

## **Spiral Welded Pipe Mill**

### **I. The production of spiral welded pipe mill**

The steel coils are unfolded and leveled by the mill equipment. And they are sent to the forming machine in a certain angle. Supplemented by a certain angle, the continual pipes are formed in the principle of three-roll rolling machine. Continual spiral welding is welded by submerged-arc welding machine.

According to the different function of our products, the spiral welded pipe mills are divided into API standard model, national standard model and special purpose model. API standard model mainly produces the delivery pipe with petroleum or natural gas (long distance). The material and quality of the steel pipe need to be very good. The requirements for mill equipment and testing equipment also are very high. National standard model produces the pipe used for short distance delivery of natural gas or water, the pipeline construction in the city, the structure pipe, column pipe and so on. The requirements for the material and quality of the steel also are very high, second only to that of API standard. Special purpose mill is used for some special purposes. For example, our company developed the special 60~214 mill aiming at the function of petroleum filter.

The welded pipe machine is divided into frontal-swing and back-swing spiral welded pipe mill according to the different working method. The frontal-swing spiral welded pipe mill adopts indirect production method with less investment and easy operation advantages and so on. Back-swing spiral welded mill adopts continuous production method with high efficiency, good quality and less repairing pipe and so on. The specification of our products is from  $\Phi 90$  to  $\Phi 3500$ . The thickness of the wall is from 1mm to 25.4mm. The material of our products is from Q235 to Q235\*80. Besides, special material such as the stainless steel is included. All of them cover all the mills.

## II. Main projects and clients

No.	Equipment name	Clients name	Remark
1	Φ90 ~ Φ214 spiral welded pipe mill	Zibo Dongsan Petroleum Technology Development Co.,Ltd.	
2	Φ219~Φ630 spiral welded pipe mill	Jiangsu Huadong steel pipe Co., Ltd	
3	Φ219~Φ820 spiral welded pipe mill	Shangdong Zhongyun group	X70 levels
4	Φ219~Φ1020 spiral welded pipe mill	Iran	Export project X70 levels
5	Φ426~Φ1420 spiral welded pipe mill	Wuhan Jinhai pipe manufacturing company	X65 levels
6	Φ219~Φ1620 spiral welded pipe mill	Pakistan	Export project
7	Φ508~Φ1820 spiral welded pipe mill(2 sets)	Malaysia	Export project X70levels
8	Φ529~Φ2400 spiral welded pipe mill	Malaysia	Export project X70levels
9	Φ400~Φ2540 spiral welded pipe mill	Korea Tongyong pipe Co., Ltd	Export project
10	Φ711~Φ3000 spiral welded pipe mill	Malaysia Oriental	Export project
11	Φ630~Φ3200 spiral welded pipe mill	Nanjing Yangzi Water supply and drainage pipeline Co., Ltd	
12	Φ325~Φ1622 back-swing spiral welded pipe mill	Mexico pipeline Co., Ltd	
13	Φ273~Φ1422 back-swing spiral welded pipe mill	India pipeline Co., Ltd	

## III. Typical projects

### 1. Mexico Steel Pipe Co., Ltd (325-1622x25.4 back-swing spiral welded pipe mill)

The mill is designed and manufactured by our company with advanced technology for Mexico Steel Pipe Company. The mill adopts back-swing continuous production equipped with completed testing equipment and equipment in precise area. The mill is mainly used to produce API standard high-class pipe.

## 2. Malaysia Steel Pipe Co., Ltd (711-3000x25.4 frontal-swing spiral welded pipe mill)

The mill is designed and manufactured by our company with advanced technology for Malaysia Steel Pipe Company. The mill adopts frontal-swing continuous production. The mill is mainly used to produce high standard column pipe and so on.

## 3. Shandong Zhongyun Steel pipe Co., Ltd (426-1620x14 frontal-swing spiral welded pipe mill)

The mill is designed and manufactured by our company with advanced technology for Shandong Zhongyun Steel pipe Company. The mill adopts frontal-swing continuous production equipped with completed testing equipment and equipment in precise area. The mill is mainly used to produce API standard high-class pipe.

### **IV. Production process:**

#### 1. Frontal-swing spiral welded pipe mill

Loading coil-uncoiling-leveling-cutting and coil welding -edge milling machine-delivering machine -prebending and guide board-forming-internal welding-external welding-tracking and cutting off-extracting-trimming-hydraulic testing-flat head chamfering-X ray inspection-ultrasonic inspection-spraying-connection of the finished products

#### 2. Back-swing spiral welded pipe mill

Loading coil-uncoiling-leveling-cutting and coil welding -edge milling machine-feeding machine-flying-welder-delivering machine-prebending and guide board-forming machine-internal welding-external welding-tracking and cutting off-extracting-trimming-hydraulic testing-flat head chamfering- X ray inspection-ultrasonic inspection-spraying-connection of the finished products

## V. Available types

No	Model	Specification	coil width (mm)	Thickness (mm)	Coil weight(ton)	Capacity(kw)	Area(M <sup>2</sup> )
1	LHJZ-400	Φ219~Φ426	400~750	5~10	10	180	18×180
2	LHJZ-500	Φ219~Φ529	400~800	5~11	15	200	18×180
3	LHJZ-600	Φ219~Φ630	450~1050	6~12.7	20	240	21×180
4	LHJZ-700	2Φ19~Φ720	500~1250	5~14	20	260	21×180
5	LHJZ-800	Φ219~Φ820	500~1300	6~18	30	380	24×180
6	LHJZ-1000	Φ219~Φ1020	500~1300	6~20	30	390	24×180
7	LHJZ-1400	Φ325~Φ1420	500~1560	6~22	30	400	26×180
8	LHJZ-1600	Φ426~Φ1620	500~1560	6~25.4	40	510	30×180
9	LHJZ-1800	Φ508~Φ1820	1100~1600	8~25.4	40	510	30×180
10	LHJZ-2000	Φ508~Φ2020	1200~2000	8~25.4	40	530	30×180
11	LHJZ-2400	Φ508~Φ2400	1200~2000	8~25.4	40	530	30×180
12	LHJZ-3000	Φ508~Φ3000	1200~2000	8~25.4	40	530	30×180