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An ISO 9001-2008 Certificated Company
Equipment and Parts for steel plant
Turn Key Solution

Advance Metallurgical Technology Co., Ltd.

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WHO WE ARE

AMT

THE ONE-STOP SERVICE SUPPLIER



Advance Metallurgical Technology Co., Ltd. (AMT for short) located in Beijing who is a one stop service supplier for Metallurgical Industry. Over the past years, AMT has developed extensive experience and expertise for steel rolling mill. Our aim is to provide our customer premier cost effective products, solution and service.

We focus on new technologies and innovation to drive business in internationally. Our engineers work in tandem with the clients to understand their application requirements and provide them best solutions. They relate all their efforts to reach maximum feasibility by selecting proper equipment and incorporating the machines in the actual working conditions to obtain best functioning of the plant. This achieved through latest designing software, hi-tech manufacturing and material handling equipment.

We have been awarded with ISO 9001: 2008 certification for following well defined quality management system throughout the business process. Our competent team of Quality Control engineers take utmost care to ensure that every job strictly adheres to the Customers' specific quality standards/requirements.



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Melting Workshop

AMT can offer customer the R&D design, Production, Installation, Test Run, Worker train service for all kinds of furnace include EAF, LF etc.. Our products range from 1 ton to 100 tons capacity.

Electric-Arc Furnace (EAF)



Item	220	260	320	360	400	430	480	520	540	580
Shell Dia(mm)	2200	2600	3200	3600	4000	4300	4800	5200	5400	5800
Capacity(T)	1.5	3	5	10	20	30	40	50	60	80
Transformer Capacity (KVA)	1250	2200	3200	5500	9000	12500	20000	25000	35000	55000
Transformer finaly Voltage (KV)	10	10	10	10	10	10	10	35	35	35
Transformer secondary Voltage (V)	210-104	220-110	240-121	260-124	300-140	314-160	350-210	436-224	490-280	460-280
Arc Current (KA)	3.4	5.8	7.7	12.2	17.8	30.3	36.1	41.2	50.5	51.3
Dia of electrode (mm)	200	250	300	350	400	450	450	500	500	500
Steel output direction	/				45°/15°					
Slag output direction	/				20°/15°					
Cooling water (m³/h)	60	100	150	250	300	300	350	500	550	600

Ladle Refining Furnace (LF)



Item	LF-15	LF-20	LF-25	LF-30	LF-35	LF-50	LF-100	LF-150
Ladle Capacity (T)	12-20	20-25	25-35	35-45	50-65	80-100	110-130	140-180
Ladle Dia(mm)	2200	2400	2600	3000	3100	3400	3600	3900
Transformer Capacity (KVA)	4000	4000	6000	7000	10000	15000	18000	25000
Temperature increase rate (°C/min)	≥3.5							≥4
Power (KW)	60	80	200	200	250	300	350	350
Water consumption (m³/h)	60	120	130	150	160	180	200	250
Argon consumption (L/min)	40	50	60	80	100	160	200	250

Parts for EAF and LF



Ladle Car



Water Cooling Cover



Ladle

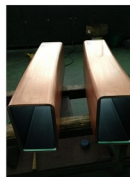
Continus Casting Workshop

Copper Mould Tube

Shape	Size	Dimension (mm)	Thickness	Length
Square & Rectangle Copper Mold Tube	Square	50X50-650X650	3000-17000	602-1100
	Rectangle	(100-500)X650	Also straight	
Round Copper Mold Tube	Ø110-Ø 1500	5000-17000	Also straight	602-900

Copper Plate Size	Dimension(mm)			Material	Coating
	Length	Width	Thickness		
Slab	350-3600	700-1000	30-75	CuDHP,CuAg0.1,CuCrZr	Cr, Ni-Co
Beam Blank	350-900	300-1000	35-300	CuDHP,CuAg0.1,CuCrZr	Cr, Ni-Co
Rectangle	700-900	200-3000	30-70	CuDHP,CuAg0.1,CuCrZr	Cr, Ni-Co
Thin Slab	1200-2000	1100-1200		CuDHP,CuAg0.1,CuCrZr	Cr, Ni-Co
Ultra-Thin Slab	1530	1100		CuDHP,CuAg0.1,CuCrZr	Cr, Ni-Co

Item	Temp	Unit	Material		
			CuZnHP	CuAg0.1	CuCrZr
Chemical Composition					
-	-	-	P 0.015-0.040	Ag 0.08-0.12 P 0.004-0.012	Cr 0.30-1.20 Zr 0.03-0.30
Physical Properties					
Electrical Conductivity	20	%IACS	83	95	80
Thermal Conductivity	20	W/(m.K)	340	372	330
Coefficient of Thermal Expansion	20-300	10 ⁻⁶ /K	17.1	17.1	17.2
Recrystallisation Temperature		°C	345	360	690
Modulus of Elasticity	20	10 ³ Mpa	120	123	128
Melting Point		°C	1083	1083	1078
Specific Gravity		g/cm ³	8.9	8.9	8.9
Mechanical Properties					
Ultimate Tensile Strength	20	Mpa	240-310	240-310	375-445
Ultimate Tensile Strength	100	Mpa	190-270	230-270	365-425
Ultimate Tensile Strength	200	Mpa	140-190	205-240	365-410
Ultimate Tensile Strength	300	Mpa	-	175-210	335-375
Ultimate Tensile Strength	400	Mpa	-	145-190	315-350
0.2Yield Point Strength	20	Mpa	190-250	200-225	280-355
0.2Yield Point Strength	100	Mpa	185-260	195-240	270-345
0.2Yield Point Strength	200	Mpa	-	180-225	260-330
0.2Yield Point Strength	300	Mpa	-	165-215	250-320
0.2Yield Point Strength	400	Mpa	-	130-145	240-290
Elongation	20	%	25-10	15-10	20-13
Hardness	20	HB	90-95	110-125	115-130



Parts for CCM



Copper Mould Tube Assembly



Water Cooling Sleeve



Magnetic Stirrer



Drum Bar



Sleeve



Transfer Roller



Straightener Roller



Straightener Roller

Rolling Mill Workshop

Mill Roll

AMT can supply the mill rolls and rings for Bar & Wire rolling mill, Light & Heavy section rolling mill, Seamless tube rolling mill, Strip & Plate rolling mill and Cold rolling mill. Beyond supplying mill rolls, AMT can also help customer improve their production line and increase rolling capacity



Nodular Cast Iron Roll



Adamite Roll



ICDP Roll



HSS Roll



Nodular Cast Iron Ring



Tungsten Carbide Ring

Roll Material Sheet

CAST IRON ROLL										
Material	C	Si	Mn	P	S	Ni	Cr	Mo	V	W
SGPI	2.9-3.6	1.4-2.2	0.4-1.0	<0.10	<0.03	1.5-2.0	0.1-0.6	0.2-0.8	-	-
SGPII	2.9-3.6	1.2-2.0	0.4-1.0	<0.10	<0.03	2.0-2.5	0.2-1.0	0.2-0.8	-	-
SGPIII	2.9-3.6	1.0-2.0	0.4-1.0	<0.10	<0.03	2.5-3.0	0.2-1.2	0.2-0.8	-	-
SGAI	2.9-3.6	1.2-2.2	0.2-0.8	<0.10	<0.03	3.0-3.5	0.2-1.0	0.5-1.0	-	-
SGAII	2.9-3.6	1.2-2.0	0.2-0.8	<0.10	<0.03	3.5-4.5	0.3-1.5	0.5-1.0	-	-
ICDPW	2.9-3.6	0.8-1.5	0.4-1.2	<0.10	<0.05	3.0-4.8	1.0-2.0	0.2-1.0	-	-
Enhanced-ICDP	2.9-3.6	0.8-1.5	0.4-1.2	<0.10	<0.05	3.0-4.8	1.0-2.0	0.2-2.0	0.2-0.2	0.2-0.2
HCR-III	2.3-3.3	0.3-1.0	0.5-1.2	<0.10	<0.05	0.7-1.7	18.0-22.0	1.5-3.0	0.0-0.6	-
CAST STEEL ROLL										
Material	C	Si	Mn	P	S	Ni	Cr	Mo	V	W
HSS	1.5-2.2	0.3-1.0	0.4-1.2	<0.035	<0.030	0.6-1.5	3.0-8.0	2.0-8.0	20-80	0.0-8.0
AD140	1.3-1.5	0.3-0.6	0.7-1.1	<0.035	<0.030	<0.20	0.8-1.2	0.2-0.6	-	-
AD160	1.5-1.7	0.3-0.6	0.8-1.3	<0.035	<0.030	<0.20	0.8-2.0	0.2-0.6	-	-
AS85	0.8-0.7	0.2-0.6	0.5-0.8	<0.035	<0.030	0.2-0.5	0.8-1.2	0.2-0.45	-	-
AS75	0.7-0.8	0.2-0.7	0.7-1.1	<0.035	<0.030	<0.20	0.8-1.5	0.2-0.6	-	-
HCS	1.0-1.8	0.4-1.0	0.5-1.0	<0.035	<0.030	0.5-1.5	8.0-15.0	1.5-4.5	-	-
Hardness(HSD)										
HSS	75-95									
AD140	30-46									
AD160	40-50									
AS85	35-45									
AS75	35-45									
HCS	70-90									

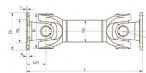
Universal Coupling

Universal Coupling is the very important transmission part in rolling mill. AMT can offer all standard coupling or produce according to customer's drawing.

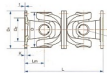
Light Type



Type A
Welded Flexible type



Type B
Non-Flexible Type

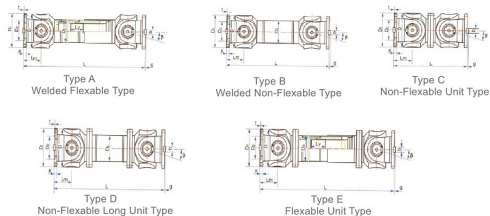


Type C
Non-Flexible Unit Type

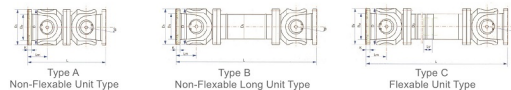
Item	SWC 15	SWC 20	SWC 30	SWC 50	SWC 80	SWC 100	SWC 150	SWC 180	SWC 200	SWC 225
A	L	255	285	335	385	445	500	590	640	775
	Lv	35	40	40	45	55	80	80	85	100
	m(kg)	2.2	3.0	5.0	6.6	9.5	17	32	40	76
B	L	150	175	200	240	260	295	370	430	530
	m(kg)	1.7	2.4	3.8	5.7	7.7	13.1	23	28	55
	L	128	156	180	208	220	252	340	348	440
C	m(kg)	1.3	1.95	3.1	5.0	7.0	12.3	22	30	56
	T ₂ (N · m)	150	200	400	750	1250	2500	4500	8400	16000
	T ₂ (N · m)	75	100	200	375	630	1250	2250	4200	8000
D	g(°)	35	35	35	35	35	35	35	25	25
	D	52	83	72	92	100	112	142	154	187
	D1	56	85	75	90	100	120	150	160	200
D2(DH)	D1	47	52	62	74.5	84	101.5	130	155.5	170
	D2(DH)	30	35	42	47	57	75	90	110	125
	D3	38	38	40	50	60	70	89	102	114
k	Lm	32	39	45	52	55	63	85	87	110
	k	3.5	4.5	5.5	6.0	8.0	8.0	10.0	12.0	14.0
	t	1.5	1.7	2.0	2.5	2.5	2.5	3.0	4.0	5.0
n	n	4	4	6	4	6	8	8	8	8
	d	5.1	6.5	6.5	8.5	8.5	10.5	13	15	17
	M (kg)	0.14	0.16	0.38	0.38	0.53	0.53	0.87	0.87	1.45
Flange Bolt	Size	M5	M6	M6	M8	M8	M10	M12	M16	M16
	Strength	7	15	15	32	32	64	110	180	270

AMT | PRODUCT INTRODUCTION

Medium Type



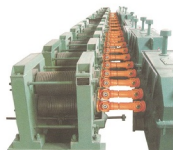
Heavy Type



Item	SWC 160	SWC 180	SWC 200	SWC 225	SWC 250	SWC 265	SWC 285	SWC 315	SWC 350	SWC 390	SWC 440	SWC 490	SWC 550	SWC 620
A	L	740	800	920	1000	1060	1120	1270	1390	1520	1530	1690	1850	2260
	LV	100	100	120	140	140	140	140	150	170	190	190	240	250
B	m(kg)	65	83	115	152	219	260	311	432	610	804	1122	1468	2154
	L	480	530	580	640	730	790	840	930	100	1010	1130	1240	1400
C	m(kg)	44	60	83	110	160	180	235	330	440	599	823	1090	1560
	L	380	420	480	500	560	600	640	720	780	860	1040	1080	1220
D	m(kg)	35	48	66	90	120	160	180	270	355	510	780	970	1330
	L	520	580	620	660	760	810	860	970	1030	1120	1230	1360	1550
E	m(kg)	48	69	90	120	173	220	250	355	485	665	920	1240	1765
	L	800	850	940	1050	1120	1180	1320	1440	1550	1710	1880	2050	2310
F	LV	100	100	120	140	140	140	140	150	170	190	190	240	250
	m(kg)	70	92	126	168	238	280	340	472	660	886	1230	1625	2368
G	TRAM - m	16	22.4	31.5	40	63	80	90	125	160	250	355	500	710
	TRAM - m	16	22.4	31.5	40	63	80	90	125	160	250	355	500	710
H	β (°)	15	15	15	15	15	15	15	15	15	15	15	15	15
	D	160	180	200	225	250	265	285	315	350	390	440	490	550
I	Df	160	180	200	225	250	265	285	315	350	390	440	490	550
	D1	127	155	170	196	218	233	245	280	310	345	390	435	515
J	D2(H)	100	105	120	135	150	160	170	185	210	235	255	275	320
	D3	108	114	140	159	168	180	194	219	245	273	299	325	402
K	Lm	95	105	110	125	140	150	160	180	195	215	260	270	305
	k	16	17	18	20	25	27	32	35	40	42	47	50	55
L	n	4	5	5	5	6	6	7	8	8	10	12	12	12
	d	15	17	17	17	19	19	21	23	23	25	28	31	38
M	b	20	24	32	32	40	40	40	40	50	70	80	100	100
	φ	6.0	7.2	9.0	9.0	12.5	12.5	15.0	15.0	18.0	20.0	22.5	25.0	25.0
N	M (kg)	2.57	3	3.85	3.85	5.17	6	6.75	8.25	10.6	13	18.50	23.75	38.08
	Size	M14	M16	M16	M16	M18	M18	M20	M22	M22	M24	M27	M30	M36
O	Flange Bolt	180	270	270	270	372	372	526	710	710	906	1340	1820	3170
	Strength													

Item	SWC 680	SWC 700	SWC 750	SWC 780	SWC 800	SWC 840	SWC 900	SWC 920	SWC 1000	SWC 1060	SWC 1100	SWC 1200
A	L	1540	1600	1840	1920	1920	2120	2280	2380	2480	2500	2720
	m(kg)	3150	3450	4300	4680	5050	6400	8420	8950	10600	12100	13900
B	L	1940	2100	2400	2500	2500	2680	2950	3130	3200	3300	3570
	m(kg)	3220	3530	4500	5400	5800	7470	9980	10500	12300	14500	15800
C	L	3230	3460	3620	4000	4000	4250	4580	4850	4770	4950	5100
	LV	250	250	250	250	250	250	300	300	300	300	300
D	m(kg)	4880	5400	6300	8450	9070	11800	15900	16500	19900	22000	27500
	TRAM - m	1640	1750	2250	2300	2670	3100	3860	4050	5200	6500	8900
E	TRAM - m	880	1050	1350	1500	1600	1860	2260	2430	3120	3805	5140
	β (°)	15	15	15	15	15	15	15	15	15	15	15
F	D	680	700	750	780	800	840	900	920	1000	1060	1100
	Df	680	700	750	780	800	840	900	920	1000	1060	1100
G	D1	635	635	695	725	745	775	835	855	915	960	1015
	D2(H)	550	570	610	640	660	710	740	760	840	840	920
H	D3	560	560	620	660	680	750	780	800	880	880	900
	Lm	305	400	480	490	480	530	570	570	595	620	625
I	k	70	70	95	95	95	110	120	120	130	130	130
	n	24	24	24	24	24	24	24	24	20	20	20
J	d	25	25	31	31	36	38	38	38	50	45	50
	Flange Bolt	M24	M24	M30	M30	M30	M36	M36	M36	M42	M48	M56

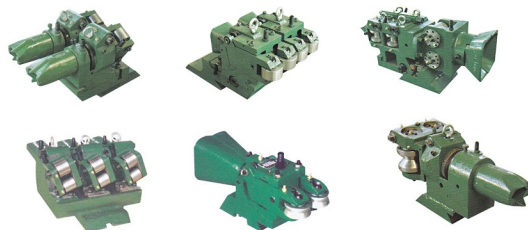
Application



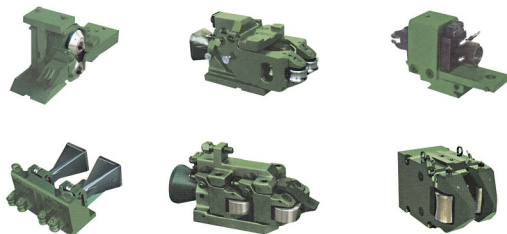
Guide Assembly

AMT can supply customer all kinds of Guide Assembly according to drawing. Also AMT can help customer design guide system with groove drawing, rolling mill beam drawing and rolling mill layout drawing.

Holteck series



Danieli series



BRG series



SMS series



Morgan series



Ashlow series



AMT | PRODUCT INTRODUCTION

Guide Parts

AMT can supply customer all spare parts for guide system. For example guide box, guide rollers, guide pipe, guide plate, right & left holder etc.



Gear Box & Gear Shaft



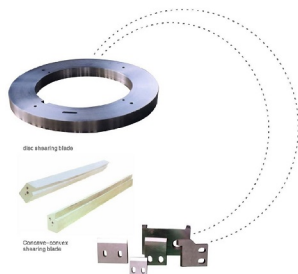
AMT | PRODUCT INTRODUCTION

Shear Blade

The shear blade is widely used in metallurgical industry to cut iron and steel material, so it require not only sufficient strength, shock strength and resistance of abrasion, but also high hot-hardness, cold and heat resistance and fatigue resistance.

The material of shear blade introduction is as below

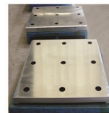
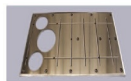
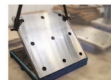
Item	Material	Hardness	Applicant
1	LD	54-60 HRC	Cold shearing blade
2	SH12	53-58 HRC	Cold shearing blade
3	65Mn	57-62 HRC	Cold shearing blade
4	6CrW2Si	42-58 HRC	Cold or intermittent heat shearing blade
5	3CrW2Si	40-50 HRC	Hot shearing blade
6	H13	40-55 HRC	Hot and cold shearing blade
7	H13K	51-56 HRC	Cold shearing blade
8	HMB	42-56 HRC	Hot and cold shearing blade



Sliding Plate

Sliding Plate is an important product for steel rolling mill, install two side of the mill housing and roller bearing. When the roller sliding on mill housing, the sliding plate will protect the mounting surface and guidance.

The two important index for sliding plate is the wear resistance and corrosion resistance, the hardness range of the sliding plate is 58-64HRC. Expect the wear resistance and corrosion resistance, the sliding plate must have good toughness to absorb impact, so the single material can't meet the harsh usage requirement, we produce with two different material and combine them with plasma spray welding process.



Other Products for Steel Rolling Mill



Rubber Roll



Furnace Roll



Bearing Housing



Bearing Bush



Mandrel



Apron Roller