



Rolling Mill Industry



Paper Mill



Cement Industry



Railway Sector



Automobile Sector

CARDAN SHAFT INDIA



# CARDAN SHAFT INDIA

Manufacturers and Exporters of :-

Cardan Shafts for Steel & Aluminium Mills, Paper Mills, Auto Sector, Tube Mill, Mining Industries, Cement Industries, Material Handling Industries, Offshore Industries etc.

E-mail : [info@cardanshaftsindia.com](mailto:info@cardanshaftsindia.com)

Website : [www.cardanshaftsindia.com](http://www.cardanshaftsindia.com)



# CARDAN SHAFT INDIA

## Director Message...

Dear Customers,

Greetings from CSI....

We are pleased to issue 2<sup>nd</sup> edition of cardan shaft catalogue and we welcome you to the Power Transmission Division of **SMT** group of industries. with the advent of new technology and the emerging customers' needs, we have launched wide range of propeller shafts to serve the industry. for this purpose we came out with a brand new company, **CSI** ( cardan shaft india ), as our sister concern.

We are well versed with the various transitions and have a great know-how of all the manufacturing processes along with applications of various mechanical components. We have a team of professional design engineers who are working solely in designing and developing the product and we manufacture the machine elements better from mere concepts. Very minute details also have been taken into considerations while tailoring the product.

Furthermore, we also have a professional workforce on the shop floor and it is well-equipped with all the manufacturing machinery. We follow various standards and do not compromise on Quality. We assure you of our sincere services and your satisfaction means more than anything to us. Please do not hesitate in writing back to us regarding your problem specific requirements and valuable suggestions.

Our promising services and regards will always delight you.

Raman Mittal  
Managing Director



# Quality Policy

...Superior  
**Quality**  
Products

## Quality Policy

CSI is committed to provide high quality products to ensure complete and exceed customer satisfaction efficiently. We shall strive to maintain the quality in all aspects: manufacturing processes, design and development, selection of high grade raw materials, quality inspection etc.

We shall continuously adopt latest technology in accordance with the product development and we promise to bestow the optimum design. Also, we ensure on time delivery and after sales services.

Managing Director  
Cardan Shaft India





# CARDAN SHAFT INDIA

## Design & Development

CSI is having a team of well qualified and experienced design engineers. Along with design team, there are also other teams like Production, maintenance, Inspection, sales and after sales-services teams.

We use Autodesk platform to design and develop our products. Autodesk Platform includes the following modules; Autodesk Inventor Professional and Autodesk Mechanical Desktop: We develop 3D models from the above mentioned software.



AutoCAD Mechanical and AutoCAD are used to generate the 2D drawings. Vault is data management software used for managing the technical drawings and the associated data. Autodesk's stress analysis module is powered by Ansys and is used to find out failure prone areas. We are strict to the design standard calculations and improving continuously with the passage of time.

## Manufacturing Facilities

CSI is a well equipped production house with all the latest technology. The machinery includes lathes, grinders, broaching machines, drilling machines, torque testing and balancing machines etc. All machines are imported from Russia and Germany.

The production floor is also facilitated with tool room which is responsible for making all the jigs and fixtures. It also acts as a store house for the various measuring instruments and gauges. All the processes in the machine shop are in line with the modern facilities. In this way we present you the most comprehensive range of Cardan Shafts.



R & D

## Standard & Customized Shafts...

### In-House research and development

The Company's interdisciplinary design and development skills ensure that CSI is geared up to develop products in order to meet the market demands. We always welcome and accept the challenges to custom engineering systems and products to meet the requirements. All products have been designed after market research and various service factors have been taking into consideration while manufacturing the product. In order to further improvements, we always welcome suggestions from our valued customers.

### After Sales Services

Due to our in-house production we provide all the spares and also at times we visit the customers for taking feedback to groom our product. We are fully responsible for the installation, commissioning and trouble-shooting of the shafts and a special team is assigned for the same.

### Product History and Information

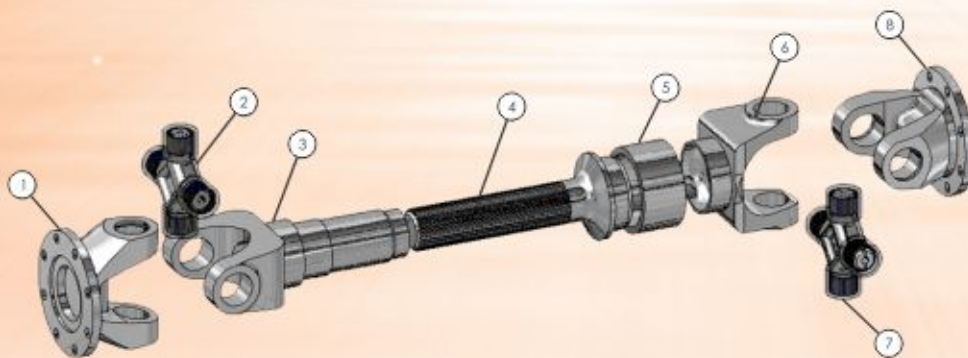
**Cardan Joint** It is a joint in a rigid rod that allows the rod to 'bend' in any direction, and is commonly used in shafts that transmit rotary motion. Cardan Joint is also called universal joint, U-joint. It consists of a pair of hinges located close together, oriented at 90° to each other, connected by a cross shaft.

**Cardan shaft** Cardan Shaft was invented in 16th Century by Girolamo Cardano. It is a mechanical component for transmitting torque and rotation, usually used to connect other components of a drive train that cannot be connected directly because of distance or the need to allow for relative movement between them. It can also accommodate a varying shaft angles.





## General Assembly of a Cardan Shaft



Sr. No.	Part Name
01.	Flange
02.	Cross with Bearing
03.	Sleeve Yoke
04.	Rear Teeth
05.	Tube
06.	Half Yoke
07.	Cross with Bearing
08.	Flange

## Product Applications

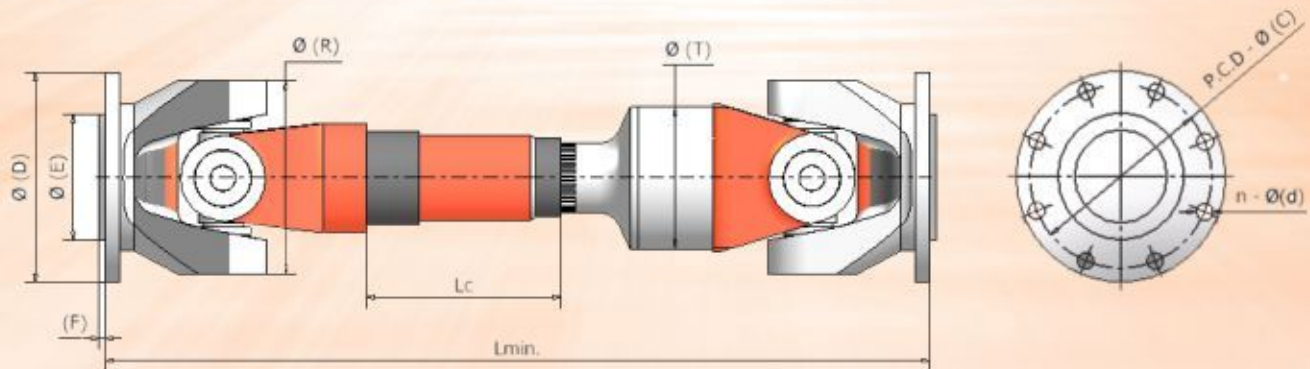
Applications of Cardan Shafts	Features of our Cardan Shafts	Benefits of Using Cardan Shafts
<ul style="list-style-type: none"> <li>Steel Plants</li> </ul>	<ul style="list-style-type: none"> <li>100% Forging</li> </ul>	<ul style="list-style-type: none"> <li>Adjust Angular Misalignment</li> </ul>
<ul style="list-style-type: none"> <li>Rolling Mills</li> </ul>	<ul style="list-style-type: none"> <li>High Quality Material</li> </ul>	<ul style="list-style-type: none"> <li>Maintenance Free</li> </ul>
<ul style="list-style-type: none"> <li>Paper Machinery</li> </ul>	<ul style="list-style-type: none"> <li>100% New Production</li> </ul>	<ul style="list-style-type: none"> <li>Length Compensation</li> </ul>
<ul style="list-style-type: none"> <li>Railways</li> </ul>	<ul style="list-style-type: none"> <li>Latest Machinery Used for every process</li> </ul>	<ul style="list-style-type: none"> <li>Capable of Operating at high Torque</li> </ul>
<ul style="list-style-type: none"> <li>Roller Drives</li> </ul>	<ul style="list-style-type: none"> <li>Low Maintenance</li> </ul>	<ul style="list-style-type: none"> <li>More durable than any other shafts of the same class</li> </ul>
<ul style="list-style-type: none"> <li>Cement Industries</li> </ul>	<ul style="list-style-type: none"> <li>Dimensionally Accurate</li> </ul>	<ul style="list-style-type: none"> <li>Easy Installation</li> </ul>
<ul style="list-style-type: none"> <li>Automobile Industries</li> </ul>		
<ul style="list-style-type: none"> <li>Mining equipments</li> </ul>		
<ul style="list-style-type: none"> <li>Tea Machinery</li> </ul>		
<ul style="list-style-type: none"> <li>Tube Mill Plant</li> </ul>		
<ul style="list-style-type: none"> <li>Crane and Pump Drive</li> </ul>		
<ul style="list-style-type: none"> <li>Vibrating Screens</li> </ul>		



# SHAFTS & PARTS

**Dimensionally Accurate...**

## Description of Cardan Shaft and Spare Parts





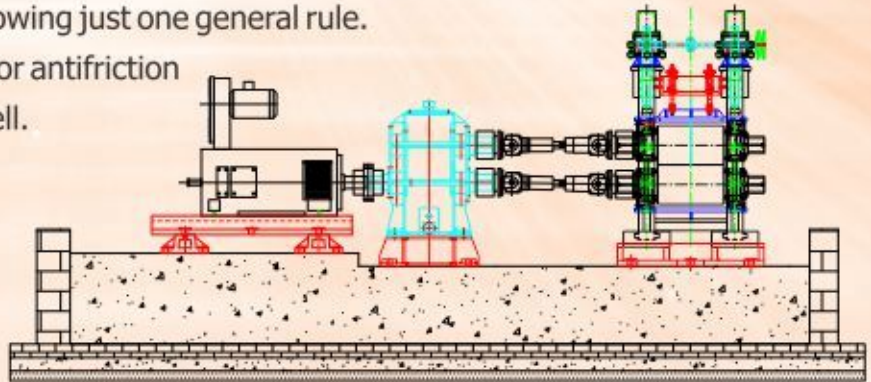
# CARDAN SHAFT INDIA

## Selection and use of cardan shafts

Cardan shafts are used for varied applications, it is impossible to choose their size and predict their service life with reliable accuracy following just one general rule.

The familiar failure probability rates for antifriction bearings apply to cardan shafts as well.

### Rolling Mill Application



The size of the cardan shaft should be chosen so that its maximum momentary torque rating, is not smaller than the maximum torque to be transmitted in your application. Additionally parameters like deflection angle, speed, length, operating conditions (kind of drive, temperature, dust etc.) should be considered.





## HANDLING & MAINTENANCE

**Sturdy & easy to Operate...**

### Transport, Storage and Safety Precautions

- Proper care should be taken while handling the product to avoid accidents.
- Horizontal position of the shaft is suggested for transit.
- The rear teeth may come out from the sleeve yoke, so handle it carefully.
- To avoid dust encapsulate the sleeve yoke with dust cover.
- The nuts and bolts should be fastened tightly.
- Do not modify the shafts without our consultation.

### General Maintenance

- Don't mantle or Dismantle the shafts without proper knowledge.
- Please ensure proper greasing prior to installation.
- Always use branded grease for optimum results.
- Maintenance should be after regular intervals.

### CSI GALLERY





# CARDAN SHAFT INDIA

## Cardon Shaft Design Selection Sheet

### Personal Information

Name of the Organisation	CARDAN SHAFTS
Contact Person	
Designation	
Mobile No.	
Fax No.	
E-mail Address	

### Information Required for Selection of Cardan Shaft

Technical details	Application No.1	Application No.2	Application No.3	Application No.4	Application No.5
Motor ( KW ) / ( HP )					
Motor RPM					
Gear Box Ratio					
Min / Max Roll Diameter					
Number of Drive Shafts					
Operating Angle					
Number of Shafts Required					
Number of Spare Kit required					

### Cardan Shafts Connection Parameters

Flange Diameter ( D )	
PCD ( C )	
Hole Diameter ( H )	
Number of Holes	
Compressed Length	
Compensation Length	
Flange Keyway width	
Flange Keyway depth	



# Our Esteemed Customers

...Your Success  
Our Success



Ashok Leyland



RAJURI STEEL



A TATA ENTERPRISES



An ISO-9001-2008 Company



Jhelum Industry



Remi Metals Gujarat Ltd.



## Our Business Network

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### Correspondence Address:

## CARDAN SHAFT INDIA

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E-mail : [info@cardanshaftsindia.com](mailto:info@cardanshaftsindia.com), [rsingh@cardanshaftsindia.com](mailto:rsingh@cardanshaftsindia.com)

### Registered Office

**Works:** G.T. Road, Near Focal Point, Mandi Gobindgarh-147301  
Province-Punjab, INDIA