



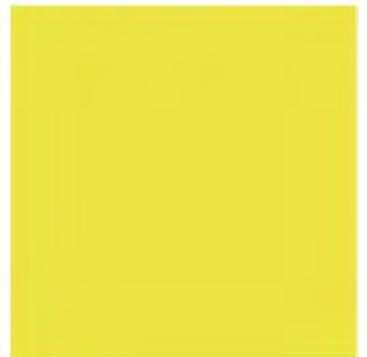
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**PROFESSIONAL PRODUCTION
PELLET MACHINERY**



Soybean Straw Pellet Production Line



1. Introduction of Soybean Straw Pellets

Soy straw pellets refer to the process of crushing, drying, heating and compressing the straw into fuel pellets after harvesting soybeans. The calorific value of soybean straw pellets is as high as 4500 kcal, which is much higher than commonly used straw pellets such as corn stalk pellets and peanut shell pellets. Although its calorific value is high, the use of straw is relatively small, because no suitable soybean straw pellet machine can meet the requirements. But now, the biomass pellet machine produced by Richi Machinery can produce soybean straw pellets.

The high protein contained in soybean straw is the best choice for livestock feed. After being crushed and heated during processing, it is more conducive to the digestion and absorption of animals. Other feeds can be customized during the processing process, and can be customized according to customer needs. After the soybean straw is crushed, there is no need to add any additives to the nutritional content of the product: crude protein 41.32%, crude protein 4.8%, and total amino acid 3.50%, so soybean straw can be used to make animal feed pellets, and we can also produce soybean straw feed Particle machine. But today we are introducing the project of soybean straw pellet production line as biomass fuel.

2. Why is Soybean Straw Made Into Biomass Pellets?

Farmers across the United States and around the world are paying attention to soybean stalks. In the past few years, farmers have always despised this because they often criticize that typical soybean straw pellets have lower nutritional value than other forms of straw pellets (such as corn), which affects dairy cows. Animals being fed. Thanks to the foresight and help of hard-working farmers, soybean straw pellets made from straw using a pelletizer can now be used in an environmentally friendly way. Now it can be used as a good source of heating fuel, especially in greenhouses that

usually require a lot of energy. You will also see a surge in interest from people who usually use firewood equipment and now choose pellet stoves.



Make soybean straw into pellets

3. Soybean Straw Pelletizer of 1-20t/h Biomass Fuel Pelletizing Plant

As farmers, we all know that sometimes it may be difficult to extract high-quality pellets from straw pelletizers. Sometimes, when we can get a certain type of pellets, it is usually unusable. Therefore, farmers must have high-quality pellet machines. For those who don't know what a pelletizer is, this is a bit unusual. It is just a machine that can turn crop waste such as corn stalks or even soybean stalks into fuel pellets. One of the other main problems that can be solved by using a straw pellet crusher is feeding animals. The large amount of crop waste accumulated on our farm after harvest could have been used to feed certain animals on our farm. Of course, a large number of biomass fuel particles can also be produced. Because they burn very well when they become particles.

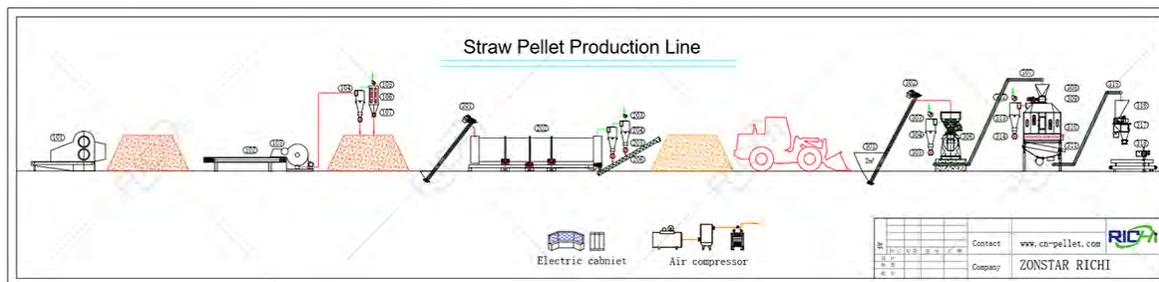
4. Technical Parameters of Soybean Straw Pelletizer

Model	MZLH320	MZLH350	MZLH420	MZLH520	MZLH768	MZLH858
Anti-caking Feeder Power	1.5KW	1.5KW	1.5KW	2.2KW	3kw	3kw
Forced Feeder Power	0.55KW	0.55KW	0.55KW	0.75KW	1KW	1KW
Capacity	300-400kg/h	500-700kg/h	1.0-1.2 t/h	2.0-2.5 t/h	2.5-4 t/h	3-4.5 t/h
Pellet Machine Power	37kw	55kw	90kw	110/132kw	250 / 280kw	280kw
Final Pellet	6-12mm	6-12mm	6-12mm	6-12mm	6-12mm	6-12mm

Soybean straw is gaining a lot of attention by farmers across America and some parts of the world. Over the past few years it has been looked down on by farmers because they usually criticize it saying that the nutrient value of a typical soybean straw pellet is pretty low comparing to other forms of straw's such as corn and it will affect cows which are the main animals it is being fed to. Thanks to the vision and help from hard working farmers, the soybean stover pellets which are

made from the stalk by use of pelletizing machine can now be used in an environmental and friendly way. It can now be used as a good source for heating fuel especially for your greenhouses which usually takes lots energy. You are also seeing a spike in interest from persons who would normally use wood fire equipment back then now choosing pellet stoves.

5. Soybean Straw Production Line Process



Flow chart of soybean straw production line

(1) Crushing system

Equipment required: bran shredder, grain hammer mill.

Use a straw chopper and a soybean straw hammer mill to crush the soybean straw raw materials into appropriate small pieces. Crushing is very necessary, especially when the raw material is logs.

Generally, the final crush size should be 3-6mm, which is required by most ring die biomass pelletizers.

(2) Drying system

Equipment needed: High drying efficiency biomass rotary dryer for soybean straw

In this process, the crushed soybean straw is dried to an appropriate moisture content. To make high-quality biomass fuel pellets, drying is one of the most important parts you should pay attention to. 12-16% is suitable for most biomass soybean straw pellet production processes. High-moisture raw materials may cause particles that are easy to break apart, while low-moisture materials may cause difficulties in granulation. If you plan to build a large soybean straw pelletizing production line, a high-quality CE certified rotary dryer is the best choice. Due to its large drum and structure, the price may be higher than ordinary dryers. If your budget is limited, the air dryer is also a good choice.

(3) Granulation system

Equipment needed: ring die pellet mill for 1-40 tons/hour soybean straw pellet processing plant

Granulation is a key process in 1-40 tons/hour biomass soybean straw pellet production plant. The annular mold design of RICHI biomass wood pelletizing equipment has different compression ratios.

Annular molds with multiple compression ratios enable our pelletizer to process a variety of biomass materials.

(4) Cooling and screening system

Equipment needed: soybean straw pellet cooler and screening machine

The cooling system helps to cool the final soybean straw pellets. The sieving system is used to remove the powder from the granules.

(5) Packaging system

Equipment needed: automatic packaging machine

Packaging is the last process to complete the production of 1-20 tons/hour of complete soybean straw turnkey biomass pellet factory. You can choose to pack soybean straw pellets in bulk bags or small bags. The bulk bag is 1 ton/bag. The small bag is about 15-30 kg/bag.

6. Application of Soybean Straw

After harvesting soybeans, many farmers process the dried remaining soybean straw into pellets.

However, it has many magical uses in our lives. Unfortunately I don't know. Let's see.

(1) Papermaking. The content of cellulose, hemicellulose, lignin and other components in soybean straw is very high. The lignin and cellulose in soybean straw can be extracted as raw materials for papermaking. In addition, soybean straw is a fibrous plant, which can also be used as industrial raw materials such as board processing and has a wide range of uses.

(2) Feed. The protein content of soybean straw is as high as 10%-12%, the sugar content is low, and the feed nutritional value is high. After being dried and crushed, it can be directly fed to cattle, sheep and other grass-fed livestock, which has a good effect on improving feed returns and economic benefits, and can also increase nutritional value and improve enzymatic hydrolysis.

The soybean straw concentrated supplement pellet feed system crushes the straw and concentrated feed, mixes them in a certain proportion according to the nutritional needs of ruminants, and processes them into a certain pellet feed with a feed block machine. At present, the raw materials of straw pellet feed are usually corn stover, wheat straw and rice straw, and soybean straw concentrate is used to supplement the pellets. The main raw material of pellet feed is soybean straw as the main raw material for feed production, which broadens the source of processed feed materials and effectively improves the utilization rate of soybean straw.

(3) Cultivate edible fungi. After crushing the soybean stalks into 2-3 cm particles, they are moisturized before use, which can be used to grow oyster mushrooms, shiitake mushrooms, fungus, mushrooms, etc. Additives generally do not exceed 50%, which can also increase the production of edible fungi.

7. Bright Prospect of Soybean Straw Pelletizing Project

As we enter a more energy-efficient world, one can expect to see rapid growth in sales of soy straw pellets, especially in the use of biofuels. It is very clean, generates more heat per unit and is easier to

handle. The future of soybean straw pellet production is brighter than ever, and it will affect many areas of various industries, including thermal power plants and household heating. In general, scientists have received funds to further in-depth research on straw pellets, because it has the characteristics of low carbon, energy saving and environmental protection, and this is what we need to deal with global warming.