

Configuration and Quotation of Recycled PET Flakes Pelletizing Line

Output: 800~1200kg/h (according to the material formulation)



Configuration of GTE-95B Twin-screw Extruder

Unit model: GTE-95B/40/500-280KW

Pelletizing pattern: Water flushing strands pelletizing line

I. Quotation of Machine

PRICE	FOB SHANGHAI USD118,000 (304 Stainless Steel)
VALIDITY	This offer is valid for sixty days since Jul 8th, 2020.

II. Equipment List

Item	Description	Qty
1	GTE-95B Host machine	1 set
2	GTE-95 Twin screw feeder	1 set
3	Oil lubrication system	1 set
4	Soft water cooling system	1 set
5	Vacuum system	1 set
6	Hydraulic plate screen changer	1 set
7	Water cooling strands die head	1 set
8	Flushing Water trough	1 set
9	Flushing Pelletizer	1 set
10	Dewatering machine	1 set
11	Water circulating system	1 set
12	Product silo	1 set
13	Electric control cabinet	1 set
14	Spare parts	1 set
15	Technical documents	1 set

III. Technical specification**No. Name, description and quantity of the machine****1. GTE-95B host machine L/D=40 R max = 500rpm**

Main motor power is 280KW (AC), which is produced by Siemens Beide motor manufacture. The Japanese Yaskawa frequency control is used for speed adjusting.

High speed and high torque gearbox, and reduction ratio is 2.5:1.

The compact host machine features integrated speed reduction and torque transfer with a design of parallel three axles.

SKF bearings are used in the reducer, torque transfer device and as the radial bearing in the output shaft.

The material of gearbox is 40CrNiMoA1A and the machining precision is 6 grade.

Screw diameter: Φ93mm, L/D = 40:1 and the screw is blocking type.

The screw core shaft is made of 40CrNiMoA, and the screw thread components connect with the core shaft in an involute curve, which features high intensity, large load, and easy

disassembly and assembly.

The screw components are made of high quality high-speed tool steel, W6Mo5Cr4V2, that receives heat treatment with vacuum hardening at high temperature. Whole hardness: HRC58~60

Barrel length: L = 360mm/section. 10 sections barrel body.

The barrel body is made of #45 steel with alloy cover.

Barrel cooling way: Water cooling.

The 1st barrel is used for feeding materials; the 5th is vent barrel and the 7.9h barrel is for vacuum, the 10th barrel is for extrusion. The other barrels are of closed mouth type.

Heating system: 11 sections for heating (including screen changer and die).

The cast copper heater is used for the first, second and die head section, cast aluminum heater is used for the other sections.

The heating efficiency is high and temperature maintaining effect is good as the asbestos used outside the heater.

The insulating resistance against ground of heater is more than 10MΩ and total heating power is about ~60kw.



2.0 GTE-95twin screw feeder

One set of feeder whose **feeding motor power is 3KW**.

Japanese Yaskawa frequency control is used for **speed adjusting**. speed ratio is 17:1.

There is horizontal stirring device in the feeder body and lubrication grease inside the feeder gearbox.

The material of hopper is stainless steel and it is spring screw used in the feeder.



3.0 Oil lubrication system

Oil pump power: 1.5KW

Lubrication oil model: 85W/90GL - 4. Hai Brand 6402 made in Shanghai, medium load gear oil.

Condenser model: SL - 408

Lube oil pump model: NB – B16

Using the filter to clean the dirty of the oil. Protect the gearbox for a long life.

Using the pressure indicator, the monitor the oil lubrication.



4.0 Soft water system

The inside of barrel body employs soft water cooling, and the main inlet and outlet pipes are stainless steel.

Soft water box is aparting from barrel body, convenient to clearing and repairing.

Holland JOCK solenoid valve

Type of cooling: water cooling

Cooling pump power: 0.75KW



5.0 Roots Vacuum system

JZJ2S150-2 Roots vacuum pump,

Motor for driving power: 10.5KW

The max inspiratory capacity: 150L/S

The pipe connects vacuum pump and vacuum chamber is with holding valve to prevent the water backflow.

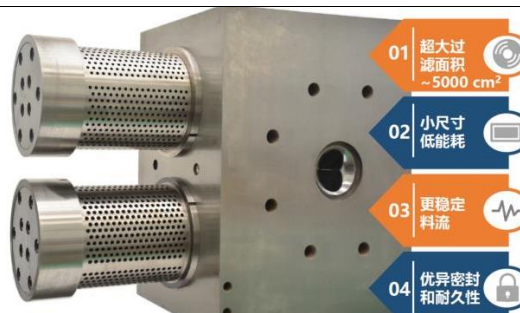


6.0 Hydraulic plung screen changer

Hydraulic plung changer, cylinder filter, very bigger filter size. The operation of screen changer is simple, which can achieve the continuity of production

Cast copper heater

Power of hydraulic station is 2.2kW, double cylinder for changing screen.



7.0 Water cooling die head

Derrick type die, cast copper heater is used for the die head
Hole 29- Φ 5.5mm

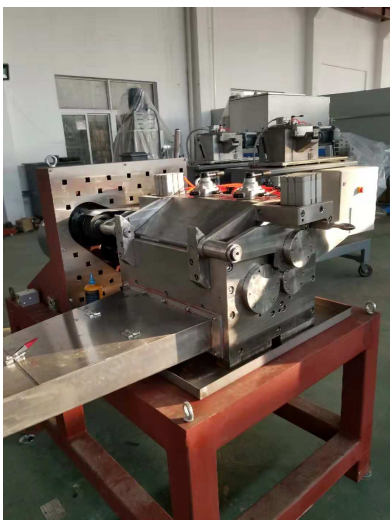
8.0 Flushing Water trough

Water trough is made of stainless steel SUS304, Model:3000mm*300*150
The trough can be moved by air cylinder. Which usually operating when start or close the machine
The height of the water-in is 1350mm. There has a plate to control the water flow pressure.
With flexible pipe connecting.



9.0 Flushing Pelletizer

MAX Capacity of pelletizer:1000-1200kg/h
Max quantity of strand: 45pcs
Product size: ϕ 3*3mm
Motor power for pelletizer: 7.5kW Siemens Beide motor
Speed controller: Yaskawa
Material of pelletizer roller: stainless steel body with Zc60 blades.



10. Dewatering machine

Power of motor is 7.5kW

Speed control: yaskawa inverter

Power of drying fan:1.1kW

the material of dewatering machine is stainless steel SUS304



11. Water circulating system

Power of water pump is 3kW. Yaskawa inverter speed control.

Heating exchanger volume is 20m³/h.

There has filter mesh put before the pump, which protect the pump

Water circulation tank size: 2000mm*150*300.

All of the parts which touch water is made of stainless steel.

12. Product silo

Blower power: 5.5KW

Pipelines are stainless steel

Silo volume: 1500L

Material: stainless steel

With discharging valve

13. Electrical cabinet

3X380V, AC, 50Hz.

Main control components are Siemens products from Germany.

Control buttons are Schneider products from France.

Main motor: AC, 280KW

The Japanese Yaskawa frequency converter is adopted for the speed regulation device of the host machine.

The Japanese Yaskawa frequency converter is adopted for the speed regulation device of the feeder.

The temperature control meter is the Japan RKC product with intelligent double channels and a temperature control in each zone.

Pressure meter range: 0- 25Mpa.

The electromagnetic valve is from Jorc of Holland.

The electrical control system controls the temperature control system, the driving system and the interlocking control system.

14 Spare parts

Screw elements: ~400mm

Electric heater

Closed cast aluminum heater: 1 pair

Open cast aluminum heater: 1 pair

Die head heater: 1 pair

Reinforced oil seal: 3 pieces

"O" shaped ring: 2 pieces

Tool box: 1 unit

Copper bar $\Phi 30 \times 250$ mm: 1 piece

Asbestos gloves: 2 pieces

15 Technical documents

Electrical assembly drawings: 1 set

User's manual of twin-screw extruder: 1 set

User's manual of frequency converter: 1 set

User's manual of temperature control meter: 1 set

Sketch map of gearbox structure: 1 set

Screw combination drawing: 1 set

Specification and certification of purchased part: 1 set

V. GENERAL CONTRACT CONDITIONS

SHIPMENT	70 working days after receipt of order and down payment
PAYMENT TERMS	- 30% T/T at sight at the order - 70% T/T at sight before delivery
PORT OF LOADING	Shanghai, China
PACKING	This production line need four 40 HC containers, each machine will be packing by stretched film and fixed with iron wire in container.
WARRANTY	- Mechanical parts: 15 months from delivery - Electric motors: 6 months from delivery or manufacture's warranty - Electromechanical components and instruments: 6 months from delivery or manufacture's warranty

SERVICE	
01	Warranty period is 12 months from the date of shipment.
02	Technical documents All labels on machines and lay-out drawings, Electrical diagram, User Manual, will be in English. LONHAM should send all necessary files to the buyer since the third week since project execution. All documents in hard copies should be also shipped with machines together.

03	Arrangement for inspection, installation and testing work a. After all machines are delivered to customer's factory; Buyer is responsible for all preparation work, e.g. electricity supply, water supply, labors and cranes, etc. b. LONHAM will prepare for visa application for their engineers, who are responsible for guide of machine installation and testing at the Buyer's factory. c. The Buyer will buy the round-trip air ticket for Engineer if visa application is approved. The buyer is also responsible to bear expenses generated, e.g. visa formalities, meals, accommodation and allowance of USD100 per day for each engineer. d. Engineer will give free training lessons to labors in buyer's factory.
04	Quantity and quality guarantee a. Quantity/Quality Discrepancy to destination port during transportation: In case of quality/quantity discrepancy to destination port in transportation, customer should file claim within 30 days after the arrival of the goods at port



of destination. LONHAM will be responsible for any discrepancy of the goods caused by shipping company and other transportation organization and/or post office.

b. Guarantee period and after-sales services: 12 months since date of bill of loading

During this guarantee period, LONHAM will provide spare parts without any charge in case of quality discrepancy caused by us. If the malfunctions are caused by your incorrect operations, LONHAM will provide the buyer spare parts at cost price.

c. Long-term service: