SUZHOU•ZHANGJIAGANG



ZHANGJIAGANG BOXIN MACHINERY CO., LTD

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RECYCLING PLASTIC SOLUTION







20 Since 2005 Years one-stop solution for recycling renewable resources





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ABOUT US

Zhangjiagang Boxin Machinery Co., Ltd is an innovative company that remains committed to plastic recycling and extrusion technology and specializes in providing plastic recycling washing and granulation equipment. We are a professional supplier of customized solutions to plastic recycling, on the basis of our development teams and a wealthy content of industrial experience.

Main Products of Boxin: PET bottle recycling washing line, PE film / PP woven bag recycling washing line, HDPE / PP hard plastic recycling washing line, plastic pelletizing line and plastic shredder, plastic crusher machine.

OUR ADVANTAGES:

Development teams specializing in plastic recycling industry more than 20 years;

A professional supplier of customized solution to plastic recycling;

Well-improved sales system including pre-sale, in-sale and after-sale;

Professional engineers in service of debugging and technological guidance.

- PET BOTTLE RECYCLING WASHING SYSTEM
- SOFT PLASTIC RECYCLING WASHING SYSTEM
- **RIGID PLASTIC RECYCLING WASHING SYSTEM**
- SINGLE-STAGE COMPACTOR PELLETIZING LINE
- DOUBLE-STAGE COMPACTOR PELLETIZING LINE
- **RIGID PLASTIC PELLETIZING LINE**

PET BOTTLE RECYCLING WASHING SYSTEM

RANGE OF APPLICATION:

It is applicable to PET material carbonated beverage bottles, drinking water bottles, fruit juice bottles, oil bottles, tea drink bottles, PET sheet,etc.

PRODUCT FEATURES:

PET bottle washing and recycling's key factor is the removal rate of impurities, which includes the pollutants in the environment, other materials attached to the original plastic products, and homogeneous substances with different colors.

The higher impurities will be more likely to produce high-quality downstream products with lower manufacturing costs and production losses. Boxin team provides more equipment combinations for customers' options according to customers' demands. We have reasonable collocation according to the composition characteristics of the different PET bottles in the world in a modular way so as to meet the requirements for best production and minimum input.

TECHNICAL DATA

| Model | BXA-500 | BXA-1000 | BXA-2000 | BXA-3000 | BXA-5000 |
|-------------------------|---------|----------|----------|----------|----------|
| Output (KG/H) | 500 | 1000 | 2000 | 3000 | 5000 |
| Water consumption (T/H) | 3-5 | 4-6 | 6-8 | 8-10 | 12-15 |
| Installed power (KW) | 120-160 | 160-230 | 260-360 | 420-580 | 880-950 |
| Labor requirements | 4-5 | 4-6 | 5-6 | 6-8 | 8-10 |
| Factory area (L×W×H) M | 70×6×5 | 80×6×5 | 90×7×6 | 100×7×6 | 120×8×6 |

Notes: The parameters above are only for your preference. The configuration parameters will subject to changes according to different materials.







SOFT PLASTIC RECYCLING WASHING SYSTEM

RANGE OF APPLICATION:

It is applicable to agricultural films, woven bags, jumbo bags, market films, municipal solid waste separation films, etc.

PRODUCT FEATURES:

PE films and PP woven bags are very valuable secondary resources, which can be used for the recycling of various domestic and industrial products. Boxin team provides a series high quality and high efficient washing and recycling equipment to effectively remove the sand and impurities, etc, and offers customized integrated solutions for customers according to the actual demands of customers and the actual situation in this region.

TECHNICAL DATA

| Model | BXB-300 | BXB-500 | BXB-1000 | BXB-1500 | BXB-2000 |
|-------------------------|---------|---------|----------|----------|----------|
| Output (KG/H) | 300 | 500 | 1000 | 1500 | 2000 |
| Water consumption (T/H) | 2-3 | 4-6 | 6-8 | 8-10 | 10-15 |
| Installed power (KW) | 100-130 | 130-160 | 180-260 | 280-320 | 350-450 |
| Labor requirements | 2-3 | 2-3 | 3-5 | 3-5 | 4-6 |
| Factory area (L×W×H) M | 30×4×5 | 40×4×5 | 45×6×5 | 48×6×5 | 55×7×5 |











RIGID PLASTIC RECYCLING WASHING SYSTEM

RANGE OF APPLICATION:

It is applicable to milk bottles, engine oil bottles, blue big drums, environmental dust bins, plastic tables, and chairs, etc.

PRODUCT FEATURES:

HDPE/PP rigid plastics recycling's key factor is the removal of all kinds of impurities from material. Boxin Team is familiar with the different characteristics of various impurities. The single machine design of different function performances is for the separation of the impurities. Different modular forms connect each unit. It can promote the capacity expansion and industrial upgrading of the follow-up equipment with the most cost-effective input, eliminate the pollutants in the initial stage, save energy and reduce energy consumption and effectively improve the product quality.

TECHNICAL DATA

| Model | BXC-500 | BXC-1000 | BXC-2000 | BXC-3000 | BXC-4000 |
|-------------------------|-------------------|----------|----------|----------|----------|
| Output (KG/H) | Output (KG/H) 500 | | 2000 | 3000 | 4000 |
| Water consumption (T/H) | 3-4 | 3-4 | 4-5 | 6-8 | 8-10 |
| Installed power (KW) | 80-100 | 120-180 | 180-260 | 260-330 | 350-450 |
| Labor requirements | 2-3 | 2-3 | 3-5 | 4-6 | 5-8 |
| Factory area (L×W×H) M | 32×6×5 | 38×6×5 | 42×6×5 | 45×7×5 | 50×7×5 |







SINGLE-STAGE COMPACTOR PELLETIZING LINE

RANGE OF APPLICATION:

It is applicable to cleaned plastic film flakes, woven bag flakes, jumbo bag flakes and other pp pe soft plastics.

PRODUCT FEATURES:

BXB1 series pelletizing production line integrates crushing, compacting, and pelletizing with a high level of automation. With high feeding efficiency, it is more suitable for the large-size film to enter the equipment directly without crushing. An intelligent modular system and one key for startup and shutdown are secure and stable. We can provide single-stage, double stage structures according to different requirements, in order to ensure the excellent quality of the particles.

TECHNICAL DATA

| Model | BXB1-100 | BXB1-120 | BXB1-130 | BXB1-150 | BXB1-160 | BXB1-180 |
|------------------------|----------|----------|----------|----------|----------|----------|
| Capacity (KG/H) | 200-300 | 300-400 | 350-450 | 500-600 | 600-700 | 800-1000 |
| Install Power (KW) | 160 | 190 | 240 | 320 | 375 | 480 |
| Labor requirements | 2-3 | 2-3 | 2-3 | 2-3 | 2-3 | 3-4 |
| Overall Size (L×W×H) M | 17×5×4 | 20×5×4 | 20×5×4 | 22×6×4 | 23×6×4 | 25×6×4 |











DOUBLE-STAGE COMPACTOR PELLETIZING LINE

RANGE OF APPLICATION:

It is applicable to cleaned plastic film flakes, woven bag flakes, jumbo bag flakes and other pp pe soft plastics.

PRODUCT FEATURES:

BXB2 series pelletizing production line integrates crushing, compacting, and pelletizing, with a high level of automation. With high feeding efficiency, it is more suitable for the large-size film to enter the equipment directly without crushing. An intelligent modular system and one key for startup and shutdown are secure and stable. We can provide single-stage, double stage structures according to different requirements, in order to ensure the excellent quality of the particles.

TECHNICAL DATA

| Model | BXB2-100/120 | BXB2-120/130 | BXB2-130/140 | BXB2-150/160 | BXB2-160/180 | BXB2-180/200 |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Capacity (KG/H) | 260-360 | 350-450 | 450-550 | 500-650 | 750-850 | 900-1100 |
| Install Power (KW) | 185 | 250 | 300 | 400 | 505 | 595 |
| Labor requirements | 2-3 | 2-3 | 2-3 | 2-3 | 2-3 | 3-4 |
| Overall Size (L×W×H) M | 18×5.5×4 | 21×5.5×4 | 23×5.5×4 | 25×6.5×4 | 26×6.5×4 | 28×6.5×4.5 |











RIGID PLASTIC PELLETIZING LINE

RANGE OF APPLICATION:

It is applicable to rigid plastics, such as plastic hard flakes from milk bottles, plastic detergent bottles, plastic blue big drums, etc.

PRODUCT FEATURES:

BXC2 pelletizing production line with forced transportation, high efficient plasticizing mixing and shearing dispersion. Nosing free backpressure backflow can avoid the over heat and help the distribution optimization of various industrial processes. High efficiency and high productivity are suitable for processing of carbon black master batch. We can provide single stage, double stages and multi-stage structure according to different requirements, in order to ensure the excellent quality of the particles.

TECHNICAL DATA

| Model | BXC2-85/100 | BXC2-100/120 | BXC2-120/130 | BXC2-150/160 | BXC2-160/180 | BXC2-180/200 |
|------------------------|-------------|--------------|--------------|--------------|--------------|--------------|
| Capacity (KG/H) | 150-250 | 200-350 | 300-450 | 500-650 | 700-850 | 900-1100 |
| Install Power (KW) | 80 | 110 | 140 | 240 | 280 | 330 |
| Labor requirements | 2-3 | 2-3 | 2-3 | 2-3 | 2-3 | 3-4 |
| Overall Size (L×W×H) M | 16×5×4 | 17×5.5×4 | 18×5.5×4 | 22×6.5×4 | 23×6.5×4 | 26×6.5×4.5 |











PET PARALLEL TWIN SCREW PELLETIZING LINE

RANGE OF APPLICATION:

It is applicable to cleaned pet bottle flakes pelleting.

PRODUCT FEATURES:

BXA1 series pelletizer is able to adjust the screw draw ratio, screw arrangement, exhaustion quantity position and rational optimized configuration according to processing material system and technology and formula requirements by using building block system principle design, thus achieving the plasticization, shearing, dispersion, homogenization, exhaust and pressure building of materials and completing the high polymer material technology.

TECHNICAL DATA

| Model | BXA1-50 | BXA1-65 | BXA1-75 | BXA1-95 | |
|------------------------|-----------------------|------------|------------|----------|--|
| Capacity (KG/H) | bacity (KG/H) 150-220 | | 500-600 | 900-1100 | |
| Install Power (KW) | 130 | 175 | 235 | 360 | |
| Labor requirements | 1-2 | 2-3 | 2-3 | 2-3 | |
| Overall Size (L×W×H) M | 15×1.5×2.5 | 16×1.5×2.5 | 17×1.5×2.5 | 19×1.5×3 | |









WET CRUSHER

RANGE OF APPLICATION:

It is applicable to pet bottles, films, woven bags, rigid materials and small hollow bottles, etc.

PRODUCT FEATURES:

BXD1 series crusher is a heavy-duty and efficient crusher specially designed for the recycling industry. It adopts scissor cutting technology and a quick blade adjustment device. The compact body design facilitates cavity maintenance, quick cleaning and replacement of rotary knives, fixed knives and screens. The operation is safe, convenient and fast.





TECHNICAL DATA

| Model | BXD1-500/800 | BXD1-650/1000 | BXD1-750/1200 | BXD1-750/1400 | BXD1-800/1600 |
|-----------------------------------|--------------|---------------|---------------|---------------|---------------|
| Capacity (KG/H) | 400-600 | 900-1200 | 1400-1600 | 2000-2200 | 2400-2700 |
| Motor Power (KW) | 37/45 | 55/75 | 90/110 | 110/132 | 160/185 |
| Rotary Knives (PCS) | 6 | 6/10 | 6/10 | 10/14 | 10/14 |
| Fixed Knives (PCS) | 4 | 4 | 4 | 4 | 4 |
| Main Shaft rotation diameter (MM) | 500 | 650 | 750 | 750 | 800 |

Notes: The parameters above are only for your preference. The configuration parameters will subject to changes according to different materials.

HEAVY DUTY CRUSHER

RANGE OF APPLICATION:

It is applicable to injection mold parts, blow mold parts, profiles, sheets, soft plastic films and hard plastic etc.

PRODUCT FEATURES:

BXD2 series crusher is designed to meet the production requirements of high-capacity crushing and one-time crushing of large materials. Therefore, this series crusher can be used for secondary crushing in the production line after shredders. We design the best cutting angle, and the most suitable cutting rate and adopt a wear-resistant design according to the materials' characteristics, in order to ensure the long time and nonstop operation of the system and achieve the ideal material crushing effect.



TECHNICAL DATA

| Model | BXD2-500/800 | BXD2-650/1000 | BXD2-750/1200 | BXD2-750/1400 | BXD2-800/1600 |
|-----------------------------------|--------------|---------------|---------------|---------------|---------------|
| Capacity (KG/H) | 400-600 | 800-1200 | 1400-1600 | 1800-2200 | 2400-2600 |
| Motor Power (KW) | 37/45 | 55/75 | 90/110 | 110/132 | 160/185 |
| Rotary Knives (PCS) | 6 | 6/10 | 6/10 | 10/14 | 10/14 |
| Fixed Knives (PCS) | 4 | 4 | 4 | 4 | 4 |
| Main Shaft rotation diameter (MM) | 500 | 650 | 750 | 750 | 800 |



SINGLE SHAFT SHREDDER

RANGE OF APPLICATION:

It is applicable to plastics injection molding, extrusion, film blowing and other general plastics, rubber-tire rubber, reclaimed rubber, chemical fiber- carpet, etc.

PRODUCT FEATURES:

BXE series single shaft shredder is suitable for the shredder various big size materials, particularly for big size or rigid materials(such as thick-wall tube, layer board, turnover box, etc). The whole machine is equipped with high-capacity hopper, crushing silo and high efficiency pushing material device, which can give full play to the capacity of rigid and large size materials.



TECHNICAL DATA

| Model | BXE-800 | BXE-1000 | BXE-1200 | BXE-1500 | BXE-1800 |
|----------------------------------|---------|----------|-----------|-----------|-----------|
| Installed power (KG/H) | 400-800 | 600-1200 | 1300-1600 | 1600-2000 | 2000-2600 |
| Installed power (KW) | 37 | 55 | 75 | 110 | 160/185 |
| Number of rotary knives | 56+2 | 56+4 | 78+4 | 116+4 | 140+6 |
| Number of fixed knives | 2 | 2 | 2 | 2 | 4 |
| Main shaft rotationdiameter (mm) | Ø320 | Ø400 | Ø400 | Ø450 | Ø500 |
| Knive Size (mm) | 40×40 | 50×50 | 50×50 | 70×70 | 70×70 |

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Notes: The parameters above are only for your preference. The conbguration parameters will subject to changes according to different materials.

KNIVE THICKNESS

RANGE OF APPLICATION:

It is applicable to rigid materials, such as plastics - mixed plastics, plastic barrels or containers, etc, electrical appliance- waste household appliances, packaging materials - waste paper, cardboard, etc.

PRODUCT FEATURES:

BXF series double shaft shredder with low noise, low energy consumption and high output, showing the superiority of low speed and large torque cut design. It is particularly suitable for the crushing of the containing metal or stone, or large size materials in package. This machine can reduce the material volume and facilitate the processing in the next step, such as secondary crushing, material separation, washing, etc.



TECHNICAL DATA

| Model | BXF-800 | BXF-1000 | BXF-1200 | BXF-1500 | BXF-1800 |
|-----------------------------------|---------|-----------|-----------|------------|------------|
| Installed power (KG/H) | 600-800 | 1000-1300 | 1500-2000 | 2000-2500 | 2500-4000 |
| Installed power (KW) | 30×2 | 37×2 | 45×2 | 75 (90) ×2 | 110(132)×2 |
| Number of rotary knives | 16 | 20 | 24 | 30 | 36 |
| Number of fixed knives(bar) | 16 | 20 | 24 | 30 | 36 |
| Main shaft rotation diameter (mm) | Ø350 | Ø400 | Ø450 | Ø500 | Ø600 |
| Knive thickness (mm) | 50 | 50 | 50 | 50 | 50 |

PLASTIC FILM AND BAG RECYCLING SQUEEZER

RANGE OF APPLICATION:

It is applicable to film, woven bag, label paper, non-woven fabric, pet film, etc.

PRODUCT FEATURES:

Mainly used for pre-plasticizing and cutting soft plastics. The screw with a special structure operates under high pressure to remove moisture. The electromagnetic heater semi-plasticizes the soft plastic and extrudes it through the die. The high-speed rotating cutterhead cuts the particles evenly.



TECHNICAL DATA

| Model | BXG-300 | BXG-320 | BXG-350 | BXG-380 |
|------------------------------------|------------|--------------|--------------|--------------|
| Capacity (KG/H) | 300 | 500 | 800-1000 | 1000-1200 |
| Motor Power (KW) | 90 | 132 | 160/185 | 200/220 |
| Pelletizing cutter motor power KW) | 3 | 4 | 5.5 | 5.5 |
| Heating motor power (KW) | 9 | 9 | 38 | 40 |
| Overall size(M) | 3×2.35×2.2 | 3.25×2.5×2.2 | 3.9×2.75×2.4 | 4.1×2.85×2.5 |

Notes: The parameters above are only for your preference. The configuration parameters will subject to changes according to different materials.

ELECTROMAGNETIC AUTOMATIC SHARPENER

RANGE OF APPLICATION:

It is applicable to crusher, paper cutting machine, plastic machine, plate shearing machine and other straight edge blades of cutting machines

PRODUCT FEATURES:

The machine adopts high-quality low-carbon plate integrated welding to improve the deformation resistance.

- The rail adopts high quality wear resistant steel bar, which makes the sliding platform operation more stable and accurate.
- Grinding head box and sliding table adopt cast iron material and the centralized oil supply device can be lubricated at various places.
- Gear and rack has stable performance, small noise high transmission, long life service and easy maintenance.
- Electromagnetic suction grinder has even suction, no deformation of blade and high straightness of the blade.
- The electromagnetic blade platform adopts turbine and worn drive with accurate rotation angle, coarse shaft design and good stability.



TECHNICAL DATA

| Blades length | 800mm | blades width | 250mm |
|--------------------------------------|-----------|------------------------------------|------------------|
| Blade platform rotation angle | 0-90° | Rotation angle of grinding head | ±90° |
| Input voltage | 380V | Straightness of blade | <0.05mm/m |
| Motor power of grinding head | 3KW | Knife grinder specification | φ200×110×φ32 |
| Motor speed of grinding head | 1440r/min | Total power | 4KW |
| Power of reciprocating motor | 0.75KW | Machine overall size | 2200×1000×1250mm |
| Reciprocating speed of sliding table | 0-12m/min | Machine weight | 1100Kg |



SEWAGE TREATMENT SYSTEM

RANGE OF APPLICATION:

It will produce a large amount of waste water in the recycling and washing process of the waste plastics. This system can mainly remove the suspended solid(SS) in the water and make the water clean again in order to achieve the recycling or discharge purpose.

PRODUCT FEATURES:

Most of the waste water from plastic washing is pollutant with suspended particles with relative few dissolved solids and large water consumption in the washing process. This system adopts coagulating sedimentation and flotation processing and directly and quickly reduces the primary settling sludge with solid and liquid separation and filtration. The sewage sludge is compressed into mud cake and can be reused after filtration with clean water.





PROCESS FLOW DIAGRAM:

Type of Waste Water: water used to clean plastics. **Wasted Water Flow:** 10-50m³/h (based on the situation of clients, we can customize the project for different water flow).

Waste Water Quality and Outlet Index: suspended solids (SS) before sewage treatment < 2000mg/L, SS after sewage treatment: ≤100mg/L.









PRODUCT QUALITY THAT COMPLIANT WITH EUROPEAN STANDARD

Sophisticated production: our manufacture technology of equipment is comparable to that of European manufacturing enterprises, thus, we got the affirmation of European and Japanese customers.

Reliability and durability: the high impurity of recycled plastics does harm to use of equipment. Therefore, the equipment should be durable enough to deal with sudden failure and unreasonable abrasion due to impurities of materials.

High security: there are two aspects for product safety, firstly, physical protection that meets the CE standard; secondly, equipment protection, that is, to detect and remove the potential factors that may do harm to equipment.

Economical operation: the equipment was designed to maintain 30% safe remaining capacity of power. Besides, we have committed to increase the operating efficiency and energy conservation.

BEST SOLUTION

Rich experience in recycling practice: with 15 years experience of plastic recycle, we operates plastic recycling factories and conducts in-depth research in chemical fiber enterprises

International team: our international technical team can meet the requirements of customer demands as well as industrial trends. Therefore, we can provide you with most competitive program

Real user feedback: by visiting and maintaining good relationship with customers, we collect the first-hand and real customer feedback, which provide foundation for our technical improvement and development.

Analysis of raw materials: with more than 150 programs all over the world, we have good understanding of various kind of raw materials in different areas.

STRONG INTEGRATING SYSTEM

Crushing, automatic separation, granulation, electrostatic separation and color sorting.

In the plastic recycling industry, Boxin is one of the few international manufacturers for mainstream automatic sorting system, granulation units with high quality and productivity and high quality shredder and crusher as well as a system integrator with rich cooperating experience.

SUITABLE AND TIMELY AFTER-SALES SERVICE

Technical support: we offer comprehensive and effective technical and business support from optimization of the cleaning recycled production line to sales of final products.

Spare parts: with plentiful spare parts at stock, we can offer customer with spare parts in time to remove their worries. Quick response: we ensure that our people can give response at once and offer on-site service in time.

Equipment installation and debugging: we will have complete installation and debugging in our factory and thus deal with risks and deficiencies before delivery. In addition, our professional installation and debugging team will go to customer's place for installation, debugging and training.

Vision

Being an industry-leading provider for plastic recycling equipment and solution by using high quality as base and taking technical innovation as breakthrough and customer demand as orientation.

Mission

Concentrating on the technical development of recycling field, customer demand and challenge, Boxin provides competitive recycling program and high-quality recycling system to realize win-win in economic benefit and green environmental protection.

Positioning

Boxin focuses on providing high-quality and high-performance plastic recycling solutions and equipment.



Click the logo above to visit our company homepage for more information!