Organic Fertilizer & Digestate Granulation Lines

Ring-die pelletizing lines · 500 to 3,000 kg/h · Technical Data Sheet



Complete turnkey lines for converting **fermented manure** and **biogas-plant digestate** into dry, uniform **6 mm organic fertilizer pellets** rich in NPK. Each line covers the full process: drying, grinding, sterilization, homogenization, ring-die pelletizing, cooling, screening and Big-Bag packing with weighing, controlled by an integrated Industry 4.0 PLC & HMI system.

Range overview

	500 – 900 kg/h	900 – 1,500 kg/h	1,500 – 2,000 kg/h	2,000 – 3,000 kg/h
Pellet mill (Atlass series)	AMP-320V 2 × 30/37 kW	AMP-420V 2 × 45/55 kW	AMP-530V 2 × 55/75 kW	AMP-650V 2 × 75/90 kW
Rotary drum dryer	SPB-5	SPB-10	SPB-20	SPB-30
Hot-air furnace	KD 350 kW	KD 500 kW	KD 900 kW	KD 1300 kW
Stainless hammer mill AMC-650	22/30 kW	37/45 kW	45/55 kW	55/75 kW
Sterilizers	2 × 7 m³	2 × 13 m³	2 × 20 m³	2 × 25 m³
Pellet diameter	6 mm	6 mm	6 mm	6 mm
SKU	LGIO-500-600	LGIO-800-1000	LGIO-1300-1500	LGIO-2000-2500
Product page	View online	View online	View online	View online

LINE 1 OF 4 · SKU LGIO-500-600

Organic Fertilizer Granulation Line 500 – 900 kg/h · Ring Die



Parameter	Specification
Output capacity	**500 – 900 kg/h**
Raw material	Fermented manure and/or biogas digestate
Final product	6 mm organic fertilizer pellets (granules)
Pre-shredder	With 3 m³ tank
Dryer	Rotary drum dryer SPB-5, hot-air furnace KD 350 kW
Hammer mill	Stainless steel AMC-650 – 22/30 kW
Sterilization	Sterilizers 2 × 7 m³, with homogenization
Raw material homogenizing hopper	3.2 m³
Pellet mill	Atlass series AMP-320V – 2 × 30/37 kW, ring die
Cooling & screening	Pellet cooler and stainless steel sieve
Packing	Bucket elevator (Noria), storage hopper and Big-Bag weighing system
Control	Industry 4.0 automation – PLC & HMI

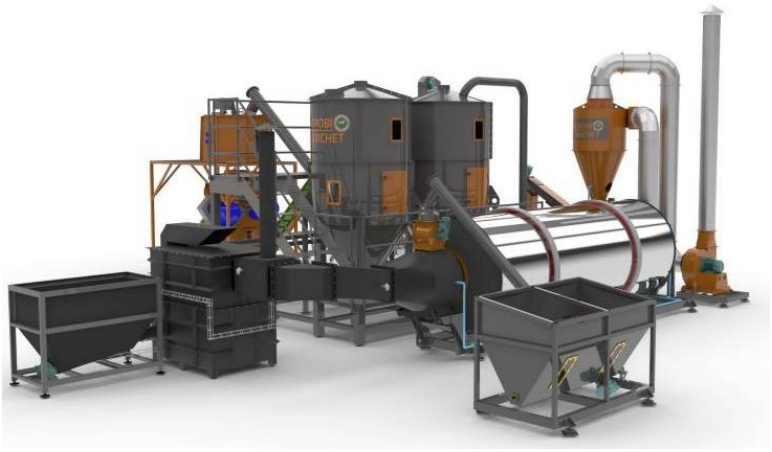
Process flow

1. Hot-air furnace KD 350 kW
2. Material receiver, pre-shredder with screening and screw feed conveyor
3. Rotary distributor
4. Rotary drum dryer SPB-5
5. Exhaust and transport fan
6. Cyclone separator
7. Rotary distributor with screw feed conveyor
8. Stainless hammer mill AMC-650
9. Transport fan feeding the sterilizer
10. Sterilizer with homogenizer
11. Homogenizing tank for granulation material
12. Conditioning hopper + ring-die pellet mill AMP-320V
13. Z-type belt conveyor
14. Pellet cooler
15. Dust particle cleaner
16. Bucket elevator (Noria)
17. Pellet storage hopper for Big-Bag
18. Big-Bag frame with weighing scale

View product page on agrobiobrichet.ro →

LINE 2 OF 4 · SKU LGIO-800-1000

Organic Fertilizer Granulation Line 900 – 1,500 kg/h · Ring Die



Parameter	Specification
Output capacity	**900 – 1,500 kg/h**
Raw material	Fermented manure and/or biogas digestate
Final product	6 mm organic fertilizer pellets (granules)
Pre-shredder	With 3 m³ tank
Dryer	Rotary drum dryer SPB-10, hot-air furnace KD 500 kW
Hammer mill	Stainless steel AMC-650 – 37/45 kW
Sterilization	Sterilizers 2 × 13 m³, with homogenization
Raw material homogenizing hopper	3.2 m³
Pellet mill	Atlass series AMP-420V – 2 × 45/55 kW, ring die
Cooling & screening	Pellet cooler and stainless steel sieve
Packing	Bucket elevator (Noria), storage hopper and Big-Bag weighing system
Control	Industry 4.0 automation – PLC & HMI

Process flow

1. Hot-air furnace KD 500 kW
2. Material receiver, pre-shredder with screening and screw feed conveyor
3. Rotary distributor
4. Rotary drum dryer SPB-10
5. Exhaust and transport fan
6. Cyclone separator
7. Rotary distributor with screw feed conveyor
8. Stainless hammer mill AMC-650
9. Transport fan feeding the sterilizer
10. Sterilizer with homogenizer
11. Homogenizing tank for granulation material
12. Conditioning hopper + ring-die pellet mill AMP-420V
13. Z-type belt conveyor
14. Pellet cooler
15. Dust particle cleaner
16. Bucket elevator (Noria)
17. Pellet storage hopper for Big-Bag
18. Big-Bag frame with weighing scale

View product page on agrobiobrichet.ro →

LINE 3 OF 4 · SKU LGIO-1300-1500

Organic Fertilizer Granulation Line 1,500 – 2,000 kg/h · Ring Die



Parameter	Specification
Output capacity	**1,500 – 2,000 kg/h**
Raw material	Fermented manure and/or biogas digestate
Final product	6 mm organic fertilizer pellets (granules)
Pre-shredder	With 3 m³ tank
Dryer	Rotary drum dryer SPB-20, hot-air furnace KD 900 kW
Hammer mill	Stainless steel AMC-650 – 45/55 kW
Sterilization	Sterilizers 2 × 20 m³, with homogenization
Raw material homogenizing hopper	3.2 m³
Pellet mill	Atlass series AMP-530V – 2 × 55/75 kW, ring die
Cooling & screening	Pellet cooler and stainless steel sieve
Packing	Bucket elevator (Noria), storage hopper and Big-Bag weighing system
Control	Industry 4.0 automation – PLC & HMI

Process flow

1. Hot-air furnace KD 900 kW
2. Material receiver, pre-shredder with screening and screw feed conveyor
3. Rotary distributor
4. Rotary drum dryer SPB-20
5. Exhaust and transport fan
6. Cyclone separator
7. Rotary distributor with screw feed conveyor
8. Stainless hammer mill AMC-650
9. Transport fan feeding the sterilizer
10. Sterilizer with homogenizer
11. Homogenizing tank for granulation material
12. Conditioning hopper + ring-die pellet mill AMP-530V
13. Z-type belt conveyor
14. Pellet cooler
15. Dust particle cleaner
16. Bucket elevator (Noria)
17. Pellet storage hopper for Big-Bag
18. Big-Bag frame with weighing scale

View product page on agrobiobrichet.ro →

LINE 4 OF 4 · SKU LGIO-2000-2500

Organic Fertilizer Granulation Line 2,000 – 3,000 kg/h · Ring Die



Parameter	Specification
Output capacity	**2,000 – 3,000 kg/h**
Raw material	Fermented manure and/or biogas digestate
Final product	6 mm organic fertilizer pellets (granules)
Pre-shredder	With 3 m³ tank
Dryer	Rotary drum dryer SPB-30, hot-air furnace KD 1300 kW
Hammer mill	Stainless steel AMC-650 – 55/75 kW
Sterilization	Sterilizers 2 × 25 m³, with homogenization
Raw material homogenizing hopper	3.2 m³
Pellet mill	Atlass series AMP-650V – 2 × 75/90 kW, ring die
Cooling & screening	Pellet cooler and stainless steel sieve
Packing	Bucket elevator (Noria), storage hopper and Big-Bag weighing system
Control	Industry 4.0 automation – PLC & HMI

Process flow

1. Hot-air furnace KD 1300 kW
2. Material receiver, pre-shredder with screening and screw feed conveyor
3. Rotary distributor
4. Rotary drum dryer SPB-30
5. Exhaust and transport fan
6. Cyclone separator
7. Rotary distributor with screw feed conveyor
8. Stainless hammer mill AMC-650
9. Transport fan feeding the sterilizer
10. Sterilizer with homogenizer
11. Homogenizing tank for granulation material
12. Conditioning hopper + ring-die pellet mill AMP-650V
13. Z-type belt conveyor
14. Pellet cooler
15. Dust particle cleaner
16. Bucket elevator (Noria)
17. Pellet storage hopper for Big-Bag
18. Big-Bag frame with weighing scale

View product page on agrobiobrichet.ro →

Scope of Supply, Warranty & Service

Applies to all four lines

Included

- Line automation, spare parts, staff training and service
- Industry 4.0 PLC & HMI automation, with update and upgrade services for optimized operation and minimal operator intervention

Optional (at extra cost)

- Accessories: rollers, ring die, steam generator, humidification system, in-line moisture sensor, hopper overload sensor
- Reactive power compensation panel with 6-step capacitor banks (cos φ 0.99)

Warranty & support

- **24 months** manufacturer warranty from commissioning of the line
- **+36 months** extended warranty offered by Agro Bio Brichet as dealer
- Fast on-site intervention within 24–72 h · spare parts in stock · full service

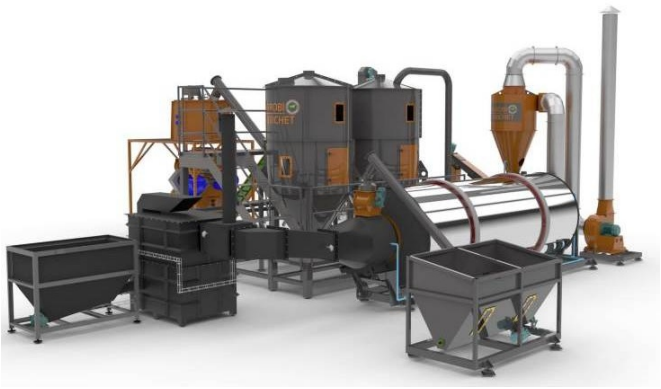
Why granulate manure and digestate

- Turns waste disposal costs into a sellable product; raw material cost is usually very low or zero
- Balanced nutrient supply (N, P, K and trace elements) with gradual release and reduced nitrogen leaching
- Raises soil organic matter, supports humus formation and soil structure, improves water retention and drought resistance
- Suitable for vegetables, vineyards, orchards, flowers and cereal crops
- Indicative payback: 6–18 months, depending on organization, operating hours (8–16 h/day) and volume

Installation note

Earthing of the equipment or the complete line must comply with applicable technical regulations and standards (e.g. I7/2011, SR EN 60204-1) to ensure personnel protection and safe operation.





Request a quote
+40 765 70 10 50 · office@agrobiobrichet.ro
All digestate & organic fertilizer lines: agrobiobrichet.ro/digestat

Images are 3D renderings of the line layout. Specifications may be adapted to the raw material and project requirements; final configuration is confirmed in the commercial offer.