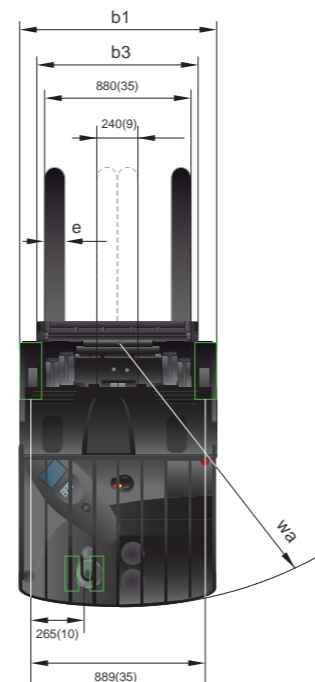
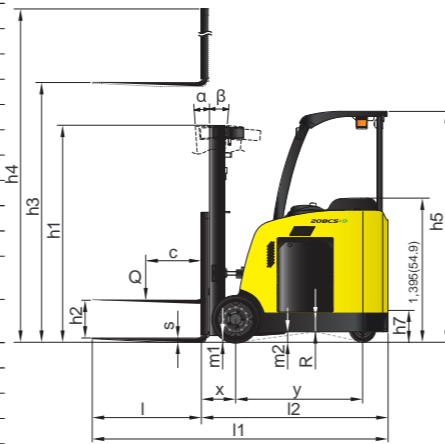


Technical Data for 15/18/20BCS-9

Identification					
1.1	MANUFACTURER (ABBREVIATION)	HYUNDAI	HYUNDAI	HYUNDAI	
1.2	MANUFACTURER'S TYPE DESIGNATION	15BCS-9	18BCS-9	20BCS-9	
1.3	DRIVE : ELECTRIC (BATTERY OR MAINS), DIESEL, PETROL, FUEL GAS	electric	electric	electric	
1.4	TYPE OF OPERATION: HAND, PEDESTRIAN, STANDING, SEATED, ORDER-PICKER	standing	standing	standing	
1.5	LOAD CAPACITY / RATED LOAD	kg(lb)	1,360(3,000)	1,590(3,500)	1,810(4,000)
1.6	LOAD CENTER DISTANCE	c mm(in)	600(24)	600(24)	600(24)
1.8	LOAD DISTANCE, CENTER OF DRIVE AXLE TO FORK	x mm(in)	330(12.9)	330(12.9)	330(12.9)
1.9	WHEELBASE	y mm(in)	1,152(45.3)	1,152(45.3)	1,222(48.1)
Weights					
2.1	SERVICE WEIGHT	kg(lb)	3,862(8,514)	4,047(8,922)	4,211(9,283)
2.2	AXLE LOADING, LOADED FRONT/REAR	kg(lb)	4,442/7,780 (9,792/1,719)	4,872/7,765 (10,740/1,686)	5,256/7,765 (11,587/1,686)
2.3	AXLE LOADING, UNLOADED FRONT/REAR	kg(lb)	1,987/1,875 (4,380/4,133)	2,001/2,046 (4,411/4,511)	2,066/2,145 (4,554/4,729)
Wheels, Chassis					
3.1	TIRES : SOLID RUBBER, SUPERELASTIC, PNEUMATIC, POLYURETHANE	V, PE	V, PE	V, PE	
3.2	TIRE SIZE, FRONT	18x7x12.12	18x7x12.12	18x7x12.12	
3.3	TIRE SIZE, REAR	10x5x6.5	10x5x6.5	10x5x6.5	
3.5	WHEELS, NUMBER FRONT / REAR (X = DRIVEN WHEELS)	2x/1Dual	2x/1Dual	2x/1Dual	
3.6	TREAD, FRONT	mm(in)	889(35)	889(35)	
3.7	TREAD, REAR	mm(in)	181(7.12)	181(7.12)	181(7.12)
Basic Dimensions					
4.1	TILT OF MAST/FORK CARRIAGE FORWARD/BACKWARD	α/β degrees	5/5	5/5	5/5
4.2	HEIGHT, MAST LOWERED	h1 mm(in)	2,098(82.6)	2,098(82.6)	2,098(82.6)
4.3	FREE LIFT	h2 mm(in)	881(34.7)	881(34.7)	881(34.7)
4.4	LIFT HEIGHT	h3 mm(in)	4,740(186.6)	4,740(186.6)	4,740(186.6)
4.5	HEIGHT, MAST EXTENDED	h4 mm(in)	5,957(234.5)	5,957(234.5)	5,957(234.5)
4.7	HEIGHT OF OVERHEAD GUARD (CABIN)	h5 mm(in)	2,235(87.9)	2,235(87.9)	2,235(87.9)
4.8	SEAT HEIGHT / STAND HEIGHT REL. TO SIP	h7 mm(in)	200(7.8)	200(7.8)	200(7.8)
4.19	OVERALL LENGTH	l1 mm(in)	2,777(109.3)	2,777(109.3)	2,847(112.0)
4.20	LENGTH TO FACE OF FORKS	l2 mm(in)	1,727(67.99)	1,727(67.99)	1,797(70.7)
4.21	OVERALL WIDTH	b1 mm(in)	1,067(42.0)	1,067(42.0)	1,067(42.0)
4.22	FORK DIMENSIONS	l/e/s mm(in)	40x100x1,050 (1.6x3.9x41.3)	40x100x1,050 (1.6x3.9x41.3)	40x100x1,050 (1.6x3.9x41.3)
4.23	FORK CARRIAGE ITA CLASS	II	II	II	
4.24	FORK-CARRIAGE WIDTH	b3 mm(in)	950(37.4)	950(37.4)	950(37.4)
4.31	GROUND CLEARANCE, BELOW MAST, LOADED	m1 mm(in)	63(2.4)	63(2.4)	63(2.4)
4.32	GROUND CLEARANCE, CENTER OF WHEELBASE	m2 mm(in)	100(3.9)	100(3.9)	100(3.9)
4.33	AISLE WIDTH FOR PALLET 1000 X 1200 CROSSWAYS (L X W)	Ast mm(in)	3,056(120.3)	3,056(120.3)	3,126(123.0)
4.34	AISLE WIDTH OF PALLET 800 X 1200 CROSSWAYS (W X L)	Ast mm(in)	3,178(125.1)	3,178(125.1)	3,248(127.8)
4.35	TURNING RADIUS	Wa mm(in)	1,397(55)	1,397(55)	1,467(57.7)
Performance Data					
5.1	TRAVEL SPEED, LOADED / UNLOADED	km/h(mph)	12.1(7.5)	12.1(7.5)	12.1(7.5)
5.2	LIFT SPEED, LOADED / UNLOADED	ft/min	70.9 / 110.2	66.9 / 110.2	65.0 / 110.2
5.3	LOWERING SPEED, LOADED / UNLOADED	ft/min	94.4 / 84.6	94.4 / 84.6	94.4 / 84.6
5.6	MAX. DRAWBAR PULL, LOADED	N(lb)	12,748(2,866)	12,748(2,866)	12,748(2,866)
5.8	MAX. GRADEABILITY, LOADED	%	15	15	15
5.10	SERVICE BRAKE		Electric release	Electric release	Electric release
Motor					
6.1	DRIVE MOTOR RATING S2 60 MIN	kW(hp)	4.3(5.7)	4.3(5.7)	4.3(5.7)
6.2	LIFT MOTOR RATING AT S3 15%	kW(hp)	14(18.8)	14(18.8)	14(18.8)
6.3	BATTERY ACC. TO DIN 43531/35/36 A, B, C, NO		Lead-Acid	Lead-Acid	Lead-Acid
6.4	BATTERY VOLTAGE	V	36/48	36/48	36/48
6.5	BATTERY WEIGHT	kg(lb)	1,034(2,279.6)	1,034(2,279.6)	1,176(2,592.6)
6.7	BATTERY COMPARTMENT DIMENSIONS L/W/H	mm(in)	975/456/800 (38.4/18/31.5)	975/456/800 (38.4/18/31.5)	975/526/800 (38.4/20.7/31.5)
Other Details					
8.1	TYPE OF DRIVE CONTROL		AC	AC	AC
8.2	OPERATING PRESSURE, SYSTEM / ATTACHMENTS	psi	2,465/2,030	2,465/2,030	2,465/2,030
8.3	OIL VOLUME FOR ATTACHMENTS	l/min(GPM-US)	20(5.28)	20(5.28)	20(5.28)
8.4	SOUND LEVEL AT THE DRIVER'S EAR ACCORDING TO DIN 12053	dB (A)	70	70	70
8.5	HEIGHT OF BATTERY ROLLER	R mm(in)	183(7)	183(7)	183(7)



- The Specifications in this brochure are subject to change for option.
- The options in this brochure are subject to change to improve the performance of the forklift.

15/18/20BCS-9

Stand up Counterbalance Trucks

MOVING YOU FURTHER

HYUNDAI MATERIAL HANDLING



HYUNDAI
MATERIAL HANDLING
North American Headquarters
6100 Atlantic Blvd, Norcross, GA 30071
TEL (678) 823 7777 FAX (687) 823 7778

PLEASE CONTACT

www.hyundaiforkliftamericas.com 2018.04 Rev.2

HYUNDAI
MATERIAL HANDLING

Your satisfaction is our priority!

Hyundai introduces a new line of **9-series** battery forklift trucks.

The newly designed stand up counter balanced trucks provide every operator with comfortable driving, increased productivity and easy maintenance.



■ Some of the photos may include optional equipment.

15/18/20BCS-9

Mast Specification (15BCS-9)

Mast Type	Maximum Fork Height		Overall Height (Lowered)		Free Lift Height				Tilt Angle		Load Capacity without side shift		Load Capacity with side shift		Truck Weight (Unloaded)		
	in	mm	in	mm	With Load Backrest		Without Load Backrest		Fwd deg	Bwd deg	24 in LC lb	600mm LC kg	24 in LC lb	600mm LC kg	lb	kg	
					in	mm	in	mm									
3-Stage Full Free Lift	TF370	147.2	3740	68.8	1748	20.9	531	48.9	1243	5	5	3000	1360	3000	1360	8366	3795
	TF400	159.1	4040	72.8	1848	24.8	631	52.9	1343	5	5	3000	1360	3000	1360	8408	3814
	TF430	170.9	4340	76.7	1948	28.8	731	56.8	1443	5	5	3000	1360	3000	1360	8450	3833
	TF450	178.7	4540	80.6	2048	32.7	831	60.7	1543	5	5	3000	1360	3000	1360	8492	3852
	* TF470	186.6	4740	82.6	2098	34.7	881	62.7	1593	5	5	3000	1360	3000	1360	8514	3862
	TF500	198.4	5040	86.5	2198	38.6	981	66.7	1693	5	5	3000	1360	2930	1330	8556	3881
	TF550	218.1	5540	94.4	2398	46.5	1181	74.5	1893	5	5	3000	1360	2820	1280	8640	3919
TF600	237.8	6040	102.3	2598	54.4	1381	82.4	2093	5	5	2600	1180	2420	1100	8774	3980	

Mast Specification (18BCS-9)

Mast Type	Maximum Fork Height		Overall Height (Lowered)		Free Lift Height				Tilt Angle		Load Capacity without side shift		Load Capacity with side shift		Truck Weight (Unloaded)		
	in	mm	in	mm	With Load Backrest		Without Load Backrest		Fwd deg	Bwd deg	24 in LC lb	600mm LC kg	24 in LC lb	600mm LC kg	lb	kg	
					in	mm	in	mm									
3-Stage Full Free Lift	TF370	147.2	3740	68.8	1748	20.9	531	48.9	1243	5	5	3500	1590	3500	1590	8774	3980
	TF400	159.1	4040	72.8	1848	24.8	631	52.9	1343	5	5	3500	1590	3480	1580	8816	3999
	TF430	170.9	4340	76.7	1948	28.8	731	56.8	1443	5	5	3500	1590	3410	1550	8858	4018
	TF450	178.7	4540	80.6	2048	32.7	831	60.7	1543	5	5	3500	1590	3350	1520	8900	4037
	* TF470	186.6	4740	82.6	2098	34.7	881	62.7	1593	5	5	3500	1590	3300	1500	8922	4047
	TF500	198.4	5040	86.5	2198	38.6	981	66.7	1693	5	5	3440	1560	3240	1470	8964	4066
	TF550	218.1	5540	94.4	2398	46.5	1181	74.5	1893	5	5	3300	1500	3130	1420	9048	4104
TF600	237.8	6040	102.3	2598	54.4	1381	82.4	2093	5	5	2770	1260	2770	1180	9182	4165	

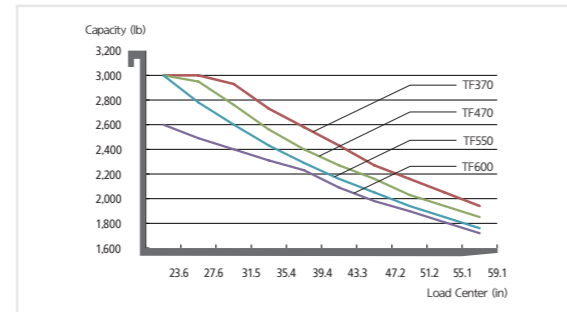
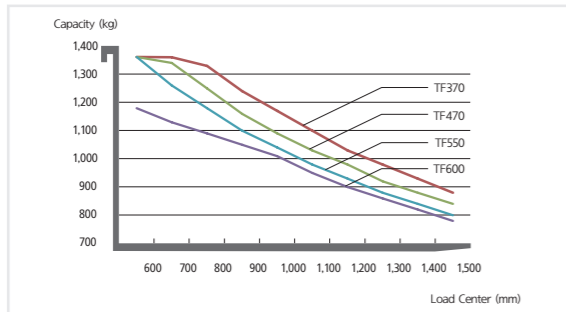
Mast Specification (20BCS-9)

Mast Type	Maximum Fork Height		Overall Height (Lowered)		Free Lift Height				Tilt Angle		Load Capacity without side shift		Load Capacity with side shift		Truck Weight (Unloaded)		
	in	mm	in	mm	With Load Backrest		Without Load Backrest		Fwd deg	Bwd deg	24 in LC lb	600mm LC kg	24 in LC lb	600mm LC kg	lb	kg	
					in	mm	in	mm									
3-Stage Full Free Lift	TF370	147.2	3740	68.8	1748	20.9	531	48.9	1243	5	5	4000	1810	4000	1810	9136	4144
	TF400	159.1	4040	72.8	1848	24.8	631	52.9	1343	5	5	4000	1810	3960	1800	9178	4163
	TF430	170.9	4340	76.7	1948	28.8	731	56.8	1443	5	5	4000	1810	3880	1770	9220	4182
	TF450	178.7	4540	80.6	2048	32.7	831	60.7	1543	5	5	4000	1810	3830	1740	9261	4201
	* TF470	186.6	4740	82.6	2098	34.7	881	62.7	1593	5	5	4000	1810	3790	1720	9284	4211
	TF500	198.4	5040	86.5	2198	38.6	981	66.7	1693	5	5	3920	1780	3725	1690	9325	4230
	TF550	218.1	5540	94.4	2398	46.5	1181	74.5	1893	5	5	3790	1720	3590	1630	9409	4268
TF600	237.8	6040	102.3	2598	54.4	1381	82.4	2093	5	5	3130	1420	2950	1340	9544	4329	

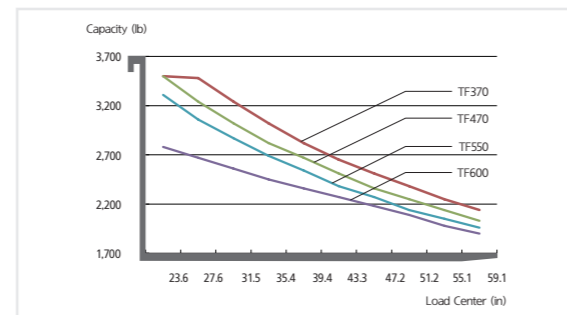
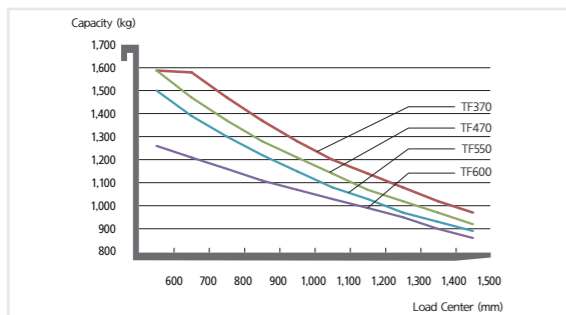
New 9 Series

Load Capacity

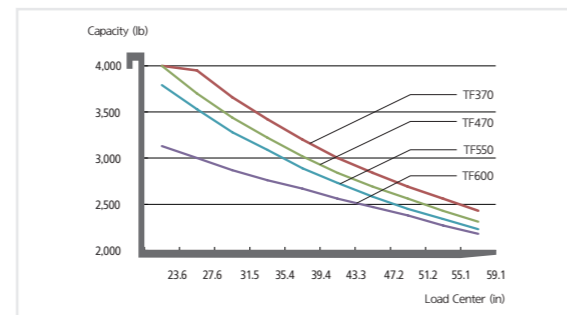
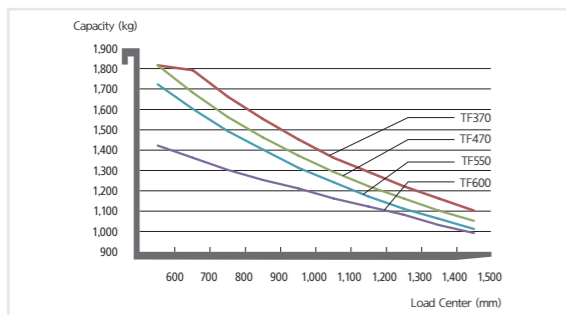
15BCS-9



18BCS-9



20BCS-9



Optional Items

Integral Sideshift

- Max. 120mm

UL "EE" rating

Beacon Lamp
- Amber, Blue, Red

Rear Work Lamp

Fork Length (mm)

- 900, 950, 1000, 1050, 1150, 1350, 1500, 1600

Fence

- Wire net type (STD)

- Tempered glass type (OPT)

Tire

- Vulkollan

Cold Storage (for -30° cold working environments)

Battery

- 700AH (15/18BCS-9), 800AH(20BCS-9)

3 Phase Charger

- 220/380V, 410V, 440V

LED work lamp

Blue spot

Compact forklift with proven AC technology

- Maximum performance
- Comfortable operating room
- Curve control system
- Load weight indicator
- 3.5" LCD smart display monitor with self-diagnostics
- Water proof controller
- EHPs Steering system for higher efficiency
- Ergonomically designed operating system
- Auto tilt leveling (optional)



Superior Power & Optimal Performance

An ideal arrangement of component parts ensures easy access and convenience for maintenance.

15/18/20BCS-9

Curve control

Curve Control limits travel speed based on turning radius, reducing speed for a smooth, precise turning operation for the driver.



Driving Speed



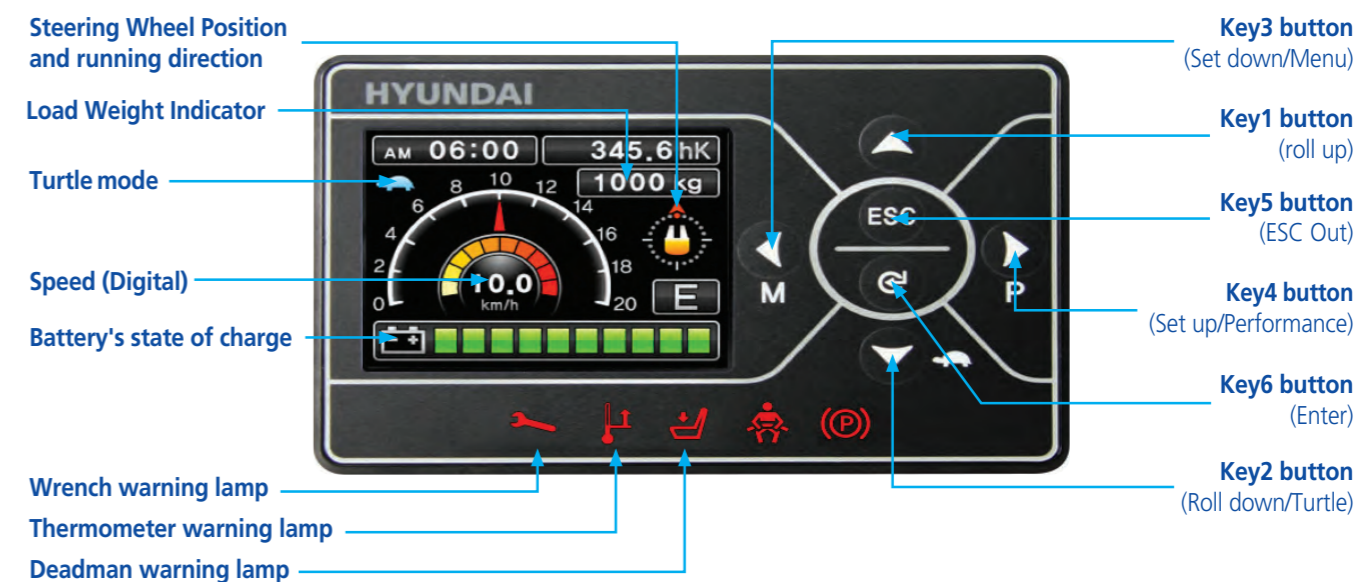
Minimum Turning Radius

Compact design suitable for narrow aisle operation guarantees work efficiency and maximum space utilization.



■ Some of the photos may include optional equipment.

Advanced LCD Monitor



H (High) mode N (Normal) mode E (Economic) mode
Turtle mode

The LCD color monitor with 3.5 inch graphic smart display allows the operator to easily and efficiently control the machine. The monitor provides information about speed & accelerator level, steer angle & travel direction, battery discharge indicator, hour meter & working mode. The optional load indicator displays the load weight and the height of fork in the monitor. System fault is also displayed to keep the forklift in the optimum condition. The operator can select various performance modes to meet all working conditions. It is available multi-languages (maximum 11) for operator is available for global use.

Easy battery replacement

The battery compartment is equipped with a side battery removal assembly for easy replacement.



Best Convenience & Easy Maintenance

Smooth running, efficient and ergonomically designed, 15/18/20BCS-9 series are built to meet your needs.

15/18/20BCS-9

BCS-9 is designed for uptime. All components have been arranged for ease and efficient maintenance.

Battery Disconnecter



Grease Fillings



Steering System



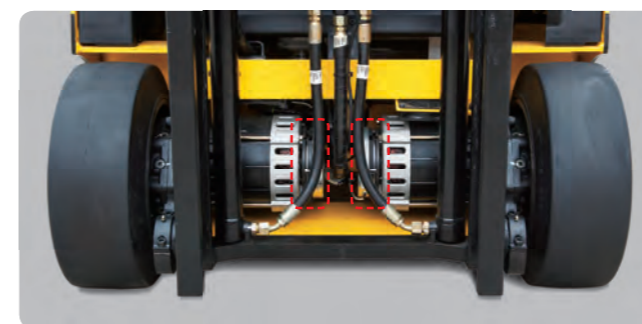
SBR Sensing Switch



Tank for Filter for Easy Replacement



Reliable ZAPI AC Controller



Dual Drive Motor & Auto Parking System

Powerful and efficient dual drive motor enables superior throughput with faster speed. Electric disc brakes provide emergency stopping and parking for the truck. Parking brake actuated automatically when the pedal released. The pre-adjusted brake assemblies require no maintenance.



On Demand Steering

Whenever operator use the steering, hydraulic motor is activated it reduce steering noise and energy consumption.



High Technology ZAPI Controller

The efficient, almost noiseless, 8kHz(high frequency) controller provides smooth and operation and protection for low & high voltage, overheating and fault recording.

Energy Efficiency

H(High) mode : 100%
N(Normal) mode : 110%
E(Economic) mode : 120%



Drive Motor & Pump Motor

AC motors are designed for optimum reliability and efficiency while providing low noise levels. The AC motors are equipped with temperature sensors to ensure long motor life.

Excellent Gradeability Operation & Anti Roll Back

A powerful dual drive motor provides for exceptional stability and excellent gradeability. When restarting after stop on a slope, an anti-roll back function ensure operational safety.



	Travel Speed (MAX)	Gradeability (MAX)	
		unloaded	loaded
15BCS-9	12.1 Km/h	15%	15%
18BCS-9	12.1 Km/h	15%	15%
20BCS-9	12.1 Km/h	15%	15%

Optimised Ergonomics & Advanced Safety

A design based on human engineering relieves fatigue and increases operator's efficiency.

15/18/20BCS-9



■Some of the photos may include optional equipment.



New High Visibility for Safe Operation

The operator is able to work with increased safety and accuracy due to a wider mast view.



Adjustable Armrest and Large Backrest

Adjustable armrest and large backrest with soft material cushion are applied for operator's safety and comfort.



Joystick Lever

Minimal operator effort is required for precise, safe and productive control. The lever's contoured design provides comfort operation.



Cup Holder, Console Box & Storage Space

Additional storage compartments are located inside the operating space for operator's convenience.



Strong Overhead Guard

The safety overhead guard meets ISO 6055 and ANSI regulations and protects the operator during hazardous work.



Non Slip Floor Mat



Blue Spot Lamp (optional)



Accessory Switches



12V Power Socket