

SOLID STATE POLYCONDENSATION SSP

IV increase, for PET and PES pellets, decontamination for direct food contact, reduction of acetaldehyde and VOCs, continuous batch process, fast and easy installation





SOLID STATE POLYCONDENSATION viscoSTAR



The patented outlet device of the reactor is designed for consistant treatment time of the material in the reactor, preventing center flow of the pellets.



AA level is reduced.Foreign particles, e.g.
glycol, are extracted.
VOCs are minimised or

VOCs are minimised or eliminated. The end product is approved for food contact applications.



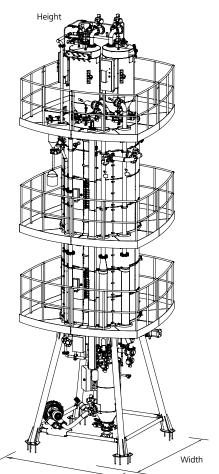
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Starlinger Head Office Sonnenuhrgasse 4 1060 Vienna, Austria T: + 43 1 59955-0, F: -180 State-of-the-art Solid State Polycondensation for the IV increase of PET and PES pellets. Possible source material is regranulate from bottles, preforms, fibres, nonwovens, sheets and strapping.

recoSTAR PET combined with viscoSTAR

feature the following advantages:

- Effective decontamination and adjustable IV increase under vacuum
- FIFO principle
- Equal residence time for each batch
- Modular design for capacity increase
- Energy saving in case of inline processing
- Low transformation costs



| 2. 3. | Crystallizer Vacuum transport Preheating unit | 2 | 3 | |
|----------|---|-------|--------------------------------|---|
| 4. | SSP reactor | | 4 | 6 |
| | Cooling unit/vacuum sluice Energy recovery kit | | | |
| | Storage silo | | State and State and Section 1. | |
| | | | 5 | 7 |

Length

| Technical data viscoST | | | | | | |
|-------------------------------------|-------------|-------------|-------------|-------------|-----------|-----------|
| Туре | 75 | 120 | 150 | 180 | 250 | 350 |
| Capacity [kg/h] | 800 | 1200 | 1800 | 2000 | 2500 | 3500 |
| Effective volume of reactor [m³] | 6.8 | 10.7 | 14.2 | 17.2 | 24.2 | 34.2 |
| Installed heating power [kW] | 150 | 150 | 225 | 225 | 360 | 480 |
| High-vacuum system [mbar] | ≤ 10 | ≤ 10 | ≤ 10 | ≤ 10 | ≤ 10 | ≤ 10 |
| Energy consumption [kWh/kg] approx. | 0.12 - 0.25 | 0.12 - 0.25 | 0.12 - 0.25 | 0.12 - 0.25 | 0.12-0.25 | 0.12-0.25 |
| iV increace (dl/g/h) | 0.01-0.04 | 0.01-0.04 | 0.01-0.04 | 0.01-0.04 | 0.01-0.04 | 0.01-0.04 |
| Height [mm] | 10228 | 11886 | 13382 | 14878 | 13600 | 16100 |
| Width [mm] | 4200 | 4200 | 4200 | 4200 | 4200 | 4200 |
| Length [mm] | 4200 | 4200 | 4200 | 4200 | 4200 | 4200 |