

Casting Steel Girth Gear



Weight: 10~35T

Applicable devices: rotary kiln, ball mill

Application: Cement, building material, metallurgy etc.

Customizable or not: Yes

一、Introduction

Girth gear, also called gear ring or gear wheel. Large Diameter Internal Ring Gears For Heavy Duty Equipment, High Precision Gears Big Size Girth gear with super large diameter, the module is more than 10mm. This kind is suitable for rotary kiln and ball mills as transmission gear. It's normally fixed in the outer sphere of the metal shell.

CSM is professionally manufacturing girth gears through sand casting and fine machining. We are goodish competitive in producing the module of gear 10mm to 40mm max.

二、Advantages of our girth gear:

1. The particular heat treatment technology is used for the big gear ring



manufactured by Xinxiang Great Wall Machinery which makes the improvement in the structure optimization and the hardness of the product. The performance of wear-resistant and anti-impacting are also enhanced greatly.

2.The high strength steel was used by us in manufacturing the big gear ring. We also take the optimization for the product against the operation characteristics of the rotary kiln to ensure the stability of the component during the long time operation and extend the service life of the component.

3.Our company has rich production capability in steel castings. For the components such as the girth gear ring, we can provide them in large production quantity with short cast period and large amount.

三、 Our main material for the Girth Gear is similar to followings:



Standard Specifications for Cast Steel		
Country	Standard	Grade
United Kingdom	BS EN 10083/2-1991	C45
USA	ASTM A 29/A29M-04	1045
Germany	DIN EN 10083-2-2006	C45/CK45
Japan	JIS G5111	SCC5
International	ISO 683/1	C45/C45E4/C45M2

Standard Specifications for Cast Steel		
Country	Standard	Grade
United Kingdom	BS 970-1	708 M40
USA	ASTM A 29/A29M-04	4140/4142
Germany	DIN EN 10083-1-1996	42CrMo4
Japan	JIS G4053-2003	SCM440
International	ISO 683/1	3

四、Girth Gear Quality assurance:

The fabrication route is governed by the provisions of the implemented Quality System ISO 2000 :9001. The standard documentation ensures the full traceability of every process step:



- Manufacturer test certificates according to DIN EN 3.1 § 10.204 including chemical composition, mechanical properties and non-destructive examination;
- Dimensional check supported with a “as-built“ sketch;
- Record of the heat treatment chart;

五、 Gear Ring Manufacturing Process:

1. Wooden pattern Production
2. Molding
3. Pouring
4. First cleaning
5. Heat treatment – grinding (inspection)
6. Rough machining (inspection)-finishing machining (inspection)
7. Packing-delivering



Cast Steel Manufacturing Processes



CHAENG(Great Wall Casting Co.,Ltd)

Custom 150-1 t Steel Castings according to Your Drawing

E-mail: casting@chaeng.co

