



Achieving an efficient and
recycle ready label production
with automated waste handling

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 **LUNDBERG**
Our waste handling keeps production going

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Agenda



- The challenge
- What does an automated waste handling system look like?
- How to be "Recycle Ready"?
- What are the potential savings and benefits using automation?

 **FINAT**
Empowering the label industry

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The Challenge

- Top of the sustainability agenda: recycling and separation
- EU Packaging Directives and future targets
- Mixed waste bins and rolls
- Bulky material
- Employee health and safety (OSH)
- Inefficient machine stops
- Wasted virgin material



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What does an automated waste handling system look like?

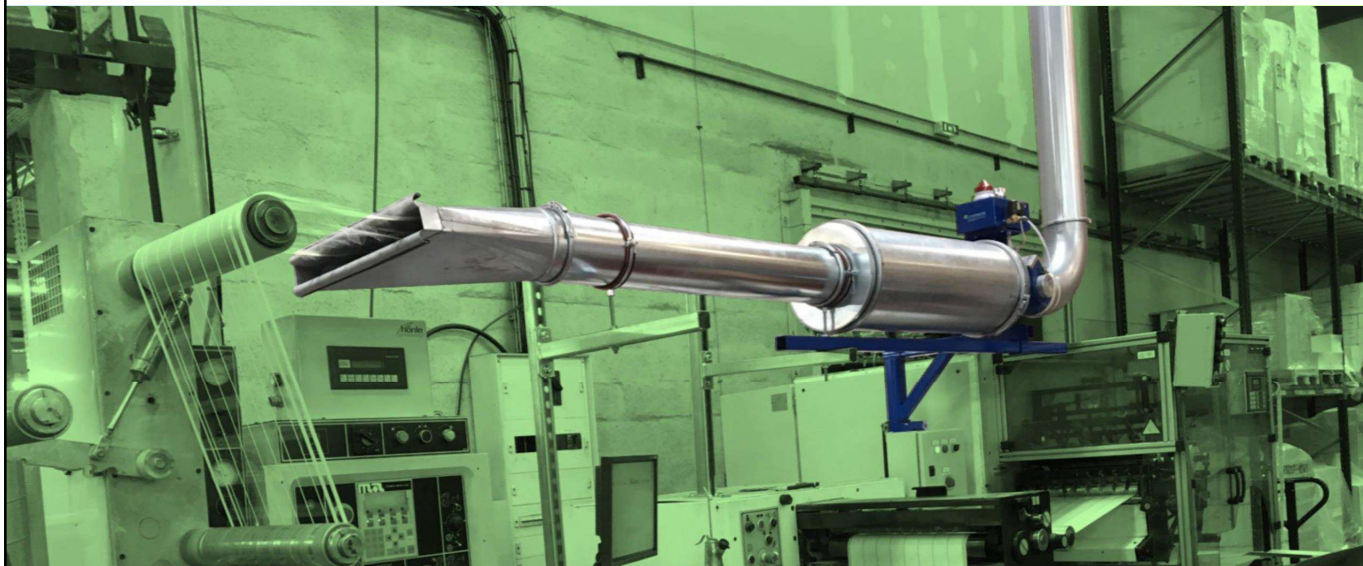


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Capture



Waste in the process line where it is created. It enables higher production speed, less down time, while removing dust from production lines.

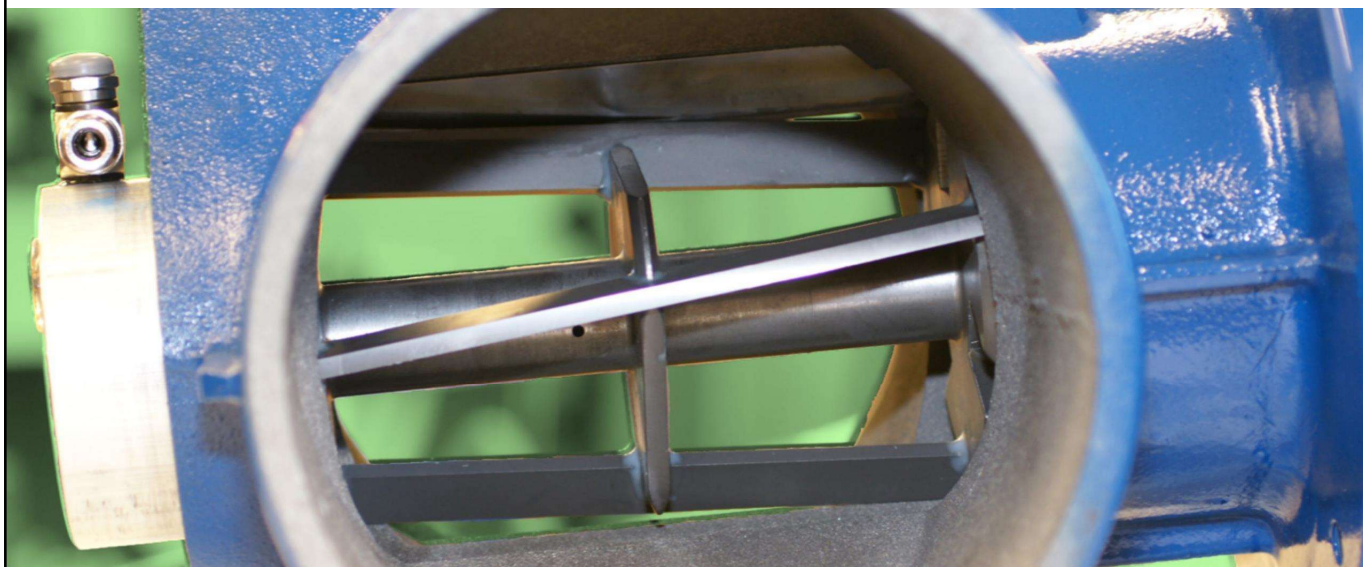


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Cut



Waste with the unique and reliable Lundberg Tech Granulator. It adds value by reducing the volume and easily conveys the waste over long distances.



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Convey



Waste by vacuum transport in a pipe system.
Can cover unlimited distances and number of machines.



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Collect



Waste and air is separated in a separator and the collected waste is going through a buffer prepared for connecting to a compacting container or a baler

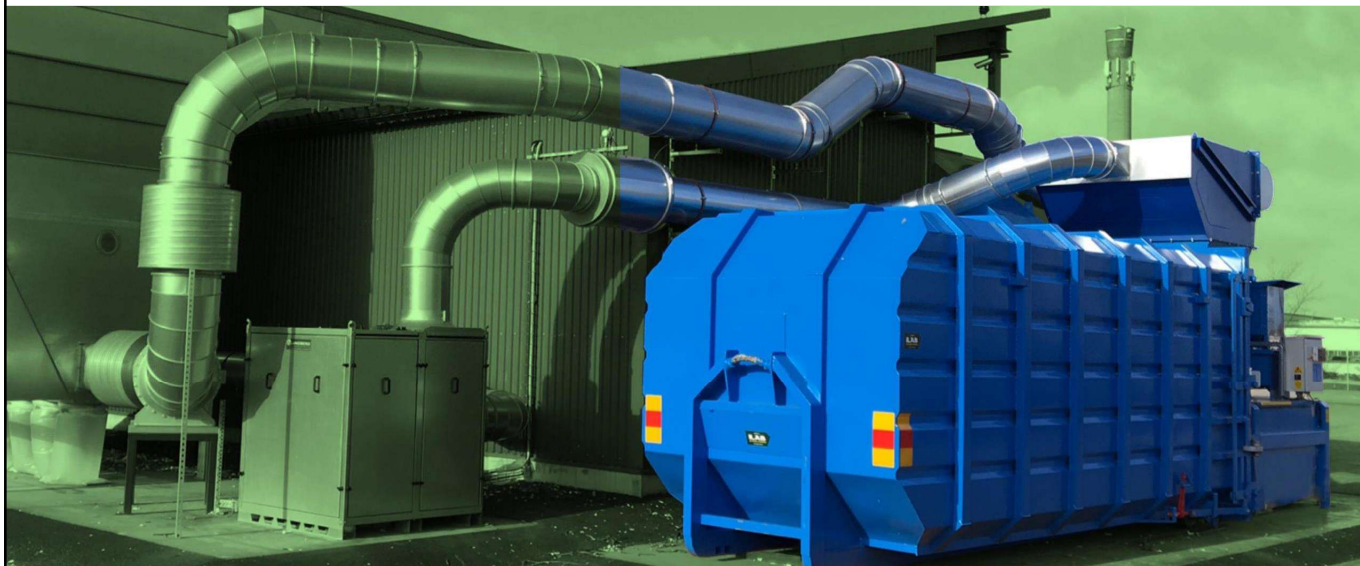


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Compact



Waste by a compactor into a container, bales or TubeBags.
It reduces both space requirements for waste and cost of disposal.



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Recycle Ready?



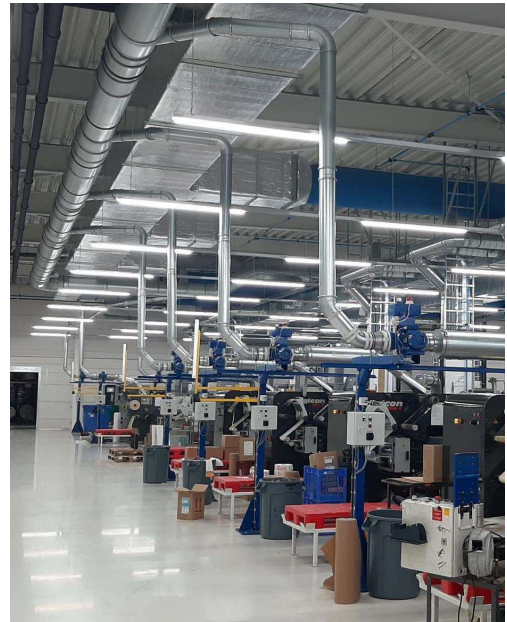
Diverters mounted after capturing and cutting the waste allow for separation of materials in different categories.
Waste goes into balers, containers, octabins etc.



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What are the benefits and savings?

- Recycle ready for future material separation
- Reduction in wasted virgin material
- Reduce CO₂ footprint from waste transport
- Do more with less
- Less manual handling
- Improve workplace environment



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Savings on virgin material

Example from Italian label manufacturer:

30m loss of virgin material per roll exchange / hour / machine

Web width 430mm = 30m x 0.43m = 12.9 m² (per machine and hour)

13 hours production / day (2 shifts)

225 working days per year

10 label printing machines

12.9 m² x 13 x 225 x 10 = 377,000 m² /year

If 50% of the stops can be prevented = a material saving of **+188,000 m²** per year and a waste reduction of **15-25 tons of waste**.



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**Optimum Group™**
Belona

“With the new matrix waste handling installation, we expect to be able to gain a higher throughput on each machine – due to fewer stops and the fact that the waste handling system is always ready”.

- Optimum Group Belona

**HAMILTON**
ADHESIVE LABELS

“The MatrixCompactor has ensured us cost and time savings. In addition, another gain is a speed up of the press”

- Hamilton Adhesive Labels Ltd