

**SYNMEC**

森迈国际·面粉机械

# SYNMEC INTERNATIONAL FLOUR MACHINERY

WHEAT/MAIZE MILLING SOLUTIONS  
2015



[www.synmecafrika.com](http://www.synmecafrika.com)

## Company Introduction

### Experienced Professional Background

Over 40% of our employees received education from U.K or U.S Universities and most of our employee are very experienced in the industry for many years. Synmec sold thousands of flour milling machine in the international market until now.

### The Best Technical Supports

SYNMEC is one of the best China based specialists in the basic technologies of cleaning, classifying, milling and packing for wheat and corn, producing and upgrading Engineering materials.



## Foreign Guests Reception



## Content

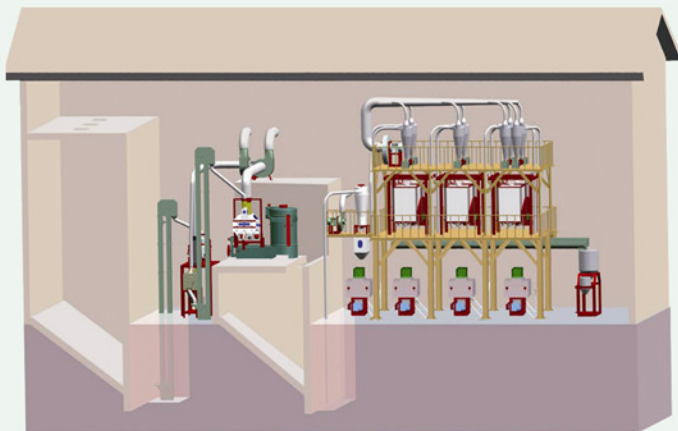
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## Wooden Case Packing And Full Container Loading For Exportation



## 6FYF Series Small Model Flour Milling Plant

### Round Sieve Grading And Square Sifter Extracting Flour



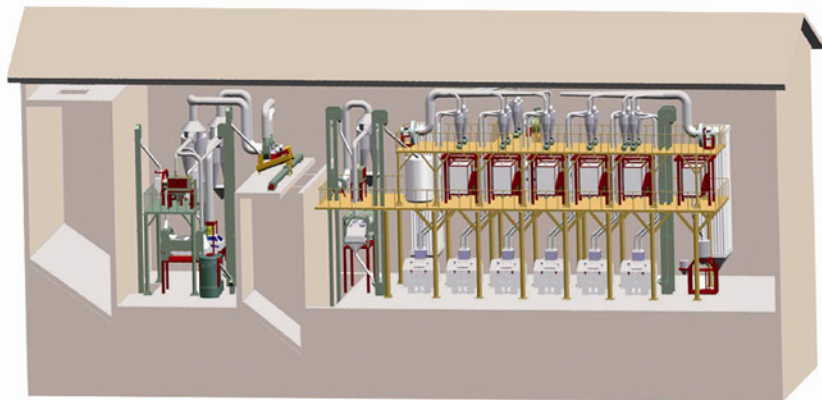
### Main Model And Technical Data.

Model	Items	Production Capacity(T/24h)	Cleaning and Milling Techniques and Main Machines
6FYF-16		16	1 sifting-2 scouring-1 destoning-1 washing-1 air separating (high speed vibrating sifter, scouter, washing machine) 4 break-3 reduction-1 bran brushing (3-6F1820 roller mill,1-6F2235 roller mill,1-double bin sifter,4-round sifter,1-bran brusher,1-high pressure air blower)
6FYF-22		22	1 sifting-2 scouring-1 destoning-1 magnetic separating-1 washing-1 air separating (high speed vibrating sifter, scouter, washing machine) 4 break-3 reduction-1 bran brushing (4-6F1820 roller mill,1-double bin sifter,4-round sifter,1-bran brusher,1-high pressure air blower)
6FYF-40		40	1 sifting-2 scouring-2 destoning-2 magnetic separating-1 washing-1 air separating (high efficiency vibrating sifter, scouter, bucket elevator, destoner, low pressure air blower,washing machine) 4 break-4 reduction-1 bran brushing (1-6F2240 roller mill, 7-6F2235 roller mill,4-round sifter, 2-83 double bin sifter,1-conveyor,1-bran brusher,1-vibrating feeder)



## 6FTF Series Small Model Flour Milling Plant

### Whole Square Plansifter Extracting Flour

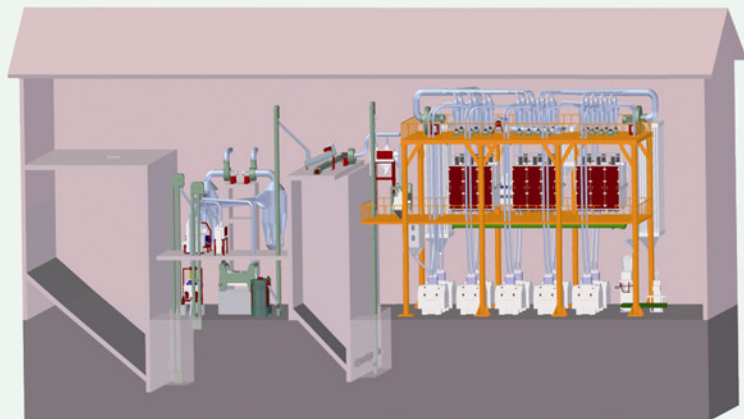


### Main Model And Technical Data.

Model	Items Production Capacity(T/24h)	Cleaning and Milling Techniques and Main Machines
6FTF-36	36	<p>1 sifting-2 scouring-2 destoning-2 magnetic separating-1 washing-1 air separating (high efficiency vibrating sifter, scourer, bucket elevator, destoner, low pressure air blower, washing machine)</p> <p>3 break-4 reduction-1 bran brushing or 4 break-3 reduction-1 bran brushing (4-FMF2240 roller mill, 2-FMF2235 roller mill,3-83 double bin sifter,1-conveyor,1-bran brusher,1-vibrating feeder)</p>
6FTF-50	50	<p>1 sifting-2 scouring-2 destoning-2 magnetic separating-1 washing-1 air separating (high efficiency vibrating sifter, scourer, bucket elevator, destoner, low pressure air blower, washing machine)</p> <p>4 break-4 reduction-1 scratch-1 bran brushing (2-FMF2240 roller mill, 3-FMF2235 roller mill,4-83 double bin sifter, 1-conveyor,1-bran brusher,1-vibrating feeder)</p>
6FTF-80	80	<p>2 sifting-2 scouring-2 destoning-3 magnetic separating-1 washing (high efficiency vibrating sifter, plane revolving sifter, scourer, bucket elevator, destoner, low pressure air blower, washing machine)</p> <p>4 break-6 reduction-1 scratch-2 bran brushing (3-FMF2550 roller mill, 3-FMF2240 roller mill, 5-83 double bin sifter, 2-conveyor,2-bran brusher, 1-vibrating feeder)</p>

## 6FTF Series Medium Model Flour Milling Plant

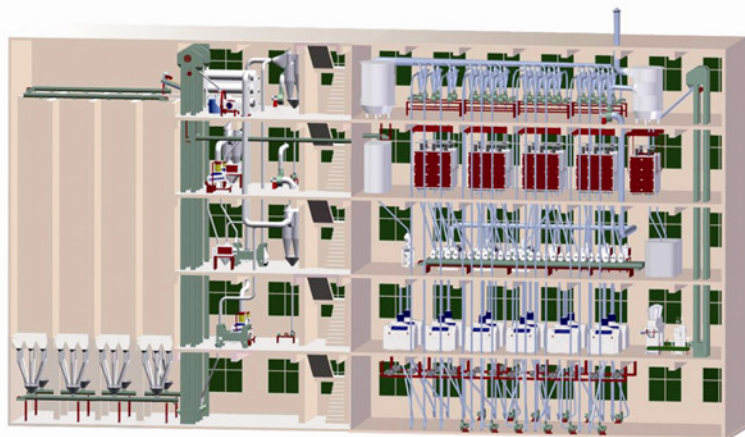
### Multi-section Plansifter And Steel Structure



### Main Model And Technical Data.

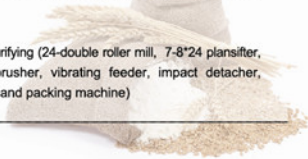
Model	Items	Production Capacity(T/24h)	Cleaning and Milling Techniques and Main Machines
6FTF-80G		80	3 sifting-2 scouring-2 destoning-3 magnetic separating-1 washing-2 damping (high efficiency vibrating sifter, plane revolving sifter, scourer, bucket elevator, destoner, washing machine) 4 break-6 reduction-1 scratch-1 tail-2 purifying-2 bran brushing (8-50*2 double roller mill, 2-6*24 plansifter, 1-49*2*3 purifier, bran brusher, vibrating feeder, impact detacher, impulse duster)
6FTF-100G		100	3 sifting-2 scouring-2 destoning-3 magnetic separating-1 washing-2 dampening (high efficiency vibrating sifter, plane revolving sifter, scourer, bucket elevator, destoner, magnetic separator, washing machine) 4 break-5 reduction-1 scratch-1 tail-2 purifying-1 inspection-2 bran brushing (10-50*2 double roller mill, 3-6*24 plansifter, 1-49*2*3 purifier, bran brusher, vibrating feeder, impact detacher, impulse duster)
6FTF-150G		150	3 sifting-2 scouring-3 destoning-4 magnetic separating-1 washing-3 dampening (high efficiency vibrating sifter, plane revolving sifter, scourer, bucket elevator, destoner, magnetic separator, washing machine, spray damper) 5 break-8reduction-2 scratch-2 tail-4 purifying-4 bran finishing-1 bran brushing-2 inspection (12-double roller mill, 5-6*24 plansifter, 3-49*2*3 purifier, bran brusher, vibrating feeder, impact detacher, impulse duster)

## 6FTF Series Large Model Flour Milling Plant Multi-section Plansifter And Stored Building Structure



### Main Model And Technical Data.

Model	Items Production Capacity(T/24h)	Cleaning and Milling Techniques and Main Machines
6FTF-300L	300	<p>3 sifting-2 scouring-2 destoning-1sorting-3 magnetic separating-2 dampening (dry cleaning) (high efficiency vibrating sifter, plane revolving sifter, scourer, bucket elevator, destoner, spray damper, gravity classifying destoner, washing machine)</p> <p>5 break-12 reduction-2 scratch-12 purifying (16-double roller mill, 6-8*22 plansifter, 6-49*2*3 purifier, conveyor, bran brusher, vibrating feeder, impact detacher, impulse duster, automatic weighing and packing machine)</p>
6FTF-500L	500	<p>3 sifting-2 scouring-2 destoning-1sorting-2 magnetic separating-2 dampening (dry cleaning) (high efficiency vibrating sifter, plane revolving sifter, scourer, bucket elevator, destoner, spray damper, gravity classifying destoner, washing machine)</p> <p>5 break-12 reduction-2 scratch-12 purifying (24-double roller mill, 7-8*24 plansifter, 5-59*2*3 purifier, conveyor, bran brusher, vibrating feeder, impact detacher, impulse duster, automatic weighing and packing machine)</p>

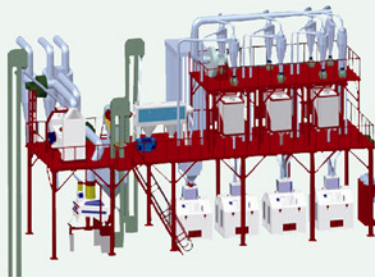


## 6FYDT Series Corn/Maize Flour (Grits) Milling Plant



The small scale maize flour milling plant is a complete process line with all the necessary machines and components for processing the maize into finished grits and/or flour. The plant, however, can be extended with additional equipment in order to meet individual demands. As standard the plant is configured for milling maize flour, with a capacity of 1500kg/hour of grain. The plant is designed with a horizontal one-level layout minimizing the building requirements and costs. The height demand is as low as 5 meters free space, and thus many existing buildings can be used for the plant installation.

Model	Items	Production capacity(T/24h)	Cleaning and Milling Techniques and Main Machines
6FYDT-8		8	High efficiency vibrating sifter, Peeling machine, Damper, Crusher, Embryo separator, Polisher, Roller mill
6FYDT-20		20	High efficiency vibrating sifter, De-stoner, Damper, Peeling crusher, Embryo separator, Roller mill, Grading machine, Super-micro-particle pulverizer Produce flour and grits



6FYDT series complete set equipment is composed of cleaning part, peeling & degerming, and grits/flour making part. The plant adopts full steel structure, featuring beautiful appearance, easy installation and small occupation. Besides, it uses double roller mill with stable performance and high flour/grits yield, able to process high-quality corn grits and corn flour. The flour screening adopts efficient double-bin plan-sifter. The whole plant adopts pneumatic and negative pressure transmission, not only preventing smell from leakage, but also reducing workshop dust and drying the flour in this process. The air outlet of the blower can be equipped with pulse deduster, making your working environment cleaner and producing all kinds of the maize flour needed. The processing plants can produce high standard maize flours, maize grits in various sizes for different usages.

Model	Items	Production capacity(T/24h)	Cleaning and Milling Techniques and Main Machines
6FYDT-50		50	High efficiency vibrating sifter, De-stoner, Damper, Peeling machine, Embryo separator, Polisher, Grading machine, Roller mill, Double bin sifter, Produce flour and grits
6FYDT-100		100	High efficiency vibrating sifter, De-stoner, Damper, Peeling crusher, Embryo separator, Polisher, Grading machine, Roller mill, Multi-section plansifter, Produce flour and grits





### High efficiency vibrating sifter

High efficiency vibrating sifter is widely used in screening, cleaning and classifying for granule material of grain processing plant. It can remove the big, small and light impurities. It has advantages of a simple structure, smooth operation, small size, light weight, low noise and low energy consumption. The cleaning effect is perfect.



### Plane revolving sifter

Plane revolving sifter is used primarily for grain cleaning in the milling of wheat, durum, corn (maize), rye, soybeans, oats, buckwheat, spelt, millet and rice. It separates coarse and fine impurities from grain via screening and classifies a broad range of materials according to size. The Main different with vibrating sifter is no angel when it is revolving, some big impurities can be sort effectively.



### TQSF destoner

TQSF destoner is applied for efficient separation of stones and pebbles, glass, and other high-density impurities from the stream of grain, according to the difference in specific weight. The throughput capacities vary according to product and degree of contamination. The destoner is widely used in mills processing soft wheat, durum, corn (maize), rye, rice and soybeans, as well as in speciality mills for oats, buckwheat, barley, spelt and millet.



### Scourer

Scourer is used for removing impurities adhere to the skin of wheat and other dirty things like: dust, mud, coal, ect. It can significantly improves product hygiene by reducing the microbial count (bacteria, fungus etc.) as well as minimizing the presence of insects or their fragments. The scourer is generally equipped at its discharge end with the aspiration channel. These serve to separate detached hull fragments or surface contaminants neatly from the grain.



### XMS series washing stoner

XMS series washing stoner is used to wash and dampen grain as well as remove heavy impurities and shell of wheat and holds the function of scourer. It wash out the duty from wheat, at the same time to remove the same size stone, it has the characteristic of high efficiency; bearing of every parts of the machine is imported, and special parts is made by stainless steel, whizzed plate is made by special steel, rot and bear-proof.



### Magnetic separator

Magnetic separator adopts high quality magnetic steel. It is mainly used for removing the magnetic metal impurities from the grains. It has the advantages of good appearance, reasonable design, durable and strong magnetic force.



### Pneumatic control double roller mill

Pneumatic control double roller mill is equipped with denti-wedge belt or chain with full close of mill chamber and is suitable for middle and small flour mills. It has the grinding roller with high-precision rotation, the roll space with high-accuracy adjustment, and it is with reliable feed mechanism and integrated structure of cast-iron base complete with welded steel framework. Laser cutting applies to sheet metal components for quality and accuracy.



### Manual control double roller mill

Manual control double roller mill is the main equipment in wheat/maize flour processing line. It adopts user friendly roller gap adjustment mechanism for precise operation and tooth synchronous belt drive to provide differentiated motion of the rollers for quiet operation and low maintenance. Main motor is assembled underneath grinding chamber for easy installation and space saving.



### 6F series roller mill

6F series roller mill has compact structure, flexible adjustment, beautiful appearance, and easy operation for wheat/maize flour processing. It also can be used for other grain milling, like corn, soybean, rice, etc.



### 6F1820 double roller mill

6F1820 double roller mill is designed by our company which has two pairs of rollers inside. They are characterized by V-belt drive of slow and quick rollers with compact structure. It has the advantages of high efficiency, good running performance, low power consumption, fluently operation and easy maintenance. It is quite suitable for small flourmills.



### Impact detacher

Impact detacher is used to impact and loosen materials from reduction system to improve the milling and sifting result. It is accessory equipment for roller mill which can impact the stock from break mill and reduction mill to loose the flour flake and separate endosperm adhered on the skin and can improve flour extraction 30-50%.



### Maize grinder

Maize grinder is developed on the basis of hammer grinder. It can perfectly break a whole maize into 4 to 6 pieces of regular shape and intact germ. It is used in the updated maize milling technology.



### FSFJ series double bin sifter

FSFJ series double bin sifter is used for the sifting and classifying in small and medium grain processing plants. There are single section type and double sections in this machine series. According to individual design for different material, the sieve sifts different granular materials to different next passages in flour mill when the whole machine is running. It is easy and quick changing of sifting scheme if necessary.



### FSFG series plansifter

FSFG series plansifter is the efficient level revolving plansifter. The effect of screening is fine, operation is reliability, operating maintenance is convenient, low power consumption, high efficiency. It is the main plansifter for large and middle grain processing plant.



### Vertical negative pressure round sifter

Vertical negative pressure round sifter is flour extracting machine used in the small flour milling plants. The equipment has advantages of low price, good running performance, high efficiency, low power consumption and easy maintenance. etc.



### Bran brusher

Bran brusher is used to brush and peel bran to decrease the flour content in bran and increase extraction rate. Material get into the machine from the inlet of bran brusher aided the beater to separate the bran and flour.



### Purifier

Purifier is used to handle coarse and medium size stocks of break system from plan sifter., and divide them into bran, endosperm with several bran and pure endosperm according to the quality. Based on similar fineness, different weight and suspended velocity of flour need to be processed by Purifier, the self-grading result of flour will be achieved by its suspended velocity with combined effect of a slight lean vibrating sieve surface of increasing sieve mesh piecewise and the up-to-down direction airflow movement.



### Impulse duster

Impulse duster is the primary de-dust equipment in grain processing industry. It can be widely used in industries such as food processing, grain, medicine, and sanitation to remove the dust. It has updated design of air tank with leaking free. It adopts air blowback nozzle for air dynamic characteristics less restriction, high air flow speed and efficient outcome, and adopts programmable timer control for setting up pulse frequency and blowing time. The flip top design enable quick maintenance and service.



### Vibrating bottom unloader

Vibrating bottom unloader is used for the offload of flour in the close which guarantees block free and even offload. It adopts reinforced vibrating cone enable smooth material flow and extended discharge funnel to reduce the weight applied to the sealing ring.



### Wheat matcher

Wheat matcher is used for the machine blending and rate supply of raw material and is essential for the production of special flour.



### Damper

Damper is used to wet the grain to improve the toughness of the cortex which can keep the intact of bran and improve the quality of finished product.



### Maize peeler and degerminator

Maize peeler and degerminator is a professional equipment to mainly remove corn germ, corn black spot and corn bran, so as to make full use of the corneous part to make maize grits in favor of improving the quality of maize grits. It can be used individually or with medium and small processing lines.



### Embryo selector

Embryo selector is used to extract embryo from the mixture of materials. It takes advantage of the airflow that can separate maize granules, maize embryo as well as their mixture, and it could also remove maize hull as a result of the winnowing.



### Maize crusher

Maize crusher adopts high quality material and advanced welding equipment and technology. This machine is the special equipment for processing corn in half-wet method. Its function is to scrap away the corn bran, corn embryo and crush corn endosperm into pieces of required size (large, middle and small).



### Spray damper

Spray damper is the essential equipment for the mill to produce classifying flour. It is used for the minim wetting of wheat before milling to increase the tenacity of cortex to amend milling effect, avoid wheat skin broken too early and increase the quality of flour and extraction rate.



### Air blower

Air blower is used to supply drive for the air to carry out the task of material conveying and dust removing. It adopts dynamically balanced blower wheels to ensure smooth operation. It is optimize designed, high efficiency and low energy consumption.



### Air seal

Air seal is used for material discharging and dust removing of pneumatic conveying system and air net in the industries such as grain, food and feed.



### Bucket elevator

Bucket elevator is used for the lifting of power and granule and is the main machine for vertical conveying. It adopts enhanced belt tension mechanism, heavy duty belt with wear resistant bucket and adjustable material flow cufe.



### Automatic packing machine

Automatic packing machine is used for the weighing and packing of power, granule and bran. It has advantage of integration of weighing, bag filling, conveying and sewing. It has a variety of series and models for a wide range of applications.



### Steel silo

Steel silo is mainly used for the grain storing in large grain processing plants and grain warehouse. It has the function of ventilation, temperature measuring, dampproofness, anti-mildewing and can be designed into silo groups or separate silos with the capacity of 300 to 1000 ton according to the demand of the customers.



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① 8T/24h maize flour milling plant

⑥ 20T/24h maize flour milling plant

② 15T/24h maize flour milling plant

⑦ 80T/24h wheat flour milling plant

③ 40T/24h wheat flour milling plant

⑧ 100T/24h maize flour milling plant

④ 30T/24h maize flour milling plant

⑨ 50T/24h wheat flour milling plant

⑤ 20T/24h wheat flour milling plant

⑩ 16T/24h wheat flour milling plant



# SYNMEC



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**SYNMEC**  
300T/24H WHEAT MILLING PLANT





# MILL THE WORLD'S GRAIN



[www.synmecafrika.com](http://www.synmecafrika.com)



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