



GRAIN TECH LTD

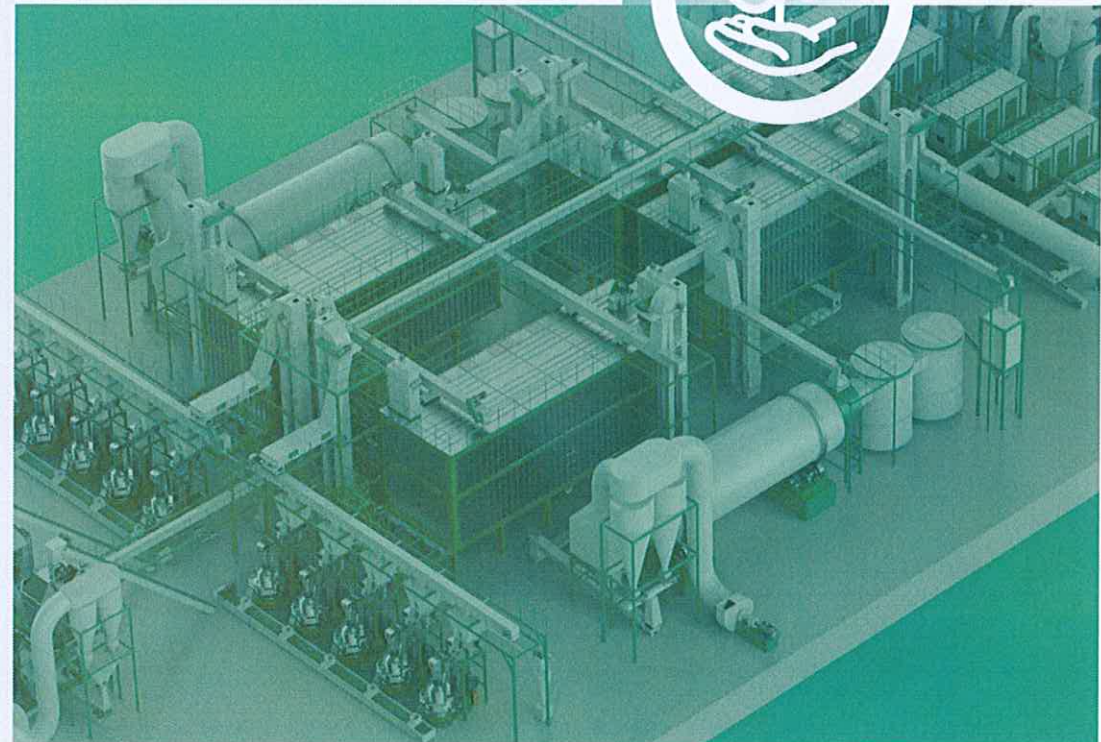
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FDSP

BIOMASS CLEAN ENERGY SOLUTION

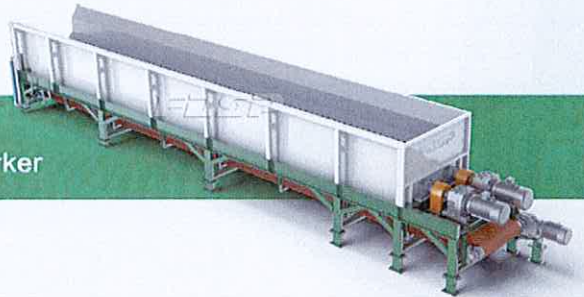
Grain Tech Engineering in collaboration with FDSP provide technologies and services for bio tech and waste material processing applications including:

- Biomass clean energy pellet fuel solutions
- Wood based materials for green methanol production
- Straw and agricultural waste green material high value transformation
- Municipal solid waste resource treatment
- Comprehensive solution for biomass co firing pelleting engineering



BIOMASS CLEAN ENERGY PELLET FUEL SOLUTIONS

LYBP Series Toothed Roller Debarker



Scope of Application

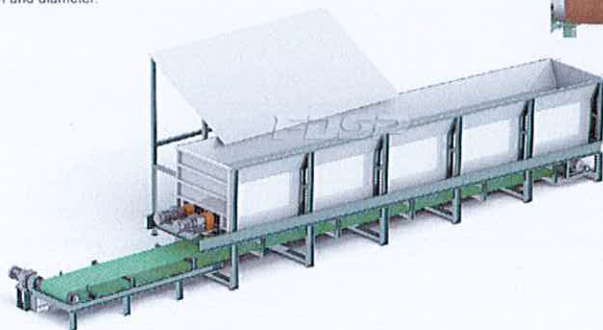
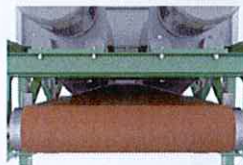
Designed specifically for common wood species such as eucalyptus and poplar. It is suitable for wood processing fields including medium-density fiberboard factories, paper mills, wood chip factories, and single-board rotary cutting factories. It can efficiently process various raw materials such as logs and branch wood, meeting the requirements of assembly line production.

Performance characteristics

Efficient Skinning: Patent comb-shaped structure, cleaning rate $\geq 95\%$, significantly improving production efficiency;

Flexible Configuration: Single roller, double rollers, or triple rollers are as options, suitable for different production volumes and raw material specifications;

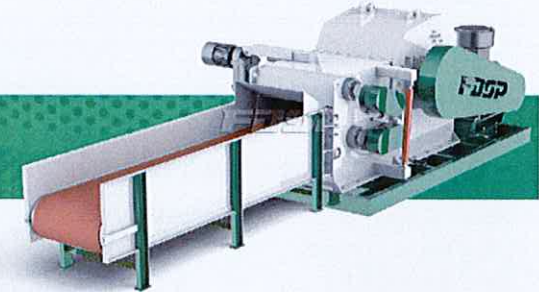
Customized Design: Can be optimized specifically according to special requirements such as raw material length and diameter.



Model	Capacity (t/h)	Power (kw)	Rotation Speed (rpm)	DebarkingRate	Loss Rate	Specification of Debarking roller (mm)
LYBP600 II	10	7.5×2	93	90	2%	Φ325×6000
LYBP1100 II	30	15×2	73	90	2%	Φ426×10000

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LYGX Series Drum Wood Chipper



Scope of Application

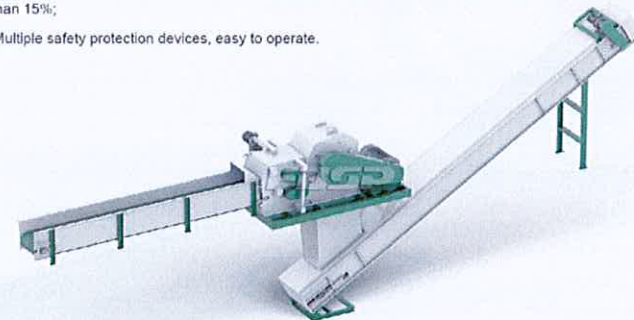
Suitable for various processing needs of wood materials, it can efficiently process various raw materials such as logs, branches, and veneers, etc. It can meet the continuous and large-scale production requirements of industries such as artificial board manufacturing, paper making and pulping, and medium-to-large-scale wood processing.

Performance characteristics

Efficient Cutting: The optimized design of the cutter drum system ensures stable and efficient cutting operations;

Energy-saving and High Efficiency: Compared to similar products, energy consumption is reduced by more than 15%;

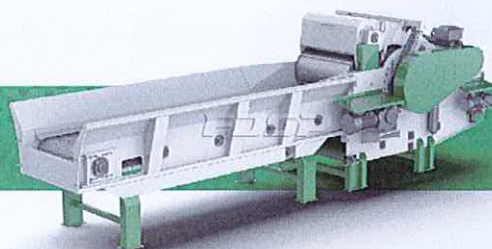
Safe and Reliable: Multiple safety protection devices, easy to operate.



Model	LYGX213	LYGX216	LYGX218	LYGX218D	LYGX2110	LYGX2113
Knife roll diameter (mm)	300	650	800	800	1000	1300
Knife roller rotation speed (rpm)	730	592	650	650	550	500
Max diameter of raw material (mm)	90	120	160	160	200	450
output (m ³ /h)	3~5	10	15	38	75	40-70
Main power (kw)	30	55	110	132	220	200-250

WOOD BASED MATERIALS FOR GREEN METHANOL PRODUCTION

LYZP1260/1400/1600 Series Combined Crusher



Scope of Application

Suitable for the crushing processing of various raw materials in the biomass energy industry, especially for the fuel pre-treatment process in biomass power plants. It can meet the fuel preparation requirements of power plants of different scales.

1 Processing of wood raw materials

- Various main materials such as logs and small-diameter timbers, etc.;
- Wood residues from logging: branches, twigs, etc.;
- Wood processing residues: board skins, board strips, log cores, waste sheets, etc.

2 Construction waste disposal

- Used construction templates;
- Abandoned wooden pallets;
- Other wooden packaging materials.

3 Non-wood material processing

- Hemp, reed, bamboo, etc.;
- Corn stalks, cotton bales and other agricultural waste materials;
- Other fibrous plant raw materials.

Performance characteristics

1、Intelligent Speed Control System

- The rotational speed of the knife roller can be adjusted continuously (0 - 1200 rpm);
- It can meet the production requirements for different particle sizes (10 - 50 mm).

3、Durable Conveying System

- Utilizes 10mm thick high manganese steel chain plates;
- Has strong impact resistance, and the feeding speed is increased by more than 30%.

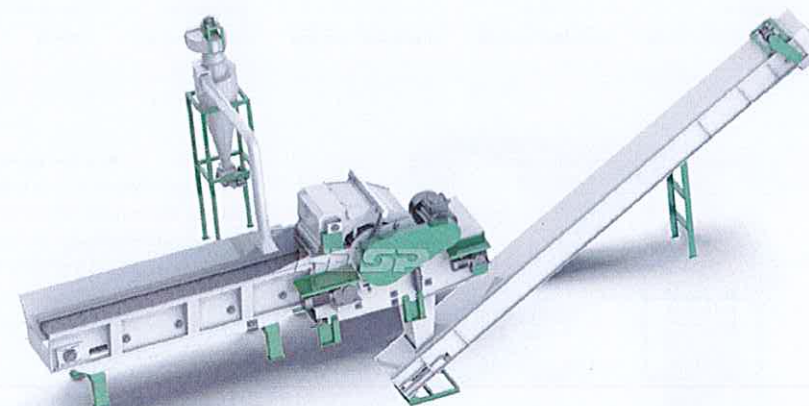
2、Efficient Feeding System

- Hydraulic forced feeding device
- Automatically adapts to the changes in the height of different raw materials.



4、Multiple Safety Protections

- Overload power-off protection
- Hydraulic quick-opening maintenance cover
- Emergency stop device



Model	LYZP1260-600	LYZP1400-600	LYZP1400-800	LYZP1600-600	LYZP1600-800
Rotor diameter(mm)	800	800	1050	800	1050
Tiger claws qty(pcs)	24	24	24	32	32
Feed port dimension(mm)	1260-600	1400-600	1400-800	1600-600	1600-800
Knife roller rotation speed(rpm)	650	760	900	760	900
Max diameter of raw material(mm)	350	350	500	350	500
Capacity(t/h)	8-10	20-25	30-35	25-30	35-40
Main motor power(kw)	160	200	250	220	315
Feeding motor power(kw)	11+7.5	11+7.5	11+7.5	11+7.5	15+11
Output motor power(kw)	4+5.5	4+5.5	5.5+7.5	5.5+7.5	7.5+11
Oil pump motor power(kw)	4	4	4	4	5.5
Feeding chain conveyor length(m)	4	6	6	6	6
Output conveyor length(m)	10	10	10	10	10
Dimension(m)	7.5 × 2.8 × 2.4	9.6 × 3 × 2.6	9.9 × 3 × 3.3	9.9 × 3 × 3.1	10.1 × 3.1 × 3.

STRAW AND AGRICULTURAL WASTE GREEN MATERIAL HIGH VALUE TRANSFORMATION

MFSY Series Straw Rotary Crusher



Scope of Application

This machine is widely applicable for the processing of agricultural crop straw. It can efficiently handle various types of straw materials such as from corn, paddy, and wheat. It is applied in fields like biomass power plants, organic fertilizer production, feed processing, and straw comprehensive utilization, meeting the resource utilization demands of different scales of straw.

Performance characteristics

Diverse feeding methods: Optional configurations include manual feeding, loader feeding, or customized conveyor feeding systems;

Super wear-resistant hammer slices design: Utilizes thickened manganese steel material and tungsten carbide spray welding technology, increasing service life by 3-5 times;

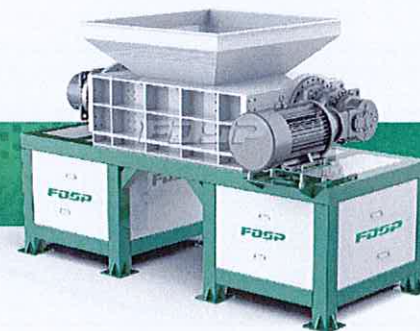
Efficient crushing system: Optimized rotor structure design, with crushing efficiency enhanced by over 30%.



Model	MFSY-1500	MFSY-1800	MFSY-2400
Main power(kw)	90	110	110+75
Feeding bin rotation speed(r/min)	3	4	5.5
Crushed length(cm)	5-10	8-10	8-10
Single shaft crushing output/ton	4-6	6-8	8-10
Double shaft crushing output/ton			10-15

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LYDS Series Double Shaft Shredder



Scope of Application

This machine is widely applicable for shredding various types of crop straw such as corn, wheat, and paddy, as well as industrial solid wastes like RDF, SRF, and TDF. It is used in fields such as biomass energy production, resource utilization of agricultural waste, and pre-treatment of industrial solid waste, meeting the production needs of different scales.

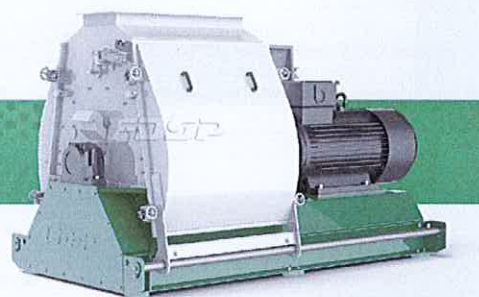
Performance characteristics

- The dual-axis dual-motor independent drive system offers powerful performance and stable operation, making it suitable for high-load operations.
- Customizable tool configurations are available. The number of moving blades and thickness can be adjusted according to the material characteristics, enabling various output fineness ranging from 5 to 20 cm.
- It uses ultra-hard wear-resistant blade materials with a hardness of $\geq$ HRC58. It supports repeated overlay welding for repair, and the service life is 100% higher than that of traditional H13 materials.



Model	Main power(kw)	Rotation speed(r/min)	Shredded length(cm)	Straw shredded capacity(t/h)
LYDS55×140×2	110/132KW×2	12-15	8-20	15-20
LYDS66×180×2	185/200KW×2	12-15	8-20	20-30
LYDS81×200×2	200/220KW×2	12-15	8-20	30-40
LYDS81×220×2	280/315KW×2	12-15	8-20	50-60

MFSP Series Biomass Hammer Mill



Scope of Application

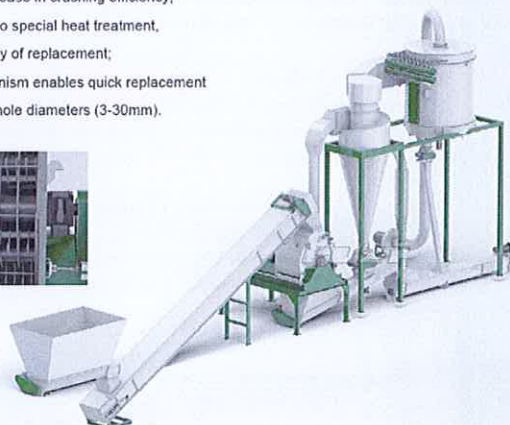
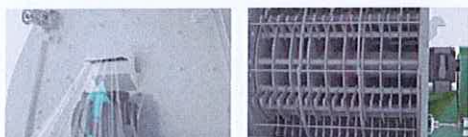
This machine is suitable for crushing various raw materials such as wood chips, wood shavings, branches, tree bark, sawdust, bamboo strips, coconut shells, peanut shells, etc. It is widely used in fields such as biomass fuel preparation, organic fertilizer production, feed processing, and environmental protection and recycling resource utilization, meeting the refined processing needs of different scales of raw materials.

Performance characteristics

Efficient crushing system: The hammer blades are optimally arranged symmetrically and combined with a high-speed rotor, resulting in a 20%+ increase in crushing efficiency;

Wear-resistant and durable: The hammer blades undergo special heat treatment, extending their lifespan by 50% and reducing the frequency of replacement;

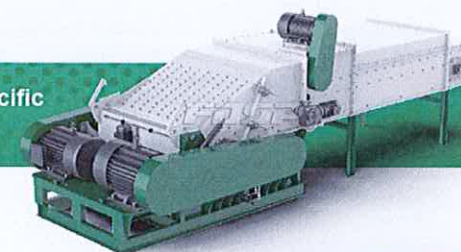
Convenient maintenance: The linked press sieve mechanism enables quick replacement of the sieve mesh, and supports customization of various hole diameters (3-30mm).



Model	MFSP110×80	MFSP110×110	MFSP132×120	MFSP138×250
Power(kw)	110	160	250	400/500
Capacity(t/h)	3-5	5-8	8-12	15-25/25-35

Note: The equipment can be customized with a crushing plan based on the characteristics of the raw materials (such as humidity and hardness), and technical guidance and after-sales support will be provided.

MDSP Series Dual-rotor Straw-specific Grinding Machine



Scope of Application

This machine is a patented product of our company. It is specially designed for various types of crop straw (such as corn, wheat, paddy, etc.) and meets the crushing requirements for the resource utilization of straw.

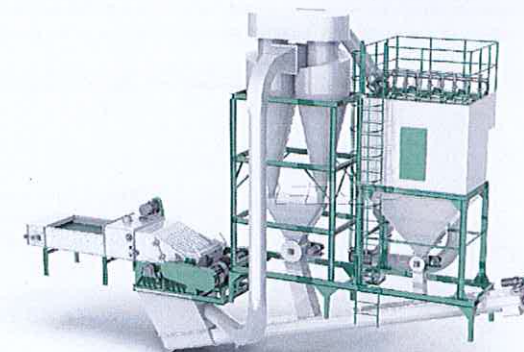
Performance characteristics

Special rotor design: The dual-rotor structure combined with optimized blades enhances the crushing efficiency by 30%, specifically solving the problem of straw fiber entanglement;

Intelligent maintenance system: A hydraulic opening and maintenance device enables quick inspection and repair of the drum, significantly reducing downtime;

Long-lasting and stable operation: Water circulation cooling of the bearing housing allows for 24-hour continuous operation, reducing the failure rate by 60%;

Safe and environmentally friendly: A fully enclosed structure and overload protection prevent material splashing and equipment jamming risks.



Model	MDSP2×75×80	MDSP2×75×120	MDSP2×75×150	MDSP2×98×250
Power(kw)	45+45	55+55	75+75	132+132
Capacity(t/h)	2-4	3-5	5-7	10-15

Note: Different power & models can be selected according to the production demand (2-15 t/h), and customized screens and blades solutions are available.

YSHG Series Triple Layer Drum Dryer



Scope of Application

It is specifically designed for drying high-humidity materials, such as biomass raw materials, sawdust, and organic fertilizers, where the moisture content needs to be reduced to below 15%. It is particularly suitable for the fields of pellet production, fuel processing, and agricultural waste treatment, especially when space is limited and high efficiency and energy saving are required.

Performance characteristics

High-efficiency and energy-saving design: The three-pass drum structure extends the contact time between hot air and materials, reducing the floor space by over 30% compared to single-drum models and lowering energy consumption by more than 30%.

Intelligent control: The exhaust temperature is intelligently regulated to control the feeding speed, ensuring uniform drying. The fully automatic feeding and discharging system reduces manual intervention.

Multiple safety guarantees: Multiple safety designs such as moisture detection, spark detection, and spark settling chambers are adopted to effectively separate and settle sparks, preventing them from entering the dryer, significantly enhancing the safety of drying flammable materials.

Model	YSHG20	YSHG30	YSHG40	YSHG50	YSHG60	LYHG80
Diameter(mm)	2300	2300	2700	3000	3200	3450
Length(mm)	7000	9700	10500	11600	11600	11600
Capacity(t/h)	2	3	4	5	6	8
Power(kw)	5.5×2	7.5×2	4×4	4×2+5.5×2	5.5×4	7.5×4

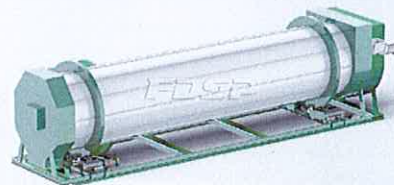
Note: Equipped with a dedicated vertical cyclone combustion furnace and a spark settling chamber, the system integrates intelligent temperature control, dust removal and spark protection modules, forming an environmentally friendly and safe closed-loop drying production line.

YDHG series single drum dryer

Scope of Application

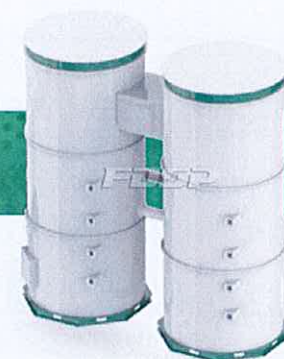
Suitable for drying of alfalfa grass, alcohol residue, straw, sawdust, shavings, Chinese herbal medicines, alcohol waste, sugarcane residue, etc. Widely used in various industries such as chemical engineering, mining, agriculture, and fertilizer production for different materials.

Model	YDHG 0.8×8	YDHG 1.2×12	YDHG 1.6×11.5	YDHG 1.6×15	YDHG 2×16	YDHG 2×20
Diameter(mm)	800	1200	1600	1600	2000	2000
Length(mm)	8000	12000	11500	15000	16000	20000
Capacity(t/h)	0.5	1	2	3	4	4.5-5
Power(kw)	2.2×2	3×2	4×2	4×2	4×4	5.5×4



Note: It is compatible with various production capacity requirements (ranging from 1.2×12 meters to 3×24 meters in multiple models). It can be equipped with equipment such as hot blast stoves, dust collectors, and spray towers, forming an efficient and environmentally friendly continuous drying production line.

LXFL Series Vertical Cyclone Furnace & Sparks Settling Chamber



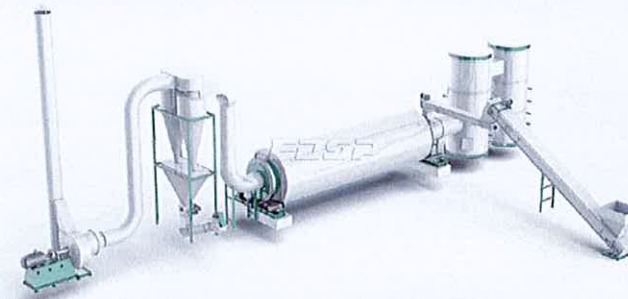
Scope of Application

Designed specifically for single-drum and three-drum dryers. It is suitable for drying materials such as biomass pellets, sawdust, and straw. It can efficiently burn various agricultural and forestry wastes and biomass pellets as heat sources, and is widely used in the fields of biomass, organic fertilizer, and new energy drying.

Performance characteristics

Efficient burning: The vertical cyclone structure ensures that the fuel is fully suspended and burned, with stable and controllable combustion temperature.

Double Interception of Sparks: Two levels of protection are set up, including cyclone separation and spark sedimentation chamber. Through centrifugal force, ash particles are separated, and the sedimentation chamber prolongs the airflow path to extinguish the ash and avoid the risk of explosion and combustion inside the dryer.



Comprehensive Drying System Solution

The integrated design of "rotary burning + sedimentation purification" is adopted:

Burning section: The vertical rotary furnace uses tangential air intake to create a high-speed vortex, allowing the fuel to burn fully in the center of the furnace. Unburned particles are thrown towards the furnace wall for secondary combustion.

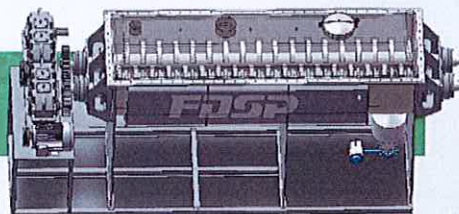
Safety section: When the high-temperature flue gas passes through the dust settling chamber, the flow velocity drops sharply. Large particles of dust fall due to gravity, while fine dust is intercepted by baffles through collision, ensuring that the hot air entering the dryer is pure and free of any fire sources.

Environmental protection section: An optional waste heat recovery device can be selected. The flue gas emission temperature is ≤ 120 °C, meeting environmental protection standards.

MUNICIPAL SOLID WASTE RESOURCE TREATMENT

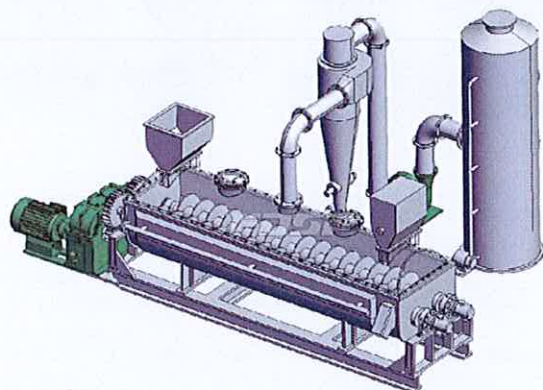
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KJHG Series Hollow Double-shaft Blade Dryer



Scope of Application

This dryer is a horizontal and continuous type dryer mainly adopt heat conduction and mixing. Its core structure comprises a W-shaped jacketed shell, a hollow mixing shaft, wedge-shaped blade, and an intelligent transmission system. The unique hollow blade design achieves efficient heat transfer and uniform drying. It is widely used in processing powdered, granular, and slurry materials in industries such as sludge, chemicals, food, medicine, and metallurgy.



Performance characteristics

1. Energy Saving and Consumption Reduction
 - Indirect heating combined with an insulation layer ensures extremely low heat loss;
 - High thermal efficiency, no large amount of exhaust gas takes away heat, significantly reducing energy consumption.
2. Compact and Efficient
 - Large heat transfer area per unit volume, machine with small occupy, saving factory space;
 - Mixing enhances heat transfer, resulting in fast drying speeds and excellent processing capacity.

3. Stable and Environmentally Friendly
 - Low-speed mixing maintains material form, and self-cleaning blade prevent sticking to the wall;
 - Low exhaust gas and dust emissions, high solvent recovery concentration.
4. Flexible Adaptability
 - Supports a variety of heat media, including steam and thermal oil, to meet the needs of heat-sensitive or high-temperature materials;
 - Expandable to include multi-functional operations such as drying, cooling, and sterilization.

ZQHG Series Steam Tube Dryer for Straw and Sawdust

Industry Pain Points:

Traditional hot air drying mode is not suitable for lightweight materials such as straw and wood sawdust. As these materials are with low bulk density, easy to tangle and clumping, need high energy consumption, and with safety risks. This equipment utilizes steam-tube conductive heating technology, focusing on efficient heat conduction for gentle drying, completely resolving the drying challenges of lightweight materials.



Scope of application

Scope of application: Biomass energy: drying of raw materials such as straw, sawdust, rice husk, etc., with the moisture content accurately reduced to 12%~15%.

Performance characteristics

1. Performance characteristics
 - Steam tubes utilize heat transfer through conduction, achieving a thermal efficiency of 60%-75%, reducing unit energy consumption by over 30%.
 - The condensate recovery system recycles heat energy, with significant overall energy savings
2. Drying Uniform and Gentle
 - Material maintains full contact with the tubes, eliminating strong airflow impact and maintaining a perfect color and appearance.
 - Adjustable drum speed and inclination angle accommodate varying material characteristics.
3. Environmentally Friendly and Safe
 - Slightly negative pressure operation prevents dust from escaping, and exhaust gas meets emission standards after dust-removed.
 - Indirect steam heating eliminates fume pollution and ensures high material cleanliness.
4. Stable and Reliable
 - An anti-winding lift plate design prevents clogging; core components such as the rotary joint are highly durable.
 - Automated control system (optional), real-time monitoring of key parameters, more intelligent operation.

PP Spray Tower Exhaust Gas Treatment System

PP spray tower exhaust gas treatment equipment is made of high-quality polypropylene (PP) material, has excellent corrosion resistance, and can effectively treat various acidic and alkaline waste gases and organic pollutants.

Performance Characteristics

1. **High-Efficiency Purification:** Utilizing a multi-layered packing system and a precision spray system, the system ensures full contact between exhaust gas and the absorbent liquid, achieving highly effective purification.
2. **Strong corrosion resistance:** The PP material withstands corrosion from a wide range of chemical media, ensuring a long service life.
3. **Energy-Saving and Environmentally Friendly:** Reasonable design of circulating water system ensures low operating costs and complies with environmental requirements.
4. **Easy Operation:** Equipped with an intelligent control system, operating parameters are clearly displayed, facilitating easy operation and maintenance.
5. **Compact Structure:** The modular design allows for a small footprint and flexible installation.

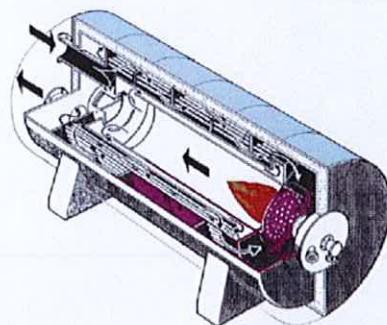


TO Furnace (Thermal Oxidizer) Exhaust Gas Treatment System

As an efficient and stable waste gas treatment equipment, the TO furnace (Thermal Oxidizer) completely decomposes organic pollutants into harmless carbon dioxide and water through high-temperature oxidation technology, helping enterprises achieve clean production and environmental compliance.

Scope of Application

TO furnaces are suitable for industrial sludge, domestic sludge, chemical industry, coatings, and other industries. They are particularly adept at treating high-concentration exhaust gases containing volatile organic compounds (VOCs) such as benzene, esters, and ketones, as well as solvent vapors.



Performance characteristics: High temperature oxidation, efficient purification

The TO furnace utilizes an advanced thermal oxidation principle, ensuring efficient exhaust gas purification through a multi-stage process:

Preheating and Efficiency Enhancement: Upon entering the system, exhaust gas is first preheated through a heat exchanger, utilizing the high-temperature combustion gases to improve thermal efficiency and reduce energy consumption.

Pyrolysis: The preheated exhaust gas enters the combustion chamber, where it reacts fully with oxygen at temperatures ranging from 760°C to 1100°C, completely oxidizing and decomposing organic matter.

Energy Recovery: Waste heat generated by combustion is recycled through a heat recovery system and can be supplied to other production processes or for heating, significantly reducing operating costs.

Clean Emissions: Treated gases are discharged after testing and meet national environmental standards.

Advantages: high efficiency, energy saving, safety and reliability

Efficient Treatment: Removal rates of various organic waste gases, including VOCs and odorous gases could reach over 95%, and the system is adaptable to complex waste gas compositions.

Stable Operation: The intelligent control system can adapt to fluctuations in waste gas flow and concentration, ensuring long-term stable operation.

Energy Savings: The efficient heat recovery design significantly reduces fuel consumption, lowering operating costs.

Safety Assurance: Equipped with multiple safety devices and real-time monitoring of operating status, the system ensures safe and reliable operation.

Environmentally Friendly: Clean emissions and zero secondary pollution help businesses achieve their sustainable development goals.

Activated Carbon Adsorption Box

The activated carbon adsorption box is a highly efficient purification device designed to address the organic waste gas and odor issues generated during the drying process of mixed sludge and sawdust. This product uses high-quality activated carbon as the adsorption medium. When used in conjunction with a spray tower or cyclone tower, it forms a complete waste gas treatment system, effectively removing pollutants such as volatile organic compounds (VOCs), odor, and dust generated during the drying process.

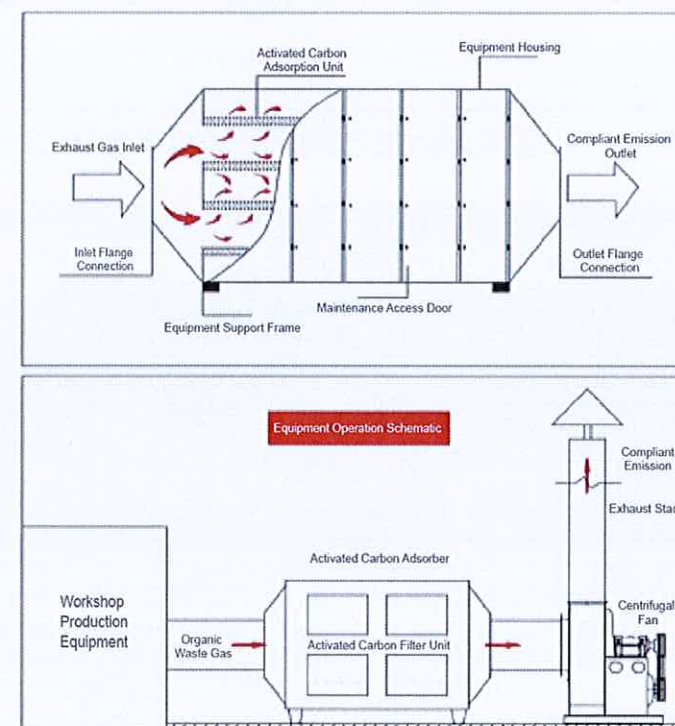
Performance characteristics:

1. Highly Efficient Adsorption Performance

- Specialized activated carbon material with a well-developed microporous structure;
- Excellent adsorption of organic waste gases such as benzene series and aldehydes;
- Multi-stage adsorption design ensures compliance with waste gas emission standards.

2. System Collaboration

- Integrates with spray towers: Provides cooling, dust removal, and acid-base neutralization pretreatment
- Integrates with cyclone towers: Provides efficient gas-solid separation pretreatment.



LXLT Series

Vertical Stainless Steel Cyclone Tower

The vertical stainless steel cyclone tower is a high-efficiency gas-liquid mass transfer equipment designed specifically for the biomass industry (such as sludge sawdust, straw, and wood sawdust). Made of high-quality 304 stainless steel, it has excellent corrosion resistance and mass transfer efficiency. It can effectively treat dust, organic waste gas, and odor generated during the production process, meeting both environmental and process requirements.



Scope of Application

Sludge and sawdust processing: Removes dust, tar, and volatile organic compounds (VOCs) generated during the drying or carbonization process.

Straw processing: Purifies fiber dust and fermentation exhaust from the crushing and compression processes, improving the workshop environment.

Wood sawdust utilization: Treats particulate matter and acidic gases (such as SO_2) in pyrolysis furnace or boiler flue gases, helping to meet emission standards.

Performance Characteristics

1. Efficient Mass Transfer

The unique swirl plate structure creates a rotating gas flow, ensuring full contact with the liquid. This significantly improves dust capture and exhaust gas absorption efficiency, making it particularly suitable for purifying high-concentration, high-volume exhaust gases in the biomass industry.

2. Strong Corrosion Resistance

The 304 stainless steel material can withstand acidic and organic gases (such as acetic acid and formaldehyde) generated during biomass fermentation or pyrolysis, extending equipment life and reducing maintenance costs.



3. Flexible Adaptability

Based on the characteristics of raw materials such as sludge, sawdust, and straw, we can customize the liquid distribution system (spray or overflow weir) to optimize the coverage of scrubbing liquids (such as alkali solution and water film), ensuring stable treatment of waste gas with complex components.

4. Low Resistance and Energy Saving

The swirl design reduces wind resistance and is equipped with a high-efficiency mist eliminator (wire mesh/baffle) to prevent droplet entrainment and reduce subsequent fan energy consumption, making it suitable for continuous production scenarios.

FKLB Series Swing Cooler



Scope of Application

Designed specifically for high-humidity, high-temperature pellets such as bio-organic fertilizer pellets and biomass fuel pellets. Suitable for pellet cooling processes in the organic fertilizer and biomass energy industries, it can effectively handle pellets with temperatures reaching 70-90°C immediately out of the mold.

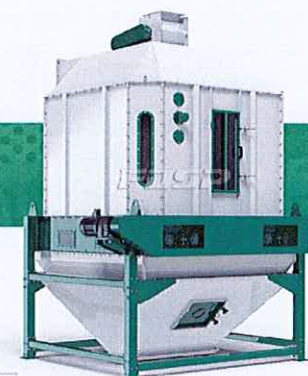
Performance Characteristics

- 1. Efficient Countercurrent Cooling:** Adopt the countercurrent cooling principle, the cold air slowly exchanges heat with the hot material, preventing surface cracking caused by sudden cooling and improving cooling uniformity by over 30%.
- 2. Intelligent Discharge Structure:** Equipped with a pneumatic/hydraulic flap-type discharge mechanism, it operates smoothly and shock-free, with adjustable discharge speed to meet varying production capacity requirements.
- 3. Modular Design:** A mechanical level sensor controls the material layer, and the fully enclosed chamber prevents dust from escaping, meeting environmental requirements.
- 4. Low-Energy Operation:** Optimized air duct design reduces fan power consumption by 15%.



Model	FKLB2.5	FKLB4	FKLB6	FKLB8	FKLB10	FKLB12
Cooling Volume(m ³)	2.5	4	6	8	10	12
Capacity(t/h)	3-5	6-10	8-15	10-20	15-25	20-30
Material Temperature After Cooling	≤ Ambient temperature + 3-5 °C					
Power(kw)	0.75	1.1	1.1	1.5	1.5+2.2	1.5+2.2

FKLY series Impeller Cooler

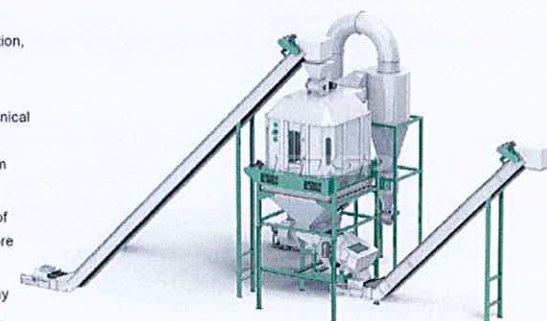


Scope of Application

The FKLY series impeller cooler is particularly suitable for products requiring stringent pellet integrity, such as extruded feed, aquatic feed, high-grade organic fertilizer, and biomass pellet fuel. They can effectively process pellets of various sizes, ranging from 2 to 20 mm in diameter.

Performance Characteristics

- 1. Low-Crushing Design:** A patented impeller-type discharge mechanism provides smooth and gentle rotation, reducing particle breakage by over 60% compared to traditional coolers.
- 2. Intelligent Control System:** Equipped with a mechanical automatic material level detection device, this system enables unmanned, precise control and ensures uniform cooling.
- 3. Durable Construction:** Key components are made of 304 stainless steel with high corrosion-resistant and more than 10years of service life.
- 4. Optimized Material Distribution System:** A four-way adjustable distributor ensures even material distribution, while a rounded lower hopper design eliminates residue and ensures more thorough material changes.

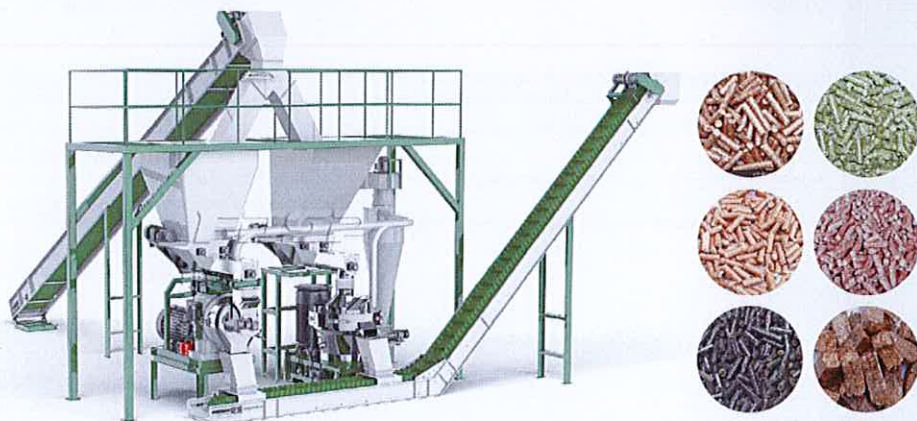


Model	FKLY2.5	FKLY4	FKLY6	FKLY8	FKLY10	FKLY12
Cooling Volume(m ³)	2.5	4	6	8	10	12
Capacity(t/h)	3-5	6-10	8-15	10-20	15-25	20-30
Material Temperature After Cooling	≤ Ambient temperature + 3-5 °C					
Power(kw)	2.2	3	3	4	5.5	5.5



FDSP Comprehensive Biomass Pellet System Solution

This system adopts pelletizing technology that has obtained multiple national patents, integrates efficient, stable and intelligent production processes, and is designed specifically for biomass pellet production.



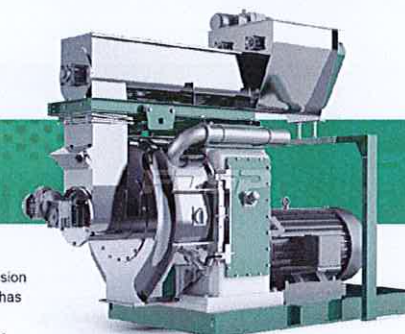
Key Optimized Configuration:

- Equipped with an automatic grease filling system for intelligent lubrication and maintenance;
- The thin oil circulation cooling system effectively controls the equipment's operating temperature;
- The patented ring die and roller system improves pelletizing efficiency and product quality;
- The ring die lifting device, integrated external discharge and pelletizing discharging, and new curved door design combine practicality, good appearance, and high efficiency.

The overall design focuses on practicality, reliability and stability, and can adapt to the characteristics of different raw materials and production needs. It is an ideal choice for all types of pellet production companies.

COMPREHENSIVE SOLUTION PROVIDER FOR THE
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BIOMASS ENERGY

WZLH420/508/680/980 Series Horizontal Biomass Pellet Mill



The WZLH series horizontal pellet mill adopts a high-precision gear transmission structure and uses imported bearings and oil seals for the entire machine. It has high transmission efficiency, stable operation and low noise. It is an ideal equipment for large-scale production of biomass pellets and organic fertilizers.

Scope of Application

Suitable for pelletizing various biomass raw materials such as sawdust, straw, and forage grass, as well as feed, organic fertilizer, and other materials.

Performance Characteristics

1. **Stable Drive:** Compensating serpentine spring coupling provides a compact structure and low failure rate.
2. **Durable Design:** Forged main shaft and pinion shaft, combined with a stainless steel feeding system, stainless steel door cover, and stainless steel forced feeder, guarantee a long service life.
3. **Intelligent Lubrication:** Automatic grease lubrication allows for non-stop maintenance and convenient operation.
4. **High-Efficiency Ring Die:** Multiple innovative ring die designs eliminate cracking issues, improving output and pellet quality.
5. **Patented Technology:** A special arch-breaking feed device and forced feeder design ensure continuous and stable production of a variety of lightweight raw materials.

The overall design of the equipment focuses on reliability to ensure long-term efficient and stable production.



Model	WZLH420	WZLH508	WZLH680	WZLH980
Capacity (t/h)	0.8-1.2	1-1.5	2-2.5	5-8
Main Motor Power (kw)	90	110/132	185/200	355/400
Feeder Power (kw)	2.2	3	4	5.5
Forced feeder power (kw)	1.5	2.2	2.2	3
Ring Die Diameter (mm)	420	508	688	980
Pellet Diameter (mm)	6-10	6-10	6-10	6-12

LZLH480/580/680/880/1180 Series Vertical Biomass Pellet Mill



LZLH series vertical pellet mill adopts innovative vertical main shaft transmission structure, which is particularly suitable for efficient pelletizing of light raw materials such as sawdust and straw.

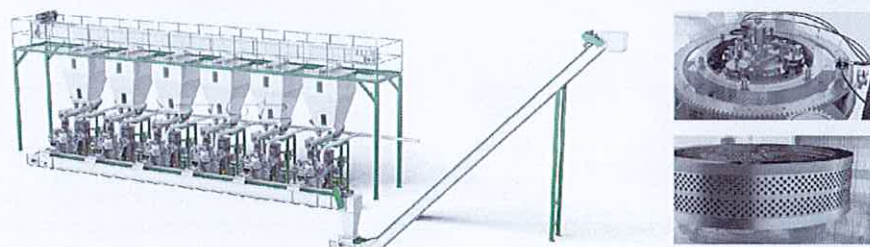
Scope of Application

Specialized in processing various biomass raw materials, including wood sawdust, sawdust, rice husks, straw, and other lightweight materials, and widely used in the processing of biomass pellet fuel.

Performance Characteristics

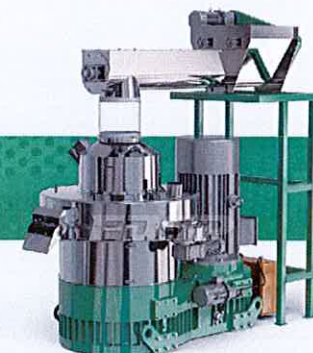
1. **High-Efficiency Drive System:** The vertical forging main shaft is equipped with imported European bearings, increasing transmission efficiency by 20% and ensuring smoother operation.
2. **Innovative Ring Die Design:** The bidirectional ring die features a dual-aperture, dual-compression ratio design, adapting to varying raw material characteristics and extending ring die life by 2-3 times.
3. **Intelligent Maintenance System:** Automatic lubrication and oil circulation cooling ensure continuous and stable operation.

This equipment is specially optimized for the characteristics of lightweight raw materials. Through its vertical structure, it achieves more uniform material distribution, significantly improving the forming rate and output of materials such as wood chips and straw.



Model	LZLH480	LZLH580	LZLH680	LZLH880	LZLH1180
Capacity (t/h)	0.5-1.2	1.5-2.2	2-2.5	3-3.5	8-12
Main Motor Power (kw)	55/75	110/132	160	220/250	630/710
Feeder Power (kw)	1.5	2.2	2.2	3	7.5
Ring Die Diameter (mm)	φ450	φ560	φ700	φ850	φ1180
Pellet Diameter (mm)	6-10	6-10	6-10	6-10	6-10

LZLH880/1180 Vertical Biomass Briquetting & Pelletizing Machine



The LZLH880/1180 series is an innovative biomass molding equipment with a patented vertical integrated design. It combines the dual functions of pelletizing and briquetting. Through the quick replacement of molds, it can achieve flexible switching between pellet and briquetting production, significantly improving equipment utilization and production efficiency.



This equipment breaks through the traditional single-function limitation and realizes multiple uses of one machine through modular design. It is the preferred equipment for large-scale production of biomass energy.

Scope of Application

Designed for various biomass raw material, including sawdust, straw, rice husks, and construction formwork waste, it can produce small pellet fuels or high-density briquettes (suitable for biomass power plants and industrial boilers), meeting the energy needs of users of all sizes.

Performance Characteristics

1. **Patented integrated design:** A bidirectional mold system allows switching between pelletizing and briquetting modes by replacing standard parts, saving equipment investment.
2. **High-efficiency powertrain:** A permanent magnet motor or high-voltage motor directly connected to a reduction gearbox achieves a 95% kinetic energy conversion rate and is equipped with a self-cooling lubrication system.



High-Precision Ring Die Series

As a core component of biomass energy equipment, FDSP Ring Dies are constructed of internationally standard X46Cr13 stainless steel and utilize innovative processes to achieve superior performance.



Performance Characteristics

- Customizable non-standard aperture arrangements and groove shapes to meet diverse production needs;
- Imported high-speed gun drills for precision machining ensure industry-leading die hole finish;
- Unique high-temperature quenching process achieves uniform die hole hardness distribution.



High-Performance Roller Series

Compatible with ring die systems, we offer a variety of specialized tooth profile solutions.



Performance Characteristics

- Customizable tooth profiles including spur, helical, and diamond shapes are supported;
- Forged from high-quality alloy steel and undergo a specialized heat treatment process;
- Precision machining ensures perfect meshing with the ring die;
- Excellent wear resistance and a long maintenance cycle.



Bolted Silo

01

High Precision

A full set of internationally leading processing equipment and technologies ensures high precision, easy installation, and a protective zinc coating.

02

High Degree of Automation

Steel silos can be highly mechanized and automated, resulting in high production efficiency and significant labor savings.

03

Large Storage Capacity

Single silo capacity can range from 30 to 12,000 tons. Modular design adapts to the needs of various industries.

04

Easy Maintenance

Using standardized, serialized, and universal galvanized steel plates and accessories, the system offers superior replacement performance, easy maintenance, and simple capacity expansion or relocation.

05

Low Investment

Compared to other types of silos, the total construction cost is 20-30% lower, saving investment costs.



Spiral Silo

01

High Strength

Vertical reinforcement ribs and transverse spiral undercut ribs on the inner wall of the silo greatly enhance its strength, providing strong resistance to wind, earthquakes, and snow loads.

02

Excellent Sealing

The silo joints are made of spiral undercuts, which are five times thicker than the silo itself, ensuring excellent sealing and facilitating fumigation and insecticide removal.

03

Short Construction Period

A short construction period allows a 1,000-ton steel silo to be constructed in just 5-6 days, enabling early commissioning and generating benefits for users.

04

Beautiful Appearance

The conical roof shape prevents dust and water accumulation, and the silo maintains a smooth, streamlined design.

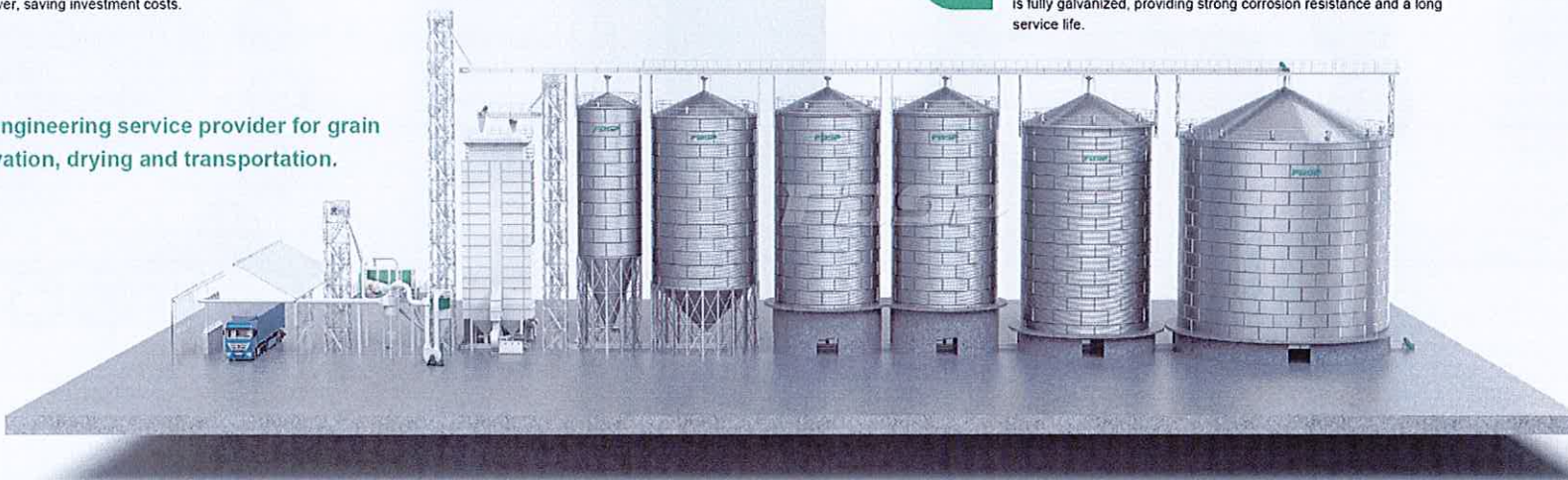
05

Long Service Life

The silo is constructed of hot-dip galvanized steel coils, and the roof is fully galvanized, providing strong corrosion resistance and a long service life.



Integrated silo engineering service provider for grain storage, preservation, drying and transportation.



I Key project cases I

30t/h coal dust pelletizing production line in South Africa

FDSP's 30t/h coal dust pelletizing production line has been successfully exported to South Africa, providing a groundbreaking solution to the local coal energy upgrade challenge. Offering comprehensive services from on-site inspections and customized design to commissioning and installation, FDSP leverages its expertise in biomass equipment R&D to address local coal energy utilization challenges, pioneering efforts in South Africa's clean energy transition. The project utilizes high-pressure forming technology to transform loose coal dust into high-density pellet fuel, increasing thermal efficiency by over 25% and reducing sulfur oxide emissions by 15%-20%, achieving a shift toward cleaner coal resource utilization.

Core application value:

Industry Adaptability: Primarily serving coal-fired power plants, cement kilns, and industrial steam boilers, replacing raw coal combustion.

Core Benefit: Resolving coal dust accumulation pollution, improving fuel combustion stability, and reducing fuel costs for businesses.

Project promotion significance:

This project, through a one-stop service package encompassing "field investigation - targeted design - commissioning and installation," introduced China's coal dust pelletizing technology to South Africa for the first time. This not only enabled resource utilization of coal byproducts, but also pioneered a new path for a "clean coal transition" in developing countries:

Environmental upgrades: Addressing the pain points of coal dust pollution and inefficient combustion;

Economic empowerment: Reducing industrial fuel costs by over 15%;

Model output: Providing a replicable model for solid waste fuel conversion for coal-producing regions worldwide.

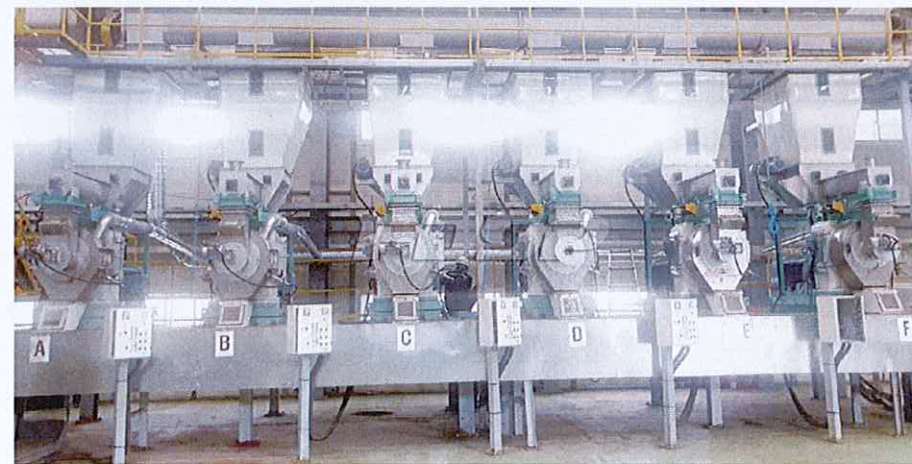


I Key project cases I

Complete pellet production lines for sludge and sawdust (10t/h, 12t/h, 15t/h, 20t/h, 24t/h) in South Korea

FDSP has innovatively developed a South Korean sludge and sawdust pelletizing production line, promoting the international application of biomass fuel. With its mature technology, our company has successfully delivered and operated multiple high-performance pelletizing production lines in South Korea, including capacities of 10tph, 12tph, 15tph, 20tph, and 24tph. The core value of these production lines lies in the efficient comprehensive treatment and recycling of municipal and river sludge. Through advanced drying processes, organic matter is extracted from the sludge and scientifically mixed with sawdust to produce biomass pellet fuel, which is supplied to South Korean power plants as a clean energy source.

This solution has successfully transformed municipal and river sludge and other pollutants into valuable resources. It not only helps the South Korean government effectively solve the environmental pollution problems caused by industrial sludge and discarded/rotten wood in a targeted manner, significantly improving resource utilization efficiency, but also contributes to the sustainable development of local urban environments. This model fully demonstrates the huge potential of biomass energy technology in solid waste treatment and renewable energy production, responding to the growing global demand for resource recycling and green, low-carbon energy.



I Key project cases I

Complete 12tph pellet production line for sawdust in Indonesia

The project of the continuous pelletizing production line with a capacity of 12 tons per hour in Indonesia, which was constructed by Liangyou, has achieved efficient conversion from raw materials to finished products. This production line uses abundant resources such as forestry small-diameter logs, leftover materials from wood door factories, wood chips, and sawdust as raw materials, covering the complete process from log debarking, slicing to final shaping. It specializes in processing and manufacturing high-quality biomass solid fuel particles.

The successful implementation of this project has significantly improved the comprehensive utilization rate of local forestry raw materials and various waste wood materials, turning waste into treasure. This not only provides Indonesia with a clean and renewable energy solution, but also effectively drives the production and application of biomass wood pellet fuel in Southeast Asia, injecting new impetus into the development of the clean energy market in this region.



I Key project cases I

Wood powder modular pelletizing unit in Japan

FDSP has meticulously designed a pelletizing unit with a production capacity of 1.5-2 tons per hour for Japanese customers. With a modular design concept, it integrates an extremely compact process layout and outstanding resource and space utilization efficiency, successfully solving the problems of equipment transportation, installation, and subsequent expansion for the customers. Quick installation, efficiency doubled: The equipment adopts an innovative frame assembly design, making on-site installation convenient and efficient, and significantly simplifying the commissioning process. Compared to traditional methods, it saves over 50% of time costs. Flexible expansion, investment worry-free: The "modular" structure of the equipment endows it with extraordinary flexibility. Customers can freely add or remove modules according to future production capacity requirements, leaving room for future expansion.

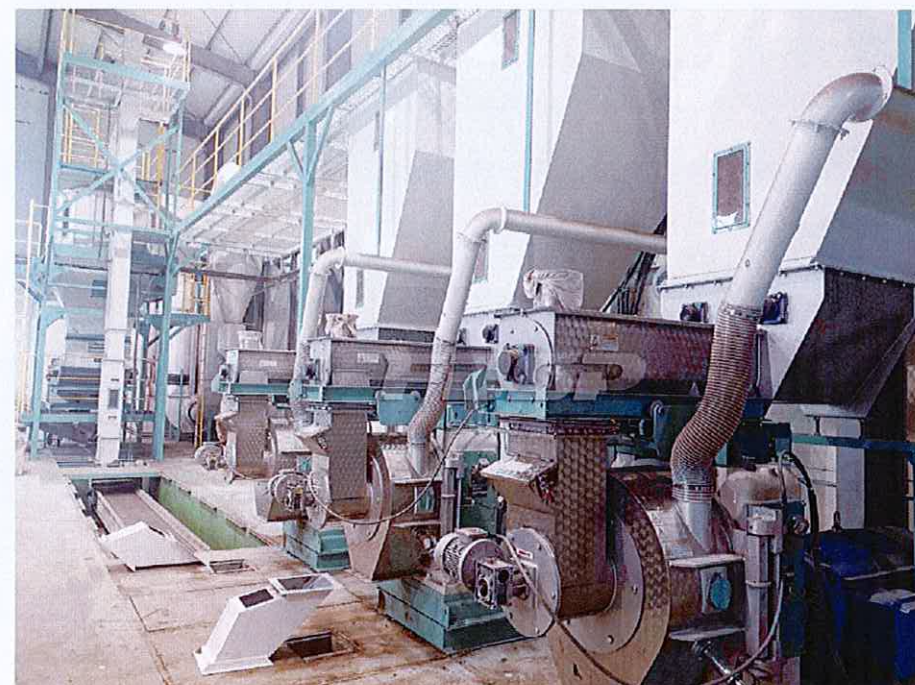
The extreme meticulousness and high standards of inspection by Japanese customers once again confirm the strict requirements for quality in the international market. Liangyou products, with their excellent quality and outstanding performance, have won high recognition from customers for the hardness and smoothness of the pelletized products, laying a solid foundation for the long-term and stable strategic cooperation between the two parties.



I Key project cases I

The 4×WZLH420 corn cob pelletizing production line in Thailand

This modular pelletizing system is designed based on the abundant corn cob resources and humid hot climate in Southeast Asia. It integrates key links such as raw material pre-treatment, intelligent pelletizing, efficient drying and environmentally friendly packaging, and can process 120,000 tons of corn cob raw materials per year, producing 80,000 tons of high calorific value biomass pellet fuel. Through the integration of intelligent control, energy-saving technology and environmental protection design, this production line achieves efficient conversion of corn cob from agricultural waste to clean energy, effectively solving the problem of waste disposal. This production line not only embodies advanced biomass conversion technology, but also serves as a benchmark practice for promoting the resource utilization of agricultural waste, achieving a green energy structure transformation, and promoting the coordinated development of the economy, society and environment in Southeast Asia.



I Key project cases I

6tph complete set of equipment wood pellet production line in Chongqing

FDSP crafted a 6tph wood pellet production line in Chongqing, which integrates the design of the entire process, equipment manufacturing and installation. This production line realizes the full-process automation production from debarking of wood logs, slicing, crushing, drying, pelletizing, cooling and screening, to ton packaging and automatic small packaging bundling. Through the advanced full-screen control system for centralized management, the operation is convenient and efficient.

To ensure safe and reliable production, the entire line is scientifically equipped with multiple integrated protection systems: including real-time temperature monitoring and alarm, highly sensitive spark detection, intelligent blockage alarm, standard explosion-proof devices, and automatic sprinkler systems. They provide comprehensive protection for production safety. Its scientific design, stable operation, and high integration level fully demonstrate the profound technical strength and rich engineering experience of FDSP in the field of biomass energy equipment.

This production line innovatively utilizes locally available waste renewable wood resources such as urban greening pruning materials and forestry waste as raw materials. This practice not only efficiently realizes the energy and high-value utilization of waste resources, turning them into treasure, but also demonstrates FDSP ability and commitment to empowering the circular economy and practicing green and low-carbon.



I Key project cases I

A complete production line for annual 100,000 tons of corn straw into green methanol in Inner Mongolia

The 100,000-ton annual production project of converting corn straw into green methanol in Xing'an League, Inner Mongolia, which was independently designed and constructed by FDSP has been successfully put into operation. This project integrates the internationally leading biomass energy conversion technology system and focuses on achieving large-scale and efficient conversion of agricultural waste into clean energy. It is an important practice of FDSP in responding to the national carbon neutrality strategy and laying out the green energy industry.

The core of the project lies in the multiple key equipment and innovative process technologies independently developed and integrated by FDSP which have constructed a highly coordinated and stable production system:



Efficient and intelligent pre-treatment system:

Special heavy-duty shredder for straw: Designed based on the characteristics of corn straw, it features high torque and anti-tangling capabilities, achieving initial crushing;

Special dual-rotor shredder for straw: A national patent product, with a design of opposite shear between the two rotors, ensuring highly uniform particle size of the crushed materials, meeting the requirements of subsequent conversion processes;

Intelligent and precise drying system: Utilizing multi-level temperature and humidity control and hot air circulation technology, it precisely regulates the moisture content of the raw materials, significantly improving energy utilization efficiency, laying a solid material foundation for stable and efficient biomass energy conversion.

Intensive Formulation and Intelligent Storage and Transportation System:

Centrifugal high-efficiency pelletizing machine: Utilizing high-speed centrifugal force and specially designed molds, the pre-treated straw materials are compressed into high-density and high-strength pellets, significantly enhancing the density and fluidity of the raw materials, and optimizing the transportation and reaction efficiency.

Large hydraulic intelligent material bins: Equipped with advanced material level monitoring, spark detection devices, anti-bridging devices, and intelligent discharge control systems, it enables the automatic, sealed, and constant-volume storage of raw materials and stable and reliable supply, effectively ensuring the continuous and stable operation of the production line.

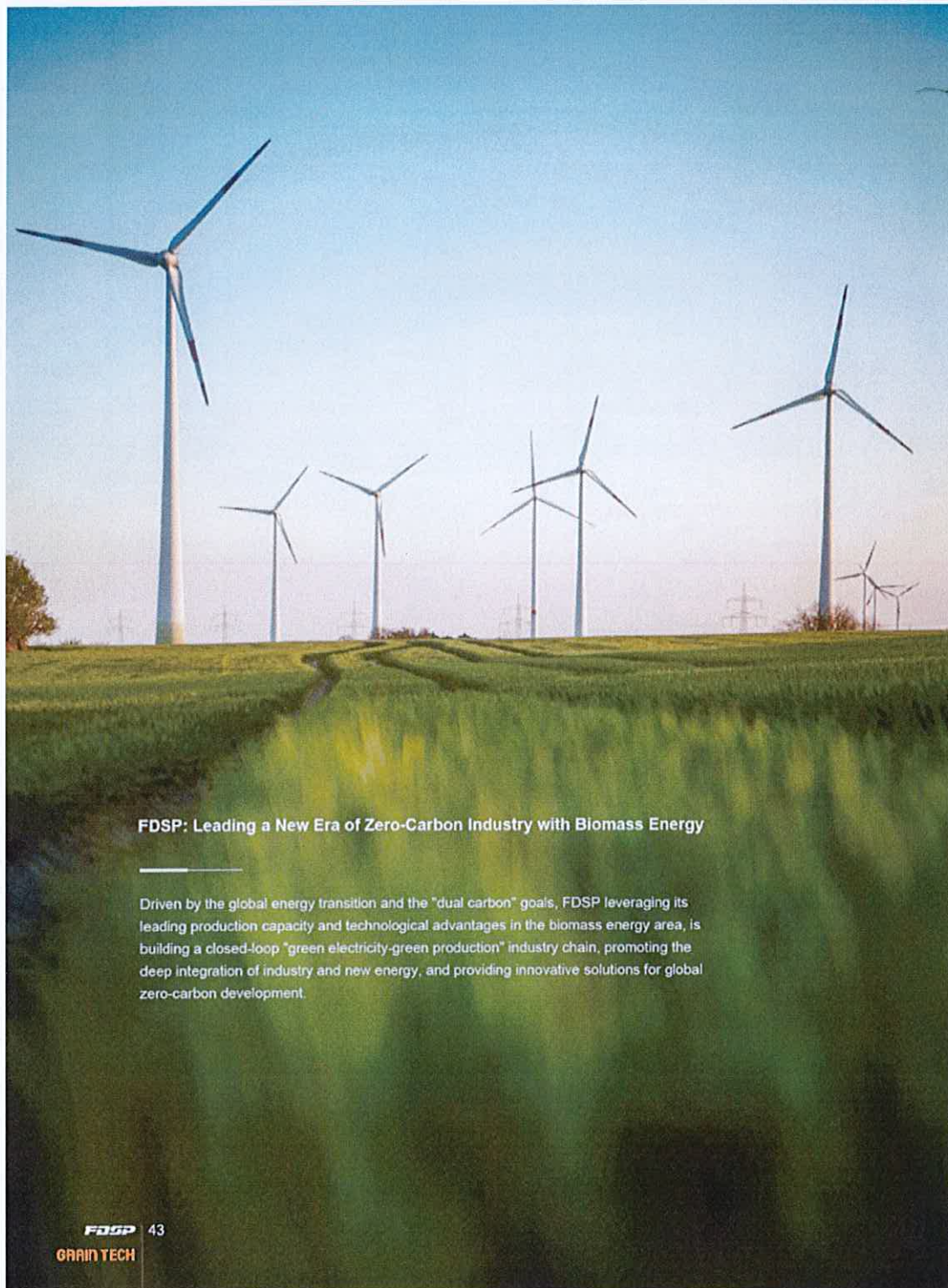
In this project, FDSP fully demonstrated its core competitiveness in the "technology + equipment + operation" integrated solution:

Technology: It provides a complete set of technical support covering the design of the entire process package, optimization of the core reaction path, system energy efficiency analysis, and intelligent control strategies.

Equipment: Relying on its strong equipment research and manufacturing capabilities, it offers the design, manufacturing, integration, and commissioning services for the core and non-standard equipment (such as the aforementioned pre-treatment, forming, storage and transportation systems) required for the project.

Operation: It extends to the deployment of the intelligent control system for the project, the formulation of production operation procedures, personnel training, and long-term operation and maintenance support, ensuring the efficient and stable operation of the project throughout its entire life cycle.

Through the successful implementation of this project, FDSP not only delivered an advanced green methanol production facility, but also with its integrated turnkey project capability, effectively promoted the biomass energy and green methanol industries to accelerate their development towards higher efficiency, lower carbon emissions, and greater sustainability.



Driven by innovation, we are building a complete biomass energy industry chain.

Leveraging our capabilities in integrating upstream and downstream resources, the company has pioneered large-scale production of green biomass electricity, establishing a complete circular economy system from raw material collection and fuel processing to clean energy output. Through its high-capacity, low-energy biomass fuel production line, FDSP not only achieves zero-carbon fuel production throughout the entire process, but also expands biomass energy into a multi-purpose energy storage carrier for industrial energy, residential heating, and green methanol, enabling the coordinated development of energy and industry.

Future Vision

As a driving force behind the integrated development of biomass energy, FDSP will continue to deepen technological innovation and industrial collaboration, promote biomass energy as a key pillar of a zero-carbon society, and collaborate with global partners to create a green and sustainable future.

FDSP: Leading a New Era of Zero-Carbon Industry with Biomass Energy

Driven by the global energy transition and the "dual carbon" goals, FDSP leveraging its leading production capacity and technological advantages in the biomass energy area, is building a closed-loop "green electricity-green production" industry chain, promoting the deep integration of industry and new energy, and providing innovative solutions for global zero-carbon development.



— Using the power of nature to revitalize the beauty of industry

Biomass Energy Full-Cycle Solutions

Under the guidance of the "Dual Carbon" goals, biomass energy is becoming a key force in the green transition. As an industry leader, FDSP leverages its extensive project experience and technological expertise to provide clients with one-stop biomass energy solutions from planning to operations, contributing to regional energy structure optimization and industrial upgrading.

Full-Process Professional Services Empower Green Development

Based on extensive experience in biomass raw material processing and regional industry research, we have established four core service systems covering the entire industry chain:

Scientific Planning: Through systematic research including raw material property analysis, site assessment, and market research, we provide customized biomass energy development plans and clean energy base construction plans.

Precision Design: We provide professional design solutions such as process optimization, production line layout, and cost control to ensure project economics and efficiency.

Efficient Construction: We integrate equipment manufacturing, plant construction, installation, and commissioning to create a standardized project delivery system.

Intelligent Operation: We provide professional training, after-sales support, and spare parts supply to ensure long-term and stable project operation.

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Creating a Green Future Together

FDSP will continue to deepen its R&D and application innovation in biomass energy technology, work with partners to promote the diversified development of renewable energy, and contribute its expertise to building a zero-carbon society.

Professional Planning,
Intelligently Creating a
New Green Energy
Ecosystem

Smart operation and maintenance on global solution for biomass energy

FDSP is committed to providing outstanding smart operation and maintenance solutions for the global biomass energy industry. Leveraging its leading domestic professional technical capabilities and the profound technical accumulation and rich operational experience accumulated over many years in the industry, we have established a professional and efficient operation and maintenance service network covering over 40 countries and regions worldwide. This experienced technical team responds around the clock to ensure that we can provide customers with stable and reliable overall smart operation services.

We always pursue the core goal of "stable and efficient, high output and low consumption, maximum value" throughout the entire project life cycle. Through professional operation and maintenance management, technological innovation and resource optimization allocation, FDSP fully helps customers effectively reduce operating costs, significantly improve energy output and equipment reliability, maximize the potential of the project, and ultimately achieve more outstanding and sustainable investment returns and business value.

Solution for improving quality and efficiency of production lines

Based on a profound understanding of the entire life cycle of the equipment and precise grasp of its performance characteristics, FDSP provides systematic solutions for existing and outdated production lines that are facing core challenges. In response to the common risks, low returns, and high operation and maintenance costs of such production lines, we conduct comprehensive inspections and in-depth evaluations to tailor personalized solutions that are systematic, professional, and reliable for our clients.

The core of this solution lies in assisting biomass pellet manufacturing enterprises in effectively carrying out production line technological renovation and extension. Through the professional intervention of FDSP, not only can the performance of key equipment be significantly improved, but the overall performance of assets can also be optimized, thereby directly improving the operation status of the production lines.

Our services cover all aspects of improving quality and efficiency:

1. Equipment upgrading: Targeted improvement of equipment efficiency and reliability;
2. Process optimization: Exploration of production process potential to reduce waste.

With its comprehensive professional technical services, FDSP is committed to helping customers achieve the following three core goals:

1. Enhancing production efficiency: Unleashing the potential of production lines and increasing effective output;
2. Reducing operating costs: Reducing energy consumption, material consumption and maintenance costs;
3. Strengthening market competitiveness: By leveraging cost and efficiency advantages, helping customers win the market.



Intelligent operation and maintenance solution

FDSP is dedicated to meticulously crafting intelligent operation and maintenance solutions covering the entire life cycle of biomass pellet plants for its clients. This series of solutions integrates three core advantages: standardized efficient execution, intelligent transparent management, and flexible personalized customization.

Based on the foundation of ensuring asset safety and achieving reliable operation, our solutions aim to help partners continuously reap stable and promising asset benefits, thereby injecting lasting momentum into the green and low-carbon transformation of the economy.

FDSP's professional services run throughout the project:

1. Planning and Deployment (Pre-Stage): Scientific design to lay a foundation for efficient operation;
2. Operation and Maintenance (Mid-Stage): Real-time monitoring, intelligent early warning, ensuring stable operation;
3. Upgrade and Optimization (Post-Stage): Precise assessment, continuous improvement, unlocking the potential of assets.

With profound technical accumulation and the service philosophy of "centering on customers", FDSP ensures that in every key stage - from the precise planning in the early stage, to the stable operation in the mid-stage, and to the continuous optimization in the later stage - It can achieve "efficient, reliable, and seamless connection" operations. Through refined management and technological innovation, we deeply explore operational efficiency, effectively control maintenance costs, and ultimately create more outstanding and sustainable value returns for customers.

COMPREHENSIVE SOLUTION PROVIDER FOR THE
ENTIRE INDUSTRIAL CHAIN OF
BIOMASS ENERGY



Comprehensive spare parts material assurance solution

FDSP has always been committed to the mission of "maximizing customer business value", actively integrating internal and external high-quality resources to build a collaborative and efficient spare parts material assurance system. We adhere to the core principles of "quality, efficiency, and environmental protection", deeply integrating the three core businesses of component repair, spare parts supply assurance, and professional technical training, providing customers with a one-stop, all-round, and highly efficient material solution.

No matter what kind of demand scenario you are facing:

1. Emergency component parts replacement: Quick response, precise matching, minimizing downtime losses;
2. Regular spare parts reserve planning: Scientific prediction, optimizing inventory structure, reducing capital occupation and shortage risks;
3. Professional technical training empowerment: Enhancing team skills, strengthening autonomous maintenance capabilities, ensuring long-term reliable operation of the system.

With its strong resource network and agile service system, FDSP ensures a rapid and accurate response to customer needs. Our goal remains consistent: Ensuring the continuous and stable operation of customer production and operations, eliminating their worries. Through providing reliable, timely, and professional spare parts material assurance services, FDSP strives to become a solid support for the stable operation of customer equipment, safeguarding the stable growth and sustainable development of their business.



Comprehensive technical support and service guarantee

Professional design · Tailored made

We conduct project planning and design based on the specific requirements of our clients, provide 3D project renderings, and offer "one-on-one" customized services to tailor a complete factory-specific solution for each client.



Professional team · Efficient delivery

Our company has a professional design, manufacturing, and installation team with over 25 years of industry experience. Adhering to the concept of "taking customer needs as our responsibility", with a highly professional and dedicated spirit, we help clients achieve project delivery in the shortest time, seize market opportunities, and provide one-stop worry-free services from preliminary design, production manufacturing to later construction, maintenance, and after-sales support.



Field investigation · Adaptation to local conditions

Our professional team conducts on-site measurements and optimization of layouts at the construction site. Strictly following the principle of adapting to local conditions, we formulate scientific, reasonable, economically practical, and environmentally compliant design plans and construction methods based on the investigation results.



Technical guidance · Full-process escort

After equipment installation and commissioning, we provide one-on-one technical guidance, customize training plans based on the client's actual situation, and ensure that all operators can safely operate the production. During the subsequent production process, we provide 7×24-hour remote technical support and offer timely on-site services as needed.

Professional service · Uninterrupted production

Throughout the pre-sale, in-sale, and post-sale stages, we are always ready to provide satisfactory services. With rigorous processes to ensure efficient work, we respond to customer technical inquiries 24 hours a day, quickly handle various issues such as on-site services, equipment maintenance, production failures, etc., and continuously improve customer satisfaction.



Rapid response · Lifetime maintenance

Response speed: Respond immediately and solve problems quickly;
Service quality: Pursue excellence, strive for perfection, and continuously improve;

Service duration: After the warranty period, as long as the equipment is in use, the service will continue indefinitely. With lifetime maintenance, we relieve customers' worries and strive to become their always trustworthy partner.

