



Life Is On

**Schneider**  
Electric



# Committed to a sustainable future by rethinking plastic recycling

Euro Machinery and Schneider Electric benefit from the power of partnership and innovation with EM LabEx. The unique extruder helps plastic manufacturers recycle plastic and test bio-based alternatives to reduce overall plastic consumption and waste for a more sustainable industry.

Plastic is without doubt a useful component in many applications, but its widescale, global use presents some environmental challenges. Companies that handle and manufacture plastic are therefore implementing new processes and methods to incorporate recycled plastic as well as bioplastic.

To remain competitive, these companies must also address concerns about time, cost, quality, and energy consumption. The result is an urgent need for a proactive approach with new machinery and testing equipment.

And Euro Machinery - a global company located in the middle of Denmark - has developed what might be a game changer in the move towards green transition for the plastic industry: The EM LabEx.

Euro Machinery is committed to provide plastic processing equipment and machinery that can test and produce products from biobased, biodegradable and recycled plastic material.

The EM LabEx is a versatile lab extruder that can test a variety of material made from recycled plastic and new "plastic" materials with pellets made from a broad range of bio-based and biodegradable materials such as potato peel, corn, wood, cardboard, sugar beet and so on.

### Built with Schneider Electric

The extruder is the result of a close partnership with Schneider Electric, designed and built from end-to-end with products and software from Schneider Electric to provide users with easy control.

With the EM LabEx extruder, recyclers and film manufacturers can test and develop alternative materials and products easily and cost-effectively with minimum consumption of energy and raw materials.

*"Testing new materials on a large-scale production extruder and running test productions can take several days. Setting up the EM LabEx and producing the first film can be done in a few hours. With test results almost instantly evident, decision making becomes much faster,"* says Carlos de Sousa, Euro Machinery's managing director.

### An improved solution - and the numbers to prove it

The EM LabEx offers a drastically improved solution for testing materials - with the numbers to prove it:

- 96 percent less energy spent - only between 25 and 40 kW
- 95 percent less material required - 20 to 40 kilograms
- Half the manpower needed - one operator only
- 67 percent shorter production time - 3 to 6 hours

#### He explains:

*"Until now, to test new plastic material on a standard production extruder would need between 800 and 1.200 kW of energy, from 500 to 800 kilograms of polymer, two operators and between 6 and 20 working hours to produce plastic film for quality evaluation."*

### Commercially viable

Given its compact size and output, the lab extruder is mainly aimed at testing new, sustainable materials. But it is equally well suited for actual production in a smaller scale, thanks to its ease of use and ability to be reconfigured to new recipes quickly.

*"I believe we have succeeded in creating a commercially viable solution to address some of the major challenges. Our expectations to EM LabEx are high, and we are seeing a rapidly increasing demand,"* says Carlos de Sousa.

Choosing the right partner is paramount to Euro Machinery, both in terms of commercial considerations and the commitment to building a more sustainable world.

### The right partner

With Schneider Electric, Carlos de Sousa is confident that Euro Machinery is in a mutually beneficial and sustainable partnership on all accounts:

*"Schneider Electric and Euro Machinery are a perfect match. We share the same values regarding sustainability, quality, and customer service. The fact that Schneider Electric was named the world's most sustainable company in 2021 and most of their products are labeled Green Premium has only reinforced our belief that Schneider is the right partner for us."*

Green Premium is a Schneider Electric label for products with superior sustainable performance. The label guarantees that the products comply with current legislation and go beyond requirements in safety, sustainability, and energy efficiency.

### Quality and serviceability

Another key consideration for the engineers at Euro Machinery is the quality and serviceability of all components in the new extruder, Carlos de Sousa explains:

*"We sell to customers all over the world, so serviceability is crucial. Schneider Electric has the global presence to support us and our customers everywhere."*

*"Equally important is the quality and longevity of each component and, quite frankly, we did try out products from other manufacturers earlier in the EM LabEx' design phase. But in the end, Schneider Electric's products proved to be exactly what we needed - without a doubt."*

### Customer value: Partnership with Schneider Electric

- Shared focus on sustainability
- Majority of products labeled Green Premium - Schneider Electric's label for products with superior sustainable performance
- High-quality, long-lasting products
- Advanced software services for data capture and analysis, remote support, and cloud-based advisory for increased sustainability
- Unparalleled global service and support
- Assurance to customers that they have chosen sustainable automation: Schneider Electric was named world's most sustainable company in 2021 in Corporate Knights' Global 100 index

### About EURO MACHINERY

Euro Machinery specializes in buying and selling machines and equipment for plastic recycling and plastic film processing and conversion.

The company also operates as an OEM and has developed the groundbreaking EM LabEx extruder for easy and cost-efficient testing of recycled plastic and plastic alternatives.

With its headquarters in Denmark, Euro Machinery has offices in Portugal, Spain, Germany, and Poland. Euro Machinery serves customers all over the world.

### About SCHNEIDER ELECTRIC

Schneider's purpose is to empower all to make the most of our energy and resources, bridging progress and sustainability for all. We call this Life Is On. Our mission is to be your digital partner for Sustainability and Efficiency. We drive digital transformation by integrating world-leading process and energy technologies, end-point to cloud connecting products, controls, software and services, across the entire lifecycle, enabling integrated company management, for homes, buildings, data centers, infrastructure and industries. We are the most local of global companies. We are advocates of open standards and partnership ecosystems that are passionate about our shared Meaningful Purpose, Inclusive and Empowered values.

### Customer value: EM LabEx

- Significant savings on time (67 percent), energy (95 percent), materials (96 percent)
- Works with a broad range of bio-based and biodegradable products derived from potato peel, corn, wood, cardboard, sugar beet and many other sources
- Easy to use - can be operated by only one operator
- Rapid reconfiguration to new recipes
- Robust and reliable with global support (also remote) by Euro Machinery and Schneider Electric

### PRODUCT/SOLUTION FACTS

EM LabEx is built exclusively with Schneider Electric products, including

- HMI panels
- PLCs
- Variable speed drives
- Synchronous motors
- Circuit breakers
- Safety modules and switches
- etc.

