



Shan Dong Rolling Mill Technology Co.,Ltd

Add: Hua Xin Road,Li Cheng District,Jinan 250000

URL : www.sdmtrolls.com

E-mail: rolls@sdmtrolls.com Tel:86-531-59590417

Shan Dong Rolling Mill Technology Co.,Ltd

YOUR ROLLS EXPERT

Company Profile



Shan Dong Rolling Mill Technology Co.,Ltd is a professional design, development, production, sales and after-sales high-tech enterprise. Our company has the professional technical personnel, the precision production equipment, the super production capacity, for the customer to build the first-class environmental protection, the energy-saving production equipment.

Our company mainly products are rollers. Rollers for hot steel strip, cold steel strip, section, re-bar and Kocks Mill. The products are widely used into different mills with different function as work rolls, intermediate rolls, back up rolls and the other function.

For rolls material, we have different type and material can be as chilled cast iron roll, infinite chilled cast roll, spherical graphite roll, high Chromium cast iron roll, high speed steel roll (hss roll), high speed iron steel, graphite steel roll, alloyed steel roll and the others based on the requirement from the customers. For material grade, it can be SGP I, SGP II, SPG III, SGA I, SGA II, CC II, CC III, CC IV, ICIV, HCr II, HCr III, AS 751, HSS, HCrS, S-HSS and the other material which is based on the requirement from the customers.

To guarantee the advanced product quality, we have also had the advanced equipment. Until now, we have had 3 sets 15 tons middle frequency furnace, 1 set 6 tons middle frequency furnace, 2 sets 5 tons middle frequency furnace, 1 set 8 tons arc furnace, 1 set 80 tons ladle refining furnace, high & low temperature resistance type furnace and constant-temperature furnace for heat treatment. As the machining, we have the full series lathe machine, MK84160*8m grinding machine, CNC milling machine, roll special CNC machine and the others. For the inspection, here we have the high precision microscope, super sonic detector, Switzerland ARL3460 metal analyzer, tension tester and the other analysis equipment.

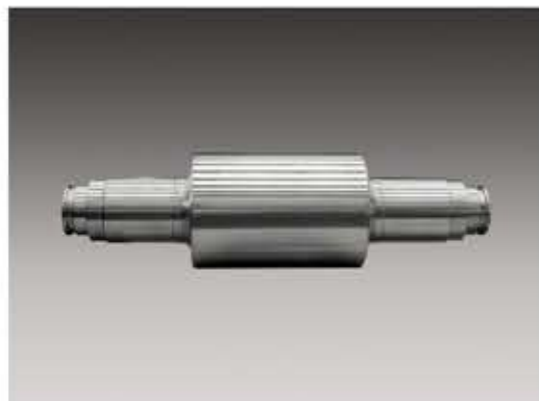
From here to the world. We have committed to understanding and respecting the laws, values and cultures wherever we do business.

We have the passion for winning in everything we do. We are committed to operational excellence, superior customer experience, leading in the global rolls market. We want to and will provide superior value to our customers over time

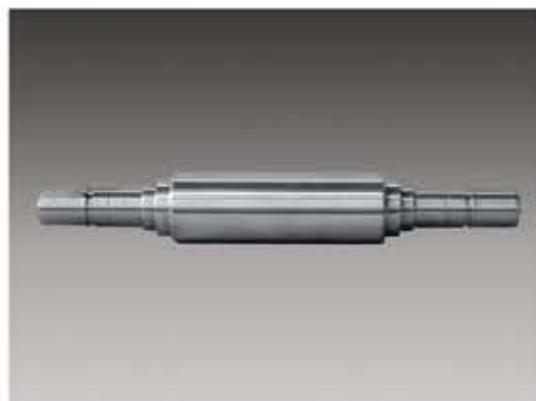
CONTENTS

01	COMPANY PROFILE	01
02	ROLLERS FOR HOT STRIP	03
03	ROLLS FOR COLD STRIP	04
04	ROLLS FOR SECTION	05/06
05	ROLLS FOR REBAR&WIRE	07
06	ROLLS FOR SEAMLESS PIPE	08
07	ADVANCED FACILITY	09/10
08	OUR LABORATORY	11
09	INSPECTION	12
10	MATERIAL LIST	13/14

Rollers for hot strip



hot strip mill back up roll



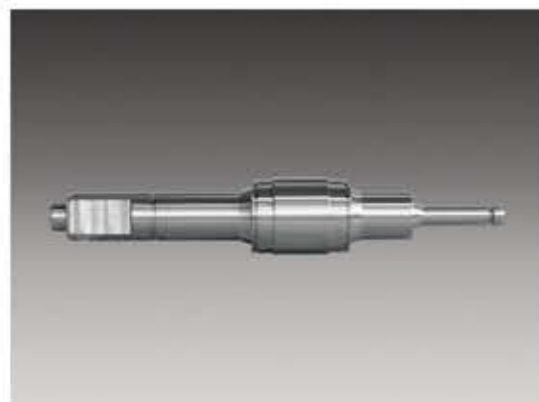
hot strip mill finishing stand work roll



hot strip mill roughing stand work roll



hot strip mill vertical roll

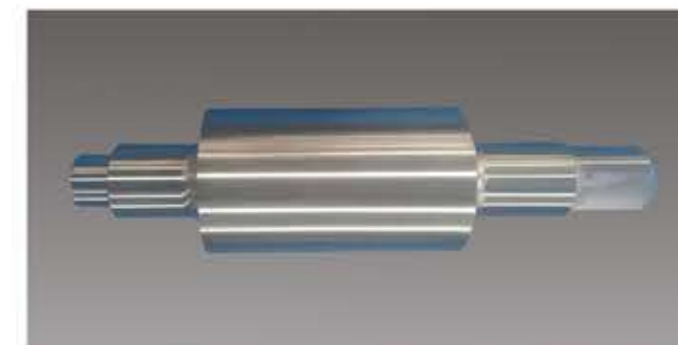


roll shaft

Rolls for Cold Strip



Cr3 Cr5 material work roll



cold rolls



Cr3 Cr5 Cold Strip Intermediate Roll

Product	Hardness(HSD)	Neck strength (Mpa)	Material	Function
Forged cold roll	88-98	≥900	Cr2 Cr3 Cr5 series	Cold strip mill Work roll
	75-85	≥900	Cr2 Cr3 Cr5 series	Cold strip mill Intermediate roll
	98-102	≥900	Cr2 Cr3 Cr5 series	Nonferrous mill work roll
Forged back up roll	55-80	≥850	Cr2 Cr3 Cr4 Cr5 series	Hot/Cold strip back up roll

Rolls for section



Groove-casted roll for section mill



section mill edge roll



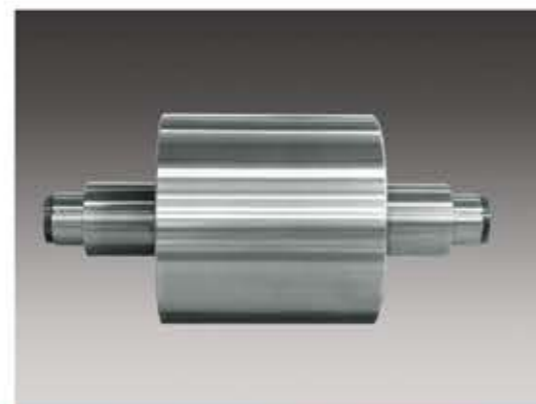
Work Rolls For Section Profiles



universal section mill vertical roll



section rolls



Work Rolls For Section Profiles



Steel sheet pile rolls



Rolls under installation



section mill rolls under installation



Section mill BD rolls



section mill rolls

Rolls for rebar&wire



rolls for wire



rolls for rebar



rebar rolls



wire rolls with Tungsten carbide

Rolls for seamless pipe



disher ring with max diameter be 4000mm



FQM rolls



piercing roll



SZ roll



Plug

Advanced facility

we have had 3 sets 15 tons middle frequency furnace, 1 set 6 tons middle frequency furnace, 2 sets 5 tons middle frequency furnace, 1 set 8 tons arc furnace, 1 set 80 tons ladle refining furnace, high&low temperature resistance type furnace and constant-temperature furnace for heat treatment. As the machining, we have the full series lathe machine, MK84160*8m grinding machine, CNC milling machine, roll special CNC machine and the others for 168 sets.



raw material



Quality Control

To guarantee the quality of the raw material,we have had our our laboratory.



impact tester



tension tester



microhardness tester



standard sample cabinet



Metallographic analyzer

Inspection

To guarantee the good quality of the products,we have had the very strictly inspection for the products.



Ultrasonic flaw detection



Size checking



hardness test



template

Quality Control

Type	Material	Material Grade	Material Chemical composition											Hardness		Application
			C	Si	Mn	P	S	Cr	Ni	Mo	V	Cu	Mg	Barrel	Neck	
Chilled cast iron	NiCrMo Chilled-II	CCII	2.9 ~ 3.6	0.25 ~ 0.8	0.2 ~ 1.0	≤0.4	≤0.08	0.3 ~ 1.2	1.01 ~ 2.0	0.2 ~ 0.6	-	-	-	62 ~ 75	35 ~ 52	Small size section mill, wire mill, hot sheet Tempering mill
	Centrifugal cast NiCrMo chilled-III	CCIII	2.9 ~ 3.6	0.25 ~ 0.8	0.2 ~ 1.0	≤0.4	≤0.08	0.5 ~ 1.5	2.01 ~ 3.0	0.2 ~ 0.6	-	-	-	65 ~ 80	32 ~ 45	
	Centrifugal cast NiCrMo chilled-IV	CCIV	2.9 ~ 3.6	0.25 ~ 0.8	0.2 ~ 1.0	≤0.4	≤0.08	0.5 ~ 1.7	3.01 ~ 4.5	0.2 ~ 0.6	-	-	-	70 ~ 85	32 ~ 45	
Indefinite Chilled cast iron	NiCrMo Indefinite Chilled-I	ICI	2.9 ~ 3.6	0.6 ~ 1.2	0.4 ~ 1.2	≤0.25	≤0.08	0.7 ~ 1.2	0.05 ~ 1.0	0.2 ~ 0.6	-	-	-	55 ~ 72	35 ~ 55	Small-Sized Section Mill, Narrow Strip Mill
	NiCrMo Indefinite Chilled-II	ICII	2.9 ~ 3.6	0.6 ~ 1.2	0.4 ~ 1.2	≤0.25	≤0.08	0.7 ~ 1.2	1.01 ~ 2.0	0.2 ~ 0.6	-	-	-	55 ~ 72	35 ~ 55	
	Centrifugal Cast NiCrMo Indefinite Chilled-III	ICIII	2.9 ~ 3.6	0.6 ~ 1.2	0.4 ~ 1.2	≤0.25	≤0.05	0.7 ~ 1.2	2.01 ~ 3.0	0.2 ~ 1.0	-	-	-	65 ~ 78	32 ~ 45	Plate Mill, Tempering Mill, Hot Strip Mill
	Centrifugal Cast NiCrMo Indefinite Chilled-IV	ICVI	2.9 ~ 3.6	0.6 ~ 1.5	0.4 ~ 1.2	≤0.1	≤0.05	1.0 ~ 2.0	3.01 ~ 4.8	0.2 ~ 1.0	-	-	-	70 ~ 83	32 ~ 45	
	Centrifugal Cast NiCrMo Indefinite Chilled-V	ICV	2.9 ~ 3.6	0.6 ~ 1.5	0.4 ~ 1.2	≤0.1	≤0.05	1.0 ~ 2.0	3.01 ~ 4.8	0.2 ~ 2.0	0.2 ~ 2.0	Nb0.0 ~ 2.0	W0.0 ~ 2.0	70 ~ 85	32 ~ 45	
Spheroidal Graphite Cast Iron	CrMo Indefinite Chilled Nodular Cast Iron	SGII	2.9 ~ 3.6	0.8 ~ 2.5	0.4 ~ 1.2	≤0.25	≤0.03	0.2 ~ 0.6	-	0.2 ~ 0.6	-	-	≥0.04	50 ~ 70	35 ~ 55	Wire Mill, Small size section mill, Narrow strip Mill
	NiCrMo Indefinite Chilled Nodular Cast Iron-I	SGIV	2.9 ~ 3.6	0.8 ~ 2.5	0.4 ~ 1.2	≤0.25	≤0.03	0.2 ~ 0.6	0.5 ~ 1.0	0.2 ~ 0.8	-	-	≥0.04	50 ~ 70	35 ~ 55	
	NiCrMo Indefinite Chilled Nodular Cast Iron-II	SGV	2.9 ~ 3.6	0.8 ~ 2.5	0.4 ~ 1.2	≤0.2	≤0.03	0.3 ~ 1.2	1.01 ~ 2.0	0.2 ~ 0.8	-	-	≥0.04	60 ~ 70	35 ~ 55	Billet/Slab Bloom Mill, Medium&large size section mill, Narrow Strip Mill
	Spheroidal Graphite Pearlite-I	SGP1	2.9 ~ 3.6	1.4 ~ 2.2	0.4 ~ 1.0	≤0.15	≤0.03	0.1 ~ 0.6	1.5 ~ 2.0	0.2 ~ 0.8	-	-	≥0.04	45 ~ 55	35 ~ 55	
	Spheroidal Graphite Pearlite-II	SGPII	2.9 ~ 3.6	1.4 ~ 2.2	0.4 ~ 1.0	≤0.15	≤0.03	0.2 ~ 1.0	2.01 ~ 2.5	0.2 ~ 0.8	-	-	≥0.04	55 ~ 65	35 ~ 55	
	Spheroidal Graphite Pearlite-III	SGPIII	2.9 ~ 3.6	1.0 ~ 2.0	0.4 ~ 1.0	≤0.15	≤0.03	0.2 ~ 1.2	2.51 ~ 3.0	0.2 ~ 0.8	-	-	≥0.04	62 ~ 72	35 ~ 55	
	Spheroidal Graphite Bainite-I	SGAI	2.9 ~ 3.6	1.2 ~ 2.2	0.2 ~ 0.8	≤0.1	≤0.03	0.2 ~ 1.0	3.01 ~ 3.5	0.5 ~ 1.0	-	-	≥0.04	55 ~ 78	32 ~ 45	
Spheroidal Graphite Bainite-II	SGAII	2.9 ~ 3.6	1.0 ~ 2.0	0.2 ~ 0.8	≤0.1	≤0.03	0.3 ~ 1.5	3.51 ~ 4.5	0.5 ~ 1.0	-	-	≥0.04	60 ~ 80	32 ~ 45		
HiCr Cast Iron	HiCr centrifugal Cast Iron-II	HCrII	2.9 ~ 3.3	0.3 ~ 1.0	0.5 ~ 1.2	≤0.1	≤0.05	15.01 ~ 29.0	0.7 ~ 2.9	0.7 ~ 2.9	0.0 ~ 0.6	-	-	65 ~ 80	32 ~ 45	Hot Strip Mill, Vertical Mill, Tempering Mill, Plate Mill, cold strip Mill Universal section mill
	HiCr centrifugal Cast Iron-III	HCrIII	2.9 ~ 3.3	0.3 ~ 1.0	0.5 ~ 1.2	≤0.1	≤0.05	18.01 ~ 22	0.7 ~ 1.7	1.51 ~ 3.0	0.0 ~ 0.6	-	-	75 ~ 90	32 ~ 45	

Material	Material Grade	Material Chemical composition											Hardness		Application	
		C	Si	Mn	Cr	Ni	Mo	V	Nb	P	S	Barrel	Neck			
Alloy Steel	AS651	0.6~0.7	0.2~0.6	0.5~0.8	0.8~1.2	0.2~0.5	0.2~0.45	-	-	-	-	-	-	35~45	≤45	Section mill, wire&rebar mill; BD stand for beam mill&universal section mill
	AS70	0.65~0.75	0.2~0.45	0.9~1.2	-	-	-	-	-	-	-	-	32~42	≤42		
	AS701	0.65~0.75	0.2~0.45	1.4~1.8	-	-	-	-	-	≤0.035	≤0.03	-	35~45	≤45		
	AS7011	0.65~0.75	0.2~0.45	1.4~1.8	-	-	0.2~0.45	-	-	-	-	-	35~45	≤45	Billet&slab Blooming Mills, medium&large size section mills; BD stand for beam-mills; universal section mills	
	AS75	0.7~0.8	0.2~0.45	0.6~0.9	0.75~1.0	-	0.2~0.45	-	-	-	-	-	35~45 40~50	≤45		
	AS751	0.7~0.8	0.2~0.7	0.7~1.1	0.8~1.5	≥0.2	0.2~0.6	-	-	-	-	-	35~45 40~50	≤45		
	Cr3	0.2~0.5	0.2~0.7	0.5~1.3	2.4~3.5	≤0.8	0.3~0.6	0.05~0.2	-	-	≤0.08	≤0.05	58~63	30~40		Back-up rolls&roughing stand rolls for hot strip mill; rough stand rolls for plate mill; back-up rolls for cold strip mill and tempering mills
Cr5	0.35~0.55	0.2~0.7	0.3~1.1	4.7~5.4	≤0.5	0.5~0.85	0.15~0.4	-	-	-	-	68~73	30~40			
Adamite	AD1401	1.3~1.5	0.3~0.6	0.7~1.1	0.8~1.2	0.5~1.2	0.2~0.6	-	-	-	-	-	35~45 40~50	≤45	Back up rolls for strip mills	
	AD1601	1.5~1.7	0.3~0.6	0.8~1.3	0.8~2.0	≥0.2	0.2~0.6	-	-	≤0.035	≤0.03	-	40~50 50~60	≤50	Roughing stand for section mills&wire&bar mills; medium&large size section mills; beam mills; billet mills; universal section mills	
	AD180	1.7~1.9	0.3~0.8	0.6~1.1	0.8~1.5	0.5~2.0	0.2~0.6	-	-	-	-	-	45~55 50~60	≤50		
Graphite Steel	GS140	1.3~1.5	1.3~1.6	0.5~1.0	0.4~1.0	-	0.2~0.5	-	-	-	-	-	36~46	≤46	Roughing stand for section mills&wire&rebar mills; billet mills; roughing stand rolls&vertical rolls for hot strip mills&universal section mills	
	GS150	1.4~1.6	1.0~1.7	0.6~1.0	0.6~1.0	0.2~1.0	0.2~0.5	-	-	-	-	40~50	≤50			
	GS160	1.5~1.7	0.8~1.5	0.6~1.0	0.5~1.5	0.2~1.0	0.2~0.8	-	-	≤0.035	≤0.03	-	45~55	≤50		
	GS190	1.8~2.0	0.8~1.5	0.6~1.0	0.5~2.0	0.6~2.2	0.2~0.8	-	-	-	-	-	50~60 55~65	≤50		
HiCr Speed Steel	HCrS	1.0~1.8	0.4~1.0	0.5~1.0	8~15	1.5~4.5	1.5~4.5	-	-	-	-	-	70~85	35~45	Roughing stand rolls&vertical rolls for hot strip mills; universal section mill rolls	
	HSS	1.5~2.2	0.3~1.0	0.4~1.2	3.0~8.0	2.0~8.0	2.0~8.0	2.0~9.0	0.0~8.0	≤0.03	≤0.025	-	75~95	30~45	Finishing stand for hot strip mills&wire mills	
	S-HSS	0.6~1.2	0.8~1.5	0.5~1.0	3.0~9.0	2.0~5.0	2.0~5.0	0.4~3.0	0.0~3.0	-	-	-	75~85 80~98	30~45	Roughing stand work rolls for hot strip mill	