

# MATERIAL HANDLING MACHINE

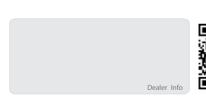






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www.sanyglobal.com

# **SANY Material Handling Machine**

The material handling machine has been widely used in steel plants, ports, stacking yards and warehouses to load or stack steel scrap and bulk cargoes as well as to pick up, hoist or cut materials. SANY Material Handling Machine has been applied multiple in–house developed technologies in the areas of energy saving and control, hydraulic linkage, anti–rollover protection, malfunction automatic detection and data real–time display to back up the world leading performance.

Faster Operation

Equipped with Kawasaki large displacement main pump, high efficiency main valve and reducer, can realize fast operation.

Wider Application

Excellent load capacity and optional boom length, adapt to a wider range of operating conditions.

Stronger Power

high torque engine and motor, adopted mature chassis, reliable structure.

More Savings

Controller has positive flow hydraulic system. Engine match with main pump perfectly and energy consumption reduced by 10%.

## SANY MATERIAL HANDLING MACHINE

#### **SMHW30**



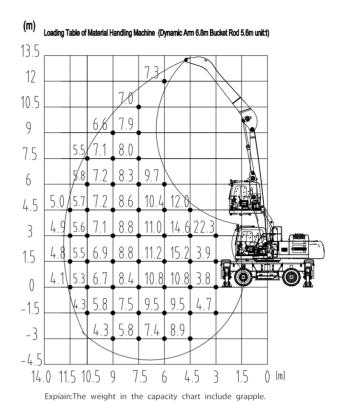
#### **Brief Introduction**

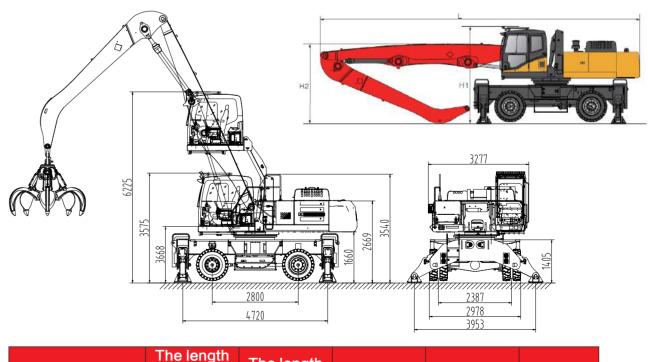
Sany 30t Material Handling machine mainly apply to various bulk cargoes grab operation. The whole machine is light and flexible, stable, efficient.

#### **CONFIGURATION PARAMETER**

		Model	Mitsubishi D06FRC-TAA
		Power	147kW/2100rpm
Power	Engine	Torque	750Nm//1350rpm
system		Emission	CHN III
		Oil tank	465L
	Tread	width	2387mm
	Whee	elbase	2800mm
Chassis	Vertica	ıl span	4720mm
Cliassis	Horizon	tal span	3953mm
	Turning	radius	8600mm
	Maximum t	ravel speed	20km/h
	Contro	ol type	Electronic control positive flow system
	Main pump	Model	Rexroth A28VO130E71CPB/10DRVG3R12F1B2S40-0
	Main pump	Rated flow	2X260L/min
Hydraulic	Main	valve	Kawasaki KMX15RB/B45606-EV1
system	Red	ucer	Sauter GS14D20C.0
system	Movable boom cylinder		Hengli JSY26.5-DB
	Stick o	ylinder	Zhongxing ZX200.3.1B
	Maximum sys	stem pressure	32MPa
	Hydrauli	c circuit	230L
Slewing	Slewing	bearing	Sauter SSF1405/40CWH II
mechanism	<del> </del>	ewing speed	8rpm
Operation Cabin	Lifting	height	2650mm
			12m
	Boom sp	ecification	Maximum working radius
			Maximum working height
Operation basic		orking radius	11.5m
parameter		orking height	12m
		orking depth	-3 m
	Theoretical load o point(inclu	n maximum radius ding grab)	5t

## Working range





	The length of movable hinge point	The length of stick point	L	H1	H2
Boom combination(standard)	6.8m	5.6m	5.85m	3.61m	3m

## **SMHC35**



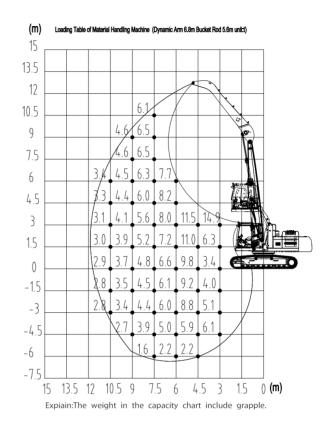
#### **Brief Introduction**

Sany 35t Material Handling machine mainly apply to grab and loading or unloading operation for waste steel and bulk, with high efficiency, super high performance, safety and reliability.

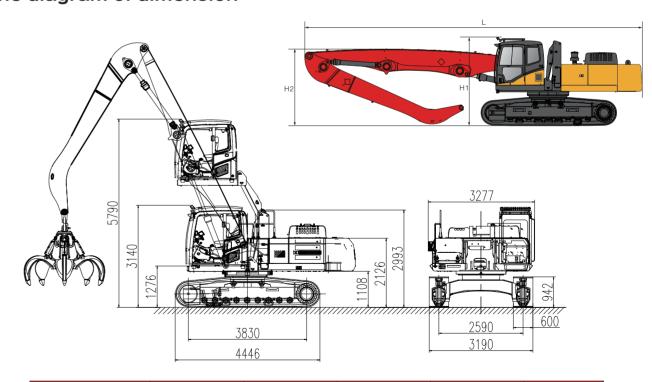
#### **CONFIGURATION PARAMETER**

			T		
			Mitsubishi D06FRC-TAA		
		Maximum power	147kW/2100rpm		
Power system	Engine	Maximum torque	750Nm//1350rpm		
3,300111		Emission	CHN III		
		Oil tank	465L		
	Working	rail span	2590mm		
	Tread	width	3830mm		
Moving system	Track	width	600mm		
	Maximum 1	travel speed	5km/h		
	Contro	ol type	Electronic control positive flow system		
	M. :	Model	Kawasaki K7V125DTP1N9R-0E05-1V		
	Main pump	Rated flow	2X260L/min		
	Main	valve	Kawasaki KMX15RB/B45217A-V		
Hydraulic system	Red	ucer	Sauter GS14D20C.0		
	Movable bo	oom cylinder	Hengli JSY26.5-DB		
	Stick o	cylinder	Zhongxing ZX200.3.1B		
	Maximum sy	stem pressure	32MPa		
	Hydraulio	oil tank	230L		
Clausin as managla an isma	Slewing	bearing	Sauter SSF1405/40CWH II		
Slewing mechanism	Maximum sl	ewing speed	8rpm		
Operation cabin	Lifting	height	2650mm		
			12m		
	Boom sp	ecification	Maximum working radius		
			Maximum working height		
Operation basic	Maximum w	orking radius	10.5m		
parameters	Maximum w	orking height	10.5m		
	Maximum w	orking depth	-6m		
		n maximum radius Iding grab)	3.4t		

#### Working range



The diagram of dimension



	The length of movable hinge point	The length of stick point	٦	H1	H2
Boom combination(standard)	6.8m	5.6m	10.4m	3.14m	2.58m

## **SMHC45**



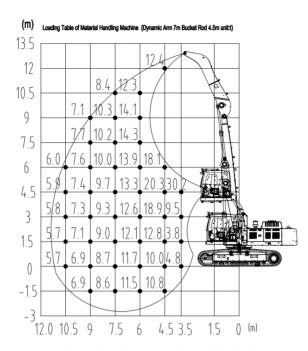
#### **Brief Introduction**

Sany 45t Material Handling machine mainly apply to grab and loading or unloading operation for waste steel and bulk, with high efficiency, super high performance, safety and reliability.

#### **CONFIGURATION PARAMETER**

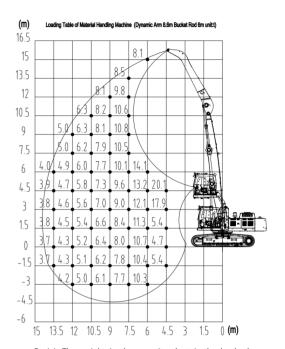
		Maximum power		212kW/	2000rpm	
Power	Engine	Maximum torque	1080Nm//1500rpm			
system	_	Emission		CH	N III	
		Oil tank		54	10L	
	Working	rail span		259	0mm	
Maying system	Tread	width		414	0mm	
Moving system	Track	width		600	)mm	
	Maximum	travel speed		5kı	m/h	
	Contro	ol type	Electron	nic control p	positive flow	system
	Main pump	Model	Kawas	aki K5V160	DDTH1SXR-9	T46-BV
	Walli Pallip	Rated flow		2X320	DL/min	
	Main	valve			5RB/B45606	
Hydraulic system	Red	lucer	Kawasaki M5X180CHB-10A-6RA/265- RG20D25			
	Movable bo	Z	Zhongxing Z	XSMHW40.1	.3	
	Stick of	Z	hongxing Z	XWMHW40.1	1.4	
	Maximum sy	stem pressure	32MPa			
	Hydraulio	c oil tank	340L			
Slewing mechanism	Slewing	bearing	Sauter SSF1405.50CWHII			
Siewing meenamism	Maximum sl	lewing speed	8rpm			
Operation cabin	Lifting	height		265	0mm	
				1m		łm
	Boom sp	ecification			Movable b	oom: 8.6m
				4.5 m	Stick: 6m	NI d
Operation basis		of boom in the slewing form	Upper hinge	Nether hinge	Upper hinge	Nether hinge
Operation basic parameters	Plat		point	point	point	point
- 3. 3. 116 613		orking radius	10.5m	10.5m	13.5m	13.5m
		orking height	10.5m	12m	13.5m	15m
		orking depth	-3m	-1.5m	-6m	-3m
		n maximum radius Iding grab)	6t	6t	3.9t	4t

#### Working range



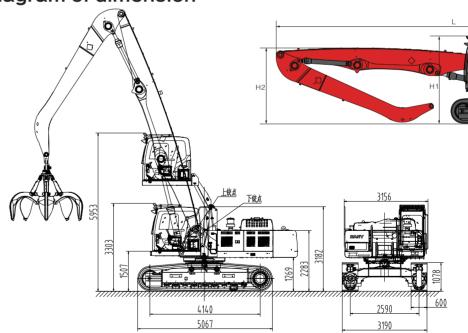
Expiain:The weight in the capacity chart is the load when arm is installed at the lower hinge point.

The weight in the capacity chart include grapple.



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The weight in the capacity chart include grapple.



	The length of movable hinge point	The length of stick point	L	H1	H2
Boom combination 1	7m	4.5m	11m	3.31m	2.76m
Boom combination 2	8.6m	6m	12.58m	3.31m	2.76m

#### **SMHW48**



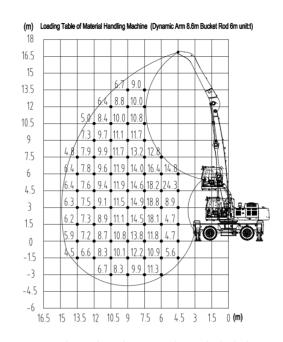
#### **Brief Introduction**

Sany 48t Material Handling machine widely apply to loading and unloading bulk material at railway or river terminals, with various boom combination option to meet different working conditions, wider working range, high efficiency.

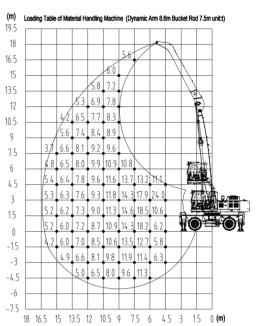
#### **CONFIGURATION PARAMETER**

		Model				lsu	zu GH-6	HK1XKSC	-01			
		Power					212kW/2	2000rpm				
Power system	Engine	Torque		1080Nm//1500rpm								
system		Emission	CHN III									
		Oil tank					54	lOL .				
	Tread	width					2445	mm				
	Whee	elbase					3200	)mm				
Power	Vertica	al span					5300	)mm				
system	Horizon	tal span					4600	)mm				
	Turning	g radius					6000	)mm				
	Maximum t	travel speed					20k	m/h				
	Contro	ol type			El	ectronic	control p	ositive f	low syste	em		
	Main nathan	Model				Kawasak	i K5V160	DTP1X7F	-0E40-BV			
	Main pump	Rated flow					2X320	)L/min				
I bealmandia	Main	valve				Kawasa	aki KMX1	5RB/B456	606-EV1			
Hydraulic system	Red	ucer		Kawasaki M5X180CHB-10A-6RA/265-RG20D25								
System	Movable bo	om cylinder		Zhongxing ZXSMHW40.1.3								
	Stick o	cylinder		Zhongxing ZXWMHW40.1.4								
		stem pressure					321	ИРа				
	Hydraulio	oil tank					34	l0L				
Slewing	Slewing	bearing				Kawa	asaki SSF	1405.500	WHII			
mechanism	Maximum sl	ewing speed					8rı	om				
Operation cabin	Lifting	height					2650	Omm				
			14	ŀm	16	śm	17	m	18	3m	20	)m
	Poom on	ecification	Movable	e boom:	Movable	e boom:	Movable	e boom:	Movable	boom:	Movable	boom:
	роош зр	ecincation	8.6	5m	8.0	5m	9.6	óm –	10.5	5 m		5 m
			Stick: 6m Stick: 7.5m Stick: 7.5m Stick: 7.5m Stick:					Stick:	9.5m			
Operation	Assembly hi	nge point of	Upper	Nether	Upper	Nether	Upper	Nether	Upper	Nether	Upper	Nether
basic		lewing platform	hinge	hinge	hinge	hinge	hinge	hinge	hinge	hinge	hinge	hinge
parameters			point	point	point	point	point	point	point	point	point	point
		orking radius	13.5m 13.5m 15m 15m 16.5 m 16.5 m 16.5 m 16.5 m 19.5 m					18m				
		orking height	12m	13.5m	12m	16.5m	13.5m	16.5m	15m	16.5m	16.5 m	18m
		orking depth	-4.5m	-3 m	-6m	-4.5 m	-6m	-4.5 m	-6m	-4.5 m	-9m	-6m
		d on maximum ncluding grab)	6.4t	6.4t	5.3t	5.4t	4.4t	4.4t	4.4t	4.5t	3.1t	3.8t

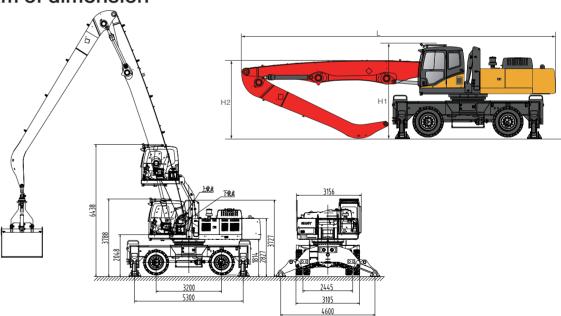
#### Working range



Expiain:The weight in the capacity chart is the load when arm is installed at the lower hinge point. The weight in the capacity chart include grapple.



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	The length of movable hinge point	The length of stick point	L	H1	H2
Boom combination 1	8.6m	6m	12.24m	3.708m	3m
Boom combination 2	9.6m	7.5m	13.32m	3.708m	5.2m
Boom combination 1	10.5 m	9.5m	14.23m	3.708m	6.1m

#### SMHC50-D



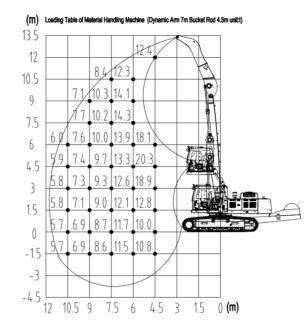
#### **Brief Introduction**

Sany 50D Materials Handler is pure electric machine. Equipped with different grabs to apply to the loading and unloading of bulk materials and waste steel. Driving by motor, zero exhaust, more environmental and saving 50% cost comparing internal combustion engine machine.

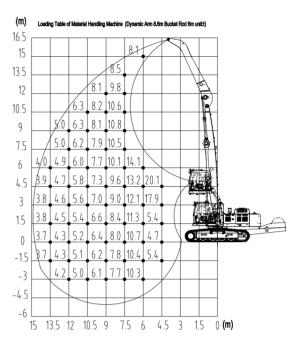
#### **CONFIGURATION PARAMETER**

Power system	Motor	Rated power		160kW/	1480rpm	
rower system	MOLOI	Voltage		380V,	50Hz	
		Start type		Soft	Start	
	Working	rail span		259	0mm	
Maring system	Tread	width		414	0mm	
Moving system	Track	width		600	)mm	
	Maximum	travel speed		5kı	m/h	
	Contro	ol type	Electron	ic control p	positive flow	/ system
	Main augus	Model	Kawas	saki K5V200	DTH1X5R-O	E30-BV
	Main pump	Rated flow		2X390	DL/min	
	Main	valve	Kaw	asaki KMX1	5RB/B45606	-EV1
Hydraulic system	Red	Kawasaki I	M5X180CHB	-10A-6RA/26	5-RG20D25	
	Movable bo	Zhongxing ZXSMHW40.1.3				
	Stick of	ZI	hongxing Z	XWMHW40.1	1.4	
	Maximum sy	stem pressure	32MPa			
	Hydraulio	c oil tank	340L			
Slewing mechanism	Slewing	bearing	Sauter SSF1405.50CWHII			
Slewing mechanism	Maximum sl	lewing speed	8rpm			
Operation cabin	Lifting	height		265	0mm	
	Boom sp	ecification	Movable	boom: 7m	Movable b	oom:8.6m
			Stick: 4.5 m		Stick: 6m	
	Assembly hinge point	of boom in the slewing	Upper	Nether	Upper	Nether
Operation basic		form	hinge	hinge	hinge	hinge
parameters	NA		point	point	point	point
	Maximum v		10.5m	10.5m	13.5m	13.5m
		orking height	10.5m	12m	13.5m	15m
		orking depth on maximum radius	-3m	-1.5m	-6m	-3m
		iding grab)	6t	6t	3.9t	4t
	L Point(Incid	iding grab)			I	

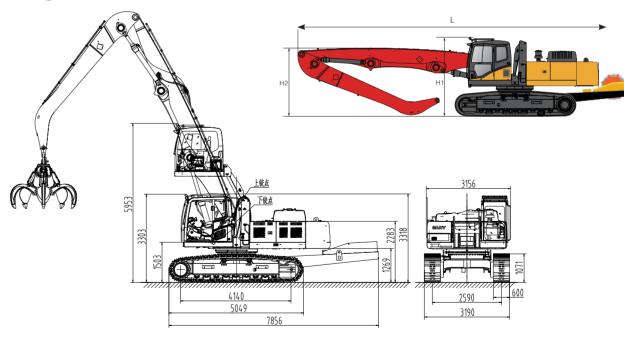
#### Working range



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	The length of movable hinge point	The length of stick point	٦	H1	H2
Boom combination 1	7m	4.5 m	12.8m	3.31m	2.76m
Boom combination 2	8.6m	6m	14.38m	3.31m	2.76m

#### **SMHC70**



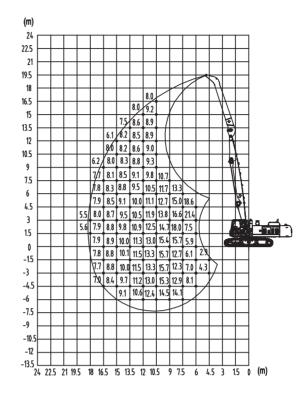
#### **Brief Introduction**

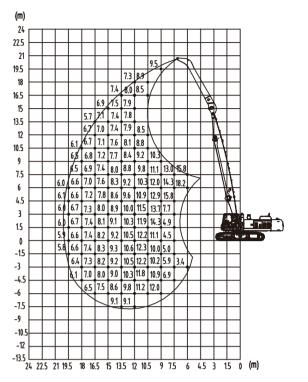
Sany 70t Material Handling machine equips with dual powers, mainly apply to bulk materials loading and unloading in river terminals. It has big double shell grab and various boom combination, working wider range, high efficiency, unloading completely.

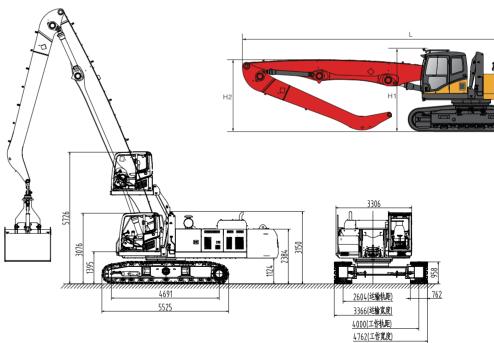
#### **CONFIGURATION PARAMETER**

		Maximum power	264kW/2	2100rpm		
	Engine	Maximum torque	1500Nm/	1500rpm		
		Emission	CHN	N III		
Power system		Oil tank	60	0L		
		Model	Chang Diantou	ı Y250-380-407		
	M-4	Rated power	250kW/1	1490rpm		
	Motor	Voltage	380V,	50Hz		
		Start type	Soft s	tarting		
	Working	rail span	4000	)mm		
Maying system	Tread	width	4691	Imm		
Moving system	Track	width	762	mm		
	Maximum t	travel speed	3kr	m/h		
	Contro	ol type	Electronic control p	oositive flow system		
	Main pump		Engine connect pump: Kawasaki K5V200DTH1X5R-OE30-BV Motor connect pump: Kawasaki K3V280DTH1GZR-0E82-BVB			
Hydraulic system		Rated flow		ith engine : 2X390L/min vith motor: 2X417L/min		
Try dradine system	Main	valve	Park M02560PH-A			
	Red	ucer	Kawasaki M5X250CHB-10A-15A/275-RG27D25E			
	Movable bo	om cylinder	Zhongxing ZXSMHC70.8.3.1			
	Stick o	ylinder	Zhongxing ZXSMHW40.1.3			
	Maximum sys	stem pressure	34.3	МРа		
	Hydraulio	oil tank	50	0L		
Slewing	Slewing	bearing	Sauter SSf15	530/60CWHV		
mechanism	Maximum sl	ewing speed	8rp	om		
Operation cabin	Lifting	height	2650	)mm		
			18m	20m		
	Boom sp		Movable boom: 10.5 m	Movable boom: 12.5 m		
			Stick: 7.5 m	Stick: 7.5m		
Operation basic	Maximum w	orking radius	16.5m	19.5m		
parameters		orking height	15m	19m		
	Maximum w	orking depth	-7.5m	-7.5m		
		n maximum radius iding grab)	8.0t	6.1t		

#### Working range







	The length of movable hinge point	The length of stick point	L	Н1	H2
Boom combination 1	10.5m	7.5m	15300mm	3140mm	6800mm
Boom combination 2	12.5m	7.5m	17560mm	3140mm	6230mm

# **TECHNICAL PARAMETER**

SANY MATERIAL HANDLING MACHINE

Technical parameter		SMHW30	SMHC35	SMHC45	SMHW48	SMHC50-D	SMHC70
Engine	Model	Mitsubishi	Mitsubishi	Isuzu GH-6HK1XKSC-01	Isuzu GH-6HK1XKSC-02	Chang Diantou	Dongfeng Cummins
	Power	147kW/2100rpm	147kW/2100rpm	212kW/2000rpm	212kW/2000rpm	160kW/1480rpm	264kW/2100rpm
	Torque	750Nm//1350rpm	750Nm//1350rpm	1080Nm//1500rpm	1080Nm//1500rpm		1500Nm/1500rpm
	EMission	CHN III					
	Oil tank	465L	465L	540L	540L		600L
Chassis	Tread width	2387mm	3830mm	4140mm	2445mm	4140mm	4691mm
	Wheelbase	2800mm			3200mm		
	Vertical span	4720mm			5300mm		
	Horzontal span	3953mm			4600mm		
	Turning radius	8600mm			6000mm		
	Maximum travel speed	20km/h	5km/h	5km/h	20km/h	5km/h	3km/h
Hydraulic system	Control type	Electronic control positive How system					
	Main pump model	Rexroth	Kawasaki	Kawasaki	Kawasaki	Kawasaki	Kawasaki
	Main pump Rated flow	2×260L/min	2×260L/min	2×320L/min	2×320L/min	2×390L/min	When use Engine 2 • 390L/min When use electromotor 2 • 417L/min
	Main valve	Kawasaki	Kawasaki	Kawasaki	Kawasaki	Kawasaki	Park M02560PH-A
	Reducer	Sauter	Sauter	Kawasaki	Kawasaki	Kawasaki	Kawasaki
	Movable boom cyhnder	Hengli	Hengli	Zhongxing	Zhongxing	Zhongxing	Zhongxing
	Stick cylinder	Zhongxing	Zhongxing	Zhongxing	Zhongxing	Zhongxing	Zhongxing
	Maximum system pressure	32MPa	32MPa	32MPa	32MPa	32MPa	34.3MPa
	Hydraulic oil tank	230L	230L	340L	340L	340L	500L
Slewing mechanism	Slewing bearing	Sauter	Sauter		Sauter	Sauter	Sauter
	Maximum slewing speed	8rpm	8rpm	8rpm	8rpm	8rpm	8rpm
Operation cabin	Lifting height	2650mm	2650mm	2650mm	2650mm	2650mm	2650mm

## SANY MATERIAL HANDLING MACHINE

## **OPTIONAL ATTACHMENTS**







Plum blossom grab

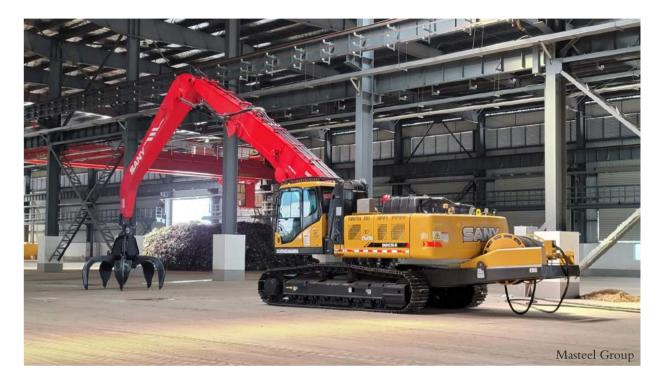
Double shell grab

Wood log grab

Grab configuration												
Material t	Density (t/m³)	Grab type	Grab model	Capacity ( m³)	Weight(t)							
Waste material	Steel, rubber	1	Plum blossom grab	SLM1000	1	2.12						
Super light density material	Fertilizer、 fodder	0.6	Double shell grab	SLS5006	5	2.97						
Light density material	Coal	0.8	Double shell grab	SLS3508	3.5	2.77						
Middle density material	Sand, grit	1.6	Double shell grab	SLS2525	2.5	2.42						
Strong density material	Iron ore	2.4	Double shell grab	SLS1525	1.5	2.34						
Wood log	3m long	0.8	Wood log grab	SWY2000	2m2	2.06						

The data above maybe be changed due to constant update of technology. The specific parameters shall be subject to the contract.

# **Shots from the Steel Factories**













# SANY MATERIAL HANDLING MACHINE

# **Shots from the Railway**









# **Shots from the Ports**











# **Shots from the Jobsites**



SANY MATERIAL HANDLING MACHINE





















# **Shots from the Jobsites**

SANY MATERIAL HANDLING MACHINE















# **SERVICE**

## **Carefree Service**



Support Service: +86-4008-87-8318

#### Service vision:

Exceed customer expectation and industry standards.

#### Service mission:

All for client, create value for customer

#### Service commitment:

- (1) Reply customer within 15 minutes.
- (2)Reach main service area within 2 hours.
- (3)Solve general problems and provide regular parts within one day.
- (4)Solve customer complaints with two days. (5)Solve all issues within 7 days.

#### Service value:

Innovation、Excellence、Clients、Cooperation、Respect、Passion、Honesty、Responsibility

#### Service advantage:

"Professional service power": Sany has offices in over 200 countries and regions, with 11 subsidiaries and 35 service points in domestic together. Setting up the parts warehouse can cover the world range, Forming the four in one of parts supply and guarantee system by headquarters warehouse, regional center warehouse, provincial and prefecture—level city, Accommodating 80000 kinds of parts to ensure fully customer service requirements in time.

"Professional operation and maintenance system": Sany has invested tens of million of RMB to build "Sany Customer cloud APP", which enable customers to monitor the running status and parameters of the equipment in real time anywhere in the world. In addition, it provides online consultation, community communication, accessories mall, one-click repair, maintenance reservation, product knowledge learning and other value-added service. So the customer can easily enjoy the highest quality of service in any place of the world.



