

TECHNOPLAST

FUTURE OF RECYCLING

LDPE Film/HDPE Flake Scrap Washing Line

Capacity: 500 kg/hour



Email: info@techplast.in
Website: www.techplast.in

General Specification:

Project Name: 500kg/hour LDPE and HDPE scrap washing line

1. Electricity power use :380V,50Hz,3phase or customized
2. Material: waste LDPE film and HDPE Flake
3. Screen net size: for plastic film: 50mm and for HDPE flake: 12mm
4. Output: 500Kg/hour
5. 5.Layout of the whole set of 500kg/hour LDPE film/HDPE scrap washing line

Technical Specification

A. Configuration of 1000kg/hour PE film washing line

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B. Spare parts

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1 Belt conveyor

This machine mainly used to convey the PE scrap into Plastic crusher

1. Motor power: 2.2 Kw, Speed control by frequency inverter
2. Width of convey belt :800mm
3. Install isolation stick against-slide on the surface of the belt.
4. Adjust Height of conveying belt freely.
5. Small moving wheels are flexible and convenient.
6. The convey speed is adjustable which control the feeding production capacity per hour of the whole line



2 PC1000 Plastic Crusher

This machine will crush the PE scrap Model: PC1000 Plastic crusher

1. Motor power: 55kw; AC motor
2. Mesh screen net: 50mm and 12mm
3. Rotation diameter of Main shaft: $\phi 680\text{mm}$
4. Length of main shaft: 1900mm
5. Feeding inlet: 1000mm \times 700mm
6. Quantity of rotating blade: 10pcs
7. Quantity of fixed blade: 4pcs
8. Capacity: 500-800Kg/hour
9. Plastic crusher will work with water process
10. Water spray pipe with diameter: 50mm
11. Blade material with SKD-11 Material



3 Screw feeder 1

This machine will be used to send the plastic film scraps into the next step

1. Effective length:3800mm
2. Screw diameter: ϕ 380mm
3. Capacity: 500 kg/hour
4. Motor power: 3kw
5. Material for contact with material: Stainless steel 304



4. High speed friction washer

This machine will use high speed centrifugal to friction wash the dirty film scraps into the next step

1. Effective length:3800mm
2. Rotation diameter: ϕ 680mm
3. Capacity: >500 kg/hour
4. Motor power: 37kw or 45kw
5. Material for contact with material: Stainless steel 304
6. Top with water spray to inside
7. Rotary speed: 1440rpm
8. Bearing with NSK bearing or SKF bearing



5. Screw feeder 2

This machine will be used to send the plastic film scraps into the next step

1. Effective length:3800mm
2. Screw diameter: $\phi 380$ mm
3. Capacity: 500 kg/hour
4. Motor power: 3kw
5. Material for contact with material: Stainless steel 304



6. Hot washer Floating washer

This machine is mainly used to clean the rest dirty on the surface of film scraps

1. Effective length: 6000mm, Width: 1500mm
2. Washing roller motor: 2.2KW+3kw
3. Qty of pushing roller : 5set
4. Material for contact with material: Stainless steel304
5. The floating washing tank with water level control device
6. Roller speed control ways : by inverter
7. Inside with heater around 72kw by electric heater



7. High speed friction washer

This machine will used to friction wash the dirty film scraps into the next step

1. Effective length:3800mm
2. Screw diameter: $\phi 380$ mm
3. Capacity: >500 kg/hour
4. Motor power: 18.5kw
5. Material for contact with material: Stainless steel 304
6. Top of screw feeder with water spray
7. Rotary speed: 640rpm



8. Floating washer

This machine is mainly used to clean the rest dirty on the surface of film scraps

1. Effective length: 6000mm, Width: 1500mm
2. Washing roller motor: 2.2KW+3kw
3. Qty of pushing roller: 5set
4. Material for contact with material: Stainless steel304
5. The floating washing tank with water level control device
6. Roller speed control ways : by inverter



9. Screw feeder

This machine will be used to send the film scraps into the next step

1. Effective length: 3000mm
2. Screw diameter: $\phi 380$ mm
3. Screw length: 3000 mm
4. Capacity: >500 kg/h
5. Motor power: 3kw
6. Material for contact with material: Stainless steel 304



10. High speed centrifugal Dewatering machine

This machine mainly used to dewater for film scraps to get final good quality film scraps

1. Motor power: 55Kw
2. Capacity: 500kg/hour
3. Motor speed: 1440rpm
4. The diameter of the screen hole: 3mm
5. The thickness of screen mesh: 3mm
6. The dewatering rate: more than 95%
7. Continuously discharge the material from side and drainage from the bottom of this machine
8. including Automatic-brushing clean system
9. The diameter of main rotor 220*16mm(Thickness)
10. The thickness of paddle:10mm
11. Rotation Diameter of main shaft: 800mm



11. Hot air pipe dryer

This machine is mainly used to use hot air to remove the moisture from PP/PE scraps

1. Total length of stainless steel pipe : 18meter
2. The diameter of stainless steel pipe : 219mm
3. Heating power of heating box : 45Kw
4. The temperature is adjustable by temperature controller
5. The Moisture of PP/PE will be around 5 %
6. Power of air blower motor: 11Kw



12. Silo

This machine is mainly used to store the PE/PP scraps for next step packing

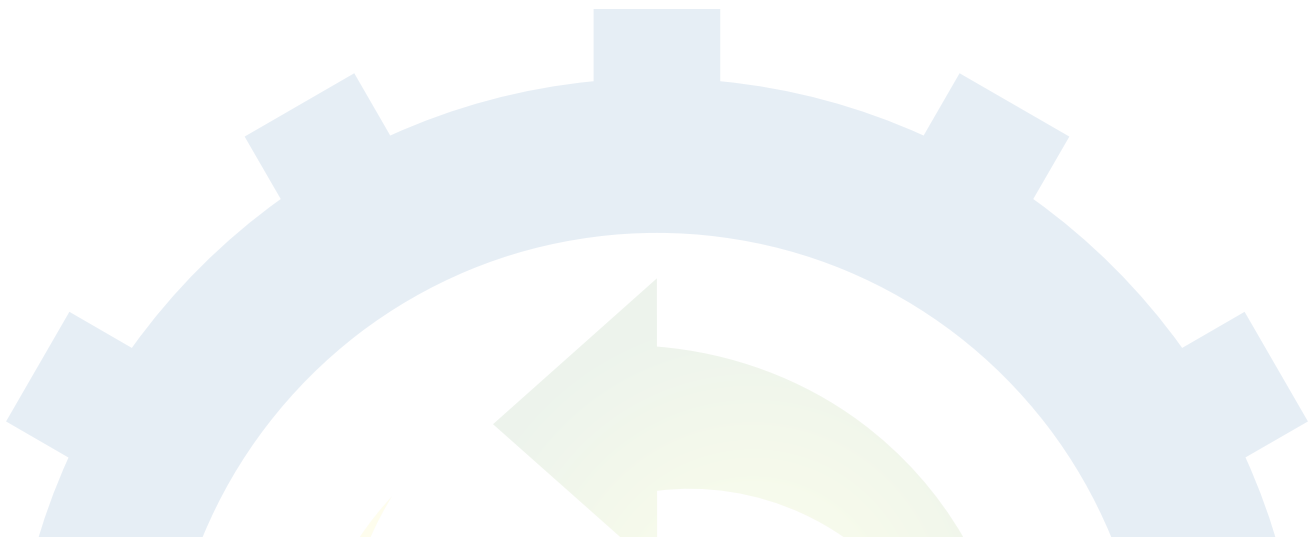
1. Effective volume: 1.5 m³
2. Tube diameter: $\Phi 219\text{mm}$
3. Material : stainless steel 304

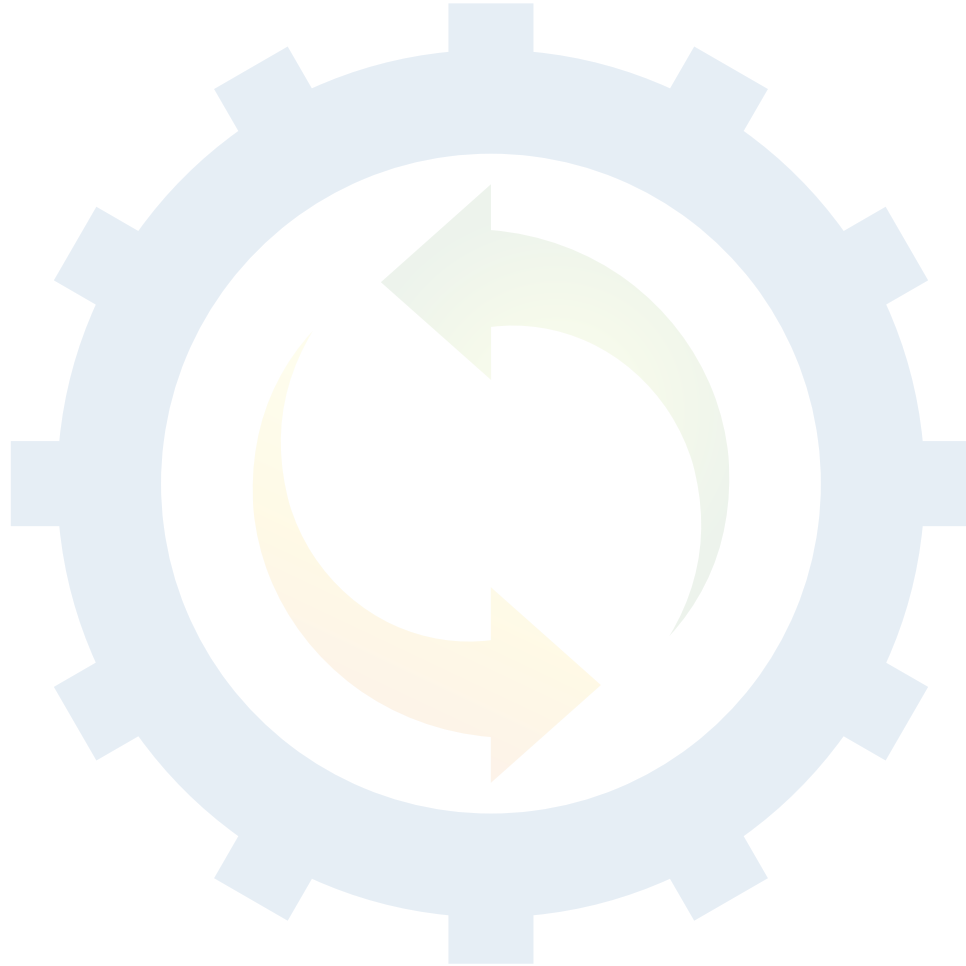


13. Control cabinet

1. Electric elements: Siemens Contactor, Siemens Relay,
2. Inverter will use ABB brand







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202/203/204/205, 2nd Floor, Business Classic
Chincholi Bunder Road, Malad (W), Mumbai 400 064 MH-India
Email: info@techplast.in Website: www.techplast.in
Tel: 28725946, 28721734
