis and selection of post-consumer and post-industrial waste, recipe testing and optimization, production automation, in-line quality and post-industrial waste recycling identify the "ZERO WASTE MYSSION" of Syncro Group.

Syncro Group is a leading supplier of automation for extrusion, quality control systems, material handling and storage, defect measurement, recycling lines, laboratory and pilot lines through the expertise of the companies SYNCRO, PLASMAL, PLANTECH-CST, ACELABS, EUR.EX.MA. and SBDRY.

Syncro Group has 9 production plants as well as subsidiaries in the USA, Brazil, China, Japan and India.

YOUR GLOBAL LOCAL COMPANY



## ABOUT EUR.EX.MA.

**Eurotech Extrusion Machinery** offers, since 1999, Lab and Pilot Extrusion lines designed for material testing and small-scale industrial production. We meet the needs of laboratories and R&D departments of companies specialized in the manufacturing and processing of thermoplastic materials. Based in Italy, **EUR.EX.MA.** works with local and international customers looking for innovative solutions.



## ENGINEERING & DESIGN

Based on our technicians' expertise, EUR.EX.MA. combines engineering and design to pioneer solutions and applications in the field of **Plastic Processing Technology**. Our main goals are to achieve constant innovation and meet your needs through high-quality mechanical construction **Made in Italy**.



## TEST CENTER

At **EUR.EX.LAB** we have set up a dedicated 600 mq Showroom where you can find our benchtop products. We make you experience first-hand the processing and the quality of our lines. Here, you will have the chance to test your own materials and check the quality of the final product.



## CUSTOMER CARE

From product design to manufacturing right through to installation, training and after sales support, **EUR.EX.MA.** works closely with you in order to provide professional and fast assistance all over the world. We assist our customers throughout the choice of the desired line and solutions.





**BLOWN FILM** lines are designed to create samples of tubular film in different scales for packaging purpose. They are designed for the testing and quality control of different materials and polymers, virgin and recycled.

### MAIN FEATURES

- **Compatibility with all materials typically used for tubular film, such as PE, PP, PA, EVA and Biopolymers**
- **Customizable configuration for film width and thickness**
- **High quality air cooling rings available for different machine size**
- **Screw extraction in less than 5 minutes to speed up the cleaning process**
- **Control panel to save and export process data on external USB memory**

### MICROEX BLOWN

Microex Blown is the smallest version of the tubular film lines, equipped with MICROEX single-screw extruders. Available in monolayer, 3-layer, and 5-layer versions, this line is very compact and allows the quality control of recycled materials, color masterbatches, additives and biopolymers with low waste and energy consumption (3 KW).

TECHNICAL SPECIFICATION	MICROEX BLOWN		
	monolayer	3 layers	5 layers
Screws Ø	17,5 mm - special lab design		
Rolls Width	120 mm	250 mm	250 mm
Layflat Max	80 mm	150 mm	150 mm
Thickness Range	20 - 100 µm	20 - 150 µm	20 - 150 µm
Throughput Max	1 kg/h	2 kg/h	3 kg/h





## MINIBLOWN

MiniBlown D20 and D25 are the monolayer lab versions that can be equipped with 20 or 25 mm Ø extruders. This line is specially used to test masterbatches and color formulations or to produce small batches.

TECHNICAL SPECIFICATION	MINIBLOWN	
	D20	D25
Screws Ø	20 mm	25 mm
Rolls Width	250 mm	380 mm
Layflat Max	200 mm	340 mm
Thickness Range	10 - 200 µm	
Throughput Max	5 kg/h	10 kg/h

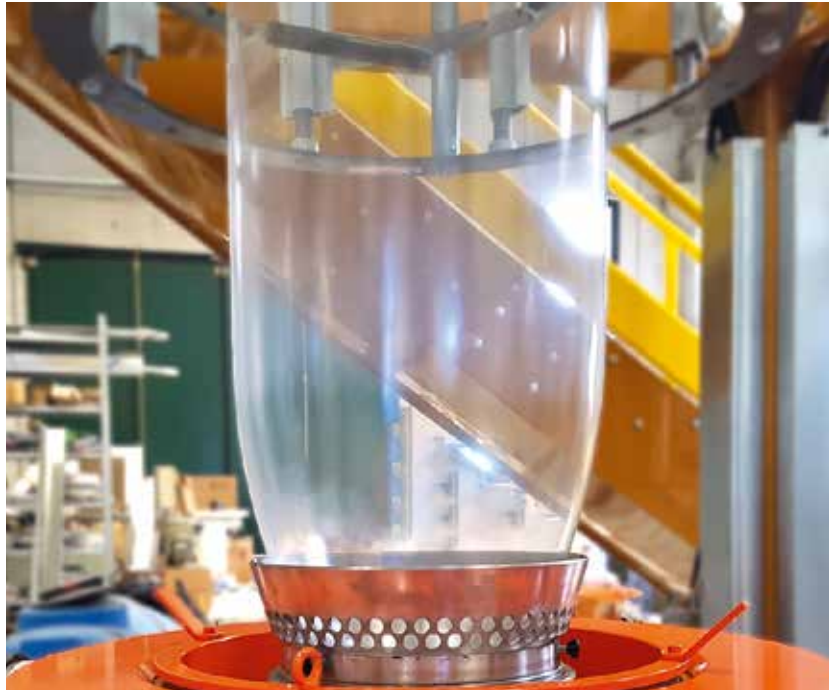
## MINIBLOWN - K

MiniBlown K3, K5, K7 are designed to test the compatibility of different polymers in a multilayer film structure. In particular, they can be used to test the properties of barrier film with a wide range of thicknesses.

TECHNICAL SPECIFICATION	MINIBLOWN - K		
	3 layers	5 layers	7 layers
Screws Ø	any combination of 20/25 mm		
Rolls Width	380 mm		
Layflat Max	340 mm		
Thickness Range	10 - 200 µm		

miniblown

Blown Film



### PILOTBLOWN D35

PilotBlown D35 is a monolayer model designed for small-scale production of tubular film. Depending on the desired layflat, it can be equipped with different dies and three different rolls width.

TECHNICAL SPECIFICATION	PILOTBLOWN
	D35
Screws Ø	35 mm
Rolls Width	450/600/800 mm
Layflat Max	400/550/750 mm
Thickness Range	10 - 200 µm
Throughput Max	25 kg/h





## PILOTBLOWN - K

PilotBlown K3, K5, K7 are multilayer lines designed to test the compatibility of different polymers or for small-scale production. Depending on the desired layflat, it can be equipped with different dies and three different rolls width.

TECHNICAL SPECIFICATION	PILOTBLOWN - K		
	3 layers	5 layers	7 layers
Screws Ø	any combination of 20/25/30/35 mm		
Rolls Width	450/600/800 mm		
Layflat Max	400/550/750 mm		
Thickness Range	10 - 200 µm		





# microex cast

**CAST FILM** lines are designed for the quality control of polymers, compounds, masterbatches, and recycled materials. The film samples can be used for mechanical properties testing, visual control of defects, processability of polymers and color matching.

## MAIN FEATURES

- **Compatibility with a wide variety of materials**
- **Customizable configuration for the film width and thickness**
- **Internal water circulation system for the thermoregulation of the rolls**
- **Longitudinal movement to setup the distance of die lips/chill roll**
- **Screw extraction in less than 5 minutes to speed up the cleaning process**
- **Control panel to save and export process data on external USB memory**

## MICROEX CAST

Microex Cast is the smallest version of the cast film lines, equipped with a MICROEX single-screw extruder. This line produce small samples of film with low waste and energy consumption (3 KW) and can be customized with EYES, a visual quality inspection system able to detect and categorize all the defects.

TECHNICAL SPECIFICATION	MICROEX CAST
	monolayer
Screw Ø	17,5 mm - special lab design
Layflat Max	100 mm
Thickness Range	20 - 800 µm
Throughput Max	1 kg/h
Chill Rolls	1

# Cast Film



minicast

## MINICAST

MiniCast 20, 25, 35 are the monolayer lab versions that can be equipped with 20, 25, 35 mm Ø extruders. This line is specially used to create cast film samples with different thickness and layflat. Equipped with one or two chill rolls.

TECHNICAL SPECIFICATION	MINICAST		
	20	25	35
Screws Ø	20 mm	25 mm	35 mm
Rolls Width	200 mm	200 mm	200/350/500 mm
Layflat Max	180 mm	180 mm	180/300/450 mm
Thickness Range	20 - 500 µm		
Throughput Max	7 kg/h	12 kg/h	30 kg/h

## MINICAST - K

MiniCast K3, K5, K7 are designed to test the compatibility of different polymers in a multilayer film structure. This line is specially used to create cast film samples with different thickness and layflat. Equipped with one or two chill rolls.

TECHNICAL SPECIFICATION	MINICAST - K		
	3 layers	5 layers	7 layers
Screws Ø	any combination of 20/25/30/35 mm		
Rolls Width	200/350/500 mm		
Layflat Max	180/300/450 mm		
Thickness Range	20 - 500 µm		

Cast Film



# minifoil

**FOIL/SHEET** lines are designed for the quality control of compounds and recycled materials. The samples can be used for mechanical properties testing, visual control of defects, processability of polymers and thermoforming.

## MAIN FEATURES

- **Compatibility with a wide variety of materials**
- **Variable thickness of the sheet**
- **Equipped with horizontal, vertical, or 45° calendering units**
- **The calendering unit can be composed of 2 or 3 chill rolls**
- **Internal water circulation system for the thermoregulation of the rolls**
- **Screw extraction in less than 5 minutes to speed up the cleaning process**
- **Control panel to save and export process data on external USB memory**

## MINIFOIL

MiniFoil 25, 35 are the monolayer lab versions of the foil/sheet lines that can be equipped with 25, 35 mm Ø extruders. This line is specially used to create sheet samples with different thickness and layflat.

TECHNICAL SPECIFICATION	MINIFOIL	
	25	35
Screws Ø	25 mm	35 mm
Rolls Width	200/350 mm	
Layflat Max	180/320 mm	
Thickness Range	0,5 - 2 mm	0,5 - 8 mm
Throughput Max	10 kg/h	30 kg/h

Foil/Sheet



## MINIFOIL - K

MiniFoil K3, K5, K7 are designed to test the compatibility of different polymers in a multilayer sheet structure. This line is specially used to create sheet samples with different thickness and layflat.

TECHNICAL SPECIFICATION	MINIFOIL - K		
	3 layers	5 layers	7 layers
Screws Ø	any combination of 20/25/30/35 mm		
Rolls Width	200/350/500 mm		
Layflat Max	180/320/450 mm		
Thickness Range	0,5 - 8 mm		



minifoil · K

Foil/Sheet



# microex CP

**COMPOUND** lines are designed to test different formulations of compounds or small batches of additives and color masterbatches with low cost and waste.

## MAIN FEATURES

- **Compatibility with a wide variety of materials, virgin or recycled**
- **Variable granules size, ranging from 1 to 3 mm Ø**
- **Single and twin screw extruder versions**
- **Different extruder size versions**
- **Strand Pelletizer / Die Face Cutting setup**
- **Control panel to save and export process data on external USB memory**

## MICROEX CP - CP TWIN

Microex CP and CP TWIN are the smallest versions of the compounding lines, equipped with MICROEX extruders. These models are very compact and allow the quality control of recycled materials, color masterbatches, additives and biopolymers with low waste and energy consumption (3 KW).

MICROEX CP TWIN, thanks to a co-rotating twin-screw extruder, achieves the optimal mixing efficiency of the polymers. It can also be equipped with a degassing port and interchangeable elements for the screws.

# Compound

TECHNICAL SPECIFICATION	CP	CP TWIN
	single	twin
Screw Ø	17,5 mm - special lab design	12 mm
Input Material Form	granules	powders
Processed Materials	TPU, TPE, PA, PET PE, PC, PMMA, PP	
Throughput Max	1 kg/h	





### X • TR

X-TR 20, 25, 35 are the single-screw lab versions for compounding that can be equipped with 20, 25, 35 mm Ø extruders. This line can be customized with a degassing port, screw coatings, and bimetallic barrels.

TECHNICAL SPECIFICATION	X • TR		
	20	25	35
Screw Ø	20 mm	25 mm	35 mm
L/D Ratio	30:1		
Processed Materials	all polymers		
Throughput Max	5 kg/h	12 kg/h	30 kg/h

### X • TWIN

X-TWIN S, M, L are the twin-screw lab versions for compounding that can be equipped with 22, 30, 35 mm Ø extruders. This line can be customized with side feeders to add any powder or liquid to the polymeric melt. It can also be equipped with degassing ports and interchangeable elements for the screws.

TECHNICAL SPECIFICATION	X • TWIN		
	S	M	L
Screws Ø	22 mm	30 mm	35 mm
L/D Ratio	40:1 / 44:1 / 48:1 / 52:1		
Processed Materials	all polymers		
Throughput Max	15 kg/h	45 kg/h	80 kg/h



**3D lines are used for the production of 3D printing filament. They can process standard materials such as ABS, PLA, PE, TPU or, if equipped with a double cooling system, several kinds of technopolymers.**

- MAIN FEATURES**
- **Different extruder size versions**
  - **Customizable configuration of the cooling system**
  - **Available versions for high temperature**
  - **In-line diameter measurement system available as optional**
  - **Screw extraction in less than 5 minutes to speed up the cleaning process**
  - **Control panel to save and export process data on external USB memory**

**MICROEX 3D - 3D PLUS**

Microex 3D and 3D PLUS are the smallest versions of 3D filament lines, equipped with a MICROEX single-screw extruder. These models can be used to test the characteristics and formulations of different materials before sending them to serial production with low waste and energy consumption (3 KW).

TECHNICAL SPECIFICATION	3D	3D PLUS
	single cooling	double cooling
Screw Ø	17,5 mm - special lab design	
Filament Ø	1,75 mm	
Throughput Max	1 kg/h	
Cooling System	Air	Air and Water



## MINI3D

Mini3D is employed for the production of filament for 3D printing. It is generally characterized by a standard extruder and a water cooling system. It can also be equipped with a high temperature extruder (450°C) and a double cooling system to process several kinds of technopolymers.

TECHNICAL SPECIFICATION	MINI3D
	single / double cooling
Screw Ø	25 mm
Filament Ø	1,75 mm
Throughput Max	10 kg/h
Cooling System	Air / Air and Water



mini3D

3D Printing Filament



# microex SP

**MELT SPINNING** line is designed for the creation of continuous filament and Full-Drawn Yarn samples used to test several kinds of polymers.

## MAIN FEATURES

- **Compatibility with PP, PA, PET, and elastomeric polymers**
- **Different sizes and shapes of the spinneret holes**
- **Quenching cabinet to equalize the air flow on all the surface**
- **Gear melt pump to dose the filaments**
- **Adjustable interlacing unit**
- **Two draw fields configuration**
- **10' Touch screen control panel to save and export process data on USB**

## MICROEX SP

Microex SP is the benchtop line designed to create small samples of Full-Drawn Yarn, equipped with a Microex single-screw extruder. This line can be used to test characteristics and formulations of different materials with low waste and energy consumption (3 KW). It is also equipped with a 10" control panel.

# Melt Spinning

TECHNICAL SPECIFICATION	SP
	full-drawn yarn
Screw Ø	17,5 mm - special lab design
Count	70 - 250 dtex
N. filaments	up to 40
Throughput Max	1 kg/h
Holes Shapes	trilobal, round, hollow, and others



**INJECTION MOULDING** line is designed for the testing of colors, polymers, additives and to prepare specimen for analitic purposes with low waste and energy consumption.

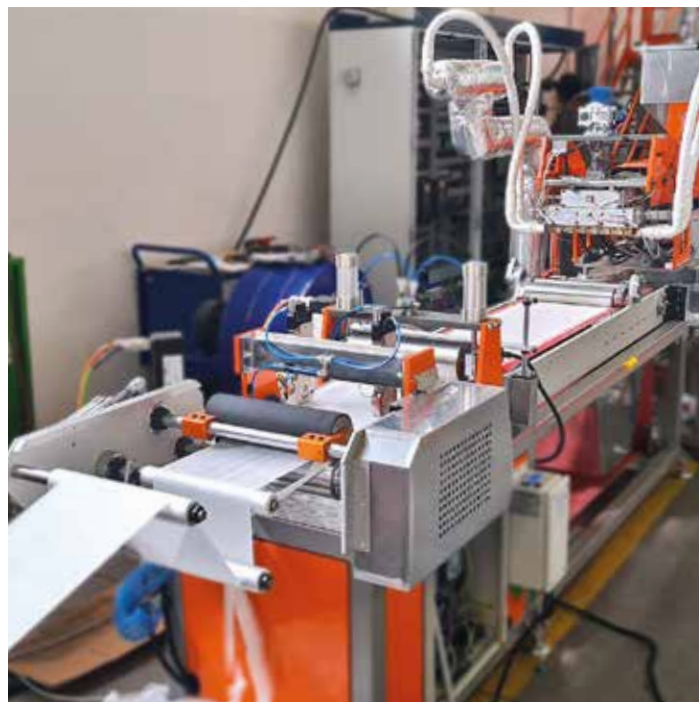
#### MAIN FEATURES

- **Compatibility with a wide variety of materials**
- **Fast mould change**
- **Fully electric machine**
- **Mould thermoregulation circuit**
- **Screw extraction in less than 5 minutes to speed up the cleaning process**
- **Control panel to save and export process data on external USB memory**

#### MICROEX MD

Microex MD is the benchtop line designed to produce mould samples. It is meant for the quality control of different materials, new and recycled and for testing various polymers with low waste and energy consumption (3 KW).

TECHNICAL SPECIFICATION	MD
	injection moulding
Screw	lab design
Volume	8 cm <sup>3</sup>
Clamping Force	2 ton
Opening Stroke	100 mm



**NONWOVEN** line is designed for the creation of samples of nonwoven used in many applications and industries including Automotive, Building Products, Filtration, Medical, and many others.

- MAIN FEATURES**
- High precision melt pumps
  - High quality spinning dies
  - Compatibility with PP, Polyesters and Biopolymers
  - Blow ducts system to cool the filaments to achieve desired properties
  - Screw extraction in less than 5 minutes to speed up the cleaning process
  - Control panel to save and export process data on external USB memory

**SPUNBOND 300 - MELTBLOWN 300**

SpunBond 300 and MeltBlown 300 are the monolayer lab versions for the production of nonwovens that can be equipped with a 25 mm Ø extruder. These lines can be used to test the compatibility of different polymers or for small-scale production.

TECHNICAL SPECIFICATION	SPUNBOND 300	MELTBLOWN 300
	nonwoven	
Screw Ø	25 mm	
Product Width	250 mm	
Thickness	20 - 80 g/m <sup>2</sup>	25 - 80 g/m <sup>2</sup>
Throughput Max	8 kg/h	
Processed Materials	PP, Polyesters and Biopolymers	only PP



**MIX DR1** is a lab mixer used to prepare melted polymer samples without heating.  
Capacity: 50-100 g  
Speed: 3000 rpm  
Power: 5,5 KW



**MIX 10** is a lab mixer used to prepare powders mixed samples with colours, additives with upper inlet for liquids. Available with cooling system.  
Power: 2,2 KW



**HP PRESS 150** and **HP PRESS 400** are hot plates pressing machines, available in the benchtop type (150x150 mm plate) or the standalone version (400 x 400 mm plate). Working with temperatures up to 400°, HP PRESS 400 can be equipped with a cooling system.





MELT  
SPINNING



CAST  
FILM

3D  
FILAMENT



At EUR.EX.LAB we have set up a dedicated 600 mq Showroom where you can find our benchtop products.

We make you experience first-hand the processing and the quality of our lines. Here, you will have the chance to test your own materials and check the quality of the final product.

**Compound Lines** (Single and Twin Screw)  
**Microex Cast**  
**Microex Blown**  
**Microex MD**



# COME AND VISIT OUR TEST CENTER

WHERE IDEAS MEET TECHNOLOGY

You will be supported by our expert technicians, who will advise you on the optimal solutions based on the type of application you wish to obtain.

To carry out the tests, you can make use of the laboratory and various equipment, such as the visual quality inspection system (EYES) and maintenance tools.



COMPOUND

BLOWN  
FILM



INJECTION  
MOULDING





PAMMATEC



**EUR.EX.MA**  
EUROTECH EXTRUSION MACHINERY SRL





**OEUR.EX.MA**  
LAB & PILOT TECHNOLOGY — SYNCRO GROUP

EDITION  
2023



EUR.EX.MA srl  
Via Salvador Allende, 7. 21049  
Tradate (VA) - ITALIA  
Phone +39.0331.827633  
Web [www.eurexma.com](http://www.eurexma.com)  
E-mail [info@eurexma.com](mailto:info@eurexma.com)