

## **RECYCLING LINE** recoSTAR universal

**for production and post-industrial scrap**, film, fibres, nonwovens and lumps, **no precutting**, feeding control for consistency, **operator and maintenance friendly**, low manpower requirements





**RECYCLING LINE** recoSTAR universal recycling technology



State-of-the-art recycling technology for the efficient processing of all different kinds of films, fibres, nonwovens, mono- and multifilaments, tapes, fabrics, as well as solid lumps, start-up scrap and injection moulding parts, from materials such as PE, PP, PS, PA, PES, PET, PPS, PLA, and more.



The hydraulic pusher in the single-shaft cutter presses the material against the water-cooled rotating shaft and thus ensures efficient crushing. The extruder-controlled dosing screw allows continuous feeding of the extruder even when the bulk density varies.



The optional degassing extruder reduces degradation and purifies the melt from volatile contamination and monomers. For special input material which is, e.g., highly printed, humid, etc., other options such as double degassing, high-vacuum, and cascade degassing are available.



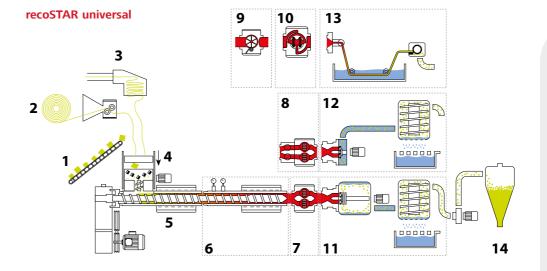
Continuous filters for dirt particle removal are available. The optional backflushing reduces costs for filter screens and operator intervention. In case of higher contamination, a power backflushing or continuous



The patented water ring pelletiser ensures exact cutting for increased pellet quality and reduced wear of knives. Alternatively, strand, automatic strand, or underwater pelletising can be used.



Compounding with powder, liquid or masterbatch allows to upcycle the plastic scrap. In-house masterbatch production through our recoBATCH solution is possible. Constant high pellet quality is ensured.



- 1. Conveyor belt with optional metal detector
- 2. Nip roll feeder
- 3. Edge trim cyclone
- 4. Single-shaft cutter with speed-controlled dosing screw
- Extruder
- 6. Degassing extruder
- 7. Melt filter without backflushing
- 8. Melt filter with backflushing
- 9. Continuous rotation filter 13. (Automatic) Strand pelletiser
- 10. Power backflushing filter
- 11. Water ring pelletiser

12. Underwater pelletiser

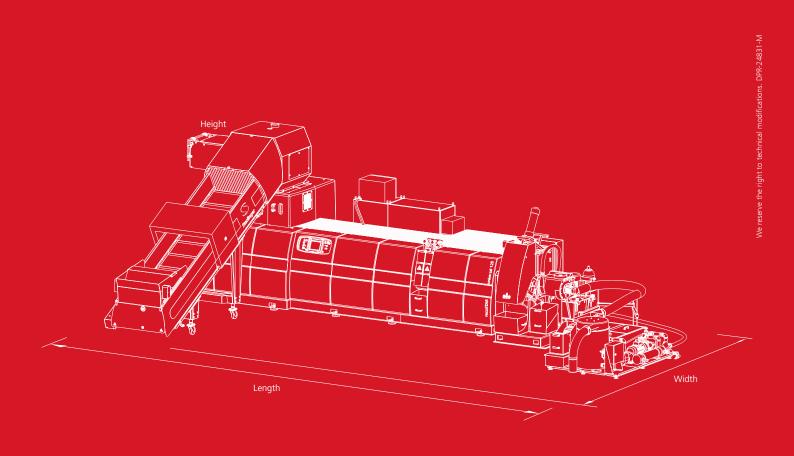
with centrifuge

14. Storage silo with centrifuge

## Advantages

- For hard-to-grind materials
- Most efficient material preparation Dosing screw system for perfect
- process stability
- Modular design provides flexibility
- Low energy consumption/kg
- One-button start/stop operation
- Sophisticated software





| Dimensions in mm        |      |      |       | recoSTAR universal |       |
|-------------------------|------|------|-------|--------------------|-------|
| Туре                    | 65   | 85   | 105   | 125                | 165   |
| Height                  | 2960 | 2960 | 4300  | 4300               | 4300  |
| Width                   | 6020 | 6020 | 7600  | 6100               | 12500 |
| Length (with degassing) | 9400 | 8300 | 11800 | 12000              | 18800 |

| Technical data                     |              |              |               | recoSTAR universal |               |
|------------------------------------|--------------|--------------|---------------|--------------------|---------------|
| Туре                               | 65           | 85           | 105           | 125                | 165           |
| Output [kg/h]*                     | 150 – 230    | 280 – 380    | 400 – 600     | 650 – 850          | 900 – 1300    |
| Energy consumption [kWh/kg]        | 0.2 – 0.35   | 0.2 - 0.35   | 0.2 - 0.35    | 0.2 – 0.35         | 0.2 – 0.35    |
| * without degassing                |              |              |               |                    |               |
| Single-shaft cutter                |              |              |               |                    |               |
| Shaft width [mm]                   | 800          | 800          | 1200          | 1200               | 2000          |
| Drive power [kW]                   | 55           | 55           | 90/110        | 90/110             | 132/160       |
| Extruder                           |              |              |               |                    |               |
| Screw diameter (L/D) [mm]          | 65 (24; 40*) | 85 (24; 40*) | 105 (24; 40*) | 125 (24; 40*)      | 165 (24; 40*) |
| AC drive [kW]                      | 55/75        | 90/110       | 160/200       | 200                | 315/345/355   |
| * with degassing                   |              |              |               |                    |               |
| Downstream equipment               |              |              |               |                    |               |
| Degassing                          | 0            | 0            | 0             | 0                  | 0             |
| High-vacuum execution              | 0            | 0            | 0             | 0                  | 0             |
| Water ring pelletiser              | •            | •            | •             | •                  | •             |
| Strand/automatic strand pelletiser | alternative  | alternative  | alternative   | alternative        | alternative   |
| Underwater pelletiser              | alternative  | alternative  | alternative   | alternative        | alternative   |

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Underwater pelletiser

standard O option

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