

Kalmar Straddle Carrier

Data sheet



A Flexible range for you.

Every Kalmar Straddle Carrier features a modular design that can be tailored to meet the needs of your business. There are three different models to choose from:

Kalmar FastCharge™ Straddle Carrier.

The Kalmar FastCharge Straddle Carrier uses electric drive units with the latest battery technology, which can be charged on the go. You may include a small diesel engine which will allow you to move your machine around your yard when it isn't charged.



Kalmar Hybrid Straddle Carrier.

The Kalmar Hybrid Straddle Carrier delivers all the power you're used to, with up to 40% reduction in fuel consumption and up to 50 tons less CO2 emissions per annum than a traditional diesel-electric machine. A regenerative energy system captures kinetic braking and spreader energy, transforming it into a storable, clean, power source.



Kalmar (Diesel-electric) Straddle Carrier.

The Kalmar Straddle Carrier offers high performance, excellent fuel efficiency, and low noise. Featuring a diesel-electric drive, this straddle carrier complies with the latest exhaust emission regulations.



Thinking of automating?

Kalmar AutoStraddles™ is a proven automation solution for container terminals. All Kalmar Straddle Carriers can be delivered automation ready or can be retrofitted for automation at a later date.

Key benefits

- Decreased fuel consumption up to 40% with hybrid
- Lower noise, lower emissions
- Zero emissions with Kalmar FastCharge™ Straddle Carrier
- Enhanced operator ergonomics and comfort
- Superior safety
- Secure and fast container handling
- Automation-ready

Kalmar FastCharge™ Straddle Carrier

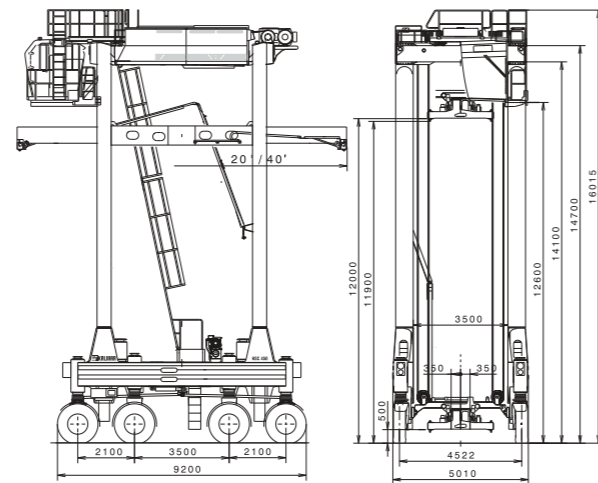
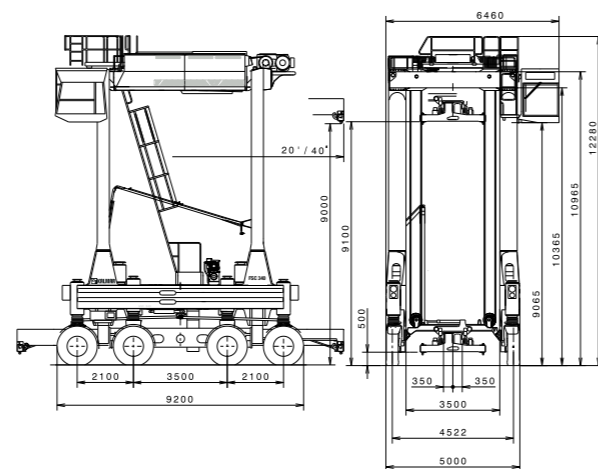
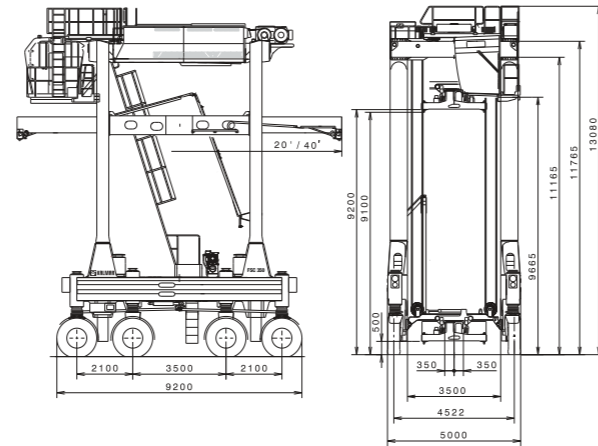
Technical Data

		FSC 340	FSC 350	FSC 360	FSC 440	FSC 450	FSC 460
OPERATING DATA							
Capacity under spreader	ton	40	50	60	40	50	60
Service weight	ton	66	67	69	69	70	72
Wheel load fully loaded	ton	13.3	14.6	16.1	13.6	15	16.5
DIMENSIONS							
Lifting height front cabin, max.	mm	9200			12000		
Lifting height side cabin, max.	mm	9100			12000		
Pick-up height, min.	mm	500					
Inside clear width	mm	3500					
Turning radius, inside	mm	3630					
Turning radius, outside	mm	9550					
SPREADER							
Twistlocks		ISO					
Positions	ft	20, 40	20, 40/2x20*	20, 40/2x20	20, 40	20, 40/2x20*	20, 40/2x20
Side shift	mm	± 350					
Slew angle	deg.	± 6					
SPEEDS							
Max. travel speed, empty	km/h	30			25		
Max. travel speed, loaded	km/h	30	25	25	17		
Max. lifting speed, empty	m/min	30					
Max. lifting speed, loaded	m/min	20	15	13	20	15	13
Max. lowering speed, empty	m/min	18					
Max. lowering speed, loaded	m/min	18	15	13	18	15	13
POWER UNIT							
Type		Fully electric					
Charging system		Kalmar FastCharge **					
Energy storage		Lithium-ion battery (LTO)					
ENGINE (OPTIONAL) **							
Power	kW	77					
Torque	Nm	425					
Displacement	dm ³	4.4					
Emission level		EU stage II/ EU stage IV/ US Tier 4f					
DRIVE SYSTEM							
Type		4-wheel drive					
Control		AC-frequency control					
Electric motors		4 induction motors					
TYRES							
Size		16.00R25, 450/95R25, 480/95R25	480/95R25	16.00R25, 450/95R25, 480/95R25	480/95R25		
SUSPENSION							
Type		Rubber	Hydraulic	Rubber	Hydraulic		
BRAKES							
Service brakes		Wet disc in four wheels					
Parking brakes		Spring actuated, wet disc in four wheels					
HOIST SYSTEM							
Type		Winch rope hoist					
Control		AC-frequency control					
Electric motor		2 induction motors					
CONTROL SYSTEM							
Type		PLC					
Voltage		24 V					
Field bus		Can open Ethernet IP					

* Also available: Extendable twinlift 45 ft.

Subject to change without notice

** Optional Diesel generator for extended operation range.



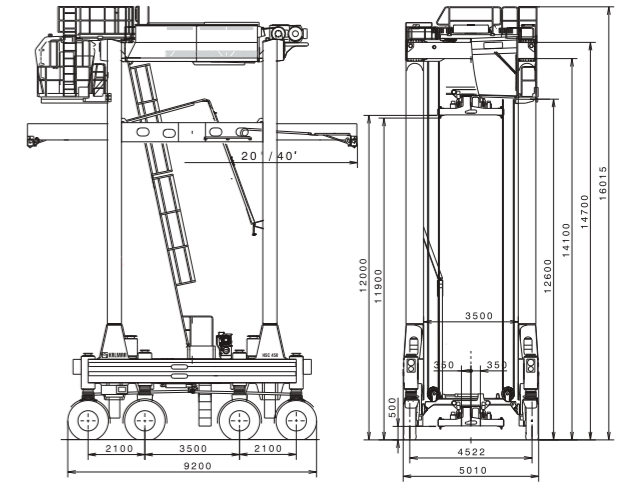
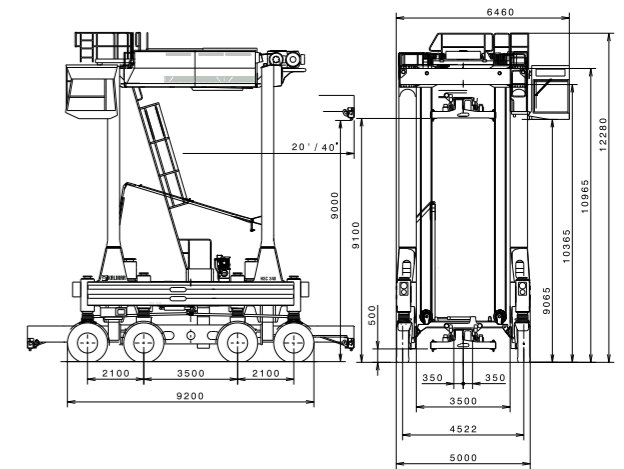
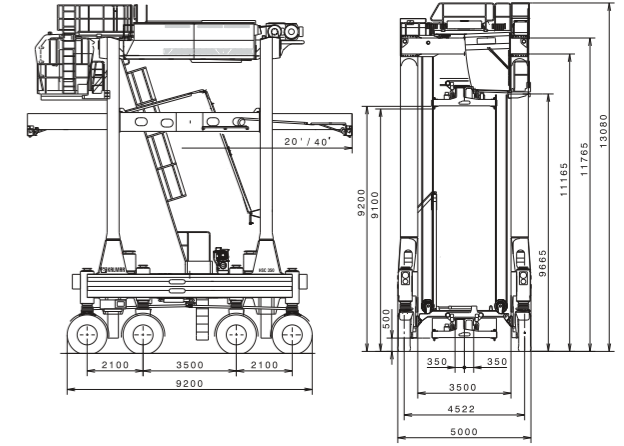
Kalmar Hybrid Straddle Carrier

Technical Data

		HSC 340	HSC 350	HSC 360	HSC 440	HSC 450	HSC 460
OPERATING DATA							
Capacity under spreader	ton	40	50	60	40	50	60
Service weight	ton	66	67	69	69	70	72
Wheel load fully loaded	ton	13.3	14.6	16.1	13.6	15	16.5
DIMENSIONS							
Lifting height front cabin, max.	mm	9200			12000		
Lifting height side cabin, max.	mm	9100			12000		
Pick-up height, min.	mm	500					
Inside clear width	mm	3500					
Turning radius, inside	mm	3630					
Turning radius, outside	mm	9550					
SPREADER							
Twistlocks		ISO					
Positions	ft	20, 40	20, 40/2x20*	20, 40/2x20	20, 40	20, 40/2x20*	20, 40/2x20
Side shift	mm	± 350					
Slew angle	deg.	± 6					
SPEEDS							
Max. travel speed, empty	km/h	30			25		
Max. travel speed, loaded	km/h	30	25	25	17		
Max. lifting speed, empty	m/min	30					
Max. lifting speed, loaded	m/min	20	15	13	20	15	13
Max. lowering speed, empty	m/min	18					
Max. lowering speed, loaded	m/min	18	15	13	18	15	13
POWER UNIT							
Type		Hybrid					
Charging system		Diesel generator					
Energy storage		Lithium-ion battery (LTO)					
ENGINE							
Power	kW	77					
Torque	Nm	425					
Displacement	dm ³	4.4					
Emission level		EU stage II/ EU stage IV / US Tier 4f					
FastCharge as option							
DRIVE SYSTEM							
Type		4-wheel drive					
Control		AC-frequency control					
Electric motors		4 induction motors					
TYRES							
Size		16.00R25, 450/95R25, 480/95R25	480/95R25	16.00R25, 450/95R25, 480/95R25	480/95R25		
SUSPENSION							
Type		Rubber	Hydraulic	Rubber	Hydraulic		
BRAKES							
Service brakes		Wet disc in four wheels					
Parking brakes		Spring actuated, wet disc in four wheels					
HOIST SYSTEM							
Type		Winch rope hoist					
Control		AC-frequency control					
Electric motor		2 induction motors					
CONTROL SYSTEM							
Type		PLC					
Voltage		24 V					
Field bus		Can open Ethernet IP					

* Also available: Extendable twinlift 45 ft.

Subject to change without notice



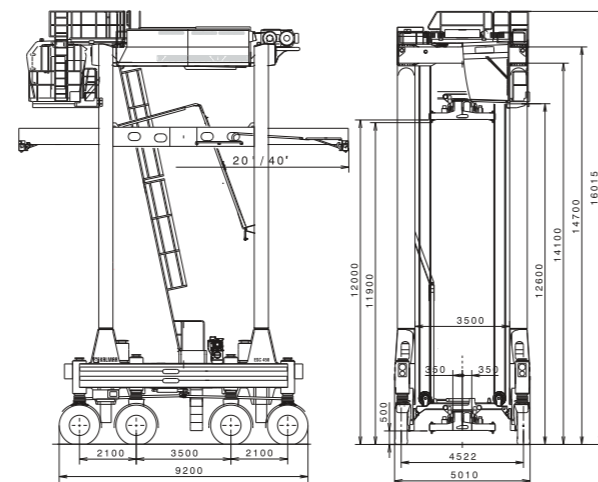
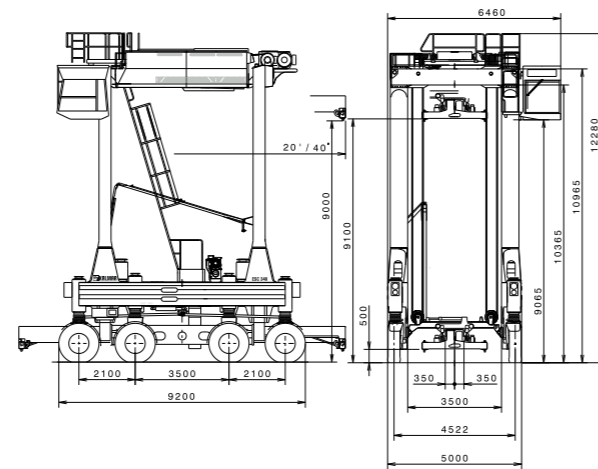
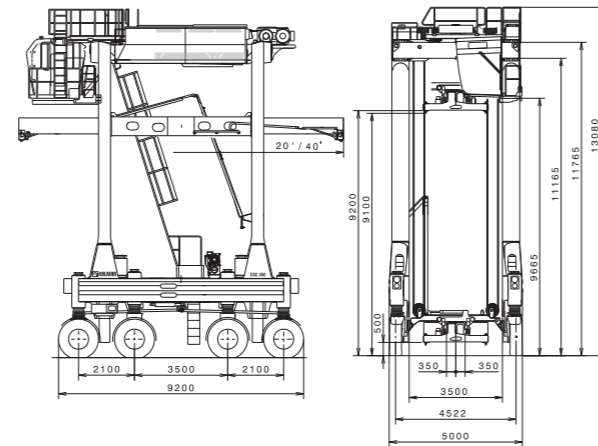
Kalmar Diesel-electric Straddle Carrier

Technical Data

		ESC 340	ESC 350	ESC 360	ESC 440	ESC 450	ESC 460
OPERATING DATA							
Capacity under spreader	ton	40	50	60	40	50	60
Service weight	ton	66	67	69	69	70	72
Wheel load fully loaded	ton	13.3	14.6	16.1	13.6	15	16.5
DIMENSIONS							
Lifting height front cabin, max.	mm	9200			12000		
Lifting height side cabin, max.	mm	9100			12000		
Pick-up height, min.	mm	500					
Inside clear width	mm	3500					
Turning radius, inside	mm	3630					
Turning radius, outside	mm	9550					
SPREADER							
Twistlocks		ISO					
Positions	ft	20, 40	20, 40/2x20*	20, 40/2x20	20, 40	20, 40/2x20*	20, 40/2x20
Side shift	mm	± 350					
Slew angle	deg.	± 6					
SPEEDS							
Max. travel speed, empty	km/h	30			25		
Max. travel speed, loaded	km/h	30	25	25	25	17	
Max. lifting speed, empty	m/min	30					
Max. lifting speed, loaded	m/min	20	15	13	20	15	13
Max. lowering speed, empty	m/min	18					
Max. lowering speed, loaded	m/min	18	15	13	18	15	13
POWER UNIT							
Type		Diesel-electric					
Power system		Variable speed AC-generator					
DRIVE SYSTEM							
Type		4-wheel drive					
Control		AC-frequency control					
Electric motors		4 induction motors					
TYRES							
Size		16.00R25, 450/95R25, 480/95R25	480/95R25	16.00R25, 450/95R25, 480/95R25	480/95R25	480/95R25	
SUSPENSION							
Type		Rubber	Hydraulic	Rubber	Hydraulic		
BRAKES							
Service brakes		Wet disc in four wheels					
Parking brakes		Spring actuated, wet disc in four wheels					
HOIST SYSTEM							
Type		Winch rope hoist					
Control		AC-frequency control					
Electric motors		2 induction motors					
CONTROL SYSTEM							
Type		PLC					
Voltage		24 V					
Field bus		Can open Ethernet IP					
ENGINE OPTIONS							
Power	kW	285					
Torque	Nm	1938					
Displacement	dm ³	10.8					
Emission level		EU stage II/ III A/ IV/ US tier 2/ 3/ 4f					

* Also available: Extendable twinlift 45 ft.

Subject to change without notice



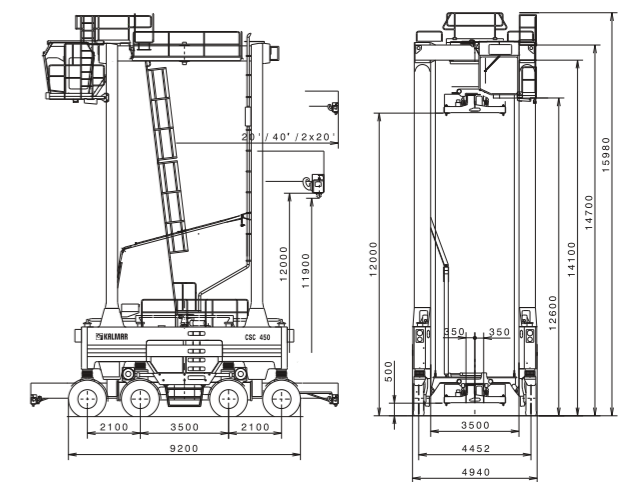
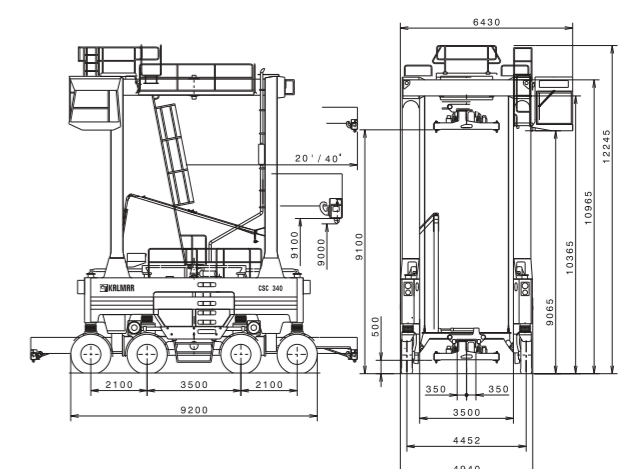
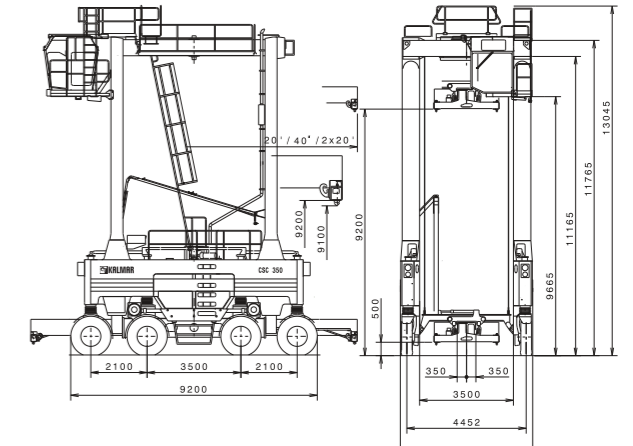
Kalmar Classic Straddle Carrier

Technical Data

		CSC 340	CSC 350	CSC 440	CSC 450
OPERATING DATA					
Capacity under spreader	ton	40	50	40	50
Service weight	ton	66	67	69	70
Wheel load fully loaded	ton	13.3	14.6	13.6	15
DIMENSIONS					
Lifting height front cabin	mm	9200		12000	
Lifting height side cabin	mm	9100		12000	
Pick-up height	mm	500			
Inside clear width	mm	3500			
Turning radius, inside	mm	3550			
Turning radius, outside	mm	9470			
SPREADER					
Twistlocks		ISO			
Positions	ft	20, 40	20, 40/2x20*	20, 40	20, 40/2x20*
Side shift	mm	± 350			
Slew angle	deg.	± 6			
SPEEDS					
Travel speed, empty	km/h	30		25	
Travel speed, loaded	km/h	26	24	25	25
Lifting speed, empty	m/min	24			
Lifting speed, loaded	m/min	20	15	20	15
Lowering speed, empty	m/min	18			
Lowering speed, loaded	m/min	18			
POWER UNIT					
Type		Diesel hydrodynamic			
No. of units		2			
DRIVE SYSTEM					
Type		4-wheel drive			
TRANSMISSION					
Gears		3+3			
TYRES					
Size		16.00R25, 450/95R25, 480/95R25			
SUSPENSION					
Type		Rubber			
BRAKES					
Service brakes		Wet disc in six wheels			
Parking brakes		Spring actuated, wet disc in four wheels			
HOIST SYSTEM					
Type		Smoothlift™ rope hoist with single cylinder			
Pressure	bar	230	260	230	260
Pilot control		Electrical			
CONTROL SYSTEM					
Type		PLC			
Voltage		24 V			
ENGINE OPTIONS					
Power	kW	135		142	
Torque	Nm	710		742	
Displacement	dm ³	7.4		6.7	
Emission level		EU stage IIIA/US Tier 3		EU stage IIIA / US Tier 3	

* Also available: Extendable twinlift 45 ft.

Subject to change without notice





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