



POLYMETRIX

POLYMETRIX designs, supplies, installs and commissions complete industrial plants for the thermal treatment of polymers.

POLYMETRIX is the developer, that supplies the benchmark technology for mechanical rPET SSP decontamination plants regarding product purity, IV build up and output capacity.

POLYMETRIX is the global market leader of vPET SSP systems with a market share of more than 75% and for rPET SSP systems with a market share with more than 40%.

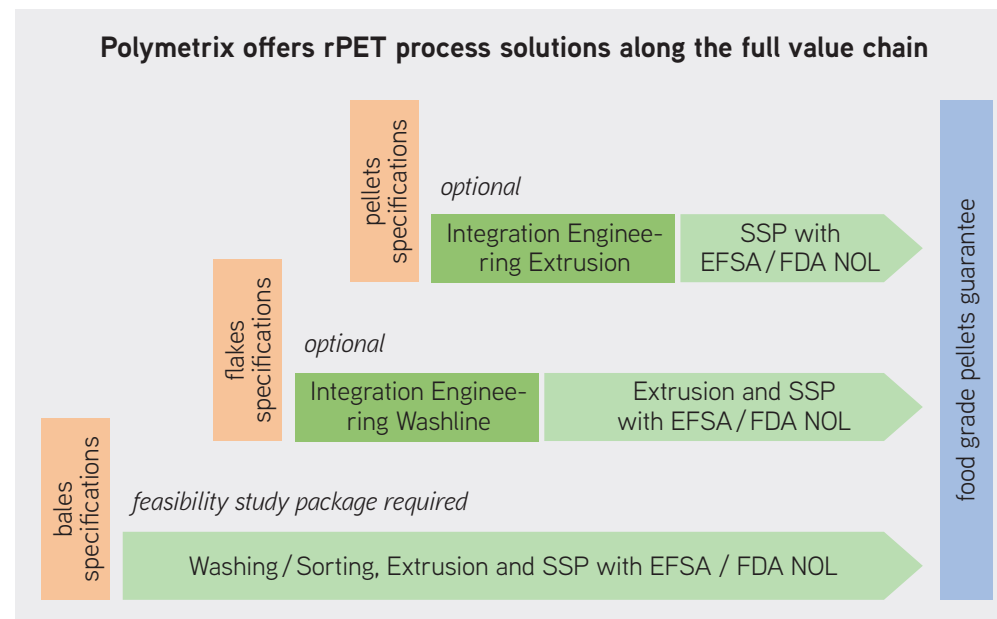
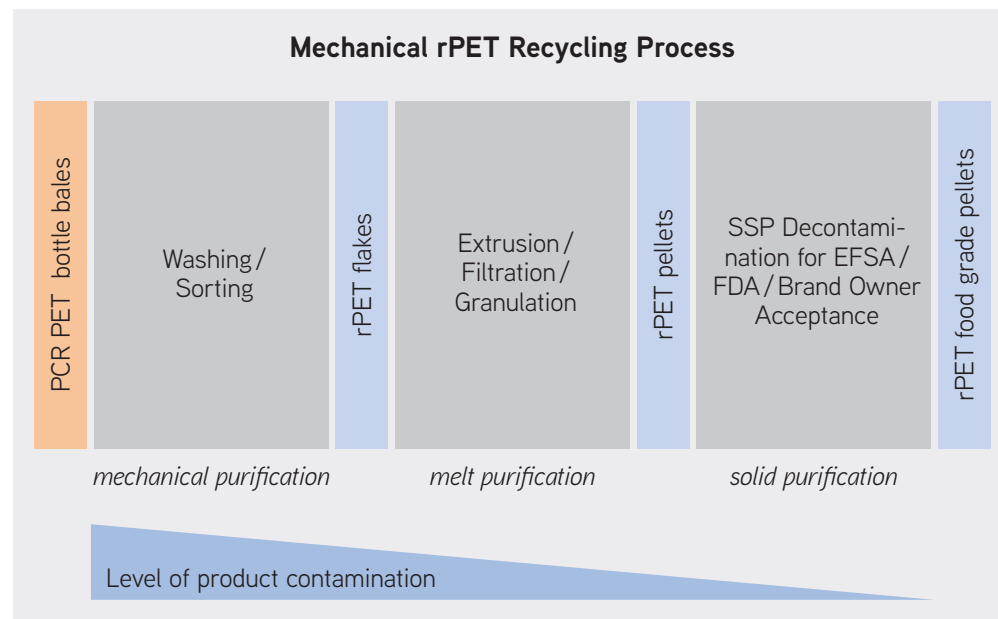
**INTEGRATED rPET
SOLUTIONS FROM
ONE SUPPLIER**



POLYMETRIX rPET EXPERIENCE

> 2,5 MILLION TONS PER YEAR

- Superior rPET quality achieved by advanced process technologies and **25 years** of experience in PET recycling.
- Proprietary SSP decontamination technology for assurance of **EFSA/FDA & brand owner food grade rPET quality**.
- Process integration knowledge covering the **full value chain of mechanical rPET** processes.
- **Lowest OPEX** in mechanical rPET manufacturing at **competitive CAPEX**.
- **Process and engineering know-how** for integrated systems from bales to food grade rPET plants.
- POLYMETRIX's scope of **supply and services** are tailored to client's requirements.
- POLYMETRIX rPET models are designed for medium to large capacities and **bottle grade & industrial grades**.



POLYMETRIX SSP PLANT MODELS

		Type		RM 2000 C	RM 3000 C	RM 5000 C	RM 6000 C	RM 2000 H	RM 3000 H	RM 5000 H	RM 6000 H
		Input material		cold amorphous pellets				hot pre-crystallized pellets			
Output capacity	SSP	8'424 h/year operation ¹⁾	t/year	18'000	32'000	50'000	75'000	28'000	46'000	71'000	109'000
		Design capacity (feed pellets at 30 °C)	kg/hour	2'200	3'800	6'000	9'000	-	-	-	-
		Design capacity (feed pellets at 140 °C)	kg/hour	-	-	-	-	3'400	5'500	8'500	13'000
	Extrusion	8'000 h/year operation ²⁾	t/year	18'000	32'000	50'000	75'000	28'000	46'000	71'000	109'000
		Design capacity	kg/hour	2'300	4'000	6'300	9'500	3'750 ⁴⁾	6'000 ⁴⁾	9'400 ⁴⁾	14'300 ⁴⁾
Space requirements	SSP footprint length		m	21	23	30	28	20	22	30	28
	SSP footprint width		m	15	15	15	20	15	15	15	20
	Height inside building		min. m	14	15	17	21	14	15	17	21
	Height of reactor top ³⁾		min. m	25	29	31	35	29	34	31	36
Expected consumption at maximum capacity	Electricity		kWh/t	139	133	132	131	78	81	80	78
	Nitrogen	purity 99.5 %	Nm³/h	60	60	80	80	60	60	80	80
	Instrument air		Nm³/t	6.4	4.5	3.6	3.0	4.8	3.8	3.1	2.7
	Compressed air		Nm³/h	-	120	174	210	-	-	-	-
	Cooling water	at 32 °C, Delta T 8 °C	m³/t	4.8	3.9	4.8	4.7	4.3	4.6	4.8	4.8
	Chilled water	at 7 °C, Delta T 5 °C	m³/t	1.7	1.5	1.6	1.7	1.5	1.5	1.3	1.8

¹⁾ The SSP process requires minimal maintenance and can be operated continuously for 8'424 hours per year.

²⁾ The extrusion process requires regular maintenance and can be operated approximately 8'000 hours per year.

³⁾ The reactor is located outside of the building, additional floor space is required.

⁴⁾ Extra extrusion capacity to compensate for the reduced storage capacity between Extrusion and SSP.



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