



## **RECYCLING LINE** recoSTAR direct

for production and post-industrial scrap, regrind  
with high bulk density, wide range of thermoplastics,  
space and energy saving, one button start/stop,  
cost-effective solution



## RECYCLING LINE recoSTAR direct



**State-of-the-art recycling** technology for the **cost-effective processing** of regrind with high bulk density ( $> 300 \text{ g/l}$ ): **production and post-industrial scrap** from materials such as PE, PP, PS, PA and PLA.



**The direct feeding** of regrind with high bulk density is done by a feeding screw mounted on top of the extrusion line. Additional dosing of master-batches or additives is possible.



**The user-friendly touch-screen** allows simple operation with RFID-Chip controlled user levels, alarm history, recipe management, maintenance control, etc. Screenshots can be downloaded via the USB-port.



**A variety of different melt filters** for dirt particle removal are available. The optional backflushing reduces costs for filter screens and operator intervention. For higher contamination, a power back-flushing or continuous rotation filter is recommended.



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

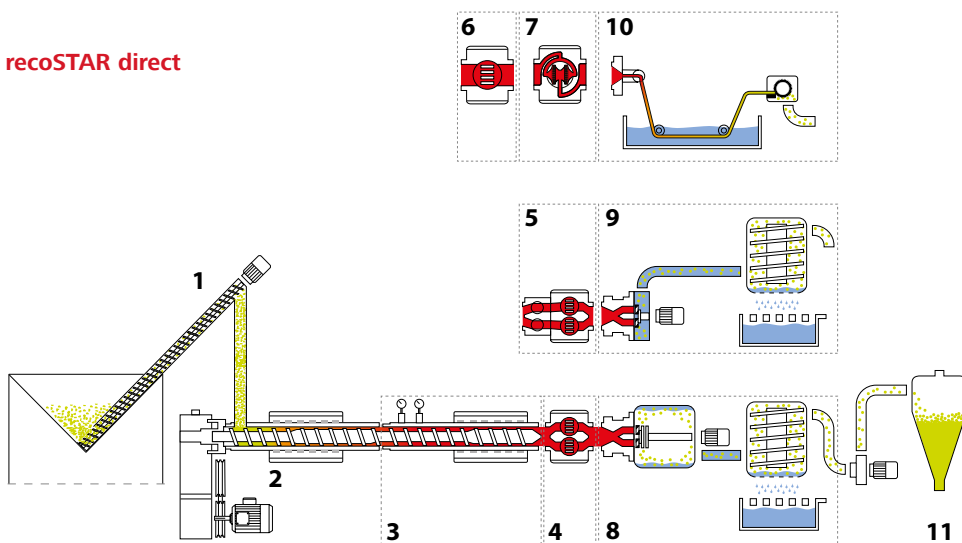


**The result: Regranulate** with consistently high quality. The uniform pellets have flow characteristics like virgin resin and can be re-used up to 100 % in the same application, or up-cycled for other purposes.



Machines pictured may include equipment sold as options.

recoSTAR direct



- 1. Hopper with feeding screw
- 2. Extruder
- 3. Venting extruder
- 4. Melt filter without backflush

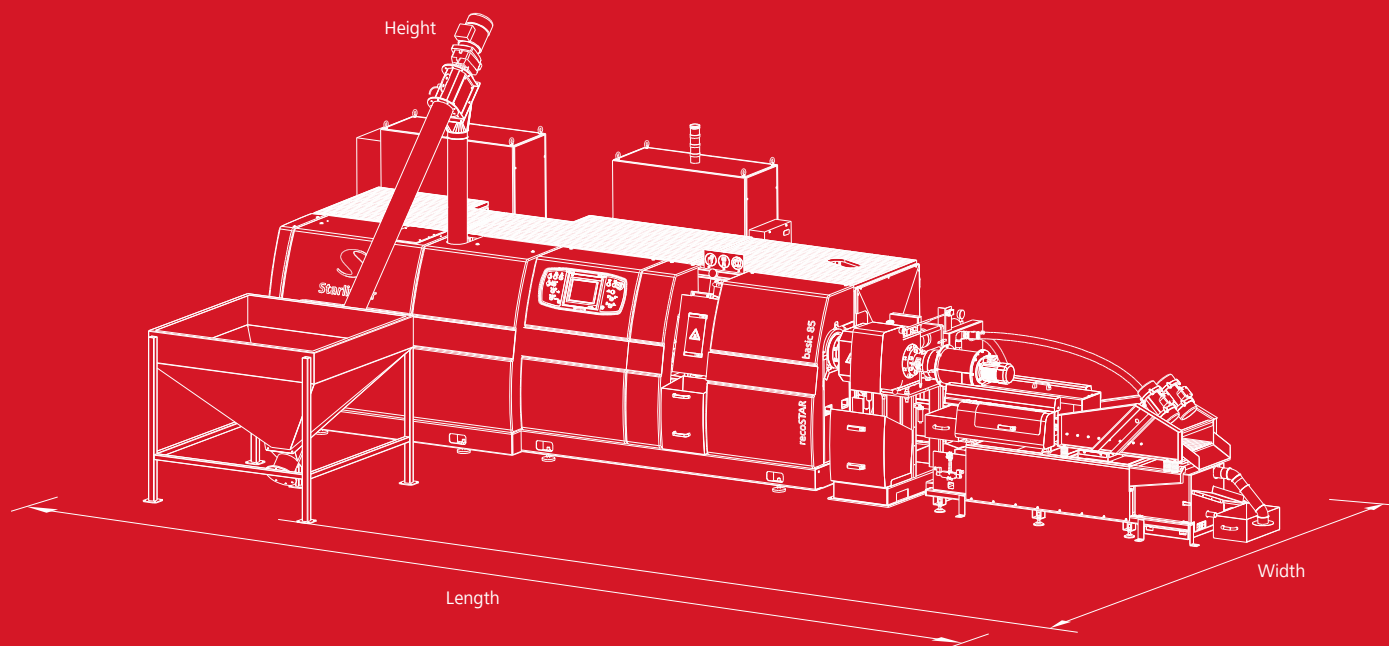
- 5. Melt filter with backflush
- 6. Discontinuous melt filter
- 7. Power backflushing filter
- 8. Water ring pelletiser

- 9. Underwater pelletiser
- 10. (Automatic) Strand pelletiser
- 11. Storage silo

Advantages

- Dusty regrind transformed into dust-free regranulate
- Economical investment
- Low energy consumption/kg
- Easy-to-work-with recycling solution
- Operator and maintenance friendly
- For a wide range of thermoplastics
- Advantageous processing costs





### Dimensions in mm

### recoSTAR direct

Type	65	85	105	125	145	165	215
Height in mm	4300	4300	4300	4300	4800	4800	5100
Height in inches	170	170	170	170	190	190	200
Width in mm	5800	5800	7500	8900	10300	10300	10300
Width in inches	230	230	300	350	400	400	400
Length (with degassing) in mm	7850	9150	14000	17800	19500	22500	24300
Length (with degassing) in inches	310	360	550	700	770	890	960

### Technical data

### recoSTAR direct

Type	65	85	105	125	145	165	215
Output [kg/h]*	130 – 180	250 – 350	400 – 600	650 – 800	800 – 1000	1000 – 1200	1600 – 2000
Output [lbs/h]*	290 – 400	550 – 770	880 – 1320	1430 – 1760	1760 – 2200	2200 – 2640	3530 – 4410
Energy consumption [kWh/kg]	0.20 – 0.35	0.20 – 0.35	0.20 – 0.35	0.20 – 0.35	0.20 – 0.35	0.20 – 0.35	0.20 – 0.35
Energy consumption [kWh/lb.]	0.09 – 0.16	0.09 – 0.16	0.09 – 0.16	0.09 – 0.16	0.09 – 0.16	0.09 – 0.16	0.09 – 0.16

\* without degassing

#### Extruder

Screw diameter (L/D) [mm]	65 (24; 40*)	85 (24; 40*)	105 (24; 40*)	125 (24; 40*)	145 (24; 40*)	165 (24; 40*)	215 (24; 40*)
Screw diameter (L/D) [inch]	2.5 (24; 40*)	3.3 (24; 40*)	4.1 (24; 40*)	4.9 (24; 40*)	5.7 (24; 40*)	6.5 (24; 40*)	8.5 (24; 40*)
AC drive [kW]	45/55	75/90	110/132	160/200	200/250	250/315/345	405/470/530

\* with degassing

#### Downstream equipment

Degassing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High-vacuum execution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water ring pelletiser	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Strand/automatic strand pelletiser	alternative	alternative	alternative	alternative	alternative	alternative	alternative
Underwater pelletiser	alternative	alternative	alternative	alternative	alternative	alternative	alternative

● standard ○ option

Starlinger recycling technology  
 Furtherstrasse 47a  
 2564 Weissenbach, Austria  
 T: + 43 2674 800 3101  
 F: + 43 2674 86328  
 E: recycling@starlinger.com  
 recycling.starlinger.com

Starlinger Head Office  
 Sonnenuhrgasse 4  
 1060 Vienna, Austria  
 T: + 43 1 59955-0, F: -180

Starlinger & Co Gesellschaft m.b.H.  
 A member of Starlinger Group

All data depending on design!

recoSTAR® is a registered trademark of Starlinger & Co Gesellschaft m.b.H.