



Quality Changes the World

REACH STACKER



Quality Changes the World



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B03S2CHAP1-RS

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SANY REACH STACKER ACHIEVEMENT OF PROFESSIONAL QUALITY

COMPREHENSIVE
PRODUCT SERIES
01

SAFE AND RELIABLE
03

HIGH-EFFICIENCY
05

ENERGY-SAVING
07



COMPREHENSIVE PRODUCT SERIES

World class, No. 1 logistics equipment supplier in China

SANY Reach Stacker is mainly used in ports, wharfs and storage yards to handle, transfer and stack various container and other materials. It is safe, reliable, and energy saving embedded with several international advanced core technology such as dynamic anti-rollover protection, anti-collision of the spreaders, vertical lift of the booms, patent technology of power driven counterweight, automatic fire extinguishing technology. All the performance indexes are world leading, making our products your most reliable choice.

With products of several series like heavy, overweight hurdling, light, empty container and off-road reach stackers, SANY Reach Stacker can accommodate to the use of various industries as logistics, energy, chemical engineering, wind power and forestry, bringing you the maximum economic benefits.



SAFE AND RELIABLE

Joint design of China and Germany, excellent quality assured

1 Dynamic Anti-Rollover Protection Technology

Adopt intelligent control technology, detect equipment's real-time working parameters and automatically adjust the operating status under dangerous conditions to prevent rollover. It can achieve safe and worry-free operation.

2 Anti-collision Technology of the Spreaders while Revolving

Intelligent control of the positions of spreaders and booms can effectively prevent collision among the spreader, frame and boom, avoiding accidents by faulty operation and greatly reducing labor intensity.

3 Automatic Fire Extinguishing Technology

The pipeline network automatic fire extinguisher with strong spray can realize fire alarm, anti-flaming and fire extinction functions. The fireproof performance is steady and reliable.

4 Solid Tyre Suspension Technology

Provide solid tyre flexible damping system according to customers' needs to achieve safer operation and lower maintenance cost. Combine with flexible suspension technology, it significantly reduced the shocking load, raised operation comfort and prolonged component longevity.

5 Automatic Braking Technology upon Reversing

Adopting technologies like laser scanning and graphic identification, the machine can precisely detect people or obstacles within the driving route and then brakes automatically to prevent accidents. It is highly intelligent with high safety.

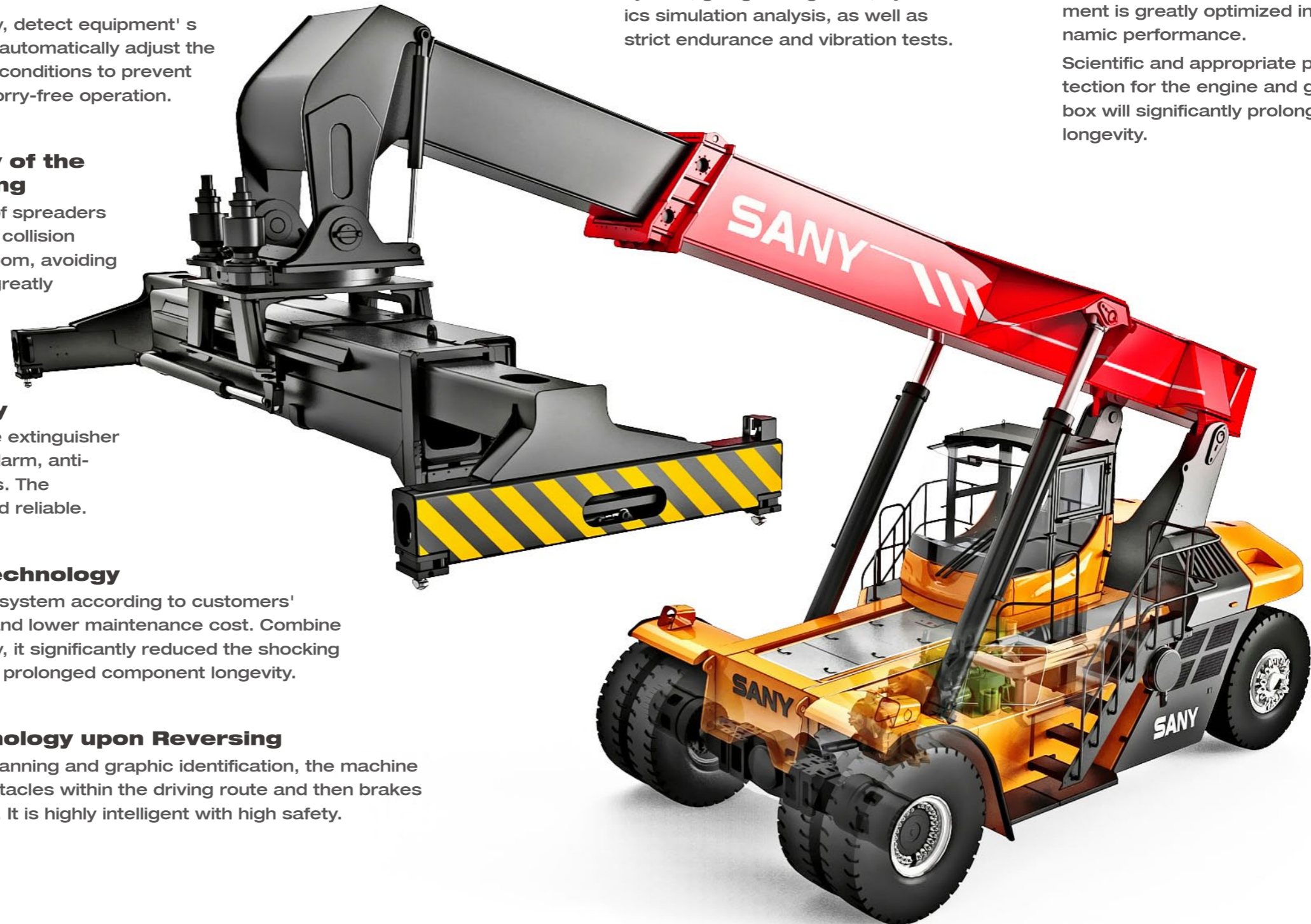
6 Reliable Structure Design

Designed by China and Germany together, the equipment is assured to be highly reliable and durable by adopting full-digit prototype design system, going through FEA, dynamics simulation analysis, as well as strict endurance and vibration tests.

7 Reliable Power System

Using world famous brand engines like VOLVO and CUMMINS which are reliable in quality and strong in power, combining the advanced power matching and control technology, the equipment is greatly optimized in dynamic performance.

Scientific and appropriate protection for the engine and gearbox will significantly prolong their longevity.



HIGH-EFFICIENCY

- 1 Vertical Lifting Technologies of Boom**

The intelligent controller monitors the boom's parameters at real-time, and automatically adjust the position of the boom to ensure vertical lifting of the spreader, which makes stacking safer and improves work efficiency significantly.
- 2 Efficient Control Technology**

The centralized joystick has inching control function. It can realize fine tuning to millimeter precision easily. All the spreaders' motions are under proportional control, providing an experience of man-machine unification. The machine also has multi-motion linkage design so that it can operate faster and more efficiently.
- 3 Comfortable Operation Environment**

The operator-oriented design includes a broad view of work condition. The controlling devices are placed in reasonable position to ease fatigue of operators.
- 4 Bulk Container Handling Technology**

The Bulk Reach Stacker broke through the bottleneck of bulk container handling and simplified the handling process, dramatically improved work efficiency and environmental protection.



ENERGY-SAVING

1 Hydraulic Load Sensing System

Automatically adjust the pump displacement according to the load, realizing high precision flow control. The effect of energy saving and consumption reduction are remarkable.

2 Dynamic Power Matching Control System

Automatically recognize dynamic power according to load change and adjust engine speed accordingly. The output power automatically accommodate to load and work conditions, greatly reducing energy consumption.

3 Design for Lighter

Optimize the structure to make it lighter and stronger.



H8 GE & CN TOP TECHNOLOGIES

INTEGRATION & DISTINGUISHED

SANY SRSC45H8 Reach Stacker incorporated the cutting-edge technology from China and Germany, owing 8 core advantages of highly energy-saving, high efficiency, high security, high reliability, highly comfortable, H-shaped brand new spreader, high maintainability and high return. The performances have been improved in all aspects, starting a new chapter of Reach Stacker design.

Highly energy-saving: world's initiative energy reclaiming system, comprehensively save energy up to 25%.

High efficiency: adopt multi-motion linkage design, spreader motion ratio control technology and micro-move control technology; the equipment can be easily controlled.

High security: dynamic anti-rollover protection system, automatic fire extinguishing system, solid tyre and hydro-pneumatic suspension system, patent technology of mobile counterweight, all meeting European safety standards.

High reliability: water identification technology of the connectors, CAN bus communication technology, digital platform design technology; German design, precise and reliable.

Highly comfortable: concentrated joystick, 360 degree view, full-range headlamp, steering dynamic response, new-style pedal design, all providing a comfortable experience.

H-type Spreader: single main beam patented technology; self-weight of spreader is less than 7t; the components passed through millions of times equivalent fatigue test; performance steady and reliable.

High maintainability: spacious maintenance room, preventative maintenance system, over 200 malfunction diagnosis programs.

High return: saving energy by 25%, saving \$12,888 per year if 90,000 containers are stacked per year.



ATTACHMENT OPTIONS

All for customers, all from innovation

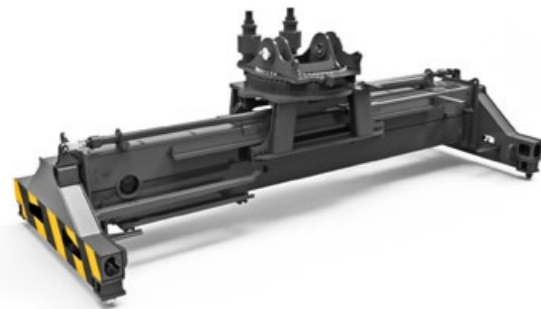
45t Container Spreader

SANY 45T container spreader is used in reach stacker to stack, load or unload ISO standard 20', 40' and 45' containers. Based on market needs, Sany Port Machinery has developed numerous container spreaders of reasonable structure with good design, strong safety protection function and cost effective, sufficiently meeting different requirements of the customers.

SDJ450H: New model of spreader, light weight design, more energy saving and lower fuel consumption

Rated capacity: 45t

Application: ISO 20'/40'/45' Containers



SDJ450: SANY classic spreader

Rated capacity: 45t

Application: ISO 20'/40'/45' Containers



Empty Container Spreader

SANY SDJE100 spreader is applicable to the transfer and stacking of ISO standard 20', 40' and 45' container or refrigerator. It is the first of its kind in China. Flexible, convenient and economic, it will be your best choice.

SDJE100: Empty container stacking, flexible and convenient

Rated capacity: 10t

Application: ISO 20'/40'/45' Containers



Combined Spreader

SANY SDJE450P spreader is applicable to the transfer and stacking of ISO standard 20', 40' and 45' container or the transfer of EN284 non-stacking container. It is of multiple uses, meeting the European and American intermodal working mode requirement.

SDJ450P: Workable at multi-conditions, quick response to container-aligning operation

Rated capacity: 45t

Application: ISO 20'/30'/35'/40'/45' Containers
EN284 non-stacking containers



Log Spreader

SANY SWG310 spreader is applicable to transfer, load and unload log or other special materials. This product has perfectly solved the difficulty of transporting and loading specific materials such as log, bringing high profit for customers

SWG310: Highly efficient log grabs

Rated capacity: 31t

Application: wood



Tilt Spreader

SANY SDJS320 spreader is designed for Reach Stacker to transport, load and unload bulk materials. This product has perfectly solved the difficulty of transporting and loading bulk materials. It fills in the domestic blank, breaks through the bottleneck of loading bulk materials, and highly improves the efficiency and environment-protection performance.

SDJS320: A born bulk cargo handling expert

Rated capacity: 32t

Tilt angle: 0~50°

Application: ISO 20' Containers



Tube Spreader

SANY tube spreader applies to transfer and hoist not only tube and pipe like material, but also container or bulk cargo.

STP450

Rated capacity: 45t

Application: Pipeline, ISO 20'/40' Containers



STH350

Rated capacity: 35t

Application: Large tube



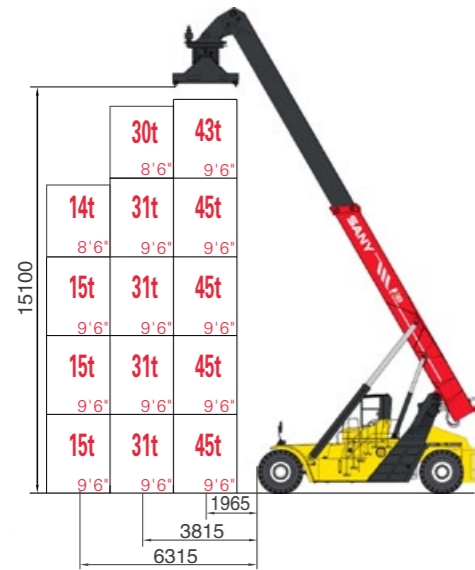
SDJ400G

Rated capacity: 40t

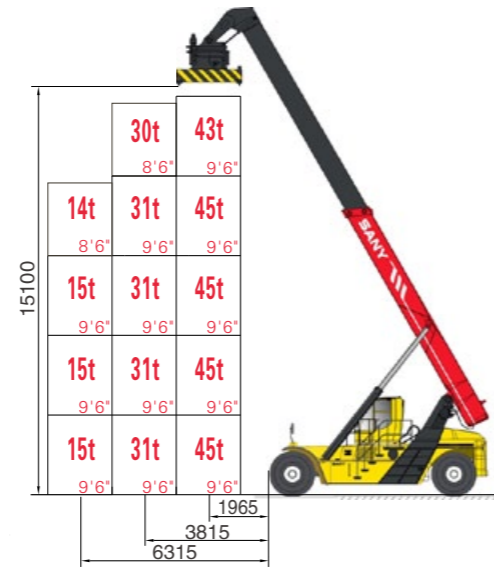
Application: Large tube, bulk cargo



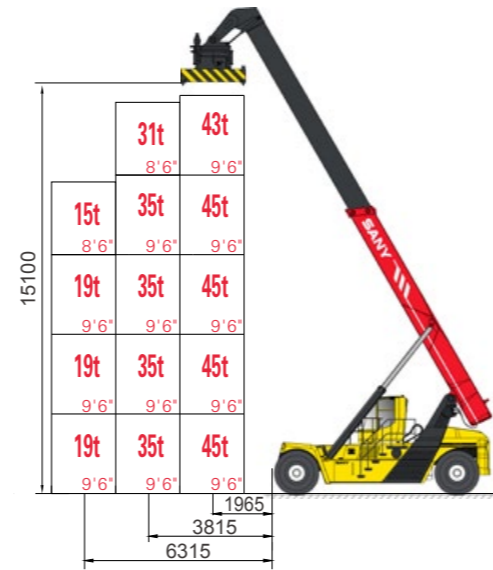
LOAD CAPACITY DIAGRAM



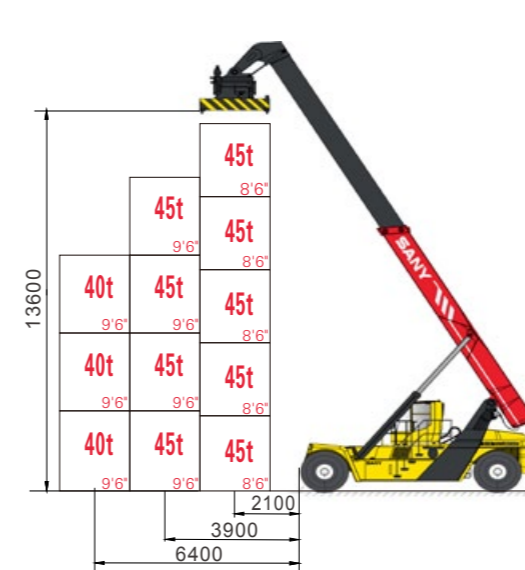
SRSC45H SERIES
CONTAINER REACH STACKER



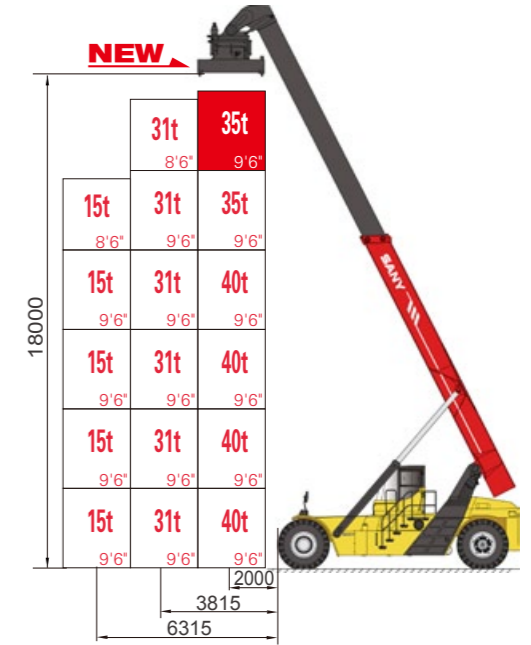
SRSC45C SERIES
CONTAINER REACH STACKER



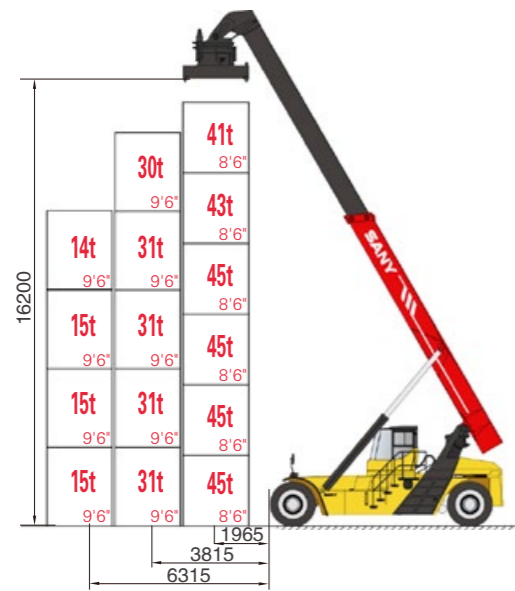
SRSC4535H SERIES HEAVYWEIGHT
CONTAINER REACH STACKER



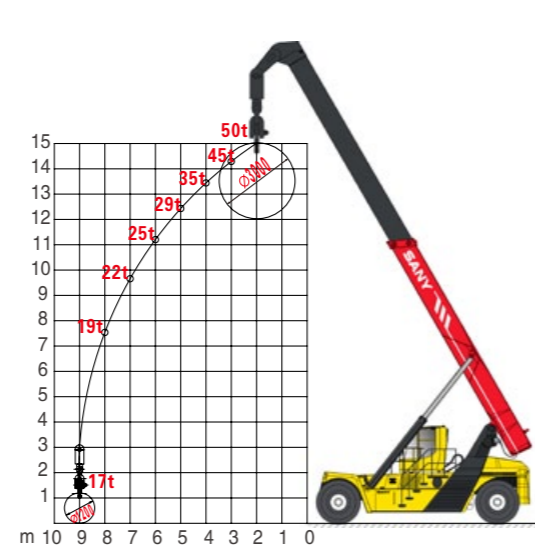
SRSC4545H SERIES OVERWEIGHT
CONTAINER REACH STACKER



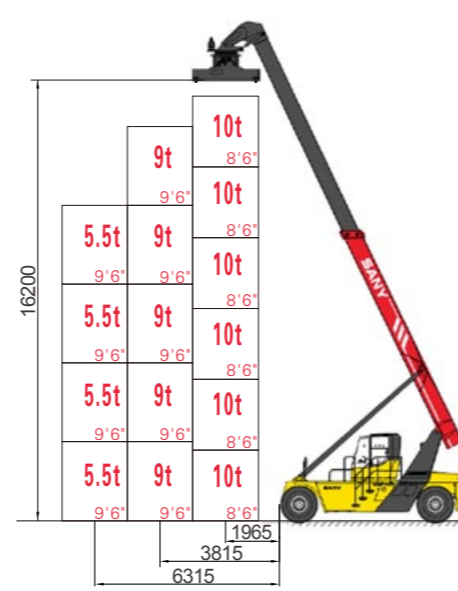
SRSC40C7-6H SERIES
CONTAINER REACH STACKER



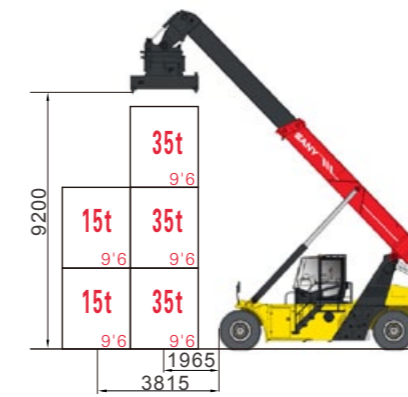
SRSC45H-6
CONTAINER REACH STACKER



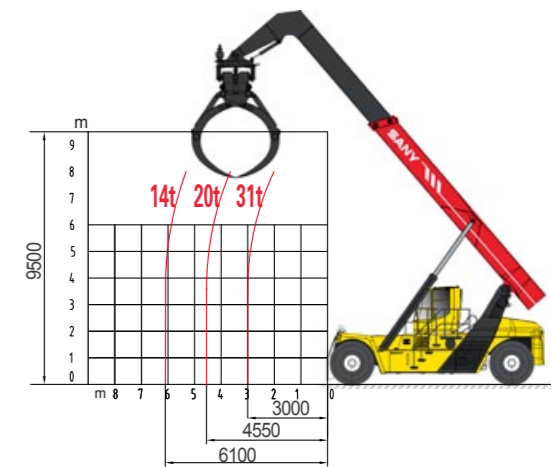
SRST50H-H
TUBE REACH STACKER



SRSC1009-6E EMPTY
CONTAINER REACH STACKER

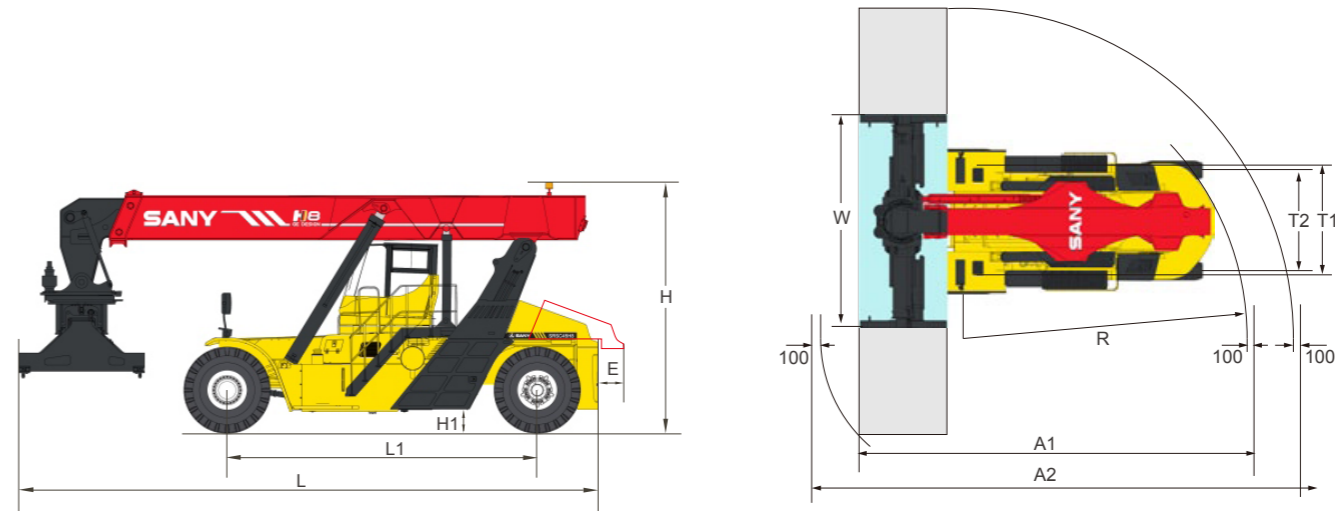


SRSC3515-3 LIGHTWEIGHT
CONTAINER REACH STACKER



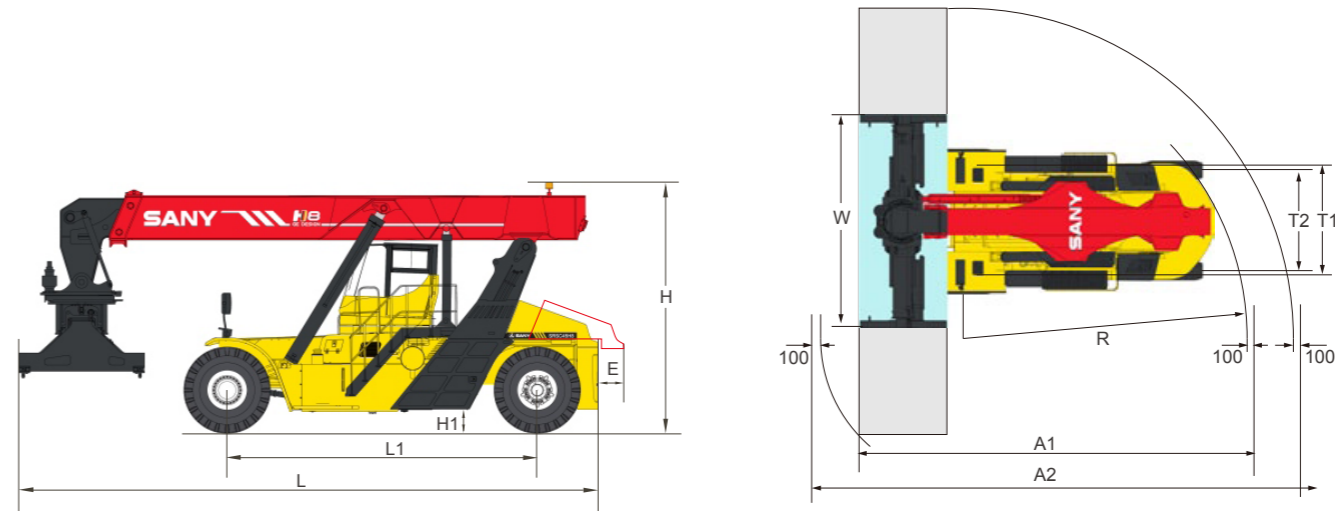
SRSW31H
LOG REACH STACKER

TECHNICAL PARAMETER



Parameter		Unit	SRSC45H8	SRSC45H1	SRSC45H2	SRSC45H3	SRSC45H4	SRSC45C30	SRSC1009-6E
Engine	Type	-	VOLVO TAD1340VE	VOLVO TAD1151	CUMMINS QSM11	VOLVO TAD1171VE	CUMMINS QSL9	VOLVO TAD1340VE	CUMMINS QSB 6.7
	Rated power	kW/rpm	256/2100	265/2100	250/2100	265/2100	261/2100	256/2100	164/2300
	Max. torque	Nm/rpm	1770/1260	1780/1260	1674/1400	1785/1260	1628/1500	1770/1260	949/1400
	Exhaust standard	-	II Stage	III Stage	III Stage	IV Stage	IV Stage	II Stage	III Stage
Gearbox	-	DANA 15.5HR36000	DANA 15.5HR36000	DANA 15.5HR36000	DANA 15.5HR36000	DANA 15.5HR36000	DANA 15.5HR36000	DANA 15.5HR36000	CLARK 13.7HR32334
Drive Axle	-	Kessler D102 PL341	Kessler D102 PL341	Kessler D102 PL341	Kessler D102 PL341	Kessler D102 PL341	Kessler D102 PL341	Kessler D102 PL341	Kessler D81 PL488
Spreader	Type	-	SDJ450H	SDJ450H	SDJ450H	SDJ450H	SDJ450H	SDJ450F	SDJE100
	Side shift range	mm	±800	±800	±800	±800	±800	±800	±800
	Rotary angle	deg	+105/-195	+105/-195	+105/-195	+105/-195	+105/-195	+105/-195	+105/-195
	Tilt angle	deg	-	-	-	-	-	-	-
	Self-weight	t	6.95	6.95	6.95	6.95	6.95	7.8	4.7
Application	-	ISO 20'/40'/45' Containers	ISO 20'/40'/45' Containers	ISO 20'/40'/45' Containers	ISO 20'/40'/45' Containers	ISO 20'/40'/45' Containers	ISO 20'/40'/45' Containers	ISO 20'/40'/45' Containers	ISO 20'/40'/45' Containers
Boom	Max. Hoisting height	mm	15100	15100	15100	15100	15100	15100	16200
	Tilt angle	deg	0-60	0-60	0-60	0-60	0-60	0-60	0-64.5
Tyre	-	18.00-25 40PR	18.00-25 40PR	18.00-25 40PR	18.00-25 40PR	18.00-25 40PR	18.00-25 40PR	18.00-25 40PR	14.00-24 28PR
Max. Hoisting speed (Non-load/Load)	mm/s	420/250	420/250	420/250	420/250	420/250	420/250	420/250	450/400
Max. Descending speed (Non-load/Load)	mm/s	360/300	360/300	360/300	360/300	360/300	360/300	360/300	400/400
Max. Travel speed (Non-load/Load)	km/h	25/21	25/21	25/21	25/21	25/21	25/21	25/21	28/25
Grade-ability (Non-load/Load)	%	39/32	39/32	39/32	39/32	39/32	39/32	39/32	33/27
Cab noise	dB	≤70	≤70	≤70	≤70	≤70	≤70	≤70	≤70
Working pressure of hydraulic system	bar	260	260	260	260	260	260	260	220
Overall weight	t	69.5	69.5	69.5	69.5	69.5	69.5	72	39
Max. Load	t	45	45	45	45	45	45	45	10
Layer of stack	-	5 (9'6"/8'6")	5 (9'6"/8'6")	5 (9'6"/8'6")	5 (9'6"/8'6")	5 (9'6"/8'6")	5 (9'6"/8'6")	5 (9'6"/8'6")	6 (8'6")
Overall length L	mm	11220	11220	11220	11220	11220	11220	11258	11000
Wheel base L1	mm	6000	6000	6000	6000	6000	6000	6000	5000
Overall height H	mm	4770	4770	4770	4770	4770	4770	4770	4000
Min. ground clearance H1	mm	350	350	350	350	350	350	350	250
Overall width W	mm	6042-12175	6042-12175	6042-12175	6042-12175	6042-12175	6042-12175	6042-12175	6042-12175
Weight motion distance E	mm	500	-	-	-	-	-	-	-
Front track width T1	mm	3033	3033	3033	3033	3033	3033	3033	3280
Rear track width T2	mm	2790	2790	2790	2790	2790	2790	2790	2450
Min. turning radius R	mm	8000	8000	8000	8000	8000	8000	8000	6800
Aisle width with 20' container A1	mm	11300	11300	11300	11300	11300	11300	11300	10000
Aisle width with 40' container A2	mm	13600	13600	13600	13600	13600	13600	13600	13600
Series of products	-	New H Series	New H Series	New H Series	New H Series	New H Series	New H Series	Classical C Series	Empty Container Reach Stacker

TECHNICAL PARAMETER



Parameter		Unit	SRSC3515-3	SRSC45H-6	SRSC40C7-6H	SRSC4535H	SRSC4545H	SRST50H-H	SRSW31H
Engine	Type	-	VOLVO TAD760VE	VOLVO TAD1151	YC6M360-30	VOLVO TAD1151	VOLVO TAD1151	VOLVO TAD1151	VOLVO TAD1151
	Rated power	kW/rpm	181/2300	265/2100	266/2100	265/2100	265/2100	265/2100	265/2100
	Max. torque	Nm/rpm	1100/1400	1780/1260	1550/1600	1780/1260	1780/1260	1780/1260	1780/1260
	Exhaust standard	-	III Stage	III Stage	National Stage III	III Stage	III Stage	III Stage	III Stage
Gearbox	-	DANA 340TE17312	DANA 15.5HR36000	DANA 15.5HR36000	DANA 15.5HR36000	DANA 15.5HR36000	DANA 15.5HR36000	DANA 15.5HR36000	DANA 15.5HR36000
Drive Axle	-	Kessler D91PL408	Kessler D102 PL341	KESSLER D102 PL341	KESSLER D102 PL341	AxleTech PRC7534W4H	KESSLER D102 PL341	KESSLER D102 PL341	KESSLER D102 PL341
Spreader	Type	-	SDJ450F	SDJ450H	SDJ450F	SDJ450H	SDJ450H	SDJ400G	SWG310-R3
	Side shift range	mm	±800	±800	±800	±800	±800	-	±500
	Rotary angle	deg	+105/-195	+105/-195	+105/-195	+105/-195	+105/-195	360	+20 /-20
	Tilt angle	deg	-	-	-	-	-	-	-
	Self-weight	t	7.8	6.95	7.8	6.95	6.95	1.2	8.1
Application	-	ISO 20'/40'/45' Containers	ISO 20'/40'/45' Containers	ISO 20'/40'/45' Containers	ISO 20'/40'/45' Containers	ISO 20'/40'/45' Containers	Tube	Wood	
Boom	Max. Hoisting height	mm	9200	16200	18000	15100	13600	15100	9500
	Tilt angle	deg	0~46	0~60	0~63	0~60	0~50	0~60	0~60
Tyre	-	16.00-25 32PR	18.00-33 36PR	18.00-33 36PR	18.00-33 36PR	21.00-35 36PR	18.00-25 40PR	18.00-25 40PR	
Max. Hoisting speed (Non-load/Load)	mm/s	420/220	420/250	420/250	420/250	320/210	420/250	420/250	
Max. Descending speed (Non-load/Load)	mm/s	360/300	360/300	360/300	360/300	360/300	360/300	360/300	
Max. Travel speed (Non-load/Load)	km/h	28/18	25/21	28/18	25/18	20/15	25/21	25/21	
Grade-ability (Non-load/Load)	%	36/22	39/32	35/22	38/24	26/17	39/32	39/32	
Cab noise	dB	≤70	≤70	≤70	≤70	≤70	≤70	≤70	
Working pressure of hydraulic system	bar	260	260	260	260	290	260	260	
Overall weight	t	54	72	77	76	103	64	72	
Max. Load	t	35	45	40	45	45	50	31	
Layer of stack	-	3 (9'6"/8'6")	6 (8'6")	6 (9'6"/8'6")	5 (9'6"/8'6")	5 (8'6")	-	-	
Overall length L	mm	9930	12173	12725	11960	13270	10552	12460	
Wheel base L1	mm	5500	6600	6500	6500	8000	6000	6000	
Overall height H	mm	4400	4870	4880	4880	5230	4770	7290	
Min. ground clearance H1	mm	320	350	350	350	420	350	350	
Overall width W	mm	6042-12175	6042-12175	6042-12175	6042-12175	6042-12175	4188	4188	
Weight motion distance E	mm	-	-	500	-	-	-	-	
Front track width T1	mm	2475	3033	3033	3033	3033	3033	3033	
Rear track width T2	mm	2450	2790	2790	2790	3120	2790	2790	
Min. turning radius R	mm	7500	8730	9000	8730	10000	8000	8000	
Aisle width with 20' container A1	mm	11000	12000	12000	12000	14500	11300	11300	
Aisle width with 40' container A2	mm	13600	13600	13600	13600	15200	13600	13600	
Series of products	-	Lightweight Container Reach Stacker	6H Reach Stacker	6H Reach Stacker	Heavyweight Container Reach Stacker	Overweight Container Reach Stacker	Tube Reach Stacker	Wood Reach Stacker	

ADD-ON OPTIONS

FUNCTION	BRAND	CODE	NOTE
Electric heating system for hydraulic oil	SANY	13524896	A essential component in environment of -5° abroad or -15° in cold areas of China. Use electric heater to heat the hydraulic oil, making its temperature within reasonable range.
Hydraulic protection system in cold areas	SANY	13519058	A essential component in environment of -5° to -15° in China's cold areas. Heat the hydraulic oil by heating the gear pump and throttle valve to make the temperature within reasonable range.
Engine pre-heating system	SANY	11145235	A essential component in areas where temperature is below -15°. Heat the coolant before starting the engine to quickly warm the equipment.
Cab electric heating system	SANY	13506164	Used in severe cold areas to warm the cab.
Cab assistant seat	SANY	12774971	Cab assistant seat
Spreader quick change function system	SANY	12774238	Use an oil cylinder pushing pin shaft to quickly unload spreader from the boom.
Spreader guiding function	SANY	11138129	Added two guide plates, easier for container-aligning operation.
Twist lock counter	SANY	11446031	Twist lock counter of the spreader
Engine hour meter	SANY	11446498	Hour meter for the engine's working hours
Amplifying alarm system	SANY	11447670	Including the amplifier and the alarm
Reach stacker LED lamp (optional)	SANY	13526507	Including: headlamp, rear lamp, boom work light, steering lamp, alarm lamp, etc.
Spreader tri-color indication light in cab	SANY	12308787	The tri-color indication light in the cab shows the conditions of the spreader: open, closed, positioning status.
Rear counterweight alarm lamp	SANY	11447452	One alarm lamp for the rear counterweight
Cab reading lamp	SANY	11446638	Brand fluorescent lamp, installed on the top of the cab.
Outdoor cab top lamp intensifier	SANY	13206545	Four xenon lamps on the cab top to increase the lighting level ahead.

FUNCTION	BRAND	CODE	NOTE
Spreader front lock lamp intensifier	SANY	12304893	Used in SANY self-made spreader. Add two lamps in the outside sides to enhance lighting.
12V power supply	SANY	11446544	Provide 12V power socket (on the top of the electric control cabinet in the cab)
24V power supply	SANY	11447306	Provide 24V power socket (on the top of the electric control cabinet in the cab)
3m range reversing radar system	SANY	11446721	Visible reversing radar with 3m range sensor
Reversing image integrated system	SANY	13206541	On reverse gear, reversing image is shown on the screen in the cab, not including the reversing radar.
Video storage function	SANY	13519577	Used in the camera system to enhance storage function; can store channel 1 to 4 video signal.
Video monitoring system (2 cameras)	SANY	13519573	Camera system (9" screen + 2 cameras)
Video monitoring system (4 cameras)	SANY	13519574	Camera system (9" screen + 4 cameras)
Spreader shock-proof camera	SANY	13519578	Shock-proof camera
Precise weighting, system	SANY	13206542	Used in SANY self-manufactured spreader, weighting the lock and protect unbalance condition.
Radio	SANY	13206553	Including radio, speaker and antenna.
Automatic engine turn off function	SANY	13206551	Power switch adopted associated contactor; when the main switch is turned off, so is the engine.
Engine fire protection system	SANY	13336684	Used together with the supporting automatic fire extinguisher: 1. automatically cut off the power when fire is detected. 2. Automatically stop the engine once on fire.
Electric centralized lubrication system	SANY	13389057	SANY centralized lubrication (automatic lubrication system including the automatic lubrication of the frame, steering axle and the sliding block, but not the spreader.)
Mobile counterweight system	SANY	12395059	Patent mobile counterweight system (significantly improve load capacity)
Automatic fire extinguishing system	SANY	13132018	SANY automatic fire extinguishing system (has the function of fire detecting and automatic fire extinguishing)

CONSTRUCTION CASES

2010, guangzhou Port



2013, Shanghai Port



2013, Taicang Port, Jiangsu



2014, Tianjin International Logistics



2014, Qingdao, Shandong



2014, Los Angeles, USA



2013, Sydney, Australia



2014, Dammam, Saudi Arabia



2012, kuantan, Malaysia



2010, Port of Luanda, Angola



SERVICE



Quality Changes the World Service Creates value



After-sales Service Hotline:

4008 87 8318

Consultation/Complaints Hotline:

4008 87 9318

Service Concept

All for customers, creating value for customers.

Service Strategy

Build unparalleled service; realize "First Brand of Global Service" of Port Machinery.

Service Commitment

- 1** Contact the customer within 15 minutes after receiving service messages and immediately go to the site or call the customer to explain handling measures.
- 2** Time from receiving the service message to arrival at the trouble site: less than 2 hours to the main service areas.
- 3** 24 hours stand-by.
- 4** Solve general failure and provide common parts within 24 hours.

Service Advantages

SANY has offices in over 200 countries and regions, with 30 agents in China, about 50 repair factories and 6S stores, over 3000 elite service engineers, 1000 offices and parts warehouse accommodating 100,000 kinds of parts worth more than RMB 600 million. We also have highly efficient logistics system by air, sea and land, which can transport genuine parts at any time.

Industry leading Enterprise Control Center (ECC): running for more than ten years, the ECC, as the industry initiative, is worth over RMB 30 million. It can realize real-time supervision and remote precision troubleshooting. With information promoting industrialization, it innovatively created SANY's service system of "Unity of man and heaven, synergy among 1st, 2nd and 3rd levels".

GCP, GPS and CSM system: customers can learn the working conditions & key work parameters through SANY's global portal and realize remote supervision. The system also supports parts and service search, providing convenient all-round equipment supervision.

