

Project:

Østfold Avfallssortering IKS - MRF

Title:

APPENDIX A2

DESIGN DATA



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B1	15.09.22	For Tender	LIF	PT	ASE
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TABLE OF CONTENT

1	GENERAL.....	3
2	CAPACITY	3
3	WASTE COMPOSITION FEEDSTOCK	3
4	YIELD AND PURITY ON SORTED FRACTIONS	4

1 GENERAL

The Plant must be capable to perform the operational mode as described below. The plant shall manage the waste of various compositions even with unavoidable daily, weekly and seasonal changes as well as variations through developments as addressed below.

2 CAPACITY

The design input capacity is minimum 40 tons/h, 60.000 tons/year in one shift.

Incoming material will be residual household waste delivered by waste compactor trucks and trucks with both open containers and compactor containers.

3 WASTE COMPOSITION FEEDSTOCK

The below mentioned data and information is given to the best of Østfold Avfallssortering IKS knowledge. The composition will vary over time due to changes in the structure of municipalities, the population's habits of waste sorting etc.

The plant shall be designed within the range shown in the below table.

Design range for the plant:

FRACTION	Design Range
Plastic Film	5 – 12 %
Rigid Plastic	5 – 12 %
Metals	1 – 5 %
Paper/Cardboard/Tetra	8 – 13 %
Glass and Inert	2 – 6 %
Organics	20 – 35 %
Textiles	2,5 – 6,5 %
Nappies	1 – 5 %
Wood, fines, other	0,5 – 3 %
Residues	20 – 30 %

Table 1- Design range for the plant

The mass balance will be calculated based on the table on the next page. The waste composition given in Table 2 represents an assumption of year 2025.

Composition of feedstock to Østfold Avfallssortering IKS	Household waste [M-%]
Film total	8,73 %
<i>PE film</i>	5,24 %
<i>PE multilayer film</i>	0,42 %
<i>PP film & others</i>	3,07 %
Rigid plastics totalt	8,43 %
<i>PET trays</i>	1,47 %
<i>PET bottles</i>	0,63 %
<i>HDPE</i>	1,72 %
<i>PP</i>	2,69 %
<i>PS</i>	0,70 %
<i>Other</i>	1,24 %
Plastics total (film + rigids)	17,16 %
Metal total	3,14 %
<i>Ferrous</i>	1,64 %
<i>Non ferrous</i>	1,51 %
Paper/cardboard total	12,01 %
<i>Dirty mixed paper < 100 mm</i>	3,00 %
<i>Office paper, newspaper</i>	2,82 %
<i>Brown cardboard</i>	0,83 %
<i>Mixed paper, paper compounds</i>	3,76 %
<i>Beverage carton</i>	1,60 %
Other	67,69 %
<i>Glass + Inert</i>	4,11 %
<i>Organics</i>	31,64 %
<i>Residues</i>	22,81 %
<i>Textiles, Leather</i>	4,52 %
<i>Nappies</i>	2,98 %
<i>Wood, other waste, fines</i>	1,31 %
<i>PVC</i>	0,30 %
Total	100,0 %

Table 2 - Composition of feedstock to Østfold Avfallssortering IKS

4 YIELD AND PURITY ON SORTED FRACTIONS

For requirements to yield and purity, refer Appendix A4.