

EN/US



# ISEC

INTEGRATED SHREDDER EXTRUDER COMBINATION

# ISEC

- · Up to 25% more throughput
- Lower recycled pellet costs per ton
- · Even easier to operate



### evolution of efficiency. ISEC evo.

Even more throughput, even easier to operate, even greater cost-efficiency. ISEC evo. The high-performance shredder-extruder combination from PURE LOOP **now gives you even more performance.** Thanks to an extensive redesign of the machine which features a set of intelligent process engineering enhancements. You can now use it to turn your valuable production waste into recycled plastic pellets with the best quality characteristics in an even gentler process. Powerful, safe and quiet.

Whether you have heavy, lightweight, large-volume or highly tear-resistant industrial or post-industrial materials, with the innovative **material all-rounder you have maximum flexibility at all times.** Including top energy efficiency. For more cost-efficiency, productivity and quality.

ISEC evo. Clean performance.

### Your benefits

# High-performance flexibility – ISEC evo adapts ideally to your scrap logistics.

- Efficient processing of many different plastic types and forms
- Discontinuous feeding of a wide variety of material forms no problem
- Multitude of feeding systems possible according to your requirements

#### **Economic benefits**

- Saves labour and time the system "looks after itself"
- · Negligible energy costs
- · Maximum machine availability
- · Minimum wear part costs
- · Fastest ROI

# High recycled pellet quality ensures top return-to-production rates

- · Minor optical change and low thermal stress
- · Minimum change to the polymer
- · Largest possible amount of recycled pellets can be returned to the production process

### Safety in focus

- · High-grade components
- · Top machine safety standard
- · Low noise emission
- · Integrated service modem
- · Service hotline





Single shaft shredder
Double feed ram
Triple flexibility

# Flexible material all-rounder

Whether it is solid parts or hollow bodies, roll material or punching scrap, lumps or trims: with the new ISEC evo you remain completely flexible.

The unique ifeed technology makes it possible with the combination of double feed ram and single-shaft shredder.









# From light to heavy. Because flexibility counts.

Thanks to the intelligent combination of the double feed ram system and single-shaft shredder the machine is able to **process a very broad spectrum** of different material types and forms: from heavy, free-flowing and self-feeding plastics to lightweight and large-volume materials. The high-performance ISEC evo also makes light work of processing extremely tear-resistant input material such as fibres and strapping.

And ISEC evo also proves its flexibility when it comes to the rhythm of the feeding. It is no problem for the system if it is fed discontinuously, for example, or with a variety of material forms directly after each other: the ingenious double feed ram system and single-shaft shredder adapt flexibly to your internal logistic requirements.

### Your benefits

### High flexibility

- · Efficient processing of many different material types and
- · System adapts flexibly to your desired feeding rhythm: discontinuous material input no problem

# istart



Easy operation. Saves time. Saves labour.

#### Operators of ISEC evo systems have got it good.

Because thanks to the innovative istart technology, operation is particularly easy and convenient. The machine is ready to operate within an extremely short time and then works its way through the prepared input material without any personnel required.

The high degree of automation ensures stable processes and constantly high recycled pellet quality as a result of, for example, the automatic feeding or forwarding control on the pelletiser motor. With these and a series of further istart features such as the practical automatic heating system or integrated recipe management you save considerable time and labour. The result: the system basically "looks after itself".

# isave



### Saving energy.

**ISEC evo stands for energy efficiency that pays off.** From the first minute. Because thanks to
intelligent isave technology, the machine works in
an extremely power-saving way, thus reducing your
running costs in production. Kilogram by kilogram.
Hour after hour.

With a complete package of design and process engineering measures, isave reduces the specific energy requirements of the machine. These include **high-quality energy-efficient components** such as premium motors.

With the **practical energy display** on your operating panel you have an overview of your current energy consumption at all times. This means that you can take specific measures to optimise consumption even further.

### Your benefits

- Machine ready to start within seconds
- Automation minimises labour requirements, ensures stable processes and quality
- Processing parameters for a variety of materials which have been saved are uploaded easily and conveniently from the recipe management system using the touchscreen
- Operators do not require any special knowledge
- In the unlikely event: integrated service modem with rapid access to service hotline

## Sensitive. From the beginning.

The more carefully the plastic is processed, the better the quality of the recycled pellets. The first steps in the recycling process are of particular importance here.

The target is: lowest material degradation.

The new ISEC evo meets this requirement profile in every respect because, thanks to the conical transition from the single-shaft shredder to the extruder, the material is compacted and oxygen is reduced. Working together with the double feed ram system, this technology also ensures continuous and uniform filling of the extruder. Completely in keeping with a high quality of your recycled pellets.

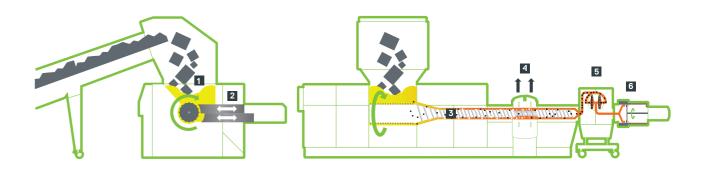
### Your benefits

- High pellet quality through sensitive processing
- High return rates of the recycled pellets to your production process
- · Stable throughput

### Your benefits

- Considerably lower specific energy consumption
- Saving energy means saving production costs
- Reduced CO<sub>2</sub> emissions: an important contribution to environmental protection

### How it works.



1 Single-shaft shredder 2 Double feed ram system 5 Coaxially configured extruder 4 Degassing zone 5 Filter fully automatic and self-cleaning 6 Pelletising system



### ISEC evo.

## Thinking further flexibly.

ISEC evo adapts to your scrap logistics with a large portion of flexibility. This includes the intelligent ISEC evo technologies ifeed, istart and isave. And this also includes the fact that we take a **flexible approach to your waste management system**. In terms of efficient material input, for example. Because the less you have to handle your material between your production line and the recycling system, the lower the risk of contamination and consequently the higher the quality you can achieve for the recycled pellets.

### Inline solutions

- Direct link of your production line to the ISEC evo recycling system (e.g. blower system for edge trim)
- Fully automatic, continuous processing of your production scrap
- No intermediate storage, no additional material handling necessary

#### Offline solutions

- We adapt our standard designs of conveyor belt and roller intake to meet your individual requirements
- For example with conveyor belt extensions which make it possible to tip your production scrap collected in crates, cage boxes or octabins directly onto the conveyor belt with the forklift
- Minimal material manipulation, labour-saving and logistics-friendly feeding of the system

# Strong partner.

Safe and reliable.

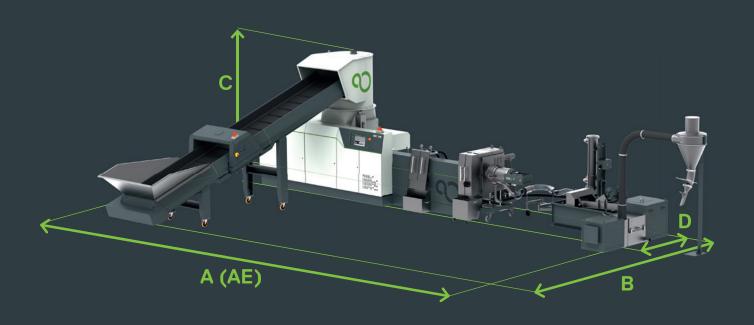
PURE LOOP is a sister company of EREMA. And EREMA is the global market leader in plastic recycling systems. As a customer of PURE LOOP you benefit from this strength. From decades of experience. From top-level technology know-how. And from the stability and innovative strength of the entire EREMA Group.

Within the EREMA Group PURE LOOP stands for the highly efficient recycling of clean production waste using shredder-extruder technology. For solutions which adapt perfectly and specifically to your scrap logistics. So you can return the largest possible amount of recycled pellets to your production cycle.









	Throughput*	Width incl. con- veyor belt (B)	Frame Width (D)	Length without degassing (A)	Length with double degassing (AE)	Height (C)
ISEC evo 002	150 - 300 lbs/h	24.0 ft	9.8 ft	22.6 ft	25.6 ft	9.8 ft
ISEC evo 102	280 - 500 lbs/h	24.0 ft	9.8 ft	22.6 ft	25.6 ft	9.8 ft
ISEC evo 202	370 - 660 lbs/h	24.0 ft	9.8 ft	22.6 ft	25.6 ft	9.8 ft
ISEC evo 252	620 - 880 lbs/h	24.0 ft	9.8 ft	24.2 ft	27.2 ft	9.8 ft
ISEC evo 302	840 - 1140 lbs/h	28.9 ft	10.5 ft	30.8 ft	34.4 ft	10.5 ft
ISEC evo 402	1000 - 1650 lbs/h	32.8 ft	12.1 ft	34.4 ft	38.7 ft	11.5 ft
ISEC evo 502	1300 - 2200 lbs/h	32.8 ft	12.1 ft	35.8 ft	41.0 ft	11.5 ft

<sup>\*</sup> Throughputs based on LDPE film processing, without degassing

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