VOLVO WHEEL LOADERS

WASTE HANDLING

VOLVO

With Volvo waste handlers, taking out the trash is no longer a chore

When it comes to moving material as fast and efficiently as possible, with minimal impact on the machine, operator, and environment, Volvo is in a class of its own. Productive, reliable, fuel efficient, and flexible are common terms used to describe Volvo wheel loaders. Designed to operate in all types of applications, Volvo wheel loaders are always up to the challenge.

Built for waste handling

When the waste handling industry asked for an effective wheel loader that could handle the most severe operating conditions, Volvo responded. Introducing the Volvo waste handlers, a series of wheel loaders which combine the features that characterize Volvo's E-series loaders, together with the equipment that is necessary for effective and productive work in all types of waste handling applications. Simply put, there is no better wheel loader for waste handling than Volvo.

The Volvo waste handlers are built and equipped for maximum availability and productivity. Volvo designed and factory installed, the waste specific equipment is perfectly matched to both the machine and application. By protecting exposed components, reducing debris entry, and making it easy to clean and service, you have more time to load the trucks, sort the recyclables, and take out the trash.

Volvo knows wheel loaders – and waste handling

Volvo is not new to waste handling. With close to 20 years experience in the waste handling industry, Volvo wheel loaders are well known for their high productivity, efficiency, and reliability. Many standard features on the Volvo wheel loaders have been specifically developed to withstand the abuse encountered in tough environments like waste handling.

Easy-to-clean radiator and condenser cores
Isolated radiator and condenser cores are easy to clean from either side via the swing out cooling fan or through easy access side service panels.

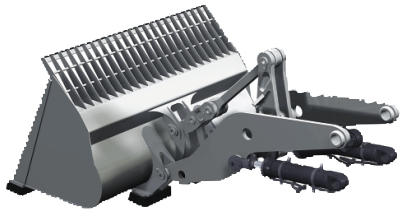
Heavy-duty countershaft transmission with responsive torque converter
Designed to handle not only the quick and frequent shifts in tight, short cycle loading applications, but also the extra weight from application specific tires and protection guards.

Engine isolated from the cooling system
Prevents debris from entering the engine compartment, which reduces the possibility for fires.

Low temperature, insulated muffler
Reduces the possibility for combustible material to ignite in the engine compartment.

Clean air filtration system
The best cab filtration system in the industry not only cleans the incoming air, but also the recirculated air inside the cab, making it the cleanest cab on the market. The filters are easily accessible from ground level for cleaning or replacing. Also, the air is vented from all major components with easy to replace breather filters, used to prevent dirty air from entering the transmission, axles, fuel tank, and hydraulic tank.

100 percent differential lock on front axle
Reduces tire spin on slippery, often wet waste covered concrete floors for faster loading times and increased productivity.



Torque Parallel Linkage
TP Linkage combines high breakout torque with parallel lift throughout the entire lifting range, making it easy to load the bucket and reduce spillage. Other design attributes include optimum visibility and excellent protection of the working components.

Waste handling equipment tailored for your application – normal waste applications

Unlike the competition, Volvo lets you choose from a full range of waste handling equipment that has been specifically designed for your business. You pick the protection that is right for you and your application. The following equipment is recommended in applications where additional, but not excessive protection is necessary.

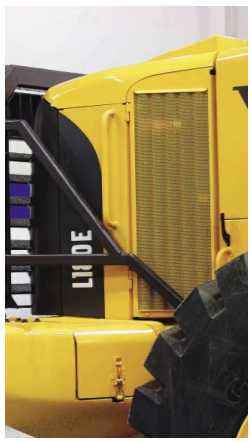
Volvo refuse buckets
Pin-on or hook-on buckets specifically designed for waste handling. With high strength steel and a spillguard designed for maximum visibility, these buckets are made to move material quickly, efficiently, and safely. Different types of wear parts are available for all applications. (L60E–L220E)

Headlight guards
Protect the headlights, worklights, and turn signals from debris that may break or damage the lenses. (L60E–L120E)

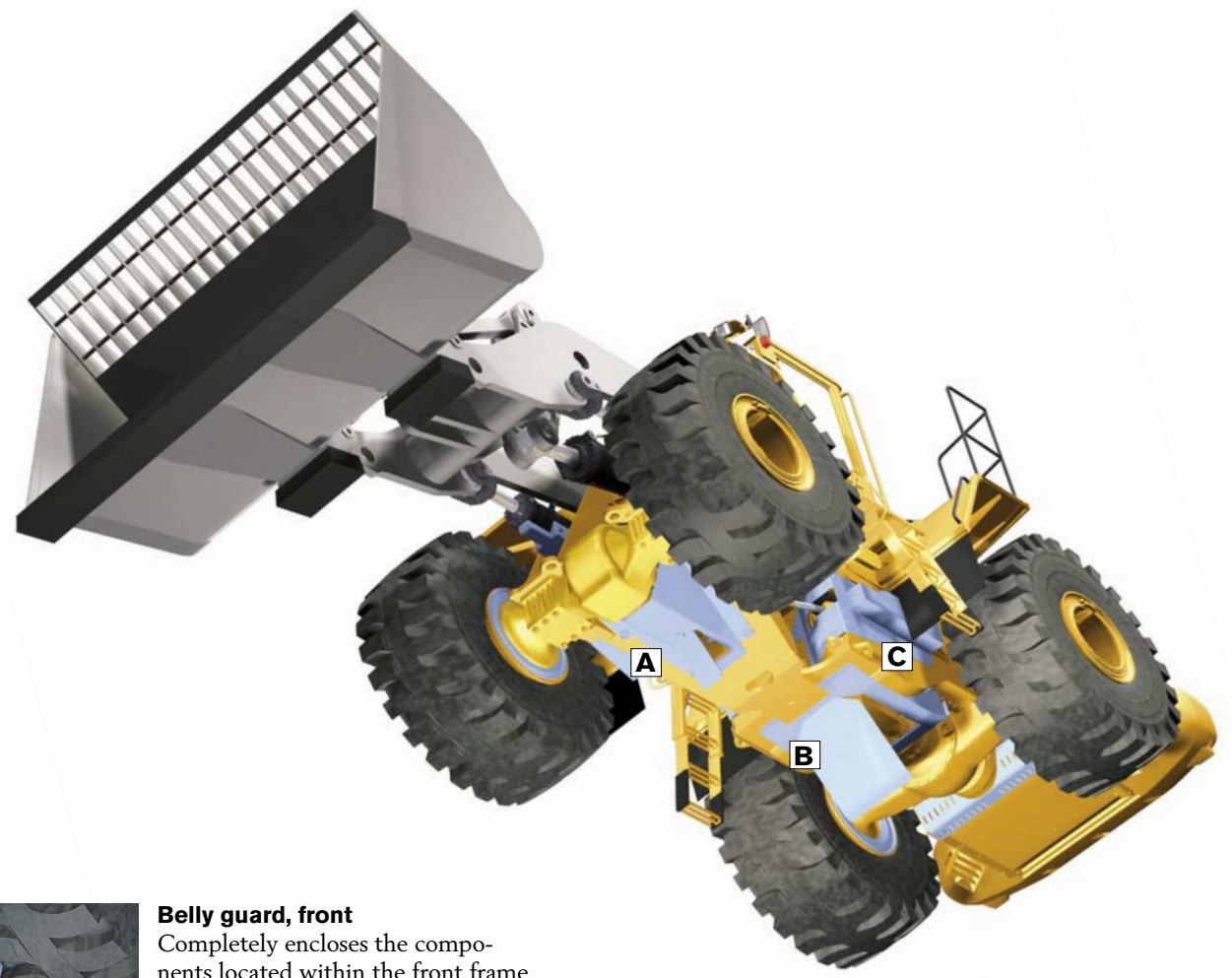
(L150E–L220E)

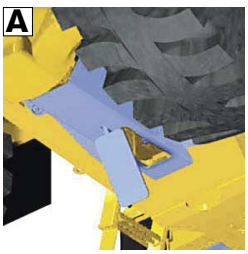
Taillight guards
Protect the taillights and turn signals from debris that may break or damage the lenses. (L60E–L220E)

Air-intake protection
Designed to limit debris entry into the engine compartment without sacrificing cooling capacity. Three separate screens are used to protect the areas where air is drawn in, the top and on each side of the engine hood. (L60E–L120E)

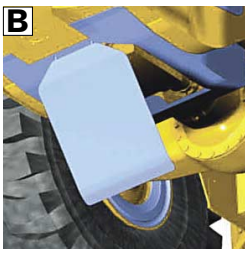


(L150E–L220E)





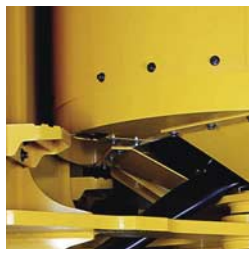
Belly guard, front
Completely encloses the components located within the front frame between the center hinge and the front axle, including the driveshaft, universal joints, and hydraulic lines. It is hinged for easy cleaning and maintenance. (L60E–L220E)



Belly guard, rear
Designed to protect the components located within the rear frame between the center hinge and the rear axle, including the engine and transmission. It is hinged for easy cleaning and maintenance. (L60E–L220E)

Steer cylinder guards
Provide protection for the items exposed in the center hinge area, including the steer cylinders, transmission, and hydraulic and electrical lines and connections. A transmission dipstick replaces the transmission oil sight guage for easy monitoring of the transmission oil level.
(L150E–L220E)

Center hinge guards
Rear frame covers, together with center hinge protection plates, keep the exposed components located within the rear frame from being damaged.
(L60E–L120E)



Under cab guard
Designed to protect the components located directly underneath the cab, including the steering valve, hydraulic connections, and electrical wiring.
(L60E–L220E)

Waste handling equipment tailored for your application – heavy-duty waste applications

When operating in more demanding, heavy-duty applications, like transfer stations, it is recommended to use the following equipment together with those recommended for normal waste applications.

Automatically activated reversible cooling fan
Timer controlled hydrostatic cooling fan automatically reverses the airflow to remove debris from the radiator/cooling cores and air intake screens before the engine overheats.
(L60E–L220E)

Heavy-duty front frame cover plate
Prevents debris from collecting inside the front frame while also protecting the main hydraulic valve and its connections from possible damage.
(L60E–L220E)

Battery boxes, steel
Steel battery boxes replace the plastic battery box covers in order to better protect the batteries from damage.
(L70E–L120E)

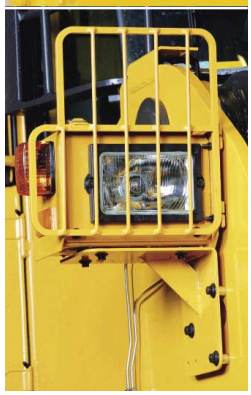
Cab ladders, rubber suspended
Flexible rubber side members have been extended to support two steps of the cab access ladders. In addition to being flexible, they have also been brought closer to the machine, making it difficult to damage or destroy the ladders in extreme conditions.
(L150E–L220E)

Front and rear mudguard alternatives
The front mudguards and rear mudguard wideners can be removed to prevent interference and/or damage. (L60E–L120E)

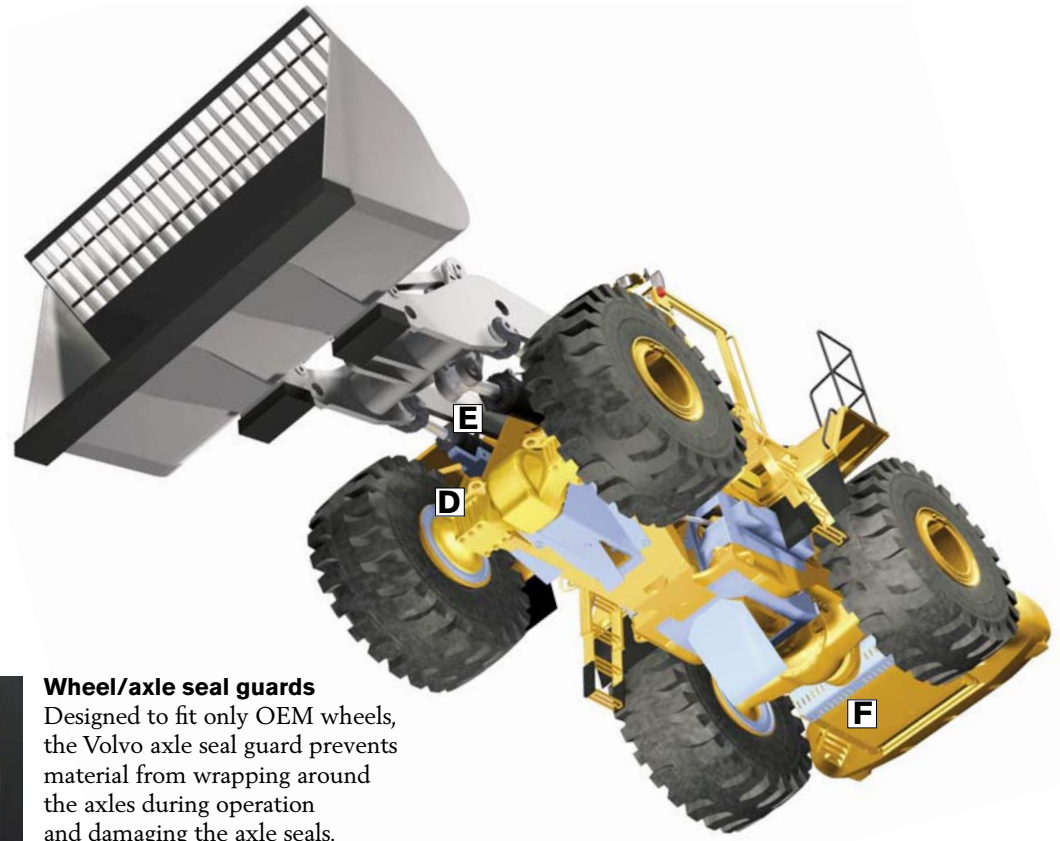
Front mudguard alternatives
The front mudguards can be removed to reduce any possibility of debris interfering with the motion of the wheels and/or tires.
(L150E–L220E)

Radiator grille guard
Intended to protect the grille, cooling fan, radiator, and condenser cores from damage when working in severe applications. It is hinged to facilitate easy cleaning and maintenance.
(L60E–L220E)

Relocated headlight assemblies
The headlight assemblies have been moved closer to the front frame to reduce the possibility for damage.
(L60E–L120E)



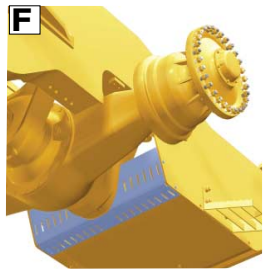
(L150E–L220E)



Wheel/axle seal guards
Designed to fit only OEM wheels, the Volvo axle seal guard prevents material from wrapping around the axles during operation and damaging the axle seals. (L60E–L220E)

Boom cylinder hose and tube guards
Designed to protect the boom cylinder hoses and tubes, these "box-type" structures prevent debris from breaking the hoses and/or tubes when debris becomes trapped between the front frame and the boom cylinders. Steel spiral hose guards and a protective plate are used to cover the hoses connecting the boom cylinders to the main valve. (L60E–L220E)

Grease tube guards
Protective guarding is used to cover exposed grease tubes and zerks. (L70E–L220E)



Belly guard, oil pan
Covers the area located between the rear axle and fuel tank, protecting the engine oil pan and drain hoses. (L150E–L220E)

Window guards, side and rear
Provide protection for both the side and rear windows. The two side window guards are hinged for easy cleaning and maintenance, while the rear window guard can easily be removed by means of two quickdisconnect latches. (L60E–L220E)

Windshield guard
Protects both the cab glass and operator from debris. It is custom designed to minimize glass breakage while maximizing visibility. (L60E–L220E)

Additional equipment

The following additional options are also recommended in waste handling applications to increase productivity, efficiency, comfort, versatility, serviceability, and safety.

Long Boom
Long boom gives the extra dump height and reach necessary for loading high container trucks or feeders. The additional reach also gives added protection when loading the bucket by keeping the machine further away from the material.
(L120E–L220E)

External Axle Oil Cooling
Provides effective cooling of the axle oil and brakes in applications where heavy loads and constant braking are common.
(L150E–L220E)

Turbine Air Precleaners
Sy-Klone and Turbo II branded precleaners are available for increased purification of the engine induction air. In addition to increased cleaning capacity, these air precleaners are highly recommended in fire sensitive applications, as they are not connected to the exhaust system.
(L60E–L220E)

Alternator Breather Filter
Cleans incoming air for the alternator. In dirty and dusty conditions, it greatly increases both the effectiveness and the lifetime of the alternator.
(L60E–L220E)

Cab Air Filter for Asbestos Environment
Protects the operator in conditions where the air is contaminated with asbestos or other small, harmful particles.
(L60E–L220E)

Fire Suppression System
Extra protection against fire in high debris applications, the dry chemical suppressant extinguishes any and all fires under the cab and in the engine compartment.
(L60E–L220E)

Exhaust Insulation
For the D9 and D12 engines, the optional exhaust insulation is recommend in applications where burnable material can easily ignite.
(L150E–L220E)

Easily Accessible Main Battery Disconnect Switch
Additional main battery disconnect switch located inside the cab for quick and easy access in case of a necessary power shutdown. It is possible to lock-out the switch to prevent the machine from being started or moved.
(L60E–L220E)

Rear View Camera with Monitor
Engine hood mounted camera eliminates blind spots when reversing. Color monitor located inside the cab lets the operator know what's happening behind him. Especially effective when working inside in tight quarters.
(L60E–L220E)

Hydraulic Attachment Bracket
With the Hydraulic Attachment Bracket, you can utilize the wheel loader in different applications where special machines are otherwise required, e.g. forks, crane arm, broom, high-tip bucket.
(L60E–L220E)

Other Optional Equipment (L60E–L220E)
Application Specific Tires
Air-Conditioning with Automatic Temperature Control (ATC)
Boom Suspension System (BSS)
Comfort Drive Control (CDC)
Single Hydraulic Control Lever
Limited Slip Differentials

Refuse bucket chart

Bucket volume		Bucket width		Loader compatibility Hook-on	Loader compatibility Pin-on
m^3	**yd^3**	mm	**ft in**		
3,1	**4.1**	2550	**8'4"**	L60E	L60E
4,1	**5.4**	2750	**9'0"**	L70E–L90E	L70E–L90E
5,5	**7.2**	3000	**9'10"**	L70E–L120E	L70E–L120E
6,8	**8.9**	3200	**10'6"**	L150E–L220E	L150E–L180E
7,8	**10.2**	3400	**11'2"**	L150E–L220E	L150E–L180E
8,8	**11.5**	3700	**12'2"**	L150E–L220E	L220E
9,5	**12.4**	3700	**12'2"**		L220E
10,7	**14.0**	3700	**12'2"**		L220E

* All buckets can be equipped with either steel or rubber bolt-on edges and wear plates.

Specifications

Volvo L60E
REF P BOE (S)*
Standard

Volvo L70E
REF P BOE (S)*
Standard

Volvo L90E
REF P BOE (S)*
Standard

Volvo L110E
REF P BOE (S)*
Standard

Engine output												
SAEJ1995, gross	kW	**hp**	103	**140**		113	**154**		122	**166**		155	**210**
ISO 9249, SAEJ1995, net	kW	**hp**	102	**139**		112	**152**		121	**165**		154	**209**
Volume, heaped ISO/SAE	m^3	**yd^3**	3,1	**4.1**		4,1	**5.4**		4,1	**5.4**		5,5	**7.2**
Static tipping load, straight	kg	**lb**	8 280	**18,270**		8 770	**19,382**		11 990	**26,430**		13 400	**29,550**
at full turn	kg	**lb**	7 200	**15,870**		7 510	**16,560**		10 270	**22,640**		11 490	**25,340**
A Overall length	mm	**ft in**	7 500	**24'7"**		7 740	**25'5"**		7 760	**25'6"**		8 340	**27'4"**
H Dump clearance at full lift and 45°discharge	mm	**ft in**	2 680	**8'10"**		2 520	**8'3"**		2 640	**8'8"**		2 520	**8'3"**
K Lift-arm height to hinge pin	mm	**ft in**	3 900	**12'9"**		3 900	**12'9"**		3 990	**13'1"**		4 060	**13'4"**
L Overall height with bucket at full raise	mm	**ft in**	5 460	**17'11"**		5 630	**18'6"**		5 720	**18'9"**		6 080	**19'11"**
M Reach at full lift and 45° discharge	mm	**ft in**	1 210	**4'0"**		1 390	**4'7"**		1 380	**4'6"**		1 420	**4'8"**
T Digging depth	mm	**ft in**	56	**2.2"**		88	**3.5"**		75	**2'9"**		51	**2.0"**
a1 Clearance circle	mm	**ft in**	11 780	**38'8"**		12 080	**39'8"**		12 130	**39'10"**		12 990	**42'7"**
Operating weight	kg	**lb**	12 210	**26,800**		14 190	**31,280**		16 970	**37,430**		20 220	**44,590**
Tire size			20.5R25 L5			20.5R25 L5			20.5R25 L5			23.5R25 L5	

Volvo L120E
REF P BOE (S)*

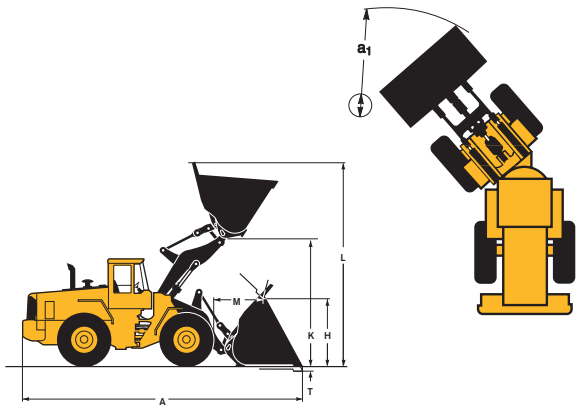
Volvo L150E
REF P BOE (S)*

Volvo L180E
REF P BOE (S)*

			Standard		**Long Boom**		**Standard**		**Long Boom**		**Standard**		**Long Boom**	
Engine output														
SAEJ1995, gross	kW	**hp**	165	**224**			211	**287**			223	**303**		
ISO 9249, SAEJ1995, net	kW	**hp**	164	**223**			210	**284**			221	**300**		
Volume, heaped ISO/SAE	m^3	**yd^3**	5,5	**7.2**	5,5	**7.2**	6,8	**8.9**	6,8	**8.9**	7,8	**10.2**	7,8	**10.2**
Static tipping load, straight	kg	**lb**	14 480	**31,920**	11 790	**26,000**	18 280	**40,310**	14 760	**32,540**	21 290	**46,950**	17 530	**38,660**
at full turn	kg	**lb**	12 340	**27,220**	9 960	**21,960**	16 030	**35,340**	12 840	**28,320**	18 580	**40,960**	15 190	**33,480**
A Overall length	mm	**ft in**	8 440	**27'8"**	8 950	**29'4"**	9 100	**29'10"**	9 630	**31'7"**	9 310	**30'6"**	9 780	**32'1"**
H Dump height at full lift and 45°discharge	mm	**ft in**	2 580	**8'6"**	3 100	**10'2"**	2 650	**8'8"**	3 220	**10'7"**	2 730	**9'0"**	3 230	**10'7"**
K Lift-arm height to hinge pin	mm	**ft in**	4 130	**13'6"**	4 650	**15'3"**	4 380	**14'4"**	4 950	**16'3"**	4 510	**14'10"**	5 000	**16'5"**
L Overall height with bucket at full raise	mm	**ft in**	6 150	**20'2"**	6 660	**21'10"**	6 410	**21'1"**	6 980	**22'11"**	6 630	**21'9"**	7 120	**23'4"**
M Reach at full lift and 45° discharge	mm	**ft in**	1 460	**4'9"**	1 440	**4'9"**	1 520	**5'0"**	1 500	**4'11"**	1 580	**5'2"**	1 610	**5'3"**
T Digging depth	mm	**ft in**	58	**2.3"**	106	**4.2"**	49	**1.9"**	104	**4.1"**	92	**3.6"**	175	**6.9"**
a1 Clearance circle	mm	**ft in**	13 050	**42'10"**	13 490	**44'3"**	14 890	**48'10"**	15 240	**50'0"**	15 210	**49'11"**	15 520	**50'11"**
Operating weight	kg	**lb**	21 000	**46,300**	21 190	**46,720**	25 690	**56,650**	26 290	**57,980**	28 900	**63,720**	29 180	**64,330**
Tire size			23.5R25 L5				26.5R25 L5				26.5R25 L5			

Volvo L220E
REF P BOE (S)*

			Standard		**Long Boom**	
Engine output						
SAEJ1995, gross	kW	**hp**	259	**352**		
ISO 9249, SAEJ1995, net	kW	**hp**	258	**351**		
Volume, heaped ISO/SAE	m^3	**yd^3**	9,5	**12.4**	9,5	**12.4**
Static tipping load, straight	kg	**lb**	23 770	**52,410**	20 950	**46,190**
at full turn	kg	**lb**	20 790	**45,840**	18 230	**40,190**
A Overall length	mm	**ft in**	9 640	**31'7"**	9 950	**32'8"**
H Dump height at full lift and 45°discharge	mm	**ft in**	2 870	**9'5"**	3 240	**10'7"**
K Lift-arm height to hinge pin	mm	**ft in**	4 680	**13'6"**	5 050	**16'7"**
L Overall height with bucket at full raise	mm	**ft in**	7 092	**23'3"**	7 480	**24'6"**
M Reach at full lift and 45° discharge	mm	**ft in**	1 640	**5'5"**	1 620	**5'4"**
T Digging depth	mm	**ft in**	104	**4.1"**	109	**4.3"**
a1 Clearance circle	mm	**ft in**	16 070	**52'9"**	16 310	**53'6"**
Operating weight	kg	**lb**	34 000	**74,980**	34 270	**75,570**
Tire size			29.5R25 L5			



Notes: Dimensions only apply to Volvo original attachments.
Dimensions only apply to machine equipped with heavy-duty recommended options.
For additional dimensions, see standard machine specification brochure.

* Refuse bucket, Pin-on, Bolt-on edge (steel)

Technology on Human Terms

The Volvo Construction Equipment is one of the world's leading manufacturers of construction machines, with a product range encompassing wheel loaders, excavators, articulated haulers, motor graders, and compact equipment.

The tasks they face vary considerably, but they all share one vital feature: technology that helps man perform better, safely, efficiently, and with care of the environment. We refer to it as Technology on Human Terms.

The sheer width of the product range means it is always possible to choose exactly the right machine and attachment for the job. Each machine also comes with the quality, continuity, and security which is represented by the Volvo name. The security of the service and parts organization; the security of always having immediate access to leading-edge research and technical development are part of the Volvo name. A machine from Volvo meets the highest demands in all kinds of jobs, under all conditions, the world over.

Volvo Construction Equipment develops, manufactures, and markets construction equipment. We are a Volvo company with production facilities on four continents and a market presence in over 100 countries.

VOLVO

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