

# KEMEIDA

CABLE REEL

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## 概述 General

我公司生产的搬运板坯用夹钳装置，是在多年的生产经验基础上，吸收国内外同类产品的先进经验开发生产的。无电能消耗，无电磁波干扰，使用安全可靠，适应性强。适应高温钢板坯的吊运。经实际使用证实，此吊具可以在无地面人员配合的条件下，自由的装卸钢坯，是一种理想的钢坯用吊具。

The tongs equipment for transporting billets is designed with the advanced experience from home and abroad on the basis of our production experiences for many years with the advantage of no power consumption, no electromagnetic wave interference, reliable & safe in operation and flexible adaptability. Facts have proved that this lifting tool can load and unload steel billets freely without the cooperation of workmen on the ground, which is an ideal lifting tool used for handling steel billets.

## 特点 Features

### 1. 基本原理

夹钳工作时，利用起重机的升降，通过吊具及钢坯自重驱动夹钳的机械开合装置（滑移式、导轨式和旋转式）完成钢坯的夹持和卸放。其基本的工作原理为简单的杠杆原理。

### 2. 使用条件

2.2.1 被夹物温度不超过1250℃。

2.2.2 户内、户外均可使用。安装方便，只需将其挂装于起重设备的吊钩上。操作简单，只需操作起重设备的升降。

2.2.3 最大夹持宽度与最小夹持宽度之差不大于300mm（1型）、600mm（2型），否则不安全。

### 3. 结构及其特点

3.1 结构由吊攀或链条、销轴、夹钳、吊梁、底梁、定位板、连杆、自动开合装置等主要部件组成。结构小巧，故障点少。

3.2 每对钳口、钳臂和吊臂组成一组夹钳，钳口固定于钳臂上，钳臂、吊臂通过铜套或自润滑轴承、铰轴铰接。

3.3 开合装置结构合理，夹放钢坯灵活可靠；其结构有滑移式、导轨式和机械旋转式。

3.4 全机械式自动夹、放钢坯，自身无需电能驱动，环保、节能。

3.5 各主要关节点可选采用自润滑轴承的新技术。延长使用寿命，免维护。

3.6 吊具夹板采用合金钢，联接轴采用调质钢，强度高；钳口用特种模具钢，高温性能良好。

### 1. Basic Principle

When the tongs works, it utilizes the hoisting of the crane, lifting tool and billets' weight to hold and unload the billets through the mechanical open-close device of the tongs (sliding type, guide axis type and rotary type). The basic working principle is lever principle.

### 2. Operating Conditions

2.2.1 The temperature of the held material shall be not more than 1250 °C.

2.2.2 It can be used indoors and outdoors. Simple and easy to install, just to hang it on the hook of crane. Easy to operate, just to operate the crane up and down.

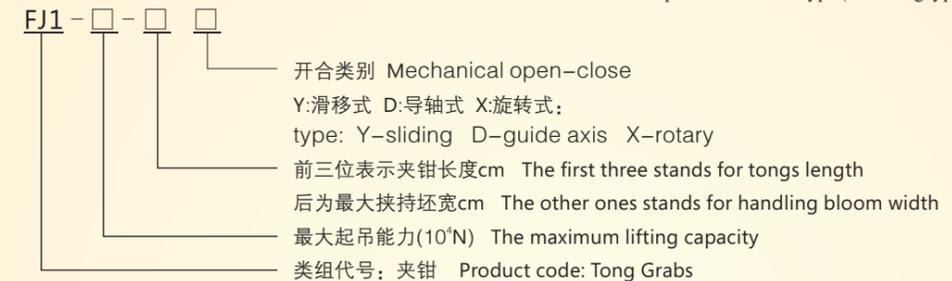
2.2.3 The difference of holding width between the maximum to the minimum is less than 300mm (Model I) and 600mm (Model II), or else it will be unsafe.

## 3. Structures and Features

- The structure is composed of main parts such as lifting hook or chain, pin, lifting beam, bottom beam, guide plate, connecting rod, automatic open-close equipment, etc. It is compact and failure points are few.
- A tongs consist of a pair of tongs mouth, tongs arm and suspending arm. The tongs mouth is fixed on the tongs arm and the tongs arm and suspending arm are hinged by self-lubricating bearing and hinge axle.
- The automatic open-close equipment is flexible and reliable in clamping and discharging the billets for its reasonable structure. The structure includes sliding type, guide spindle type and mechanical rotary type.
- It clamps and discharges billets automatic without power drive, which is environment-friendly and energy economized product.
- All these main joints adopt new technology of self-lubricating bearing to make the tongs durable and maintenance-exempted.
- Lifting tool and cleat adopt alloy steel and the coupling bearing adopts quenched and tempered steel, with high intensity; the mouth of tongs adopts special kind of die steel that has good performance at high temperature.

## 型号说明 Model Designation

说明：机械开合装置类别（Y：滑移式）通常为默认可省略。  
Note: mechanical open-close device type (Y: sliding type) generally omitted.



## 选型指南 Guide for Model Selection

请您按以下选型指南对照选型。

Please select the correct model as per the following guide.

1. 根据被夹物选择合适的系列，可参照下表：

Select the correct product series according to the holding material as per the following table

钢坯夹钳系列 Series	被夹物举例 Example of the material to be held	备注 Remarks
FJ1	方坯、板坯，宽度差不大于300mm Billets and slabs, with width difference less than 300mm	方坯单层最多一次夹6根，厚度不小于60mm For single layer of billets, at most six pieces one time with thickness no less than 60mm.
FJ2	方坯、板坯，宽度差不大于600mm Billets and slabs, with width difference less than 600mm	方坯单层最多一次夹6根，厚度不小于60mm For single layer of billets, at most six pieces one time with thickness no less than 60mm.

2. 选用FJ1序列夹钳时，当两组夹钳间距不大于160cm时采用结构A，当两组夹钳间距大于160cm时采用结构B；  
For tongs series FJ1, adopt structure A when the space between each two groups of tongs is no more than 160cm; otherwise, adopt structure B.

3. 提供起重机规格、吨位、起升高度、起重机是否双钩、双钩间距；

Provide the specification, tonnage, hoisting height of crane, hook space, and if it is double hook or not.

4. 提供物料几何参数（长、宽、厚等）及一次须夹持根数或层数等；

Provide the geometrical data (like length, width and thickness) and the pieces and layers that can be held once.

注：本样本提供各系列产品外型尺寸、参数仅供选型参考使用，具体以实物为准。

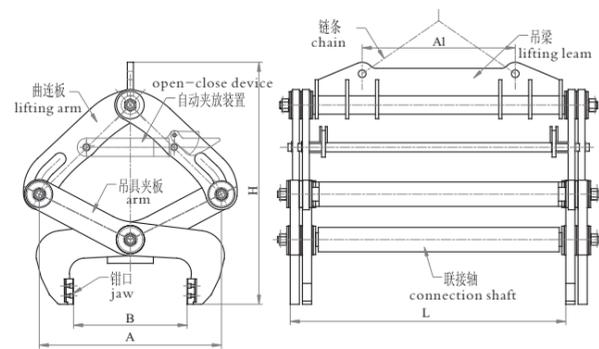
Note: The overall dimension and data for model selection is just for reference in this sample, subjected to the actual product.

FJ1序列钢坯夹钳  
Tong Grabs Series FJ1

当两组夹钳间距不大于160cm时采用结构A，当两组夹钳间距大于160cm时采用结构B。

Adopt structure A when the space between each two groups of tongs is no more than 160cm; otherwise, adopt structure B.

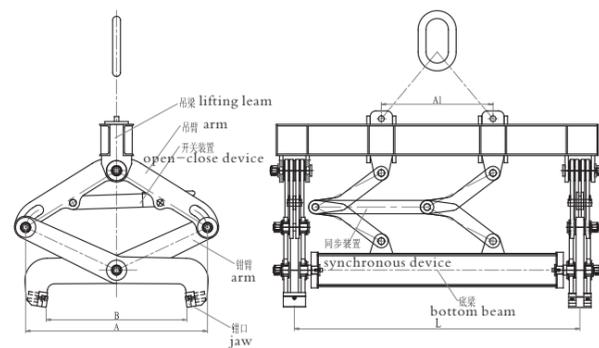
FJ1系列A结构  
Structure A of Series FJ1



外形尺寸图  
Overall Dimension Drawing



FJ1系列B结构  
Structure B of Series FJ1



外形尺寸图  
Overall Dimension Drawing



主要技术参数 Main Technical Data

型号 model	被夹物宽度范围 width range of the material to be held (mm)	被夹物长度 length (mm)	吊运能力 lifting capacity (10 <sup>4</sup> N)	自重 deadweight (kg)
FJ1-2-10015A	100~150	2000~6000	2	380
FJ1-3-16065A	350~650	2000~9000	3	1300
FJ1-5-16075A	450~750	2000~9000	5	1460
FJ1-8-13045A	250~450	2000~6000	8	1630
FJ1-8-16075A	450~750	2000~9000	8	1830
FJ1-10-16075A	400~750	2000~9000	10	2260
FJ1-10-25085A	550~850	2000~12000	10	2560
FJ1-12-16090A	600~900	2000~9000	12	2460
FJ1-12-32075A	400~750	2000~12000	12	2960
FJ1-15-18090A	600~900	2000~9000	15	4310
FJ1-20-28090A	600~900	2000~9000	20	5660
FJ1-25-24090A	600~900	3000~12000	25	6560
FJ1-30-300120A	900~1200	4000~12000	30	7630

外形尺寸 Overall Dimension

型号 model	A (mm)	B (mm)	C (mm)	L (mm)	H (mm)	A1 (mm)
FJ1-2-10015A	545	190	120	1000	910	300
FJ1-3-16065A	1215	820	260	1600	1480	800
FJ1-5-16075A	1300	900	315	1600	1520	800
FJ1-8-13045A	1269	600	305	1300	1720	500
FJ1-8-16075A	1305	900	307	1600	1780	800
FJ1-10-16075A	1310	900	310	1600	1780	800
FJ1-10-25085A	1560	1010	305	2500	2260	1200
FJ1-12-16090A	2175	1060	405	1600	1980	800
FJ1-12-32075A	1330	910	310	1600	2490	1500
FJ1-15-16090A	2175	1060	415	1600	2010	800
FJ1-20-28090A	2175	1060	415	2800	2430	1000
FJ1-25-24080A	1994	950	550	2400	2740	1600
FJ1-30-300120A	2718	1350	620	3000	3160	1800

