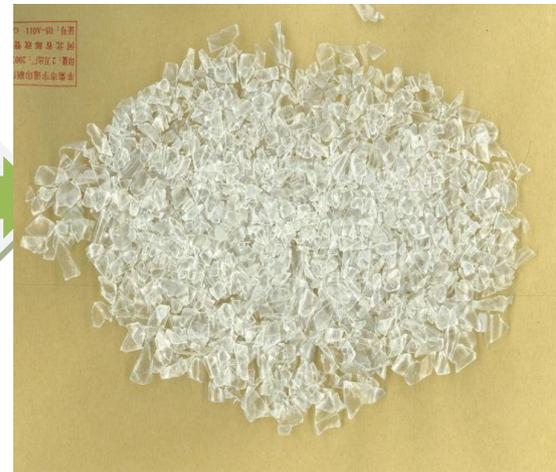


## 500-3000KG/H PET Bottle Washing Line

POLYTEC Machinery provides [PET Bottle Washing Line](#) (500-3000KG/H) which is specifically used for recycling, crushing and washing waste PET bottles and other PET plastic bottles.



**PET bottles**



**Cleaning PET flakes**

Post-consumer PET bottles are doubtless among the most important components of the recycling market. Recycled PET may be used in a wide variety of final applications, with very interesting and remunerable financial returns for the recycling companies.

As the quality of the collected PET bottles varies significantly from country to country, and even within the same country, and as their conditions can be very bad, it is necessary to be continuously updated on the technologies and technical solutions of PET recycling, in order to correctly process the most difficult and contaminated materials and reach the best final quality. POLYTEC Machinery, thanks to its worldwide experience in the field of [PET bottle washing line](#) and [recycling line](#), can provide its customers with proper technical solutions and state-of-the-art recycling technologies, delivering a response tailored to the frequently changing needs of its customers and of the market.

PET Flake Quality Reference Table:

Moisture Content	<0.9%	Label	<20ppm
PVC	<50ppm	Variiegated tablets	<30ppm
Glue	<10ppm	PH	Neutral
PP/PE	<20ppm	Total impurity	<100ppm
Metal	<20ppm	Flake size	12mm, 14mm or according to customer needs

According to the final usage of PET flakes, POLYTEC's PET recycling and washing system divides into 4 categories:

1. Bottle to bottle grade, PET bottles recycling and washing line
2. Yarn/filament grade, PET bottles recycling and washing line
3. PSF grade, PET bottles recycling and washing line
4. Regular grade, such as strapping, brusher making, etc., PET bottles recycling and washing line

**Features:**

1. Recycled material: Total impurity content  $\leq 320$ PPM; Moisture content  $\leq 2\%$
2. Production Capacity: 300-1000Kg/h ( But if lower than 500Kg/h, there will be no label remover machine, as the lowest capacity for label remover is 500Kg/h.).
3. Note: We can design the machines exactly according to Customers' requirements. If want to know the details for this machine, just feel free to contact us, send us your inquiry.

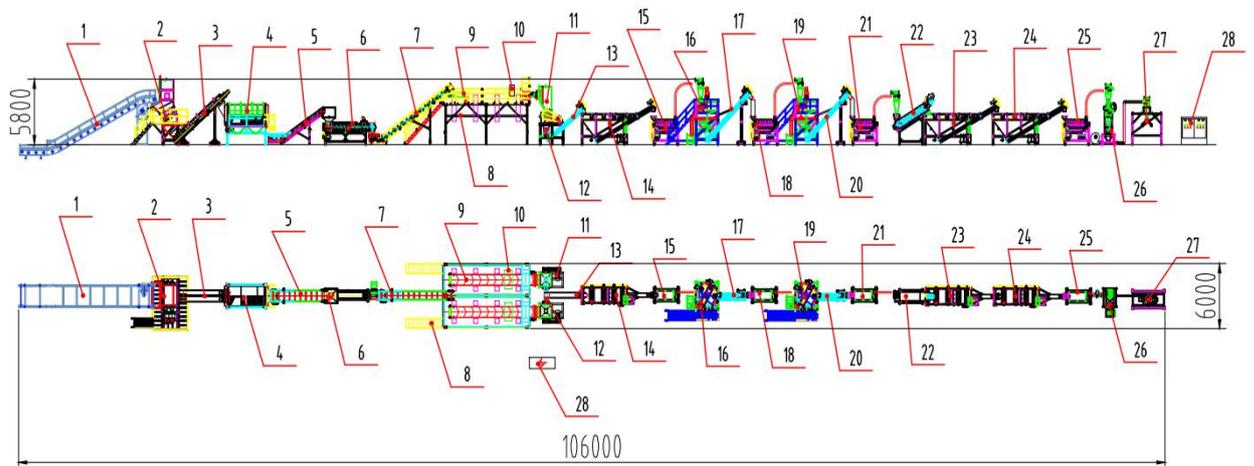
**Project evaluation**

Raw material:waste plastic pet bottle

Finished product: Clean PET flakes:

1. water content:  $\leq 1.5\%$
2. stacking density: 0.25-0.35 g/m<sup>3</sup>
3. Power supply :380V,3phases,50HZ(made by customer requirement)
4. placed in a line or an angle (Need to provide plant lay out drawing.)

### Equipment lay out drawing



### Equipment list and price

No.	Name	Qty.
1	Metal chain conveyor (sink into the ground)	1
2	De-baler	1
3	Double screw loader(with silo)	1
4	Trommel	1
5	Belt conveyor	1
6	Label remover	1
7	Belt conveyor	1
8	Steel table	1
9	Manual sorting table	2
10	Metal detector + automatic separation device	2
11	Crusher	2
12	Horizontal screw conveyor	1
13	Screw loader	1

14	Floating washer ( with sliding ladder)	1
15	High speed de-watering machine	1
16	Steam washer (Including working platform)	1
17	Screw loader	1
18	High speed de-watering machine	1
19	Steam washer (Including working platform)	1
20	Screw loader	1
21	High speed de-watering machine	1
22	High speed friction washer	1
23	Floating washer	1
24	Floating washer	1
25	Centrifugal dewatering machine	1
26	Zig-zag label blower	1
27	Silo	1
28	Electric cabinet	2

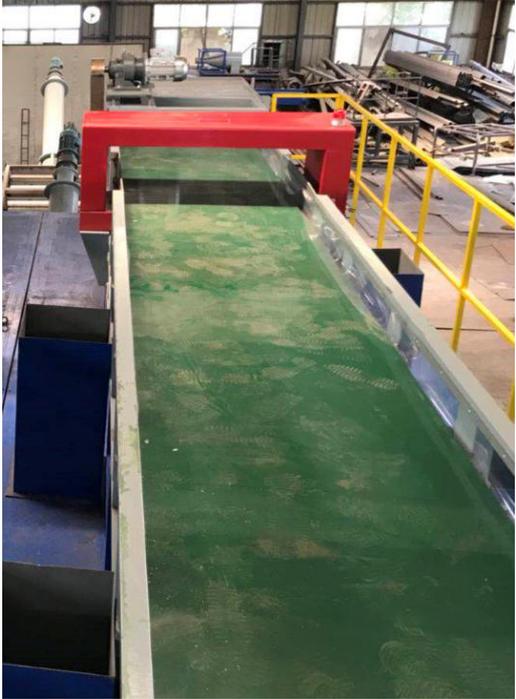
### Technical data

No.	Name	Description	Picture
1	Metal chain conveyor	Usage: cut off the packaging steel line, then convey bottles into De-baler .	

2	De-baler	Usage: Open the packaging PET bottles	
3	Double screw loader (with silo)	Usage: conveying material into next stop.	

4	Trommel	<p><b>Usage:</b> Separate different impurities, such as sand, stone, metal and so on according to the size of the holes</p>	
5	Belt conveyor	<p><b>Usage:</b> conveying material into next stop.</p>	

6	<p><b>Label remover</b></p>	<p><b>Usage: for removing the labels by friction between screen and arms</b></p> <p>Exfoliation rate: Compressed bottle: 90% Uncompressed bottle off rate: 98%</p>	
7	<p><b>Belt conveyor</b></p>	<p><b>Usage: conveying material into next stop.</b></p>	

8	Steel table	The main frame adopts thicker square tube and I-beam steel.	
9	Sorting table (2 pieces)	Usage: Manually separate any impurities that can be seen.	
1	Metal		

<p><b>0</b></p>	<p><b>detector + automatic separation device (2 pieces)</b></p>	<p><b>Usage:Usage:for detecting metals automatically</b> Width: 1200mm Precise metal detection: ≥ 2 mm</p>	
<p><b>1 1</b></p>	<p><b>Crusher s (two pieces)</b></p>	<p><b>Usage: for crushing the material into smaller size</b></p>	

<p>1 2</p>	<p><b>Horizontal screw loader</b></p>	<p><b>Usage:for transporting flakes to next step. The parts which contact with flakes is made of SUS304.</b></p>	
<p>1 3</p>	<p><b>Screw feeder</b></p>	<p><b>Usage:for transporting flakes to next step. The parts which contact with flakes is made of SUS304.</b></p>	

<p>1 4</p>	<p><b>Floating washer</b></p>	<p><b>Usage: Remove labels, caps and so on</b> <b>The parts which contact with water is made of SUS304.</b></p>	
<p>1 5</p>	<p><b>High speed de-watering machine</b></p>	<p><b>Usage: to get rid of glue, dirties, oil, detergent and etc.</b> <b>The parts which contact with wet flakes is made of SUS304.</b></p>	

<p><b>1</b> <b>6</b></p>	<p><b>Steam washer</b></p>	<p><b>Usage:</b>for wash with hot water and detergent to get rid of oil, dirties and some labels .</p> <p>The parts which contacts with the wet flakes is made of stainless steel SUS304.Steam boiler (will be provided by buyer) provide hot steam to the steam washer and heat the water to 90-95°C, mix caustic soda or other detergent into the water carefully to clean the flakes.The flakes will stay in the steam washer about 8-10 mins.</p> <p>This new steam washer has a special design for discharging the label and bottle cap which float on the water.This new design improves the quality of the clean flakes.</p>	
------------------------------	----------------------------	---	--

<p>1 7</p>	<p><b>Screw loader</b></p>	<p><b>Usage:for transporting flakes to next step.</b> With automatic return water device <b>The parts which contact with water is made of SUS304.</b></p>	
<p>1 8</p>	<p><b>High speed de-watering machine</b></p>	<p><b>Usage: to get rid of glue, dirties, oil, detergent and etc.</b> Bearing: NSK <b>The parts which contact with the wet flakes is in made of SUS304.</b></p>	

<p>2 0</p>	<p><b>Screw loader</b></p>	<p><b>Usage:for transporting flakes into next step.</b> With automatic return water device <b>The parts which contact with water is made of SUS304.</b></p>	
<p>2 1</p>	<p><b>High speed de-watering machine</b></p>	<p><b>Usage: to get rid of glue, dirties, oil, detergent and etc.</b> <b>The parts which contact with the wet flakes is in made of SUS304.</b></p>	

<p>2 2</p>	<p><b>Friction washer</b></p>	<p><b>Usage: through the injection of high pressure water, the effective removal of chemicals and impurities</b></p> <p><b>The parts which contact with the wet flakes is in made of SUS304.</b></p>	
<p>2 3</p>	<p><b>Floating washer</b></p>	<p><b>Usage: to remove labels, caps, chemicals dirties and etc.</b></p> <p><b>The parts which contact with the wet flakes is in made of SUS304.</b></p>	

<p>2 5</p>	<p><b>De-watering machine</b></p>	<p><b>Usage: for reducing water content</b> Dehydration rate: 98%. This machine greatly reduces energy consumption <b>The parts which contact with the wet flakes is in made of SUS304.</b></p>	
<p>2 6</p>	<p><b>Zig-zag label blower</b></p>	<p><b>Usage:for separating little amount labels and dust from PET flakes.</b> <b>The parts which contacts with flakes is made of SUS304.</b></p>	

<p>2 7</p>	<p><b>Silo</b></p>	<p><b>Usage :</b>for temporary storage for PET flakes. The parts which contacts with flakes is made of SUS304.</p>	
<p>2 8</p>	<p><b>Control cabinet</b></p>	<p><b>Usage:</b>for controlling the whole line . Inverter:Delta Contactor :CHNT Relay: CHNT General switch:CHNT Circuit-breaker:CHNT <b>Note: Customer need to provide the wire from control cabinet to each machine.</b></p>	

### Spare parts list

Item	Name	Quantity	Price(USD)
1	Bearing for belt conveyor	6pcs	<b>FREE</b>
2	Tungsten steel blade of label remover	15pcs	
3	Belt of label remover	1 piece	
4	Belt of crusher	1 piece	
5	Crusher screen	1piece	
6	Screw for crusher blade press	50pcs	
7	Chain for screw feeder	1piece	
8	High speed friction wash belt	1pcs	
9	High speed de-watering machine belt		
10	Contactors which is less than 15am	2pcs	
11	Relay which is less than 15am	2pcs	
12	Maintenance tool	1set	

### Estimated Plant Parameters:

Capacity(kg/h)	Power Installed(kw)	Required Area(m2)	Manpower	Steam Volume(kg/h)	Compressed Air(m3/min)	Water Supply(m3/h)
500	220	400	8	350	4	1
1000	500	750	10	500	10	3
2000	700	1000	12	800	15	5
3000	900	1500	12	1000	15	6
4500	1000	2200	16	1300	18	8
6000	1200	2500	16	1800	18	

About our service:

#### **PET Bottle washing line Before-sale**

- 1、Introduce products and applications detail

- 2、 Recommend suitable solution
- 3、 Provide with reference information
- 4、 Offer lab for test

### **During Manufacturing**

- 1、 Provide with layout and engineering conditions
- 2、 Inform the project processing status
- 3、 Offer other documents

### **After-sale**

1. Provide with installation, commissioning and training
2. Register and record customer information
3. Offer spare parts
4. Provide with necessary technical support for new application
5. Visit customer regularly and correct information

### **Why choose us**

- 1.Lower investment cost for a high quality and durable machine;
2. Low energy consumption with high production output;
3. Overseas installation and training are available;
4. Machine warranty with spares in stocking and in-time delivery;
5. Fast machine delivery and installation: POLYTEC produces on an average of 10 sets of plastic machines per month and can deliver the machine faster than most manufacturers. The regular delivery time of an POLYTEC recycling machine is 60 days.

Customer factory :

美国客户工厂 **Client's Factory in usa**

**(4tons/nour)**





土耳其客户工厂 turkey client plant

