



INTAREMA®

Built to perform

CHOOSE THE NUMBER ONE.

Efficiency boost.

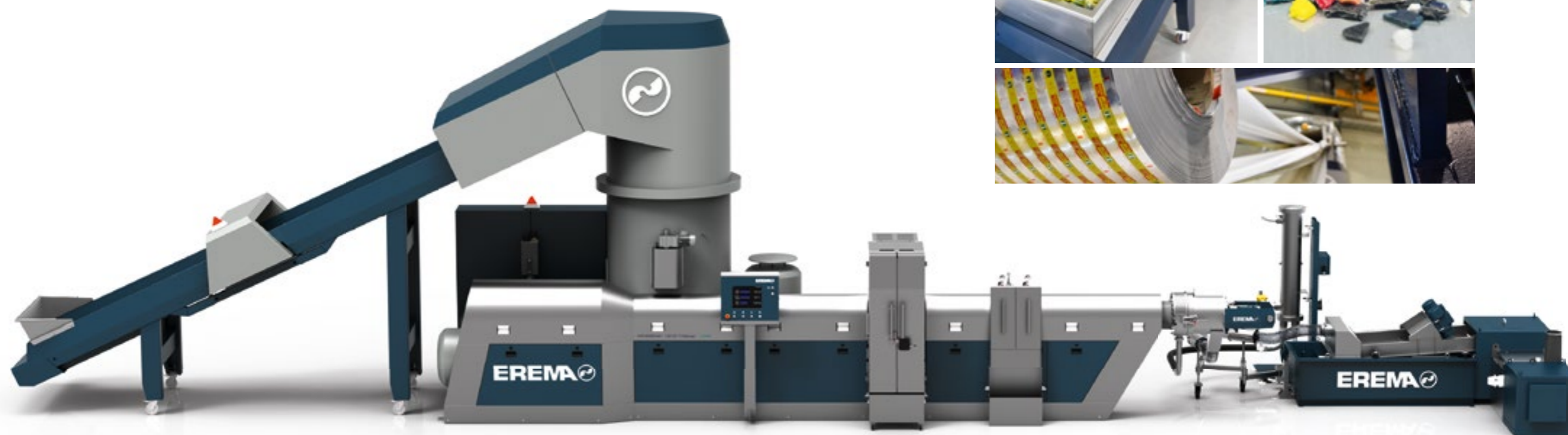
INTAREMA® – the new dimension in plastics recycling.

More recycled pellets per hour. In a grade which is second to none. Produced in a quality which is consistently high. Thanks to processes which are as stable as possible. From a remarkably broad spectrum of a wide variety of input materials. In short: **INTAREMA® sets the standard in production efficiency in plastics recycling.** And this is made possible by the revolutionary, patented Counter Current technology which changes the direction of rotation inside the preconditioning unit, plus other ingenious design enhancements. This gives you a whole host of benefits. Output, for example, stays at a consistently high level within a very broad temperature range in the preconditioning unit.

The system's operator guidance also sets a new standard. **The intelligent Smart Start concept makes it particularly easy for the operator** to use INTAREMA® in an efficient, safe and ergonomic way. The high degree of automation saves labour and stabilises the process at the same time. Another plus: thanks to enhanced ecoSAVE® the system handles energy even more carefully for you. And this enables you to reduce production costs considerably. Hour after hour.

Built to perform.

The new INTAREMA® generation of systems featuring **patented Counter Current technology** brings together top productivity, flexibility and extremely easy operation in an unparalleled way. Plus energy consumption is considerably lower.



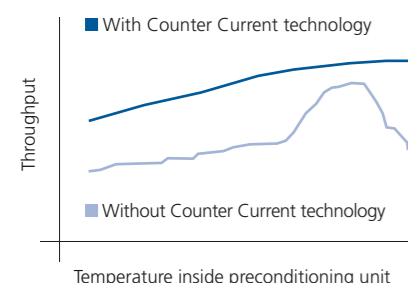
Counter Current

A groundbreaking innovation.

With EREMA's Counter Current technology development the preconditioning unit and extruder work more efficiently than ever before.

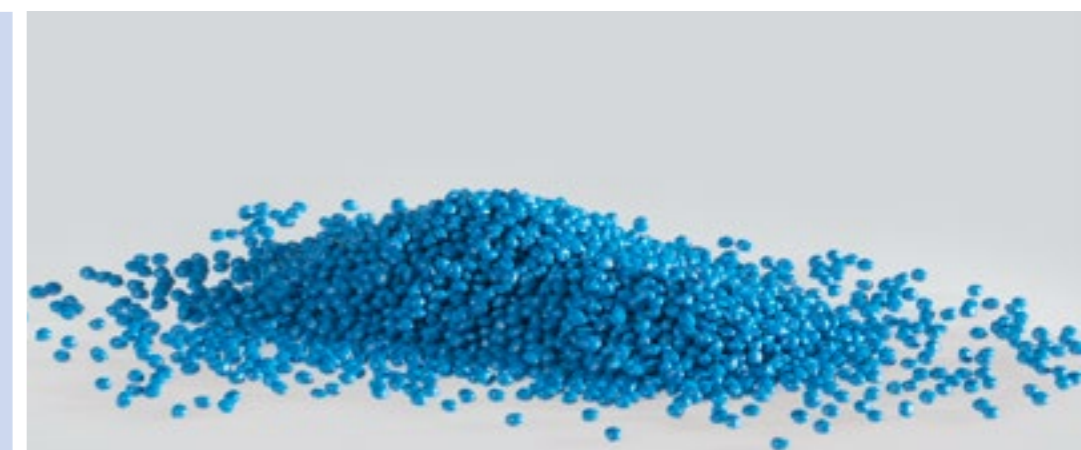
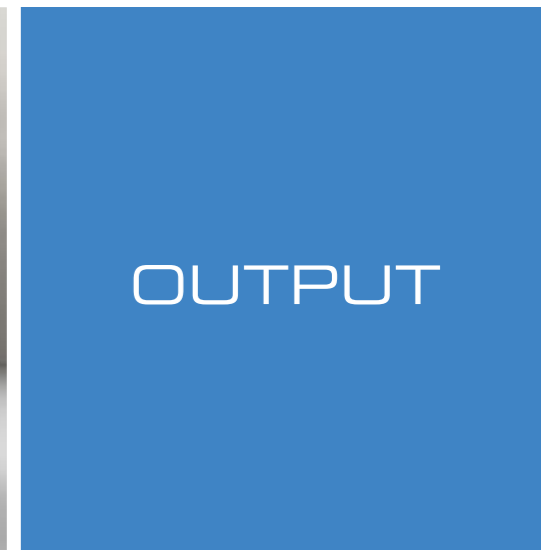
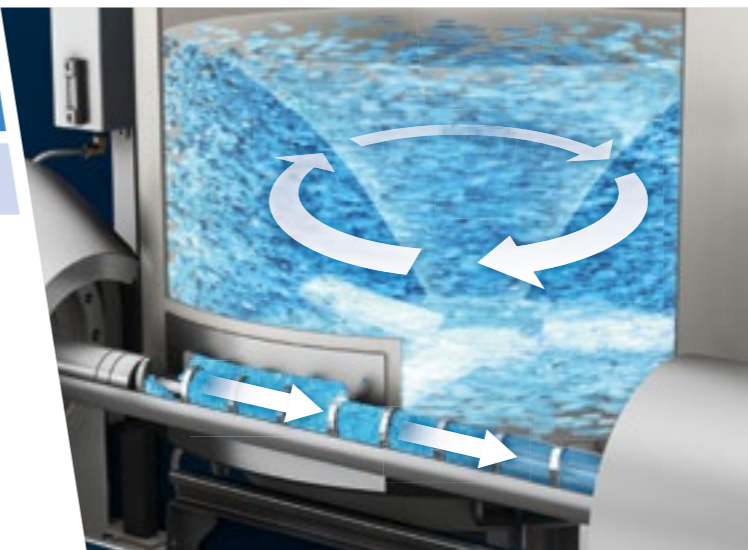
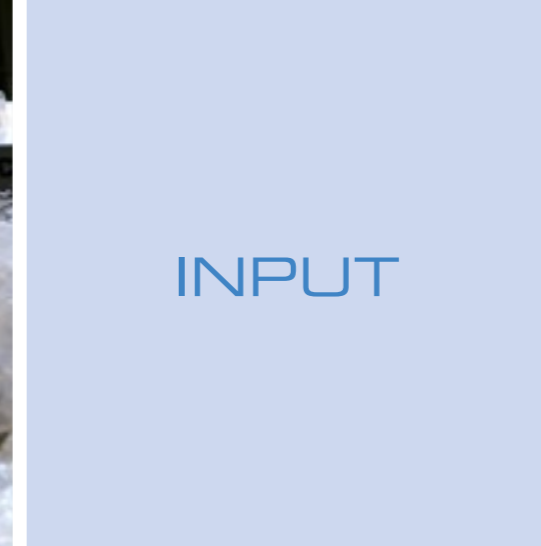
- **Highest process stability through improved material intake** ensures constantly high output over a considerably broader temperature range
- **Higher flexibility** and operational stability with a variety of materials
- **Increased throughputs** with the same plant size for more productivity

Cutting, homogenising, heating, drying, compacting, buffering and dosing – in a single stage. The dynamically controlled preconditioning unit is multitalented. It prepares the material ideally for the extruder and sets the course for consistently high end product quality already at the beginning of the recycling process.



In the past the material inside the preconditioning unit turned in the same direction as the extruder – forwards. The patented **Counter Current technology now changes the direction of rotation inside the preconditioning unit**: the plastic material thus moves in the opposite direction to that of the extruder screw.

A simple effect with a major impact. Because the relative speed of the material in the intake zone, i.e. when passing from the preconditioning unit to the extruder, increases to such an extent that the extruder acts in the same way as a sharp cutting edge which literally "slices up" the plastic. The result: the extruder handles more material in a shorter time. Thanks to the improved material intake and a whole host of additional, ingenious design modifications, your output stays at a consistently high level within a considerably broader temperature range in the preconditioning unit. **Fully in keeping with higher productivity, flexibility and reliability.**



Smart Start

Easy operation,
innovative automation.

Perfect pellet quality at the press of a button

Save labour, time and energy – the intelligent INTAREMA® Smart Start concept combines production efficiency and remarkably straightforward operation. With the accent on usability. And including a high-performance automation package and practical recipe management.



Smart benefits.

The intelligent Smart Start operating concept:

Smart Start | automation

- Stable processes, top recycled pellet quality and reduced labour & energy thanks to a high degree of automation through high-performance control technology
- Strong standard and upgrade control systems for special applications and for the perfect integration of industrial facilities

Smart Start | recipe management

- Ready to start faster – the right recipe for every application saved processing parameters can be loaded easily and conveniently from the recipe management system at the push of a button. This saves valuable preparation time and ensures reproducibility and constant processes
- Strong standard, extensive upgrade possibilities: the high standard level of recipe management can be enhanced even further through extensive options (re360 MES)

Smart Start | operation and data management

- Easy and convenient operation: few buttons, clearly structured handling, ultramodern, ergonomic touchscreen operator panel
- Strong standard, extensive upgrade possibilities: the high standard level of operating convenience, data transparency and data protection can be enhanced even further through extensive options (smart portal, CSV data storage, OPC interface with customer's MES, re360 MES)

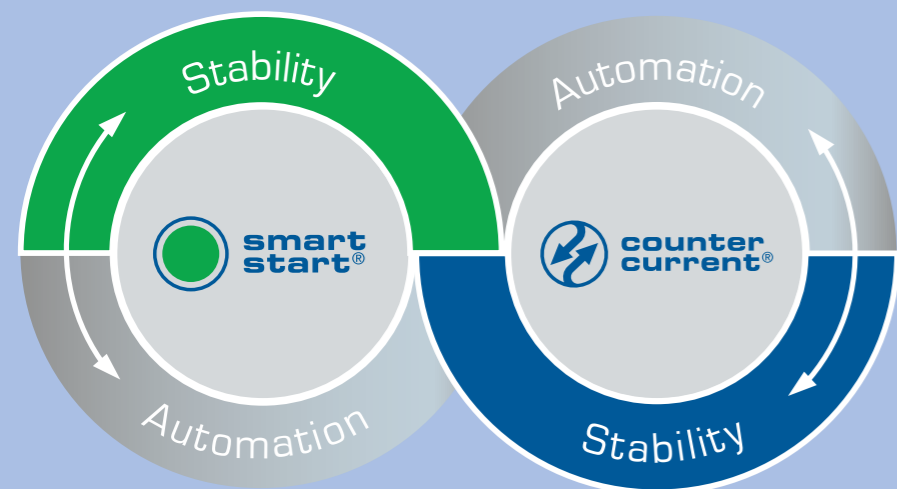


Smart Start

Stability for automation.
Automation for stability.



The more stable a process runs on the whole, the easier it is to automate it, too. With INTAREMA®, Counter Current elevates the recycling process to a remarkable level of stability already at the beginning, thus creating the ideal basis for automation. This is particularly effective thanks to the ingenious Smart Start control technology and increases process consistency even further. **Counter Current and Smart Start. A strong duo for stable quality.**



Standard control systems

High-performance automation. Standard.

Every individual INTAREMA® is already equipped with extensive, ultramodern control technology as a standard feature. The high degree of automation ensures the extremely efficient and consistent processing of a number of different applications.

Standard control system examples:

Start / stop control, automatic load detector, automatic feeding supervision of the preconditioning unit, automatic pelletiser speed control

Upgrade control systems

Customised for special applications and the integration of facilities

Building on the high standard, customised control system sets ensure the perfect interplay with other industrial facilities and, in the case of more demanding applications (such as foaming), consistently high end product quality and top productivity.

Use case inhouse recycling

Film production – recycling machine keeps pace with the main line

In film production it is normal for the main line to define the frequency and the inline recycling machine connected to it adapts accordingly. Thanks to intelligent control technology the INTAREMA® not only adapts quickly and precisely to the current feeding fluctuations of the main line, it also features another bonus: it recognises when no more edge trim is supplied from the film plant and switches itself automatically to the energy-saving standby mode. When edge trim production recommences the INTAREMA® starts up again and processes it to make high-quality pellets.

Use case post-consumer recycling

Integration of sorting and washing plants

Thanks to ultramodern control technology INTAREMA® not only compensates for differences in moisture stemming from the washing plant, it also recognises automatically when the washing plant is no longer supplying material. When this happens the recycling machine switches automatically to standby mode and restarts when material comes from the washing plant again.

Use case special applications

Foams and regrind

The use of ultramodern sensor technology ensures constantly high end product quality with materials which have varying bulk densities. These input materials include foams such as EPP, EPS and XPS plus regrind material.

Smart Start | operation and data management Standard & upgrades

■ Convenient operation
 ■ Transparency
Data overview / data analysis
 ■ Data traceability /
data protection

STANDARD



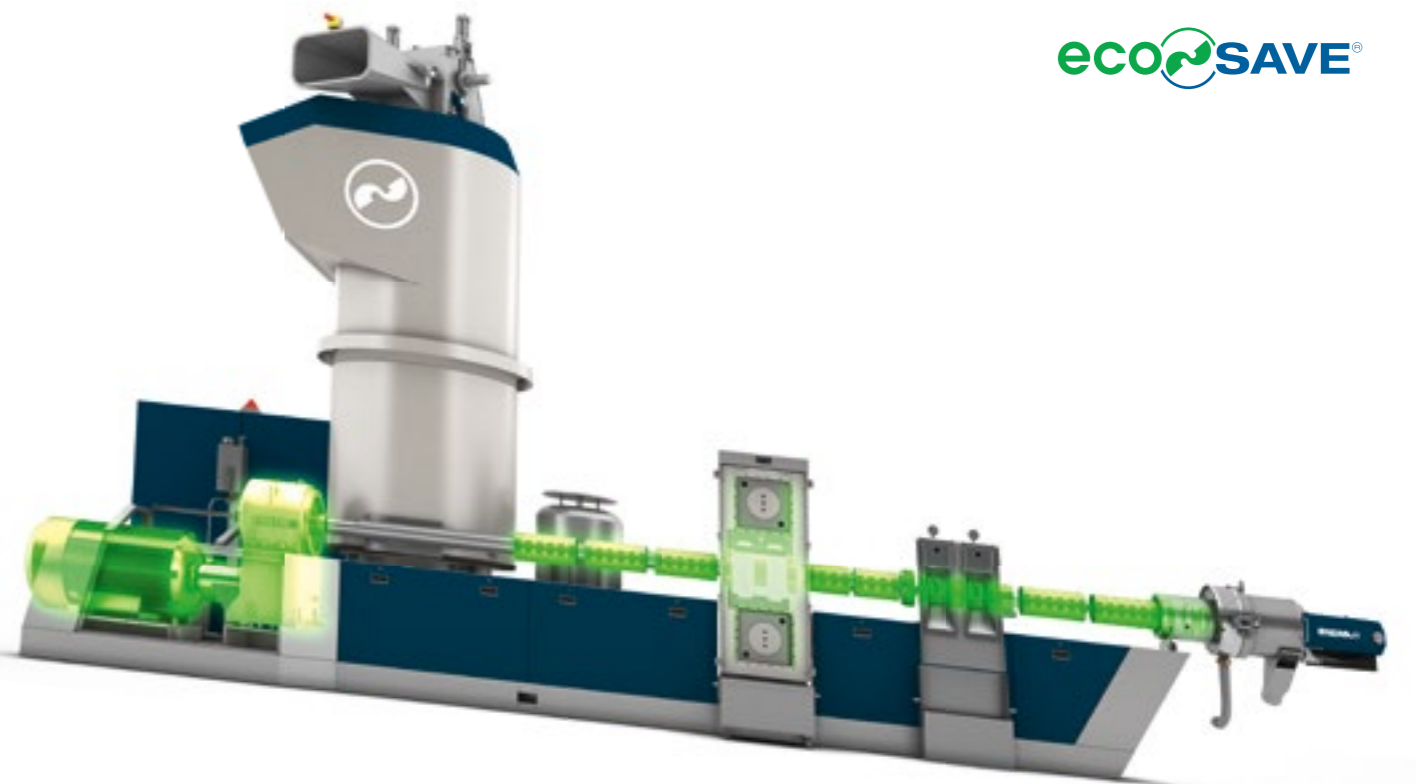
UPGRADES



* Smart portal Communication made possible between the machine and the "outside world": remote control of the system and services (e.g. remote maintenance/process engineering support and software updates) (optional)

** CSV Data storage in CSV format (optional)

*** OPC + customer's own MES OPC interface enables the integration of an MES provided by the customer (optional)



ecoSAVE® Energy saving champion

Save energy. Save costs.

INTAREMA® systems handle valuable energy resources in a particularly responsible way. With the enhanced ecoSAVE® you benefit from up to 12 % less energy consumption, reduced CO₂ emissions and lower production costs – thanks to an overall package of engineering and process-oriented measures. This includes the new and highly efficient direct drive of the INTAREMA® extruder screw, for example. Additionally, the practical energy display on your operating panel gives you a constant overview of energy consumption at all times, thus enabling you to take specific measures to optimise consumption

**Save energy the intelligent way.
A standard feature and at no extra cost with every INTAREMA®.**

Headquarters & Production Facilities

EREMA Engineering Recycling
 Maschinen und Anlagen Ges.m.b.H.
 Unterfeldstraße 3 / A-4052 Ansfelden / Austria
 Phone: +43 (0)732/31 90-0 / Fax: -23
 erema@erema.at / www.erema.at

Subsidiaries

EREMA NORTH AMERICA INC.
 23 Old Right Road - Unit#2 / Ipswich, MA 01938 / USA
 Phone: +1 978 356-3771 / Fax: -9003
 erema@erema.net / www.erema.net

EREMA Shanghai Office
 Room 1009 / Tomson Financial Building
 710 Dong Fang Road / Pudong / Shanghai China (200122)
 Phone: +86 21 6876-6201, -6204 / Fax: -6203
 erema@erema.com.cn / www.erema.at

OOO EREMA
 Business Park "Rumyancevo", Building A, Entrance 4,
 4th floor, office 413A / 2, 142784 Moscow, Russia
 Phone: +7 495 9848839
 Fax: +43 732 3190-71

More questions?**We would be pleased to answer them!**

Your EREMA advisor will be pleased to attend to your request personally and quickly. If you are interested in a demonstration or a test run with your specific material it would be a pleasure for us to make an appointment and welcome you to our EREMA Customer Centre at the headquarters in Ansfelden, near Linz in Austria.

We look forward to seeing you at EREMA!

For worldwide representatives please visit www.erema.at

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