

SINCE **TONGDA** 1952
Spinning Ring Cup

BRANCHES

- Shandong Tongda Textile machinery Co.,Ltd
- Qingdao Tongda Textile Machinery Co.,Ltd
- Qingdao Weaving Machine Co.,Ltd
- Shandong Tongda Nickel Screen Co.,Ltd
- Shandong Tongda Synthetic Co.,Ltd
- Shandong Tongda Textile Machinery (group) Co.,Ltd

CONTACT INFORMATION

DE Global Consulting
(Authorised Agent for Tongda Machines)
11/12, Pushpa Apt. Vanaj Corner Kothrud,
Pune-38
Phone: +918780041406;+917203018558
email : sales@deglobalconsulting.com
atamvir.sharma@deglobalconsulting.com
website: www.deglobalconsulting.com
 wa.link/uy9ipa
www.china-tongda.com



TONGDA

Spinning Ring Cup Series

Quality Makes the difference

COMPANY PROFILE

TONGDA Group was founded in 1952. It specializes in design, manufacturing, and marketing of a wide range of textile machinery and related spare parts. We offer high-quality and characteristic steel ring for textile machinery with many years, the company's products all over the country, sell well overseas, favored by customers.

TONGDA mainly has PG1/2, PG1, PG2, QM and the kinds of non-standard steel collar including wool steel collar and other five series, we adopt high quality steel, low carbon steel, high carbon alloy steel as well as more high-end wear-resistant steel. Surface treatment are mainly: smooth, Matt, fine chrome, fine chromium molybdenum plating, sulfide, coating, can meet the needs of different customers. In 2008 the market imitation imports (one or two, three) series of steel collar, using high-tech unique processing technology, products of high precision, good consistency, low breakage rate, reducing hairiness and yarn quality effect, suitable for ring spinning and compact spinning of various models, pure cotton of different yarns, blended pure chemical fiber and special fiber yarns, the service life is 3 ~ 6 years, The price performance ratio can comparable with imported steel ring. After deep processing of Qs-T series super wear-resistant steel wire ring launched in 2011, the use of cycle for 25~40 days. can greatly improve the stability of yarn quality and reduce the customer's labor costs.

TONGDA has built a complete infrastructure to support a full effort for product research and development to satisfy the needs of the marketplace. The company places its focus on becoming a professional supplier of Textile machinery, related spares parts and new materials with continuous development of modern ergonomic designs, a reliable service support network, and an efficient global network of logistics. Today, Tongda machines and spare parts are being widely used by thousands of cotton and yarn, textile manufacturers. Along with product development, Tongda has been awarded technology patents. Special techniques in design and manufacturing have also been perfected.

TONGDA is an ISO9001, ISO14001, and ISO13485 company. The products are designed to meet the technical standards of 3C and CE. All the products are certified by the Industry Administration Authority. Tongda will continue to strive to be a stronger leader in the global market of Cotton machinery and Spinning machinery.

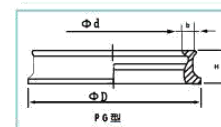


PRODUCT USE

Our steel ring and ring traveler are used in the car ring spinning yarn machine, twisting machine, and ring-spinning machine, and they can be combined complete the twisting and winding of yarn, suitable for spinning all kinds of cotton, chemical fiber or other blended fiber. imitation of imported II, III type steel ring, special apply to all types of compact spinning, high speed spinning.

PRODUCT SPECIFICATION

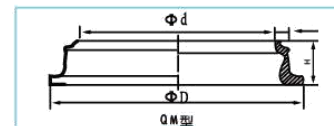
① Cotton Steel Ring



Type No.	Dimension(mm)				Yarn count	Selection of traveler
	b	D	d	H		
PG½-3251	2.6	51	32	8 9 10	≥150S pure cotton , polyester cotton,TC,PC	RSS ,CO ,0SS ,W216
PG½-3254	2.6	54	32	8 9 10		
PG½-3547	2.6	47	35	8 9 10	≥100S pure cotton , polyester cotton,TC,PC	RSS ,CO ,0SS ,W216
PG½-3551	2.6	51	35	8 9 10		
PG½-3554	2.6	54	35	8 9 10		
PG½-3847	2.6	47	38	8 9 10	≥60S pure cotton , polyester cotton,TC,PC	RSS ,CO ,0SS ,W216
PG½-3847.2A	2.6	47.2	38	7.5		
PG½-3851	2.6	51	38	8 9 10		
PG½-3854	2.6	54	38	8 9 10		

PG½-4051	2.6	51	40	8 9 10	45S-80S pure cotton , polyester cotton,TC,PC	RSS ,CO ,OSS ,W216
PG½-4054	2.6	54	40	8 9 10		
PG½-4250.2	2.6	50.2	42	8 9 10	32S-60S polyester cotton, PC, TC,chemical fiber	RSS ,CO ,OSS ,W216
PG½-4251	2.6	51	42	8 9 10		
PG½-4254	2.6	54	42	8 9 10		
PG1-3251	3.2	51	32	8 9 10	≥120S pure cotton , polyester cotton,TC,PC	FO 6802 6903
PG1-3254	3.2	54	32	8 9 10		
PG1-3547	3.2	47	35	8 9 10	≥80S pure cotton , polyester cotton,TC,PC	FO 6802 6903 BU 772
PG1-3551	3.2	51	35	8 9 10		
PG1-3554	3.2	54	35	8 9 10		
PG1-3847	3.2	47	38	8 9 10	≥50S pure cotton , polyester cotton,TC,PC, chemical fiber,twisting, silk spinning	FO 6802 6903 BU 772
PG1-3847.2A	3.2	47.2	38	7.5		
PG1-3851	3.2	51	38	8 9 10		
PG1-3854	3.2	54	38	8 9 10		
PG1-4051	3.2	51	40	8 9 10		
PG1-4054	3.2	54	40	8 9 10		
PG1-4250.2	3.2	50.2	42	8 9 10	21S-45S pure cotton , polyester cotton,TC,PC, chemical fiber, twisting, silk spinning	FO FU 6802 6903 BU 772 W321
PG1-4251	3.2	51	42	8 9 10		
PG1-4254	3.2	54	42	8 9 10		
PG1-4260	3.2	60	42	8 9 10		
PG1-4554	3.2	54	45	8 9 10	12S-32S pure cotton , polyester cotton,TC,PC, chemical fiber, twisting,silk spinning	6802 6903 GS GO W321
PG1-4560	3.2	60	45	8 9 10		
PG1-4563	3.2	63	45	8 9 10		
PG1-4854	3.2	54	48	8 9 10	8S-21S pure cotton , polyester cotton,TC,PC, chemical fiber, twisting,silk spinning	6802 6903 GS GO W321
PG1-4860	3.2	60	48	8 9 10		
PG1-4863	3.2	63	48	8 9 10		
PG1-5160	3.2	60	51	8 9 10	8S-18S pure cotton , polyester cotton,TC,PC, chemical fiber, twisting	6802 6903 GS GO W321
PG1-5163	3.2	63	51	8 9 10		
PG2-4554	4	54	45	8 9 10	6S-18S pure cotton , polyester cotton,TC,PC, chemical fiber, twisting	G
PG2-5160	4	60	51	8 9 10		

② Cotton Steel Ring



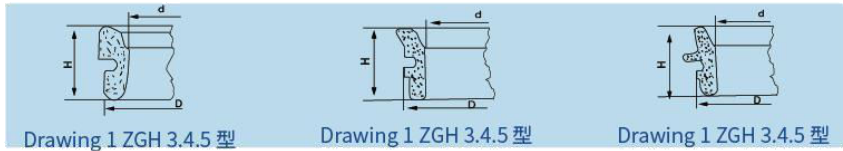
Type No.	Dimension(mm)				Yarn count	Material
	b	D	d	H		
QM1-3854	3.2	54	38	9	<60S cotton, blended, chemical fiber etc.	20# 20CrMnTi GCr15
QM1-4254	3.2		42			
QM1-4554	3.2		45			
QM½-3854	2.6	54	38	9	>32S cotton, blended, chemical fiber etc.	
QM½-4254	2.6		42			
QM½-4554	2.6		45			

Ring Traveller



Type No.	Shape	Section	British No.	Ring Fitting	Fiber scope
6903			21/0~15#	PG1	Cotton,blended yarn
6802			21/0~15#		
FO			22/0~10#		
GS			10/0 15#		
W321			18~320 (international number)	PG1/2	Pure cotton,polyester cotton
OSS			28/0~1/0		Pure cotton,polyester cotton
RSS			28/0~1/0		
G			8/0~1/01#~30#	PG2	Cotton,wool, linen and other coarse branch

Woolen Steel Ring



The number after type represents different height size H(mm)

Number	3	4	5	5 ½	6	7	8
H(mm)	8	10.3	11.2	12.7	16.7	22.2	25.4

Main specifications as following form

Inner Diameter	D Bottom Diameter (mm)				
	ZGH 5	SGH 5½	SGH 6	SGH7	SGH8
51	58	—	—	—	—
55	62	—	—	—	—
60	67	—	—	—	—
65	72	—	—	—	—
75	82	—	82	—	—
90	97	—	97	—	—
100	107	—	110.5	—	—
110	117	—	120	—	—
112	—	—	122	122	122
115	—	122.7	—	—	—
140	147	—	152	—	152
165	—	172.7	—	—	—




Special Kind of Steel Ring



In the past few years, a considerable proportion of cotton textile factory in Chinese mainland imported a certain scale ring spinning machine of a certain scale, the original steel ring part has reached the replacement cycle, please these customers don't have to go to that special trouble, do not have to pay large fees for it, you only need to spend the products of 10% ~ 20% of the cost, can get our company for the same product you tailor-made products, life is 60% ~ 80%, in addition also according to your requirements, while maintaining the original appearance unchanged, modified for our common steel ring size universal bottom root, in this way, the difficulty of changing the ring size of the original spinning varieties is completely eliminated.

THE CLASSIFICATION OF THE PRODUCTS AND THE SIMPLEST SOLUTION

Type No.	Category	Simple explanation	Photo
①	Ordinary self lubricating steel collar (export version)	The traditional product we already took the lead in the domestic implementation of numerical control steel or steel pipe production, in addition to maintain the original surface friction is low, the car walk short maturity, spinning range, but also ensure the consistency of the product is good, high precision, good performance of anti wedge, thereby effectively reducing the end breakage, reduce hairing, improve the quality of the products. It is the weakness of short service life (8-14 months), poor anti-corrosion performance.	
②	Fine chrome plated steel ring	Fine chrome and chrome molybdenum concentrate two, the key parts are processed by high precision numerical control equipment. The two anti-corrosion performance are good (the latter on short maturity), spindle small difference, strong environmental adaptability, good performance, the life of 1 to 2 times longer than ordinary (18 ~ 30 months)	
③	TITAN alloy (20CrMnTi) steel ring	It can be divided into two kinds: low anti-corrosion and high anti-corrosion. In addition to the above excellent characteristics of ①② products, spinnability is stronger, and its service life can be further improved, low corrosion for 16 ~ 24 months, high corrosion resistance for 36 ~ 48 months.	
④	Bearing steel ring (GCr15)	Selection of strip steel or steel pipe, using half NC and NC two ways of production, with advanced heat treatment process, forming tight and fine martensite structure, make the Vickers hardness from the surface to the cores of product were up to HV830-850. So the good wear resistance, long-term stable yarn quality. The product of low corrosion and high anticorrosion of life, respectively 2-3 and 4-5, is the siro spinning, compact spinning first products.	
⑤	Upgrade Bearing steel ring (GCr15) (black/golden)	The product is upgraded on the basis of ④. After low-temperature treatment, it is plated with a layer of black or gold special material. After installation, there is no running in period, which is comparable to other imported rings of the highest quality, greatly improving the production efficiency, life more than 5 years	
⑥	Precision bearing steel ring	Using GCr15 high-quality bearing steel tube to be completed with the most advanced production technology. It not only has the physical indexes of the high-precision steel ring, but also has no cracks on the surface, no softening layer features such as, and the consistency of the run way is excellent. This product because of high precision, good performance of anti wedge, surface friction coefficient is small, the car walk ripe period is very 'short', can long remain stable spinning performance, to reduce breakage, reduce hairiness effect, life of 4-5 years, suitable for compact spinning, high speed spinning	
⑦	Imitation of imported steel ring	The first line of imitation imported steel collar in China is divided into I, II, III, three types, the production process with reference to the latest technology and equipment at home and abroad, the appearance is the famous foreign products of the same kind, in order to achieve the best spinning effect, can according to the customer's choice of ring traveller to process into a special shape of steel collar matching. This series of steel ring operation effect is good, one thousand ingots breakage rate is low, the gas ring tension is very stable, reducing hairiness effectively, stronger spinning ability, high ratio of performance to price, is the ideal alternative products imported steel collar, service life according to the forms of about 2 ~ 6 years.	

⑧	QM Curved steel ring	This product adopts the unique processing technology of production, not only novel appearance, internal structure has been improved, so that the contact area is increased with the steel ring in the high speed operation, reduce the pressure of the increase of contact points, thereby reducing the wear, heat dissipation performance increases. which can improve the spindle speed. high yield. Such products are divided into three types, the service life ranges from 1.5 to 6 years.	
⑨	QS-T ring traveller	After the deep processing QS-T super wear-resistant steel wire ring is divided into type I and type II two, surface were grey light and blue gray, excellent lubricating performance. It also has the advantages of low breakage rate, less flying rings, light lifting head, good heat dissipation and strong spinnability, equivalent decrease hairiness index in 15% above, often under the rules a: type I life in 25 days. Type II life in 40 days.	
⑩	Special kind of steel ring and steel ring platform	The steel collar is made of high quality bearing steel pipe to ensure the accuracy of the original matching, the steel ring seat is made of high quality titan alloy.	

Special remind

If the customer uses a brand of imported steel ring wire for a long time but need replace the steel collar, can contact us, we can provide customers with timely and customized special shaped steel ring phase matching, in order to achieve the best spinning effect.

Special remind

We can be free for Chinese and foreign customers to provide a free trial of your company product trial. As you can tell by spinning yarn, varieties and other parameters, we will be better for your selection effect.

GET ON THE BUS AND STORAGE PRODUCTS GUIDE


1. before putting a new ring on the clean and soft cloth to wipe the surface available, remove excess grease and dust, without any surface treatment (the company's products surface of the factory have excess oil, has deoiling treatment), no cleaning or soaking gasoline, alcohol etc.

2. In normal state, a new ring on should be selected in the width or wide bottom forming after end, such as conditions permit, the best to open 30 minutes slow speed (the original speed of 30 ~ 50%) after the restoration of the original speed, so that the long use more favorable, and steel wire ring should lighter than normal type No.1 (according to the actual capacity, gas ring size), after driving, during the middle yarn of second doffing to exchange (to not more than two classes), later according to the normal use cycle can be replaced.

FOR STEEL COLLAR MARK ABBREVIATION CORRESPONDS TO THE TABLE

Brand name	Material			
	A(common)	B(Titan alloy)	C(Bearing)	D(super)

ABRASIVE GRINDING FLUID (CAST STEEL RING SPECIAL)

Polishing Mass (Abrasive Material)	Coarse	$\Delta 3 \times 3 \sim \Delta 8 \times 8$	
		More than $\Delta 8 \times 8$	
	High-aluminum Porcelain	$\Phi 2, \Phi 3$	
		More than $\Phi 4$ Above $\Phi 4$	
	Polyester Plastic Polishing Mass	$\Delta 10 \times 10$	
		$\Delta 15 \times 15$	
$\Delta 20 \times 20$			
More than $\Delta 25 \times 25$ Above $\Delta 25 \times 25$			
Lapping Liquid	LM-10	A light yellow transparent, suitable for aluminum alloy, stainless steel and other parts of coarse grinding.	
	LM-12	A light yellow transparent, suitable for black metal parts, stainless steel, copper, zinc alloy, powder metallurgy parts.	

RESPECTFUL REMARKS**REDUCING HAIRINESS OF SPINNING PROCESS MEASURES****1. Optimizing reasonable spinning process**

- 1.1 Roving quantitative light. (in 3.0g/10m)
- 1.2 Larger roving twist factor.
- 1.3 Increasing the back roller gauge. (such as: from the original 29mm increases to 33mm)
- 1.4 Reduce the drafting ratio
- 1.5 Select the appropriate speed of spinning.

2. REASONABLE SELECTION OF DRAFTING COMPONENTS

- 2.1 Top pin. (automatic tension nylon top pin)
- 2.2 The bottom pin. (MD-1) type ladder under pin
- 2.3 Rollers: rollers selection is the main drafting unit of spinning machine. (nano hardness soft elastic roller, double layered nontreatment COT)

3. Preferred winding parts**3.1 The steel wire ring**

The steel wire ring should accord with the following characteristics:

- (1) Good adaptability, short maturity, short head less.
- (2) Twist head refreshing, especially in small yarn twist head should not be overweight and joint easy.
- (3) To prevent the yarn and ring friction cut ends, prevent yarn and ring on the steel ring on the orbital overlap.
- (4) The high-speed operation, wedge resistance performance is good, the yarn channel is smooth, stable balloon no gas ring too tight, too loose and jitter phenomenon
- (5) A long period of use
- (6) Steel wire ring should not be too wide. otherwise easily injured, so that the weight increase.
- (7) Traveler: according to the weight of the temperature and humidity conditions, steel collar aging degree, the spindle speed to determine the level of, should as far as possible to ensure the gas ring does not wear tube head, do not wear the separator plates, in the premise of less, emphasis on mastery.

3.2 Preferably steel collar

Quality steel ring directly affects the yarn tension, breakage and hairiness, the steel ring requirements are as follows:

- (1) Materials with fine grains

- (2) The surface hardness uniformity
- (3) inside and outside the runway friction coefficient is small, smooth, constant.
- (4) Diameter roundness deviation smaller is better.
- (5) Only with only, between batch and batch steel ring consistency.
- (6) Steel ring top surface roughness and the top surface and the bottom surface parallelism should be good

3.3 Reasonable selection of yarn

The yarn guide hook aperture size, relatively large impact on the yarn Mao Yu, yarn guide more big, jitter yarn from twisting triangle area to run to the yarn is bigger, Mao Yu more, the formation of vice, yarn guide is small the Mao Yu index is smaller

4. TO STRENGTHEN EQUIPMENT MANAGEMENT

- (1) First, strict demands on the three column process, straightening roller, strict control of the jaw and the roller and so on each gauge;
- (2) Do the ring plate and spindle level;
- (3) Do the yarn guide hook, steel collar, spindle three concentric:
- (4) in the lowest position of spinning, the yarn guide hook and the pipe is far should be 25-30mm;
- (5) Such as a cleaner, should be cleaner and a steel wire ring distance adjustment within 0.5mm;
- (6) Ring plate up and down motion should not frustrate phenomenon;
- (7) Check whether the smooth, no burrs spinning channel;
- (8) Do a good job cleaning, oiling work spindle, spindle vibration reduction, replacement of linen hand spindle

5. STRENGTHEN THE OPERATION MANAGEMENT

Asking the operator to do parts of cleaning work, timely run tour, handle the decapitation, prevent sticking, Winding, Hanging, Plugging

6. TO STRENGTHEN THE AIR CONDITIONING MANAGEMENT, STRICTLY CONTROL THE WORKSHOP TEMPERATURE AND HUMIDITY

Appropriate temperature and humidity is to guarantee the stability of the rubber roller, steel wire ring normal operation, reduce the electrostatic effect, stable tension, stable gas ring, an important condition for reducing workshop of flying. In the premise of not winding rollers, as far as possible to improve the relative humidity (60-65%), temperature control in 22-32 degrees, moisture regain control (7 ± 0.5)% is appropriate.

To sum up, reduce yarn hairiness, first ask the machinery in good condition, and then handle the spindle speed, temperature and humidity, steel ring aging degree and weight of traveler, the relationship between the variables of the yarn tension

As long as through optimizing the spinning process, selection of component of drafting and winding right, strengthen equipment management operation management and management of temperature and humidity, can achieve good effect .

SPINNING FACTORY LOOK FORWARD TO WHAT KIND OF PLANE STEEL RING?

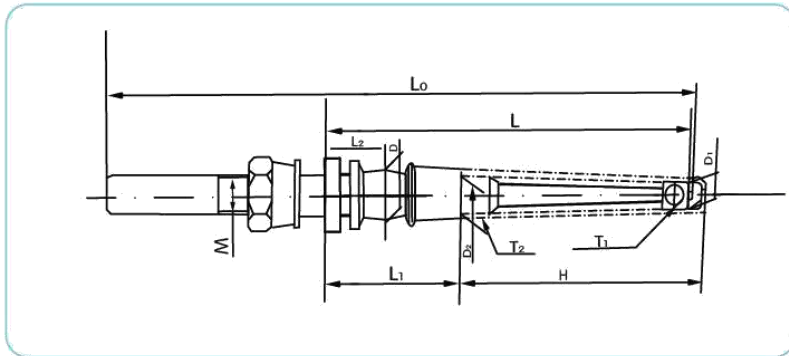
The plane steel ring is commonly known as the PG series ring, because of its installation, easy to use, reducing hairiness is satisfactory, still is the main force in the market today.

As everyone knows: Blake (Bracker) the plane steel ring strong spinning fitness (ring spinning, compact spinning, fiber and various environment) :the car good consistency (spindle difference is small, the gas ring, tension is stable and uniform): thousand ingots breakage rate is low; the yarn quality stability and sustainable 6-10 years; and suitable for high speed spinning, spinning can improve efficiency. superior product performance and welcomed by customers, but because of the expensive price, many users only look and sigh.

Our company over the years devoted to the study of technology of wire ring ring, introduced to the market of Imitation imported characteristics. I, II, III type series steel collar, because of its high performance price ratio , good effect, is chosen to get the and allows many users. We firmly believe that: with the characteristics of such products, the perfect further, will become the most popular plane steel mills.

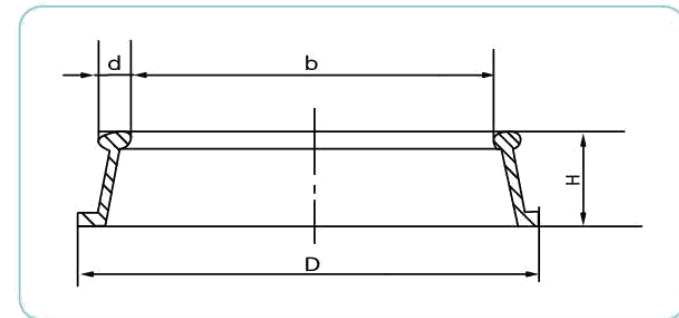
SPINDLE FOR FLAX FIBER SPINNING

TYPE	SPECIFICATION										TECHNICAL DATA			
	H	L	L ₀	L ₁	L ₂	D	D ₁ × T ₁	D ₂ × T ₂	M	Bearing Type	Inner diameter	work speed (r/min)	Match main engine type	
D1409	240	279	422	96	39	Φ38	Φ22.08 × 0.036	Φ28.3 × 0.036	M27 × 1.5	DZ4	Φ10			
D1509	240	271	422	96	38.5	Φ38	Φ22.08 × 0.036	Φ28.3 × 0.036	M27 × 1.5	DZ5	Φ12			
D2501A	240	268	425	96	38.5	Φ38	Φ22.08 × 0.036	Φ28.3 × 0.036	M30 × 1.5	DZ5	Φ12	5000-8000	FX502	
D3532	240	268	411.5	96	38.5	Φ38	Φ22.08 × 0.036	Φ28.3 × 0.036	M30 × 1.5	DZ5	Φ12	12000	FX520A	



FLAX STEEL RING & RING HOLDER

TYPE		SPECIFICATION			
		b	d	D	H
G-1-6274	G-1-6274D	Φ62	4.5	Φ74	14
G-2-5772	G-2-5772D	Φ57		Φ72	13



- 1.G-1-6274. G-2-5772 is suitable for wet spinning flax spinning frame.
- 2.The material of steel ring is made of stainless steel, after heat treatment, it's durable and wear-resistant, which improves the service life of steel ring.
- 3.The inner and outer runways of the steel ring are connected by multiple arcs, the inner and outer surfaces are smooth, it's best matched with nylon ring. It has good wedge resistance, short running period, high spinning speed, uniform tension and less end breakage.
- 4.All kinds of cotton spinning steel ring are available in our factory.