

Company Profile

Since 1983 Chodan Sazan Co. has been one of the leading companies in designing and producing rolls for hot rolling mills and other steel industry equipment such as slag pots, moulds and accessories. Relying on the experience and technical ability of motivated experts with implementing up to dated technology, a variety of different grades of rolls are manufactured to meet the requirements of domestic and international customers worldwide.

Since 2008 CS roll's expertise at roll technology has extended further into multiple other industries such as food processing, rubber, oil extraction and coffee industry. Valuable experience gained throughout these years has resulted in developing mill rolls to the highest quality standards. Research and development has ever since been the main focus to continuously improve the quality of rolls.

In order to improve the mechanical properties and increase the hardness of roll's working layer, the rolls are casted centrifugally. Since 1996 Chodan Sazan Co. has been implementing this technology and now manufactures grinding rolls using the same method.

Why CS Roll?

By using CS rolls our customers gain the following values of our products and services:

- High performance
- Good lifetime
- Rolls engineered with proper dynamics to work smoothly
- Strong after sales services



We Have Mastered The Art Of Rolling

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CSROLL
Chodan Sazan Co. (P.J.S)
High Quality Roll & Sleeve Producer



Rolls for Flour Mills

Relying on the sophisticated technologies and to serve the flour and other food industries, we produce grinding rolls which in terms of performance and durability have the highest quality standards. Grinding rolls are manufactured with the use of clear chill cast iron for the outer layer, gray cast iron for the inner layer and the journals are made of forged steel. To overcome the machine vibration, all rolls will go through a balancing procedure. Barrel length varies from 800mm up to 1500mm however orders with customized sizing to match the customer's requirements are always welcome.

Grades:

The correct choice of material and hardness of the rolls according to their use is essential since it guarantees the performance of the roll being used. In the table below, the most common alloys used in grinding wheat and grain mills are listed. Upon customer's request other suitable alloys will be recommended.



Chemical Composition and Mechanical Properties													
Roll Grade	Barrels Hardness (HB)	C		Si		Mn		Cr		Ni		Mo	
CC64C	440-490	3.0	3.6	0.3	0.7	0.1	0.5	0.3	1.4	0.2	0.8	0.01	0.3
CC68C	475-510	3.0	3.6	0.3	0.7	0.1	0.7	0.3	1.4	0.2	0.8	0.01	0.3
CC70C	490-530	3.0	3.6	0.3	0.7	0.1	0.8	0.3	1.4	0.2	0.8	0.01	0.3
CCNIH76C	530-570	3.2	3.8	0.3	0.7	0.3	0.8	0.8	1.5	1.5	3.5	0.2	0.6
CCNIH80C	570-630	3.2	3.8	0.3	0.7	0.3	0.8	0.8	1.5	1.5	3.5	0.2	0.6

Common Dimensions				
Length (mm)	Diameter (mm)	Approximate Weight (Kg)	Minimum Working Layer	Max Working Layer
800 ± 0.1	250 ± 0.1	260	20 mm	Customer's Choice
1000 ± 0.1	250 ± 0.1	340	20 mm	Customer's Choice
1250 ± 0.1	250 ± 0.1	470	20 mm	Customer's Choice
1500 ± 0.1	250 ± 0.1	620	20 mm	Customer's Choice

*note: Other dimensions will be produced according to customer's specifications.

Journal Properties						
Core Grade	UTS (N/mm²)	Elongation (%)	Bending strength (N/mm²)		Youngs Modulus E (KN/mm²)	
CK45	590 - 740	18	1000	1200	205	215

Rolls for Oil Seed Extraction

Since rolls are the key equipment in oil seed extraction process and presence of impurities in the process could damage the rolls; therefore it is of great importance to have rolls with good hardness and resistance against breakage. Oil seed extraction rolls are casted both statically and centrifugally with the use of clear chill cast iron for the outer layer and gray cast iron for the inner layer. The journals are made of forged steel which are fitted into the roll depending on the application. To overcome the machine vibration all rolls will go through a balancing procedure. On customer's request, wear resistance rings could be installed on each side of the roll. Finishing jobs on the surface are depended on the customer's request and it could be grinded, ribbed or sand-blasted.

Grades:

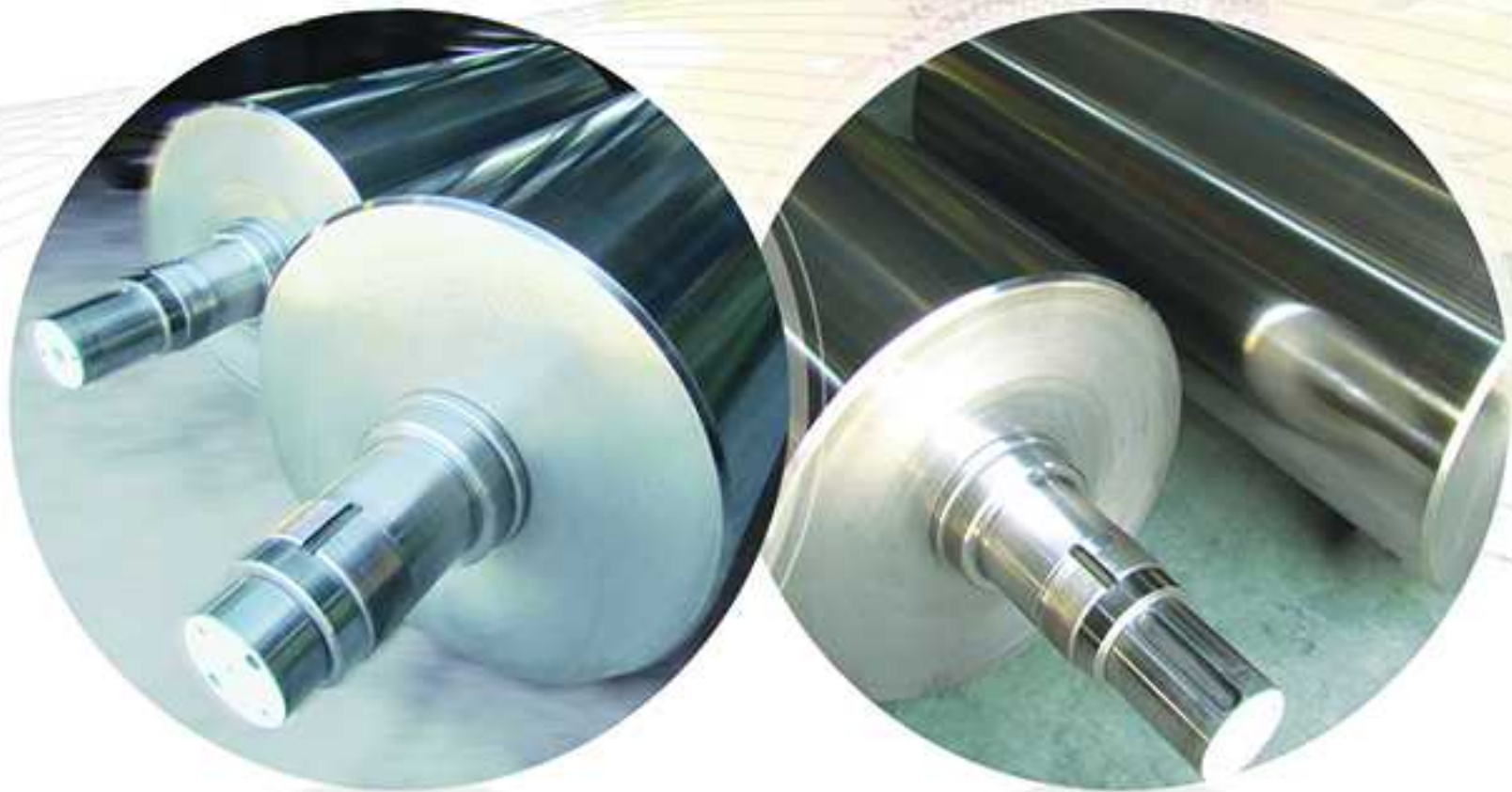
The correct choice of material and hardness of the rolls according to their use is essential since it guarantees the performance of the roll being used. In the table below the most common alloys used in oil seed extraction industry are listed. If needed other alloys will be recommended to suit customer's applications.

Chemical Composition and Mechanical Properties													
Roll Grade	Barrels Hardness (HB)	C		Si		Mn		Cr		Ni		Mo	
CC68C	475-510	3.0	3.6	0.3	0.7	0.1	0.7	0.3	1.4	0.2	0.8	0.01	0.3
CCNIH72	510-540	3.2	3.8	0.3	0.7	0.3	0.6	0.5	1.5	1.5	2.5	0.2	0.6
CCNIH76C	530-570	3.2	3.8	0.3	0.7	0.3	0.8	0.8	1.5	1.5	3.5	0.2	0.6

Common Dimensions		
Length (mm)	Diameter (mm)	Approximate Weight (Kg)
1600 ± 0.1	800 ± 0.1	6100
1300 ± 0.1	800 ± 0.1	4900

*note: Other dimensions will be produced according to customer's specifications.

Journal Properties						
Core Grade	UTS (N/mm²)	Elongation (%)	Bending strength (N/mm²)		Youngs Modulus E (KN/mm)²	
CK45	590 - 740	18	1000	1200	205	215



Other Services & Products

To serve plastic, paper, coffee and other food industries, Chodan Sazan Co. produces rolls, sleeves and spare parts such as: Neck ring, Mill Stand, Bearing housing, Crane wheel & etc. with the highest quality. To satisfy our valuable customers, Chodan Sazan Co. provides services such as: Roll repairs, Roll grooving and etc. Quality and grade of the rolls are varied according to the application of the rolls and customer's customized requirements. Rolls are casted both statistically and centrifugally depending on the requirements and to reach a better hardness depth and longer lifetime. Finishing job is done through machining equipment to reach maximum surface quality.