EN Applications & Solutions

Working for a better **future**

Plastic Recycling Technologies

> Post Industrial Recycling
> PET Improvement
> Post Consumer Recycling

NGR®
PLASTIC RECYCLING TECHNOLOGIES

All action alters the **future**. It's on us to change it for the **better**.

– Josef Hochreiter – CEO –

WORK LIFE MISSION

Building recycling machines is much more than just a job. With our systems and plants we want to make a decisive difference: For you and for all future generations.

Is it just a job, or is it a calling?
At NGR, it is a calling!

As part of the NEXT GENERATION GROUP, we are proud to belong to a network of solution- and future-oriented companies. It is important to us to contribute to a better future with our products, to give our best every day and to continue to improve.
We are happy to invest in this development: after all, a company is only as good as its employees. And people become as good as the company encourages and challenges them to be. Our team works as a family in which everyone should feel that they are in good hands. Growing together, finding ever more efficient solutions for a future worth living – and having fun at the same time – is a working atmosphere that can only be found at NGR.

Post Industrial Recycling (PIR)

Residual waste materials created by the industrial production of plastic products are a high-quality and valuable raw material. To ensure that they can be fed back into production, we build recycling machines with maximum technological sophistication to handle this task flawlessly. When building these machines, we focus primarily on economic and environmental sustainability. NGR solutions preserve the full value of the material between input and output (zero-waste production) in addition to minimizing labor and energy expenditure. The benefits speak for themselves.

PET Improvement (PET)

With P:REACT, a revolution in PET recycling has reached the market! It only takes a few minutes to take PET from industrial waste or post-consumer PET and turn it into food-safe rPET. This groundbreaking innovation, which makes rPET material safe for food packaging (FDA, EFSA), is also of high interest to fiber manufacturers. This is because the Liquid State Polycondensation (LSP) method developed specifically for P:REACT ensures removal of the spinning oils without residual products during plastic processing. The advanced P:REACT technology is providing us with definitive proof that plastic recycling goes hand-in-hand with a brighter future.

Post Consumer Recycling (PCR)

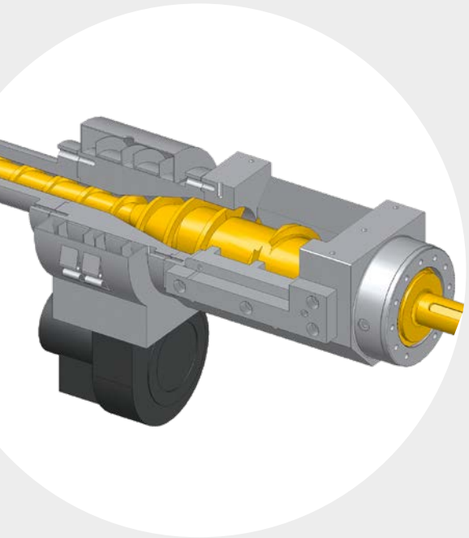
Nearly half of the plastic produced in the world gets thrown away after just one use. This waste could serve as a valuable resource if only we took advantage of it. Our one-of-a-kind recycling technologies are making crucial contributions to the solution. Through efficient material handling during the conversion process, minimized energy consumption and custom machine configurations, NGR makes sure that “one-way” plastics find their way back into the material cycle—giving the environment sustainable protection.

Our solutions **for all requirements**

Post Industrial Recycling

E:GRAN

CHOPPER-FEEDER-EXTRUDER COMBINATION



The compact repelletizing solution **for any type of film**

More information online!

A space-saving design, an energy-efficient drive and simple, intuitive operation. These are all features of **E:GRAN**, the re-processing technology for thermoplastic film edge trims and roll scraps. Whether it's being used as a stand-alone solution or integrated with a film production process, E:GRAN stands out for its ideal in-feed thanks to the innovative chopper/feeder design.

	up to [kg/h]*	up to [lbs/h]*
E:GRAN 50-12	50	110
E:GRAN 75-16	120	270

* Output values for LDPE according to NGR company standard, depending on material and quality. In addition, NGR provides all the equipment for conveying pellets such as blower, pipes, cyclones and much more.

AT A GLANCE

- **Effective film preparation**
- **Automatic adjustment of the extruder speed to fluctuating edge trim amounts**
- **Startup and shutdown by a single push button**
- **Clean, dust-free operation: The machine can even be installed in production halls**
- **One-step technology – without additional intermediate steps**

PROCESSING EXAMPLES MATERIALS

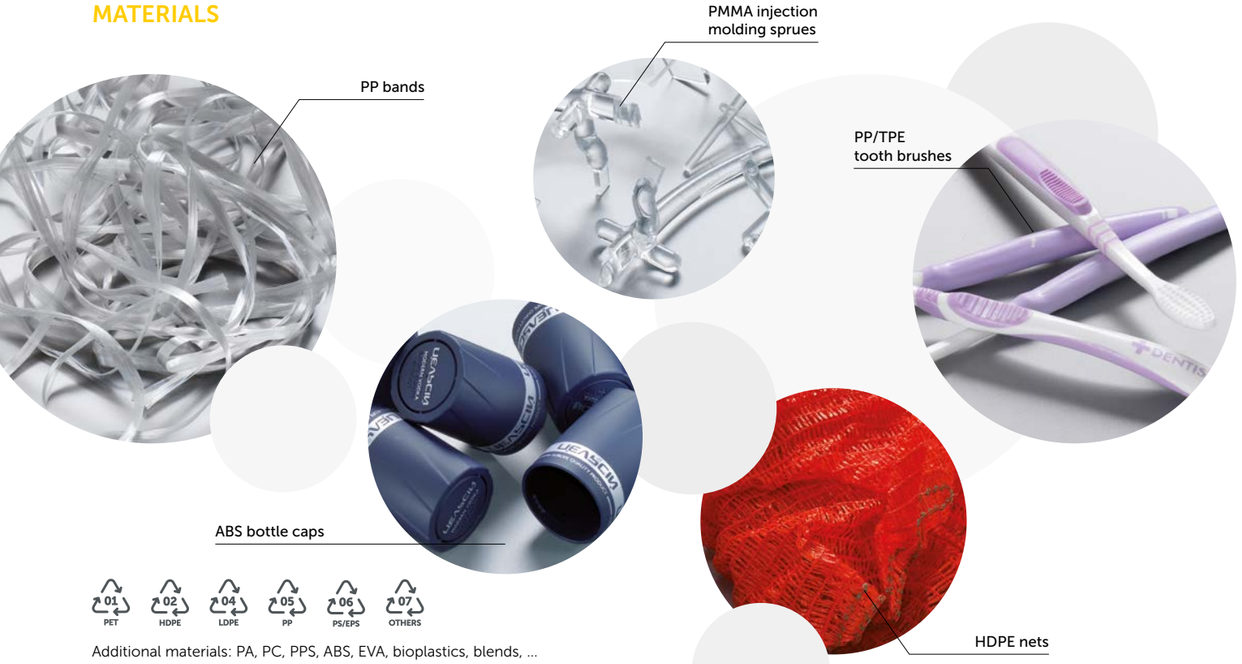
02 HDPE 04 LDPE 05 PP

Post Industrial Recycling

A:GRAN

SHREDDER-FEEDER-EXTRUDER COMBINATION

PROCESSING EXAMPLES MATERIALS



Additional materials: PA, PC, PPS, ABS, EVA, bioplastics, blends, ...

The multi-talented, **high performer**

More information online!

A:GRAN is the compact technology for scrap plastic products created in industrial processes of any type. The solution focuses on high performance in a compact space. Do you have production waste that is created intermittently? No problem! This versatile solution switches on and off quickly and easily, enabling you to work efficiently and meet the needs of the shop floor.

	up to [kg/h]*	up to [lbs/h]*
A:GRAN 65-40	100	200
A:GRAN 70-40	120	270

* Output values for LDPE according to NGR company standard, depending on material and quality. In addition, NGR provides all the equipment for conveying pellets such as blower, pipes, cyclones and much more.

AT A GLANCE

- **Processing industrial plastic waste of any kind**
- **Auto start and stop by a single push button**
- **Quick and easy start-up and shut-down at any time**
- **Minimum energy consumption**
- **Gentle shredding**

Post Industrial Recycling

S:GRAN

SHREDDER-FEEDER-EXTRUDER COMBINATION

PROCESSING EXAMPLES MATERIALS

Additional materials: PA, PC, PPS, ABS, EVA, bioplastics, blends, ...

The market leader for all types of **industrial plastic waste**

More information online!

S:GRAN is the perfect solution for processing scrap plastic materials of a variety of types, materials and shapes created by industrial processes. Even thick-walled scrap plastic materials as well as fibers and textiles can be processed without additional pre-shredding.

AT A GLANCE

- **Simple, high quality processing of post industrial waste of any type**
- **An evolution of our patented single-shaft shredder/extruder combination.**
- **Minimal operator interaction, one button, easy start-up and shut-down**
- **NXT design platform, flexible, modular construction with multiple options**
- **Faster ROI, and lower OpEx with the latest generation technology**

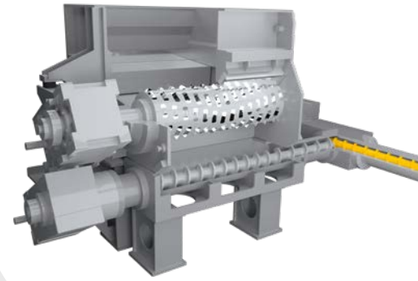
	up to [kg/h]*	up to [lbs/h]*
S:GRAN 65-50	250	550
S:GRAN 75-70	400	880
S:GRAN 85-70	500	1100
S:GRAN 95-70	600	1320
S:GRAN 105-100	700	1540
S:GRAN 125-100	900	1980

* Output values for LDPE according to NGR company standard, depending on material and quality. In addition, NGR provides all the equipment for conveying pellets such as blower, pipes, cyclones and much more.

Post Industrial Recycling

X:GRAN

SHREDDER-FEEDER-EXTRUDER COMBINATION



PROCESSING EXAMPLES MATERIALS

Additional materials: PA, PC, PPS, ABS, EVA, bioplastics, blends, ...

The power package for plastic waste **of all shapes and sizes**

More information online!

Robust and extremely capable – the power of the **X:GRAN** is clear to see. The X:GRAN solution does more than just process all types of plastics waste. It even handles bulky materials such as large bales and carpet pads – without any additional preliminary size reduction.

AT A GLANCE

- **Easy, material-conserving processing, even for difficult industrial plastic waste**
- **Auto start and stop by a single button**
- **Quick and easy start-up and shut-down at any time**
- **Small footprint saves space**
- **Maximum energy efficiency in the top performance segment**

	up to [kg/h]*	up to [lbs/h]*
X:GRAN 125-140	800	1760
X:GRAN 145-140	1100	2430
X:GRAN 165-180	1400	3090
X:GRAN 185-180	1800	3970
X:GRAN 205-180	2100	4410
X:GRAN 225-180	2500	5500

* Output values for LDPE according to NGR company standard, depending on material and quality. In addition, NGR provides all the equipment for conveying pellets such as blower, pipes, cyclones and much more.

PET Improvement

P:REACT

LSP: LIQUID STATE POLYCONDENSATION

PROCESSING EXAMPLES MATERIALS

The future of **PET recycling**

More information online!

P:REACT makes it possible to revolutionize the PET recycling process. It transforms PET waste and PET bottle flakes into food-grade recycled PET in minutes. Thanks to the advanced LSP (Liquid State Polycondensation) process, the PET melt phase is used to trigger the polycondensation of PET. The reaction speed in the PET melt is significantly higher than in the solid phase. The clear advantage: IV values, controlled with pinpoint accuracy, that can be even higher than those of the original starting material – depending entirely on your objectives.

AT A GLANCE

- **PET recycling at the highest level**
- **Continuous process with enormous process stability**
- **Fast iV build-up and automatic, continuous adjustment of iV values**
- **100% food grade quality with FDA and EFSA approval and brand owner confirmation**

	up to [kg/h]	up to [lbs/h]
P:REACT 600	700	1540
P:REACT 1200	1400	3080
P:REACT 2000	2200	4850
P:REACT 3000	3000	6610
P:REACT 4000	4000	8820

In addition, NGR provides all the equipment for conveying pellets such as blower, pipes, cyclones and much more.

The process steps, **perfect solutions for any application**

P:REACT

LSP: LIQUID STATE POLYCONDENSATION

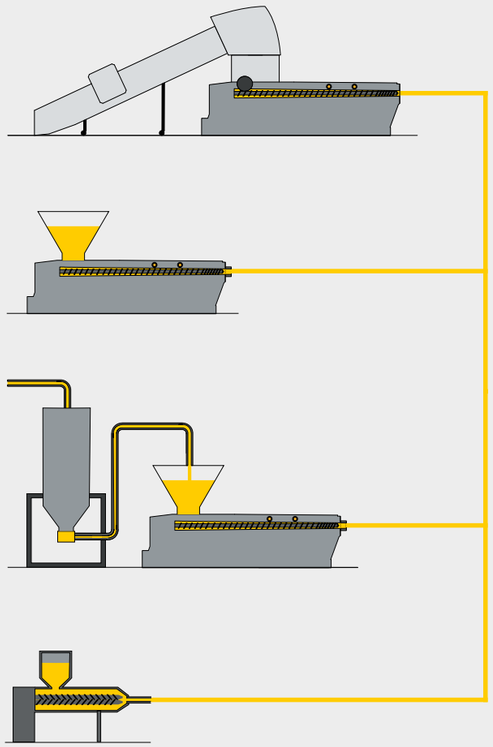
Melt preparation ▶ **Decontamination** ▶ **Follow-up process**

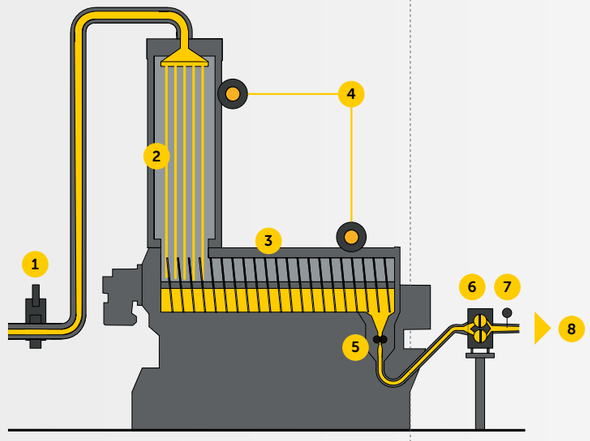
Shredding and extruding

Extrusion

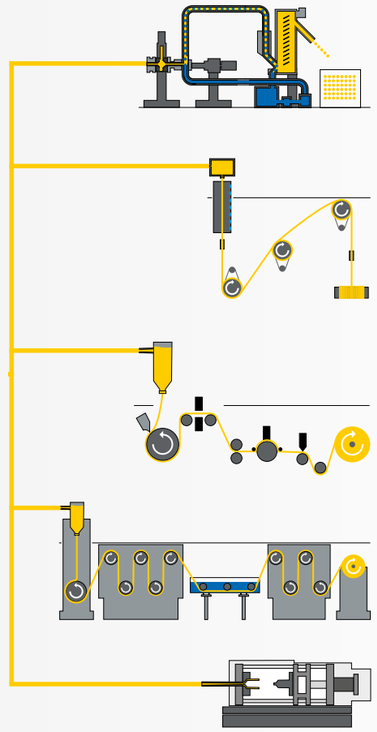
Drying and extruding

Extrusion and high-efficiency venting





1) Bypass
2) Vacuum container (melt reactor)
3) Horizontal drum
4) Discharge of decontaminated substances
5) Melt discharge pump
6) Filtration
7) Viscosity measurement
8) Transfer to a downstream production system



Pelletization unit

Spinning system

Film manufacturing

Manufacturing strapping

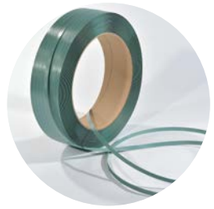
Preform

SEE ANIMATION

Pelletization unit

Spinning system

Film manufacturing



Manufacturing strapping

Preform

P:REACT

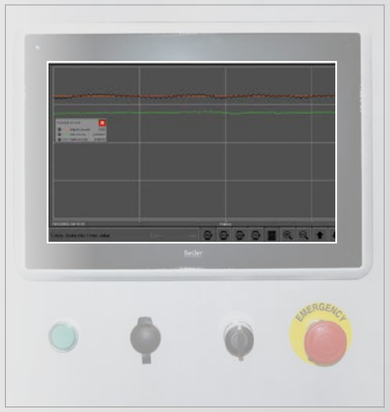
LSP: LIQUID STATE POLYCONDENSATION

PET Improvement

The next dimension of PET recycling **for the standards of tomorrow**

UNIQUE iV CONTROL

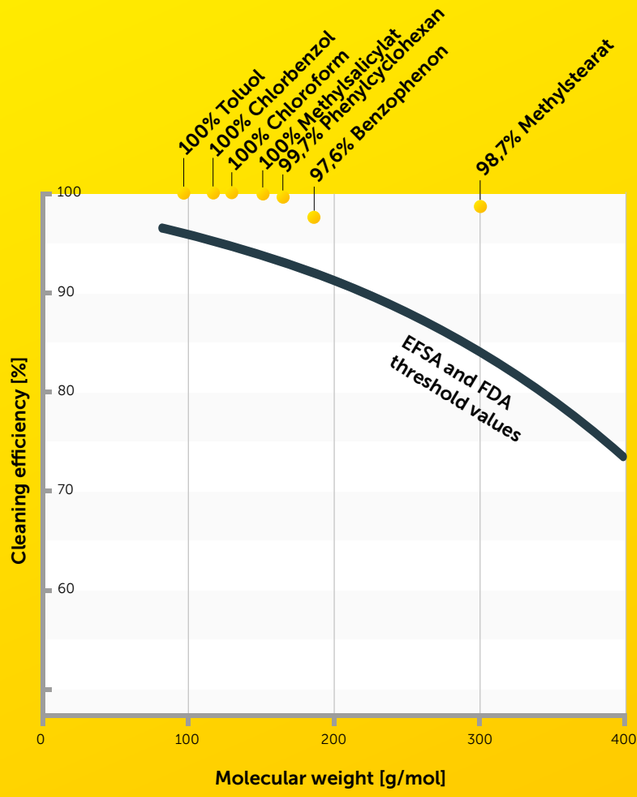
- **Permanent online measurement and control of the intrinsic viscosity (iV) of the emerging melt**
- **Adjustable setpoint of the iV target value**
- **Automatic control of the set iV through LSP vacuum control**



PROCESS STABILITY

- **Dust-free due to condensation in the melt phase**
- **Energy efficiency and flexibility in the mixing ratios and properties of the input materials**
- **PET-G is fully recyclable**

SEE ANIMATION



Before purification	After purification
Inpurities SSP	Remaining impurities in the core
Inpurities LSP	**Effective purification due to enormous surface area of the material strands**

FDA AND EFSA CONFIRM: VALUES FAR BELOW THE LIMITS

In addition to the high mobility of the molecules in the liquid phase, the enormous surface area exposure of the melt strands is another factor in effective cleaning. This means that the quality of the decontaminated material far exceeds the acceptable limits specified by EFSA and FDA.

Reliable decontamination performance, certified for **100% food contact**.

efsa European Food Safety Authority

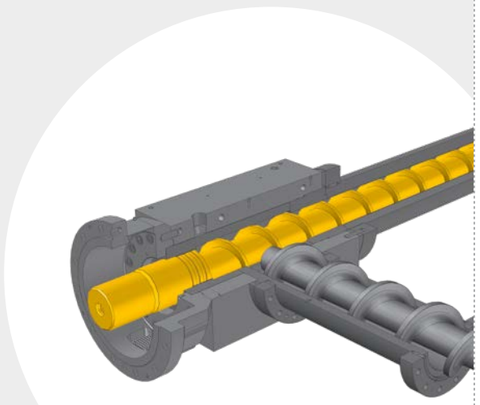
FDA

BRAND OWNER APPROVED

Post Consumer Recycling

F:GRAN

FEEDER-EXTRUDER COMBINATION



The efficiency star **for pre-shredded material**

More information online!

In recycling of ground up plastics, predominantly from plastic washing systems, there is no better choice than the **F:GRAN**. Flakes, even of varying size, are processed at a consistently high throughput rate. F:GRAN is distinguished by its efficient material handling. The flakes to be processed are continuously circulated by rotors in a storage silo measuring up to 30 m³. This prevents problems caused by bridging from the beginning.

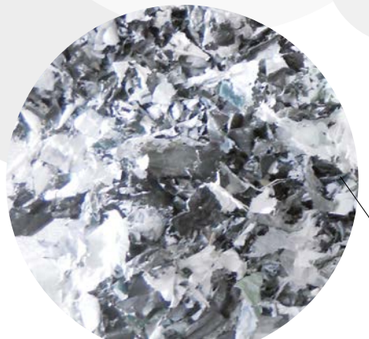
	up to [kg/h]*	up to [lbs/h]*
F:GRAN 105-20	600	1320
F:GRAN 125-20	800	1760
F:GRAN 145-20	1100	2430
F:GRAN 165-25	1400	3090
F:GRAN 185-25	1800	3970
F:GRAN 205-25	2100	4410
F:GRAN 225-25	2500	5510

* Output values for LDPE according to NGR company standard, depending on material and quality. In addition, NGR provides all the equipment for conveying pellets such as blower, pipes, cyclones and much more.

AT A GLANCE

- **Processing regrind and film flakes**
- **Auto start and stop by a single push button**
- **Simple, stable process**
- **Storage silo up to 30 m³ for material buffer**
- **Maximum ease of use, possibly operator free**

PROCESSING EXAMPLES MATERIALS



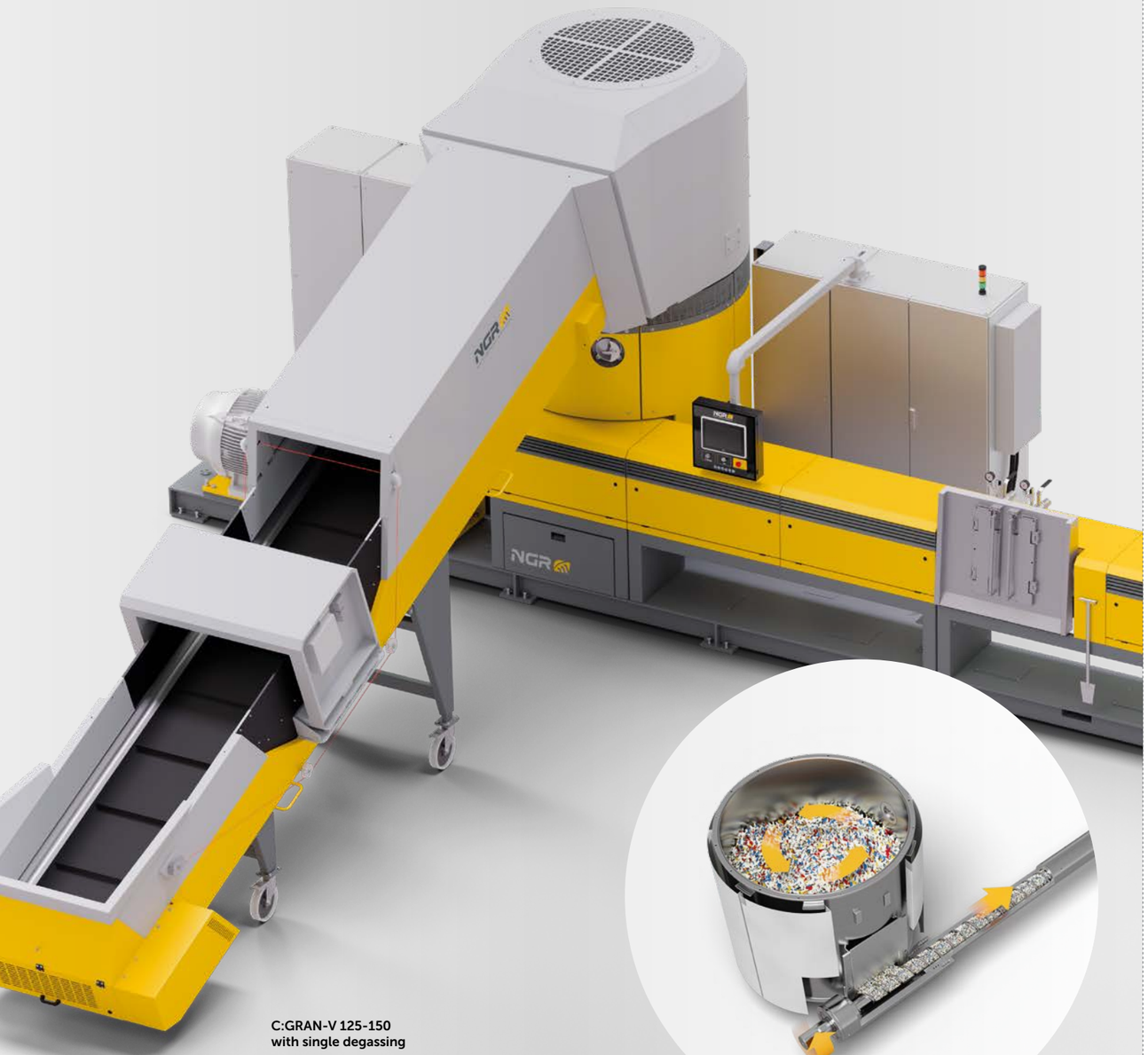
01 PET · 02 HDPE · 04 LDPE · 05 PP · 06 PS/EPS · 07 OTHERS

Additional materials: PC, PPS, ABS, blends, ...

Post Consumer Recycling

C:GRAN

CUTTER-COMPACTOR-EXTRUDER COMBINATION



C:GRAN-V 125-150
with single degassing

Modular design in the following versions:

C:GRAN (extruder without degassing)

C:GRAN-V (extruder equipped with degassing)

C:GRAN-CAS (with single-screw cascade incl. power venting section)

C:GRAN-CAS (with twin-screw cascade)

The cutting specialist **for wet materials**

More information online!

The **C:GRAN** is the ideal solution for materials with low bulk density and high input moisture. Flakes, regrind or films can be optimally processed thanks to the excellent pre-drying and compaction properties of the cutter compactor.

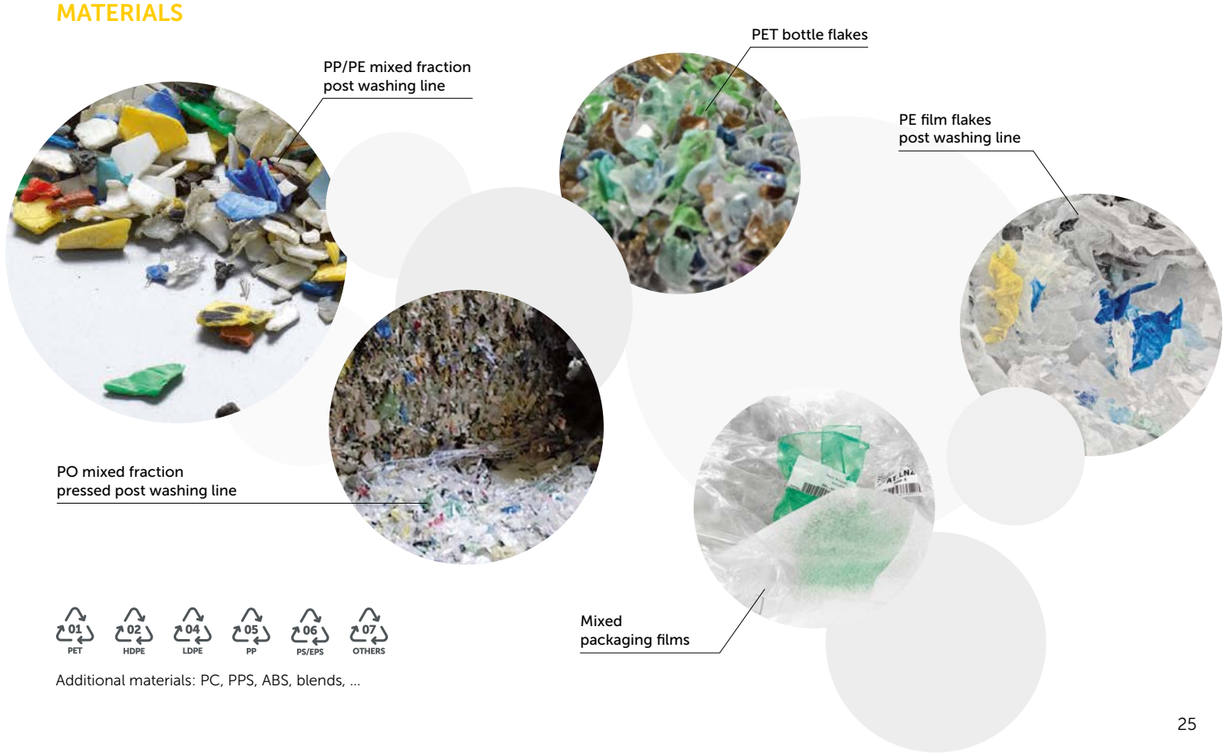
AT A GLANCE

- **Processing of flakes, regrind, films even with high residual moisture**
- **Fully automated operation thanks to Auto-Pilot**
- **In combination with cascade for the highest degassing requirements**
- **In combination with twin screw, "recycling & compounding" also possible in one step**

	up to [kg/h]*	up to [lbs/h]*
C:GRAN 085-130	550	1210
C:GRAN 105-150	800	1760
C:GRAN 125-150	1200	2650
C:GRAN 145-170	1500	3310
C:GRAN 165-170	1800	3970
C:GRAN 185-200	2200	4850
C:GRAN 205-200	2500	5510
C:GRAN 225-200	3000	6610

* Above mentioned throughputs are expected values. The actual achievable throughput depends on the viscosity of the polymer to be processed, the material properties, the input moisture, the type and quantity of any impurities present, the particle size, the degree of printing, the melt filtration, etc.

PROCESSING EXAMPLES MATERIALS



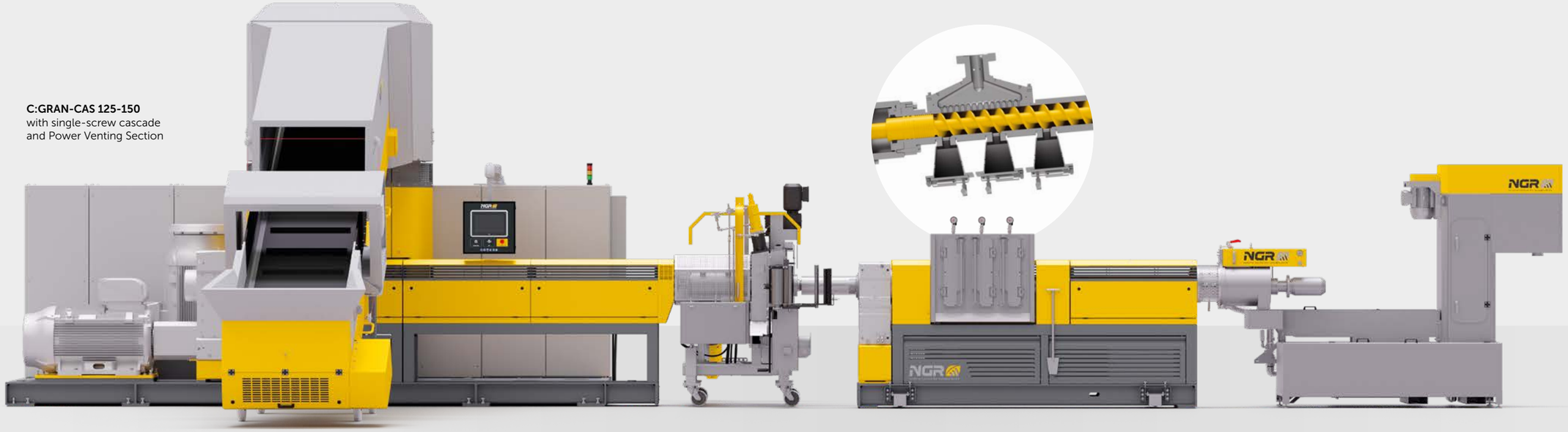
01 PET · 02 HDPE · 04 LDPE · 05 PP · 06 PS/EPS · 07 OTHERS

Additional materials: PC, PPS, ABS, blends, ...

Post Consumer Recycling

C:GRAN

CUTTER-COMPACTOR-EXTRUDER COMBINATION



C:GRAN-CAS 125-150
with single-screw cascade
and Power Venting Section

1 C:GRAN: Drying, melting, homogenization

2 Melt filter

3 Cascade extruder with Power Venting Section

4 Pelletizer

Safer and more efficient **thanks to AUTO-Pilot**

The AUTO-Pilot control system developed by NGR ensures maximum automation of the system and guarantees absolute operational reliability with optimum energy use. The system reacts independently to fluctuating input material qualities and automatically regulates the material preparation without the need for operator intervention. By automatically adjusting both the cutter-compactor and the extruder and pelletizing speeds to the changing conditions, the C:GRAN ensures very stable process conditions with consistent pellet quality.

AT A GLANCE

- **Fully automatic operation possible without operator intervention**
- **No more melt downs in the cutter/compactor**
- **Operation without water injection**
- **Controlled and therefore extremely efficient energy input**

More throughput and higher quality **thanks to the Power Venting Section**

Impurities are removed from the melt flow before degassing. The cascade downstream of the melt filtration is equipped with a special degassing zone, the Power Venting Section.
This guarantees continuous renewal of the melt surface and thus creates excellent conditions for removing volatile impurities from the melt.
This extremely efficient form of degassing meets the highest quality requirements in post-consumer recycling. Two independent extruder drives ensure the optimum operating point for the melting and degassing process via speed control. If required, a second filtration stage can also be installed between the cascade and pelletizing.

AT A GLANCE

- **Highest throughput values with a shorter processing unit**
- **Melt filtration before degassing**
- **Highest quality output material thanks to Power Venting Section**
- **Stable production without the risk of producing off-spec pellets**

PLASTICS RECYCLING **REIMAGINED**

CUSTOMIZED PERIPHERALS

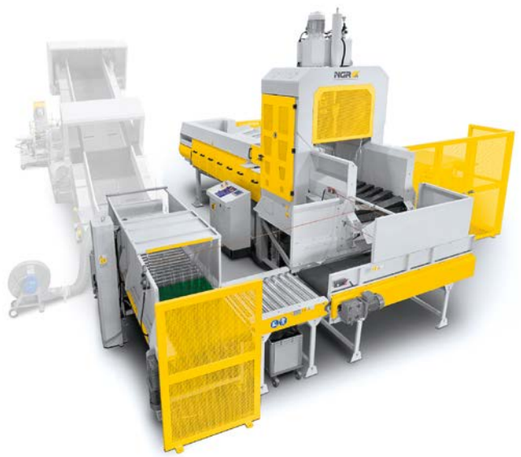
As varied as the properties of the starting materials are, the requirements of our customers are consequently no less varied regarding production sequences, process and quality of the output downstream of the recycling procedure. Because of this, our philosophy at NGR is to understand your needs across the entire process chain and to develop a plastics recycling solution that matches them optimally. It is our goal that in the future, you will work with the technology that is ideal for you and your requirements and achieve a perfect result.

BEST PRACTICE
FILM MANUFACTURING SPAIN

Starting material
Film rolls with a length of 3,500 mm and a diameter of 600 mm

Requirements
> Easy material handling
> De-coring
> Repelletizing (zero waste production without loss of material)

THE CUSTOMIZED NGR PERIPHERALS SOLUTION
After a conveying lift has been loaded with film rolls, a conveyor belt picks up the rolls and transports them to the hydraulic splitter, where they are manually de-cored. Any unwanted residual particles are removed in the wind tunnel.



BEST PRACTICE
INJECTION-MOLDED BOXES GERMANY

Starting material
HDPE boxes in sizes up to 1,200 × 1,000 × 600 mm

Requirements
> Easy material handling
> Size reduction
> Recycling (zero waste production without loss of material)

THE CUSTOMIZED NGR PERIPHERALS SOLUTION
After a conveyor belt has been loaded with containers and boxes, the process circulation is started at the central control unit. The materials are conveyed automatically through the cutting area, where they are cut into pieces approximately 200 × 200 mm in size. The pieces then drop onto the conveyor belt of the downstream S:GRAN (shredder-feeder-extruder combination).

BEST PRACTICE
PIPE MANUFACTURING BELGIUM

Starting material
HDPE/LDPE pipes with a length of 4,000 mm and a diameter of up to 400 mm

Requirements
> Easy material handling
> Size reduction
> Recycling (zero waste production without loss of material)

THE CUSTOMIZED NGR PERIPHERALS SOLUTION
After a charging hopper has been loaded with PE pipes with a length of 4,000 mm, the process circuit is started at the central control unit. The pipes are conveyed forwards hydraulically and cut into rings between 500 and 600 mm in size using a guillotine. Then they drop onto the conveyor belt of the downstream S:GRAN (shredder-feeder-extruder combination).

BEST PRACTICE
FILM MANUFACTURING FRANCE

Starting material
BOPET film rolls with a length of 600 mm and a diameter of 400 mm

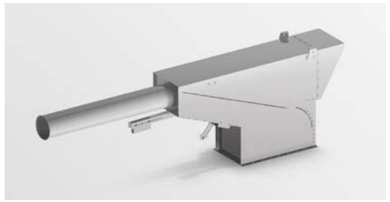
Requirements
> Automated material handling
> Low space requirement
> Recycling (zero waste production without loss of material)

THE CUSTOMIZED NGR PERIPHERALS SOLUTION
The machine is loaded automatically by an integrated lifting/tipping device for containers, thus eliminating the need for a conveyor belt and any manual labor.

Feed in & degassing
Accessories for all needs

FEED IN

Depending on the application and form of material, different feeding options are used. If necessary, dosing stations for additives can be installed downstream from the material shredding process.



Air seperator
The air separator is used in the production process to continuously recycle film edge trim, which is fed pneumatically into the machine. With "inline operation" further material handling is unnecessary, and the NGR recycling machine is now fully automated.

Roll feeder
With variable feed speed, roll scrap is treated in a process-controlled manner. The virtually unmanned machine is fed continuously. The roll feeder can be operated at the same time with other types of feeding (e.g. conveyor belt).

Conveyor belt
The conveyor belt transports the feed material through a metal detector into the feed hopper. The belt is stopped automatically, if metallic matter is detected to allow removal.

Dosing unit
Additives such as color pigments, $CaCo_3$, compatibilizers can be added to the material flow in a process-controlled manner. Dosing systems for pellet and/or powdered additives are available.

Conveyor screw
The conveyor screw transports pre-shredded feed material into the feed area of the system (e.g. into the cutter bin, silo or hopper).

DEGASSING

Depending on the degree of contamination and volatile substances in the melt flow, different modular degassing units are used. Homogeneous melt without entrapped gas is the result.

Single venting
Designed for light printing and low humidity. The vacuum degassing system includes a vacuum pump and is connected to two venting ports on the extruder.

Double venting
Designed for highly printed plastics, for example, on all surfaces and/or moist plastics.

High-performance vacuum
In addition to the modular venting unit, a combination of water ring pump and high-performance vacuum pump runs in order to increase the vacuum performance (e.g. PET processing).

Cascade extruder
After filtration, the cascade extruder is fed with melt and degassed with high efficiency over a maximum surface area in the subsequent Power Venting Section. The following metering area ensures efficient pressure buildup. The conveying capacity can be adjusted with the variable screw speed.

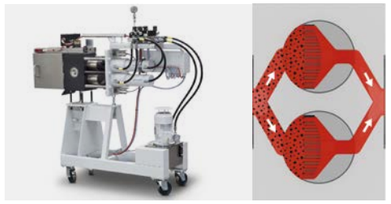
Vacuum pump with closed water circuit
Each venting combination can be equipped with a closed water circuit. The fresh water consumption at the vacuum pump is thereby reduced significantly.

Filter & pelletizing
Accessories for all needs

FILTER

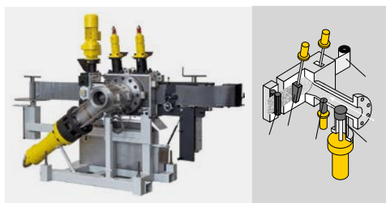
Depending on the application, a variety of filter systems is used. The melt is cleaned efficiently with low melt loss. Basically, the appropriate filter is selected to meet the customer requirements. Depending on the degree of contamination, the following variants are available as standard.

Manual screen changer
For clean, in-house production waste. Using the manual lever, two screens can be exchanged alternately to allow for cleaning of the melt stream. The process is discontinuous, because the machine must be shut down to change the screen.



Double-piston screen changer
For light impurities. The hydraulically operated double-piston screen changer allows continuous filtration of the melt. This allows a screen change without process shutdown.

Back-flush screen changer
For heavily contaminated materials. The hydraulically operated double-piston screen changer filters the melt in a process-controlled and continuous manner. The integrated backwash device automatically cleans the screens. The number of back-flushes and the related service life of the screens depend on the degree of contamination of the material.



Band melt filter
For high contamination at high throughput rates. With the lowest melt losses and low filter costs, fully automatic operation ensures excellent filtration results. It is used particularly for post-consumer plastics.

High-performance melt filter
The continuous melt filters in the ERF series are suitable for a wide range of moderate and highly contaminated polymers and provides a pressure constant operation, long screen lifes, very low melt losses and a compact design. By the permanently rotating filter drum foreign particles are being constantly and effectively removed, depending on the application ERF melt filters enables throughputs from 150 to 10,000 kg/h.

PELLETIZING

Due to the modular construction of the recycling systems, different pelletizer systems can be used in a process-controlled manner, depending on the plastic processed.

Hot-die waterring pelletizer (HD)
For thermoplastics with a higher viscosity. The melt exits through the wear-resistant die plate, and is cut by the pelletizer blades. The pellets cooled in the water ring are flushed out, dried in the centrifuge and discharged. By adjusting the blade pressure, pelletizer blades provide a long service life; replacement is quick and easy.

Strand pelletizer (SP)
For low-viscosity melts. The melt emerges from strand nozzles, is cooled in a water bath, dried by means of a fan and cut to the desired length in the pelletizer. The result is cylindrical, dust-free pellets with excellent mixing properties.

Automatic strand pelletizer (A-SP)
In addition to the benefits of the SP, the A-SP option offers the added convenience of fully automated start-up. The strands are conveyed automatically by a water slide to the pelletizer, and the pellets are dried in a centrifuge.

Hot die-air pelletizer
Specially designed for inline applications where water is not used. The melt exits through the wear-resistant die plate, and is cut by the pelletizer blades. The pellets are carried away in the air stream and cooled.

Underwater pelletizer (UWP)
For difficult-to-process (e.g. sticky) polymers or thermoplastics with a very high melt flow index. The melt emerges from the die plate and is cut by the pelletizer blades. The whole process takes place under water. In the centrifuge, the pellets are separated from the process water and dried.

Demonstration Center
Tech center for the strictest requirements

Every source material fed into the plastics recycling process requires intelligent, high-performance recycling technology and highly complex production processes in order to be returned to the market as a high-value, recycled material. Would you like to get to know our technologies as an interested party and future investor? Or work with our experts on your formulations and production processes as an existing customer? Then the NGR Demonstration Center is the right place for you to improve your performance!

POST INDUSTRIAL RECYCLING (PIR)
You can test your valuable production scrap material for future ZERO-WASTE production on five different recycling machines.

POST CONSUMER RECYCLING (PCR)
Put the C:GRAN to the test with your own post-consumer waste and get an idea of its enormous cleaning performance in our technical center!

PET IMPROVEMENT (PET)
Two P:REACT systems for all applications (e.g. Bottle2Bottle, fiber, film, ...) are operated in our own Demonstration Center. Convince yourself of the outstanding properties of LSP technology with your own material.

PUT US TO THE TEST!

Polymer Analytics Center
Analysis tools and methods

Our goal is your maximum output! That's why our in-house Analytics Center focuses on methods to increase efficiency in the areas of PCR, material identification and quality assessment.

- Thermoanalytical (DSC, TGA) and spectroscopic (IR) methods for material identification to check processability
- Viscosimetry (MFI), rheometer (IV) and other methods for assessing the quality of the input and output of the machine
- Further development of existing methods and development of new analysis techniques to solve even more complex problems, e.g. in the area of post-consumer recycling

360° SERVICE

Our service solutions – comprehensive support for you and your machines.

RETROFIT & REFURBISHMENT

Performance Enhancement through Modernization
Bring your machines up to date Upgrade and refurbish your machines with targeted improvements to sustainably increase productivity, throughput, and efficiency.

MACHINE & PROCESS ASSESSMENT

Optimization for Greater Efficiency
We analyze machine conditions and processes, eliminate bottlenecks, and enhance efficiency and output quality – ideal for systems of any age.

MAINTENANCE

Preventive and Ongoing Maintenance for Maximum Efficiency
Regular maintenance and analysis by our specialists minimize downtime, optimize operations, and maximize the lifespan of your system.

SPARE PARTS

Reliable Spare Parts Supply
Benefit from seamless access to original equipment parts throughout the lifetime of your machine – ensuring top performance and reliability.

TRAINING ACADEMY

Knowledge That Secures Your Success
On-site or NGR Factory based training provides practical expertise for maximum machine availability and production quality – including certification and a 5% discount on spare parts.

ADVISORY SERVICE

Your Questions, Our Solutions
Optimize your processes with our expert consulting. We provide answers before, during, and after installation regarding processing, functionality, and efficiency to enhance your business success.

INSTALLATION & START-UP

A Perfect Start for Maximum Performance
From installation to the first production run – we take care of connections, commissioning, and training your team to ensure seamless system operation.

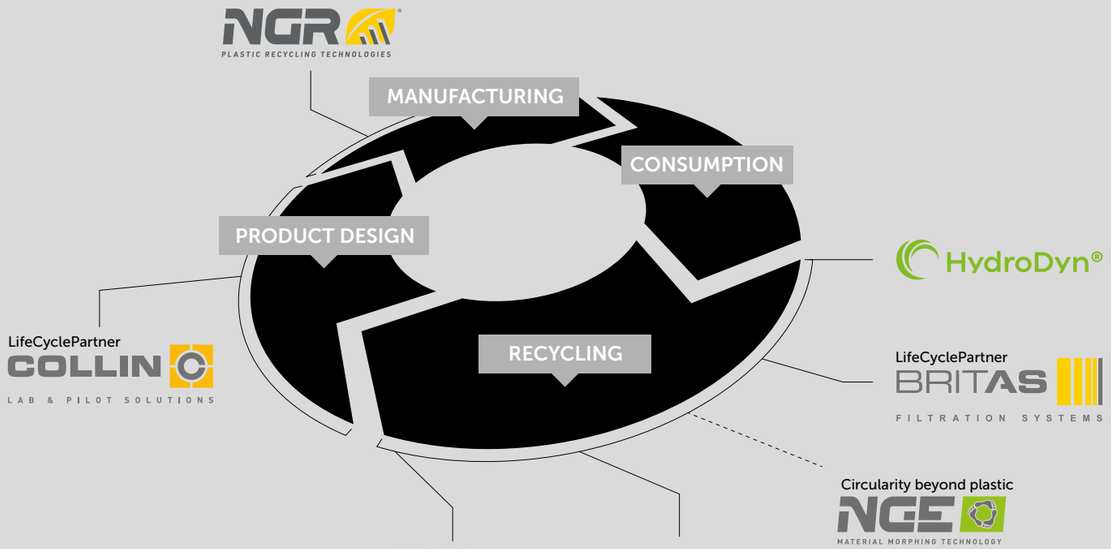
WARRANTY

Security for Your Investment
Protect yourself from unexpected costs with our extended warranty. Our maintenance experts maximize the lifespan of your machines.

SUPPORT

Immediate Assistance When You Need It
Receive expert support in real-time via remote assistance or directly on-site – fast, reliable, and tailored to your needs.

NEXT GENERATION GROUP –
Together for a better **future**



Together for a better future
In the NEXT GENERATION GROUP, we are convinced that we can achieve great things together. Our mission is simple: by joining forces, we want to fundamentally change the plastics recycling industry and create a better, sustainable future for ourselves and future generations.

As a strong collective, consisting of **Next Generation Recycling Machines and HydroDyn Recycling**, we use our combined expertise and decades of experience to develop fully integrated recycling solutions for our customers.

Rethinking plastics
In collaboration with our LifeCyclePartners Next Generation Analytics and SynCycle we are rethinking the entire life cycle of plastics – from product design to the recycling process.

With a clear focus on innovative and highly efficient technologies, we are committed to closing the loop, keeping plastics in the loop and reducing the global carbon footprint.

Circular economy beyond plastic
Next Generation Elements (NGE) is our expert in developing advanced recycling solutions for biogenic residues. By applying innovative pyrolysis technologies, NGE transforms organic waste materials into valuable secondary resources, contributing to a circular economy beyond plastics. With a strong commitment to sustainability, NGE expands the Next Generation Group's impact, offering solutions that help industries reduce waste and maximize resource efficiency.

Get to know our technologies and become part of our **#zerowaste** goal.

Together we create change.

NEXT GENERATION GROUP
PLASTIC LIFE UNIQUE SOLUTIONS

next-generation-group.com

SUCCESS NEEDS **A VISION**

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