

RECYCLING MACHINES SERIES

L:GRAN

65

UNIVERSALLY SUITABLE FOR ...

75

...thermoplastics

... such as film, edge trims, raffia, woven bags, etc.

...pellets output up to 230 kg/h (500 lbs/hr)



L:GRAN 65 V

QUALITY | INGENUOUS DESIGN

ONE-STEP Technology

The heart of all L:GRAN series machines is the "cutter-feeder-extruder combination". This allows three working steps at once:

- 1 Slow-running cutting blades shred any plastic waste without preliminary size reduction.
- 2 The shredded material is transported to the extruder immediately by a feeding screw.
- 3 Extrusion, and optionally venting take place in the extruder.

This is our "NGR ONE-STEP technology": a single operation, without the necessity of involving additional machines.

Economic operation

The L:GRAN machines cannot only be used as individual recycling machines with small footprint (off-line), but can also be fully implemented, e.g. into an automated cast film production plant, for the recycling of edge trims. The edge trims are blown into the extruder feeding zone by means of an air separator. L:GRAN is also able to convert film rolls, which can be fed into the system using a roller intake. Both material feeding systems can be used simultaneously for this purpose.

Optimized operating costs as a result of low energy consumption, minimized labor requirement and small footprint make for fast paybacks.



Uniform first class pellets quality

The unique design of the L:GRAN feed guarantees especially uniform processing and gentle material melting. This results in high material quality without any tangible loss of physical characteristics. In addition to high quality, the consistency of the regranulate allows it to be mixed homogeneously with original material. Therefore, indirectly, NGR is a guarantor for constant end product standards and the prevention of production rejects.

1

2

3



Reel feeder for materials on rolls

Air separator for trims

1

2

2

3

Designed and built for long-term profitability

Equipped with a smaller shredder than the S:GRAN 65 and 75 but having the same extruder the machine is very cost-efficient for in-line and off-line applications where less cutting performance is required.

Simple maintenance and long operating periods reduce down times to a minimum.

Conveyor belt for loose scrap

OPTIONS | FEATURES

OPTIONS

■ Conveyor

Stable design with high sidewalls and metal detector, e-drive, process controlled.

■ Reel feeder

Feed hopper with electrically powered intake rolls, process controlled.

■ Air separator feeding

Film edge trims can be carried to the L:GRAN using compressed air. The air separator, which is mounted above the feed opening, separates the transport air from the edge trims.

■ Additive dosing device

In the section between the shredder and the extruder intake, additives equaling to up to 20% of the material flow can be fed in (e.g. for the improvement of flow characteristics or material coloring), process controlled.

■ Venting (V)

Vacuum venting consists of two openings, where melt venting takes place using vacuum pumps.

■ Screen changer

Either discontinuous or continuous screen changer operated manually or hydraulically.

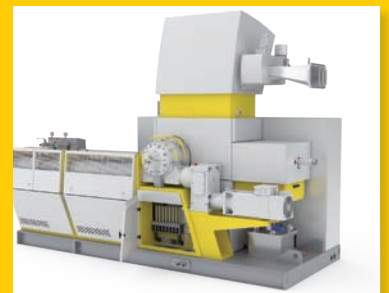
■ Pelletizing systems

As a result of the modular design of the L:GRAN, various process controlled pelletizing systems can be utilized on line with the plastic to be processed. Hot die pelletizing (HD) is generally used for the majority of polyolefins. Strand pelletizing (SP) or under-water pelletizing (UWP) are used for technical plastics such as PA, PET and also other polymers with a high melt flow index.

In addition, NGR also supplies the entire pellets transport equipment such as blowers, piping, cyclones, etc.



Cutter maintenance opening



Easy access



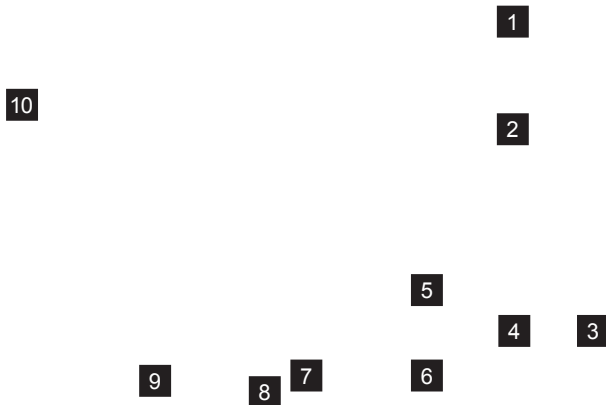
Operating terminal



Filter systems
Pelletizing

TECHNICAL FEATURES

- High overall process stability
- Advanced energy efficiency due to the use of the latest technology in drive units
- Superior and consistent output rates due to improved transfer of material from the integrated shredder into the extruder
- Small footprint with the compact design
- Effortless operation via standard 12" touch screen operator terminal
- Simple shredder access for easier clean-outs and faster material changeovers
- Streamlined adjustment of stationary shredder-knives
- Full automation featuring "single button" start-ups and shut-downs



- 1** Conveyor
- 2** Metal detector
- 3** Reel feeder
- 4** Cutter/fedder
- 5** Operating terminal
- 6** Extruder
- 7** Venting device
- 8** Screen changer
- 9** Hot die water ring pelletizer
- 10** Cyclone silo combination

type venting option			L:GRAN 65		L:GRAN 75	
			Basic	V	Basic	V
output of pellets *)		kg/h / lbs/hr	up to 150 / 330		up to 230 / 500	
extruder	screw diameter	mm / inch	65 / 2,56		75 / 2,95	
	screw length	L/D	26 37		26 37	
dimensions	A	m / inch	5,5 / 217 6,2 / 244		5,8 / 228 6,6 / 260	
	B	m / inch	3,3 / 130 4,0 / 158		3,6 / 142 4,4 / 173	
	C	m / inch	2,9 / 114		2,9 / 114	
	D	m / inch	6,5 / 256		6,5 / 256	
	E	m / inch	3,1 / 122		3,1 / 122	

*) output for LDPE according NGR standards, material and form.
Values are "up to"

standard execution:

Basic ... short screw without venting

additional option:

• V ... single vacuum venting

WE TAKE CARE OF YOUR PLASTIC WASTE

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