



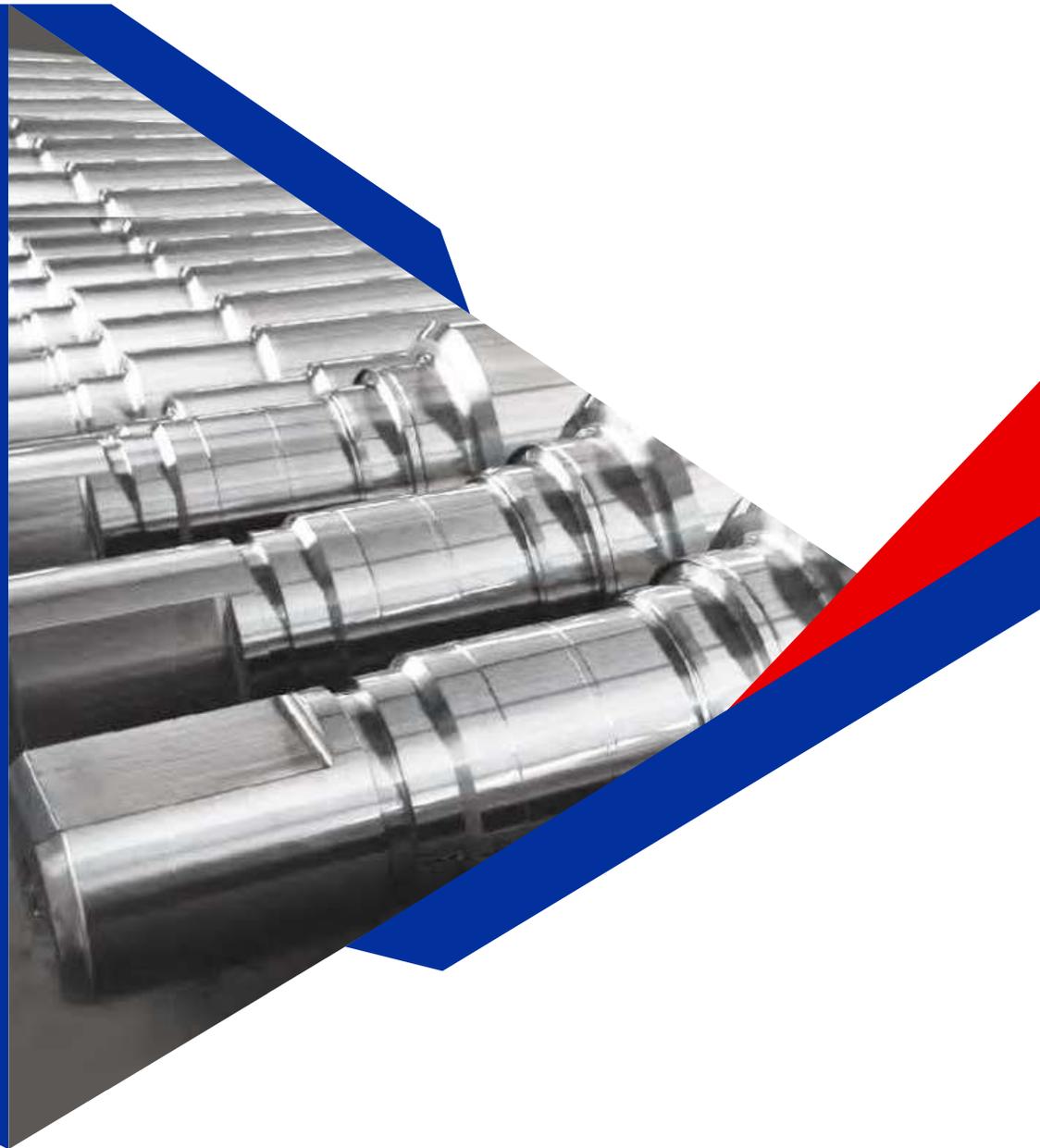
QUALITY



SERVICE



VALUE



# CAST ROLLS

Zhuzhou Silvereagle Metal Material Co. Ltd.

# ABOUT US



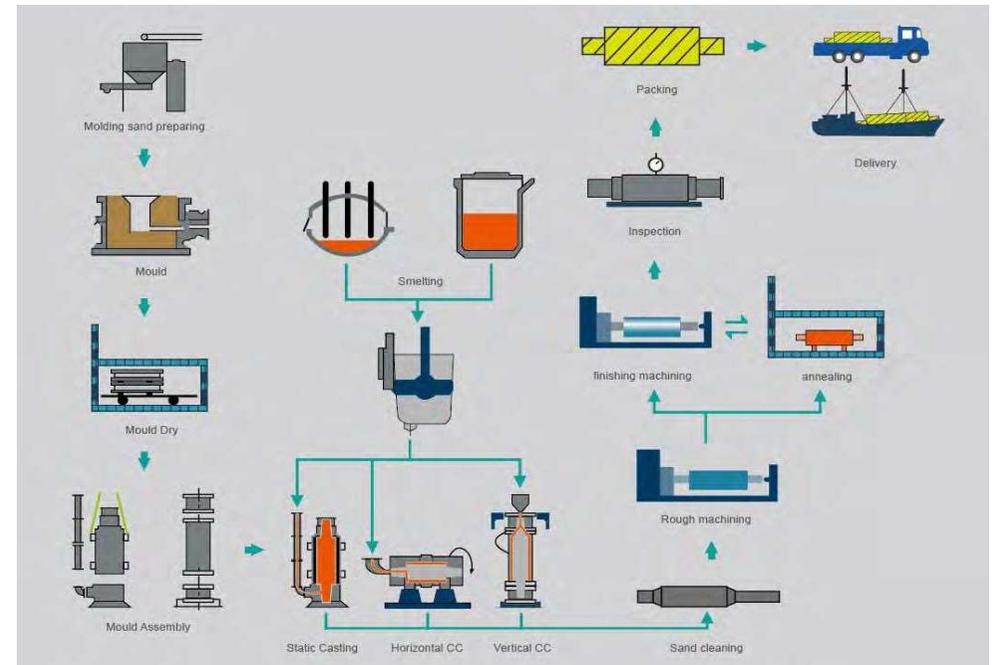
Zhuzhou Silvereagle Metal Material Co., Ltd. was founded on April 4, 2002, with the purpose of providing high-performance Carbide products to all over the world. Based in China, we are a company passionate in the carbide business and committed to always going beyond our customer's expectations when it comes to quality, packaging & delivery.

With a vast variety of carbide products, we hope to always have exactly what you are looking for with the material quality you expect.

Zhuzhou Silvereagle Metal Material believes not only in high quality products, but the highest-quality customer service. With that said, we will always do our best to provide you with products that exceed your expectations and earn your trust. Our success is defined by Silvereagle's dedication to customer service and the happiness of you, the customer.



## PRODUCTION PROCESS



# PLANT CONSTRUCTION



# FOUNDRY EQUIPMENT

The company has 5 tons of intermediate frequency furnace, 3 tons of inter-mediate frequency furnace, 2 tons of intermediate frequency furnace and 20 tons of refining furnace smelting equipment, etc. On the other Have the environmental protection and efficient heat treatment equipment, all kinds of type resistance furnace, rate-of-rise treatment furnace, etc.



# MACHINING EQUIPMENT

The company has a professional CNC lathe, milling machine, roll Longmen CNC grinding machine and other mechanical automation equipment, fully meet the processing needs high quality roll.

CNC ROLLS GRINDER



ROLL LATHE



CNC VERTICAL LATHE



LONGMEN MILLING MACHINE



ROLL LATHE



CNC ROLLER LATHE



# INSPECTION

The company has advanced product testing system and passed the ISO9001 standard quality management system certification, established a perfect quality assurance system, to ensure the physical and chemical properties of various products.

## SPECTRAL ANALYSIS



## TENSION TEST



## SIZE INSPECTION



## METALLOGRAPHY DETECTION



## CHEMICAL ANALYSIS AND DETECTION



## HARDNESS INSPECTION



## UIRASONIE INSPECTIONN



## QUALITY PRODUCT SERIES

Our products are divided into 5 series more than 30 varieties. The main products are roll, hot roll, centrifugal often hair straightening roller and all kinds of material roll rings.

### HSS ROLLS



### HORIZONTAL ROLL RING, VERTICAL ROLL RING STRAIGHTENING ROLL RING



### 1.CHILLED CAST IRON ROLL



### 2.INFINITE CHILLED CAST IRON ROLL



### 3.SPHEROIDAL GRAPHITE ROLL



# QUALITY PRODUCT SERIES

4.CHROMIUM CAST IRON ROLL



7.SEMISTEEL ROLL



5.HIGH CHROMIUM STEEL ROLLER



8.GRAPHITIC STEEL ROLLER



6.HIGH SPEED STEEL ROLL



9.ALLOYED STEEL ROLL



# APPLICATION

Type	Materials	Materials Code	Chemical Composition (%)											Hardness (HSD)		Tensile strength Rm/ (N/mm <sup>2</sup> )	Application
			C	Si	Mn	P	S	Cr	Ni	Mo	V	Cu	Mg	Barrel	Neck		
Chilled cast iron	NiCrMo Chilled- II	CC I	2.90 3.60	0.25 0.80	0.20 1.00	≤ 0.40	≤ 0.08	0.30 1.20	1.01 2.00	0.20 0.60	-	-	-	62 75	35 52	150	Small-Sized Section Mill, Wire Mill, Hot Sheet Tempering Mill
	Centrifugal Cast NiCrMo Chilled-III	CCIII	2.90 3.60	0.25 0.80	0.20 1.00	≤ 0.40	≤ 0.08	0.50 1.50	2.01 3.00	0.20 0.60	-	-	-	65 80	32 45	150	
	Centrifugal Cast NiCrMo Chilled-IV	CCIV	2.90 3.60	0.25 0.80	0.20 1.00	≤ 0.40	≤ 0.08	0.50 1.70	3.01 4.50	0.20 0.60	-	-	-	70 85	32 45	350	
Infinite chilled cast iron	NiCrMo Indefinite Chilled- I	IC I	2.90 3.60	0.60 1.20	0.40 1.20	≤ 0.25	≤ 0.08	0.70 1.20	0.05 1.00	0.20 0.60	-	-	-	55 72	35 55	160	Small-Sized Section Mill, Narrow Strip Mill
	NiCrMo Indefinite Chilled- II	IC II	2.90 3.60	0.60 1.20	0.40 1.20	≤ 0.25	≤ 0.08	0.70 1.20	1.01 2.00	0.20 0.60	-	-	-	55 72	35 55	160	
	Centrifugal Cast NiCrMo Indefinite Chilled-III	ICIII	2.90 3.60	0.60 1.20	0.40 1.20	≤ 0.25	≤ 0.05	0.70 1.20	2.01 3.00	0.20 1.00	-	-	-	65 78	32 45	350	Plate Mill, Tempering Mill, Hot Strip Mill
	Centrifugal Cast NiCrMo Indefinite Chilled-IV	ICIV	2.90 3.60	0.60 1.50	0.40 1.20	≤ 0.10	≤ 0.05	1.00 2.00	3.01 4.80	0.20 1.00	-	-	-	70 83	32 45	350	
	Centrifugal Cast NiCrMo Indefinite Chilled-V	ICV	2.90 3.60	0.60 1.50	0.40 1.20	≤ 0.10	≤ 0.05	1.00 2.00	3.01 4.80	0.20 2.00	0.20 2.00	W0.00 2.00	Nb0.00 2.00	77 85	32 45	350	
Spheroidal Graphite Cast Iron	CrMo Indefinite Chilled Nodular Cast Iron	SG II	2.90 3.60	0.80 2.50	0.40 1.20	≤ 0.25	≤ 0.03	0.20 0.60	-	0.20 0.60	-	-	≤ 0.04	50 70	35 55	320	Wire Mill, Small-Sized Section Mill, Narrow Strip Mill
	NiCrMo Indefinite Chilled Nodular Cast Iron- I	SGIV	2.90 3.60	0.80 2.50	0.40 1.20	≤ 0.25	≤ 0.03	0.20 0.60	0.50 1.00	0.20 0.80	-	-	≤ 0.04	55 70	35 55	320	
	NiCrMo Indefinite Chilled Nodular Cast Iron- II	SGV	2.90 3.60	0.80 2.50	0.40 1.20	≤ 0.20	≤ 0.03	0.30 1.20	1.01 2.00	0.20 0.80	-	-	≤ 0.04	60 70	35 55	320	
	Spheroidal Graphite Pearlite- I	SGP I	2.90 3.60	1.40 2.20	0.40 1.00	≤ 0.15	≤ 0.03	0.10 0.60	1.50 2.00	0.20 0.80	-	-	≤ 0.04	45 55	35 55	450	Billet / Slab Bloom Mill, Medium and Large Sized Section Mill, Wire Mill, Narrow Strip Mill
	Spheroidal Graphite Pearlite- II	SGP II	2.90 3.60	1.20 2.20	0.40 1.00	≤ 0.15	≤ 0.03	0.20 1.00	2.01 2.50	0.20 0.80	-	-	≤ 0.04	55 65	35 55	450	
	Spheroidal Graphite Pearlite-III	SGP III	2.90 3.60	1.00 2.00	0.40 1.00	≤ 0.15	≤ 0.03	0.20 1.20	2.51 3.00	0.20 0.80	-	-	≤ 0.04	62 72	35 55	350	
Spheroidal Graphite Spicula- I	SGA I	2.90 3.60	1.20 2.20	0.20 0.80	≤ 0.10	≤ 0.03	0.20 1.00	3.01 3.50	0.50 1.00	-	-	≤ 0.04	55 78	32 45	350		
Spheroidal Graphite Spicula- II	SGA II	2.90 3.60	1.00 2.00	0.20 0.80	≤ 0.10	≤ 0.03	0.30 1.50	3.51 4.50	0.50 1.00	-	-	≤ 0.04	60 80	32 45	350		
HiCr cast iron	HiCr Centrifugal Cast Iron- II	HCr II	2.90 3.30	0.30 1.00	0.50 1.20	≤ 0.10	≤ 0.05	15.01 20.00	0.70 2.90	0.70 2.90	0.00 0.60	-	-	65 80	32 45	150	Hot steel, vertical roll, flat, medium thick plate rolling mill, NiCrMo Chilled-II cold strip rolling mill, shape steel universal rolling mill, roller
	HiCr Centrifugal Cast Iron-III	HCr III	2.90 3.30	0.30 1.00	0.50 1.20	≤ 0.10	≤ 0.05	18.01 22.00	0.70 1.70	1.51 3.00	0.00 0.60	-	-	75 90	32 45	150	

Materials	Materials Code	Chemical Composition (%)										Surface Hardness (HSD)		Application				
		C	Si	Mn	Cr	Ni	Mo	V	Nb	P	S	Barrel	Neck					
Alloy Cast Steel	AS651	0.60 0.70	0.20 0.60	0.50 0.80	0.80 1.20	0.20 0.50	0.20 0.45	-	-	-	-	-	-	-	-	35 45	≤ 45	Section steel, wire bar roughing mill, rolling beam, section steel universal billet cutting machine, hot rolled strip phosphorus breaking roll, rough roll, medium plate rough roll, strip support roll, vertical roll, small and medium section steel
	AS70	0.65 0.75	0.20 0.45	0.90 1.20	-	-	-	-	-	-	-	-	-	-	-	32 42	≤ 42	
	AS701	0.65 0.75	0.60 0.45	1.40 1.80	-	-	-	-	-	-	-	-	-	-	-	35 45	≤ 45	
	AS7011	0.65 0.75	0.20 0.45	1.40 1.80	-	-	0.20 0.45	-	-	-	-	≤ 0.035	≤ 0.030	-	-	35 45	≤ 45	
	AS75	0.70 0.80	0.20 0.45	0.60 0.90	0.75 1.00	-	0.20 0.45	-	-	-	-	-	-	-	-	34-45 40-50	≤ 45	
	AS751	0.70 0.80	0.20 0.70	0.70 1.10	0.80 1.50	≤ 0.20	0.20 0.60	-	-	-	-	-	-	-	-	34-45 40-50	≤ 45	
Adamite	Cr3	0.20 0.50	0.20 0.70	0.50 1.30	2.40 3.50	≤ 0.80	0.30 0.60	0.05 0.20	-	-	-	-	≤ 0.08	≤ 0.05	58 63	32 45	Hot strip support roll, rough roll, sheet steel rough roll, strip cold rolling and leveling support roll	
	Cr5	0.30 0.50	0.20 0.70	0.30 1.10	4.70 5.40	≤ 0.50	0.50 0.85	0.15 0.40	-	-	-	-	≤ 0.08	≤ 0.05	68 73	32 45		
	AD1401	1.30 1.50	0.30 0.60	0.70 1.10	0.80 1.20	0.50 1.20	0.20 0.60	-	-	-	-	-	-	-	-	34-45 40-50		≤ 45
	AD1601	1.50 1.70	0.30 0.60	0.80 1.30	0.80 2.00	≤ 0.20	0.20 0.60	-	-	-	-	≤ 0.035	≤ 0.030	-	-	40-50 50-60		≤ 50
Graphite Steel	AD180	1.70 1.90	0.30 0.80	0.60 1.10	0.80 1.50	0.50 2.00	0.20 0.60	-	-	-	-	-	-	-	-	40-50 50-60	≤ 50	
	GS140	1.30 1.50	1.30 1.60	0.50 1.00	0.40 1.00	-	0.20 0.50	-	-	-	-	-	-	-	-	36 46	≤ 46	
	GS150	1.40 1.60	1.00 1.70	0.60 1.00	0.60 1.00	0.20 1.00	0.20 0.50	-	-	-	-	-	-	-	-	40 50	≤ 50	
	GS160	1.50 1.70	0.80 1.50	0.60 1.00	0.50 1.50	0.20 1.00	0.20 0.80	-	-	-	-	≤ 0.035	≤ 0.030	-	-	45 55	≤ 50	
HiCr Steel	GS190	1.80 2.00	0.80 1.50	0.60 1.00	0.50 2.00	0.60 2.20	0.20 0.80	-	-	-	-	-	-	-	-	50-60 55-65	≤ 50	
	HCrS	1.00 1.80	0.40 1.00	0.50 1.00	8.00 15.00	0.50 1.50	1.50 4.50	-	-	-	-	-	-	-	-	70 85	35 45	
High Speed Semi-high Speed Steel	HSS	1.50 2.20	0.30 1.00	0.40 1.20	3.00 8.00	0.00 1.50	2.00 8.00	2.00 9.00	0.00 8.00	0.00 8.00	-	-	≤ 0.030	≤ 0.025	-	75 95	30 45	
	S-HSS	0.60 1.20	0.80 1.50	0.50 1.00	3.00 9.00	0.20 1.20	2.00 5.00	0.40 3.00	0.00 3.00	0.00 3.00	-	-	-	-	-	75-85 80-98	30 45	