

PLANT DESCRIPTION

TF3 Thermoformer

1. Pulper:

1.2 m cub. in 304L stainless steel, hardened stainless steel rotor, 15 kW motor, loading hopper with hoist, load cell and electronic scale.

2. Stock tank:

1.5 m cub. in 304L stainless steel with 2.2 kW side mounted agitator. 1m cub constant head box with 1.1 kW agitator.

3. White water tank:

2.0 m cub in 304L stainless steel with 2.2 kW side mounted agitator. 1m cub constant head box with 1.1 kW agitator.

4. Vacuum separator:

1.1 m cub. in 3CR12 stainless steel with magnetic level controllers, sight glass and glycerin filled analogue gauge.

5. Pipe work & valves:

All pulp and backwater pipes, fittings and valves in 304L stainless steel. All pneumatic/electrically controlled valves by Schubert. All fresh water and compressed air lines in galvanized mild steel.

6. Pumps:

Transfer pump	2.2 kW	Centrifugal	Stork
Control pump	2.2 kW	Centrifugal	Stork
Vacuum separator	3 kW	Centrifugal	Stork
Vacuum pump	45 kW	Liquidring	Nash
High pressure	4 kW	Centrifugal	Calpeda

7. Cooling tower:

0.75 kW in 304 stainless steel with replaceable P.V.C. core by Universal Airbrand.

8. Compressor:

20KW supplied by customer

9. Pressure vessels:

0.5 m cub. Main receiver in mild steel with glycerin filled analogue gauge.

10. Moulder:

TF3 thermoformer with moulding, transfer and pressing platens (950x650mm) electromechanically driven using SEW variable speed drives totalling 15kW. Unit comprises 1 forming, 1 transfer and 2 pressing stations. Transfer and pressing plenums electrically heated, maximum 270kW. Forming station fitted with high and low pressure cleaning sprays. Moulder control via Panelmate touchscreen. All stainless steel/phosphor bronze construction. Fully automatic operation. Automatic stacking and counting of finished products. Maximum output at 100% efficiency, 1200 egg trays per hour or 80 kg of dry fibre for a similar product at approximately 25 second cycles. Output and cycle time will vary with product type and depth. Moulds excluded.

11. Fixings:

All fixings to the floor 304L stainless steel and Hilti epoxy resin chemical anchors.

12. Electrical:

**All motors by G.E.C.
All switchgear by Klockner Moeller
P.L.C. and controls by Omron
Hertz controllers by S.E.W.
All wiring to local standards.**

13. Alternatives:

SPM reserves the right to replace any of the equipment described above with that of other manufacturers and which is of equal or better quality.

PRODUCTION DATA

1. Production rate:

80kg per hour at nominal 28 second cycle time. Output and cycle time will vary with product depth and thickness and raw material used.

2. Electricity consumption:

Installed power 270kW, consumption approximately 3.5kwh/kg of finished product

3. Water:

Nominal for cleaning and cooling tower only. Process water recovered in vacuum system for re-use

4. Waste newsprint or Kraft:

80 kg/h

5. Chemicals:

Dye stuff as required. Defoamer, antifloculents, wet strength resins etc all as per recommendation of Hercules Chemical Inc to suite local conditions and raw material.

6. Air consumption:

2 cub m per minute at 8 bar.

7. Number of direct staff/shift:

1 operator per three machines.