

VOLVO WHEEL LOADERS

WASTE HANDLING



MORE CARE. BUILT IN.



FOR ALL TYPES OF WASTE HANDLING

With more than 20 years of experience in waste handling, Volvo can offer wheel loaders that live up to all the high demands for safety and comfort, as well as reliability and cost-effectiveness. We know wheel loaders, we know waste handling, and the combination of our wheel loaders and in-house waste handling equipment gives you the most productive waste handlers on the market.

Machines for all types of waste handling

There are many types of waste facilities. There are major differences between transfer stations, recycling stations and landfill sites, and even local work and operating conditions can vary quite a lot. That's why there is no single standard solution that suits all types of handling and facilities. But with Volvo's complete range of protective equipment and waste handling equipment, you can tailor your loader so that it's perfect for exactly your conditions, whatever the waste facility. All optional equipment is purpose-built for waste handling, and has the same high quality as the rest of the machine.

An optimal combination of performance, fuel economy and environmental care

The standard versions of Volvo's wheel loaders are already built for tough environments and are renowned for their high productivity and low fuel consumption. The high-performance engines provide a lot of power and have excellent response – immediate power for fast work cycles. Bucket movements are smooth and never give you any nasty surprises like jerking or pitching. Volvo's wheel loaders offer an optimal combination of performance, fuel economy and environmental care.

We care about you

When you invest in a Volvo wheel loader, you get a construction machine of the very highest quality. But of course, even the best machine needs service and maintenance, especially considering the extreme stresses to which your machine is subjected. Volvo Construction Equipment and wheel loader are built center around a professional customer support organization, providing parts supply, aftersales services and training. Highly trained personnel is totally committed to offering the best quality of support services for all our customers all over the world. We care about your ownership, your operation and the operator.





DEVELOPED FOR TOUGH ENVIRONMENTS

Waste handling is tough on both operator and machine. It's fast-paced, the environment is noisy and extremely dusty, and operating space is usually tight. Many standard features on Volvo wheel loaders have been specifically developed to withstand the abuse encountered in tough environments like waste handling.

Effective filters protect both man and machine

Many waste facilities are extremely dusty, which not only may reduce air quality in the cab but may also damage vital machine parts. That's why Volvo has more filters than any other wheel loader on the market, to protect both the operator and the machine. With a filter system in a class all of its own on the market, the air in the cab is always clean, and dust and dirt don't get into the engine, transmission, axles, hydraulic system or the fuel tank. Our optional equipment protects exposed machine parts from damage, and also makes for easier cleaning, service and maintenance. All this gives more time for sorting and handling of waste, as well as Volvo wheel loaders with longer operating lives.

Low temperature, insulated muffler

The insulated muffler reduces the possibility for combustible material to ignite in the engine compartment.

Heavy-duty countershaft transmission with responsive torque converter

The transmission is 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 protective equipment.

100 percent differential lock on front axle

The lock reduces tire spin on slippery, often wet waste-covered concrete floors for faster loading times and increased productivity.

Torque Parallel Linkage

The Volvo 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.

Engine isolated from the cooling system

The isolation reduces debris entering the engine compartment, which reduces the risk of fires.

Good visibility all around the machine

Operating space is often restricted in waste facilities and, in tight areas where people move around, good visibility is a must. The generous window surfaces in Volvo's cabs give excellent allround visibility and the operator has complete control of the work area on all sides of the machine. Volvo's machines are highly maneuverable and effective, even where space is limited.





CUSTOMER SUPPORT WITH VOLVO

Volvo Construction Equipment and Volvo wheel loaders center around a professional customer support organization, providing parts supply, after-sales services and training. Highly trained personnel is totally committed to offering the best quality of support services for all our customers all over the world. All this gives customer benefits through controlled owning and operating costs.

We care about your ownership - today and tomorrow

When you invest in a Volvo wheel loader, you get a construction machine of the very highest quality. But of course, even the best machine needs service and maintenance, especially considering the extreme stresses to which your machine is subjected. Your machine shouldn't only be productive today; it should also be just as productive tomorrow.

Sign up for a customer support agreement - four levels of support, one level of care

The best way to get the most out of your Volvo wheel loader is to invest in a Volvo Customer Support Agreement. There are four levels of agreements designed to give you total peace of mind; white, blue, silver, and – of course – gold, which includes all service, maintenance and repairs during the whole contract period at a fixed price. From this completely flexible starting point, we can create an agreement uniquely tailored to the needs of your business and the age of your loaders. Our objective is to help you maintain maximum machine productivity within a budget that suits your cashflow.

We care about your operation - anywhere at anytime

When you invest in a Volvo wheel loader, the availability of good service and access to the right parts are just as important as the price. After all, it is the total cost during the machine's entire life that's interesting. With all the products and resources we have at our disposal, we can offer you the best support. Anywhere, anytime.

Genuine Volvo parts - for good performance and productivity

Leave nothing to chance; always use genuine Volvo parts. It's the best way to avoid breakdowns and to obtain efficient operating costs. Each genuine part is developed and manufactured together with all other machine components. It's a complete system where each part works in perfect harmony with other parts. Only by using genuine parts can you be sure that your machine retains the qualities and features we gave it from the beginning.

We care about the operator

An aspect of major importance in Volvo machines is the operator's environment. If it isn't good, it doesn't matter how good the rest of the machine is. A machine operator has a job full of responsibility, and the productivity demands are high. Operators with a safe, comfortable and ergonomic operator station do a better job and get more out of their machine. Day after day.





WASTE HANDLING EQUIPMENT TAILORED TO YOUR APPLICATION

Automatically activated reversible cooling fan

Timer-controlled hydrostatic cooling fan automatically reverses the air flow to remove debris from the radiator and cooling cores as well as air intake screens to prevent the engine from being overheated. (L60E-L220E, pictures from L70E)



Relocated headlight assemblies

The headlight assemblies have been moved closer to the front frame to reduce the for risk of damage. (L110E-L220E)



Headlight guards

Protect the headlights, work lights, and turn signals from debris that may break or damage the lenses. (L60E-L220E)

Tail light guards

Protect the tail lights and turn signals from debris that may break or damage the lenses. (L60E-L220E)



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)



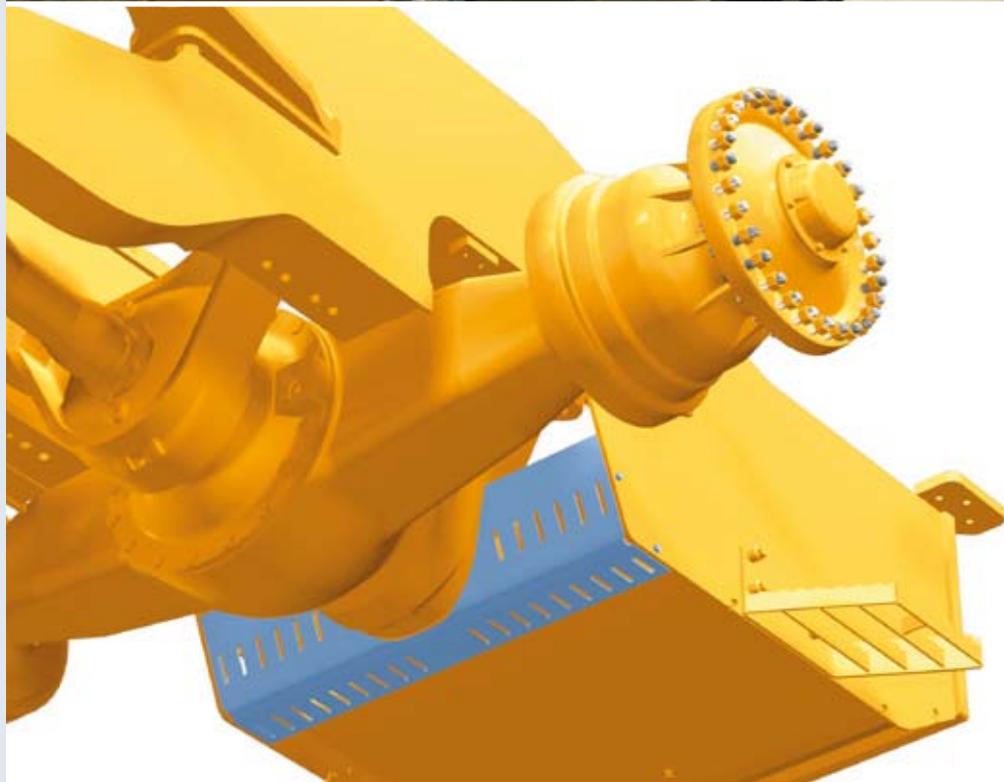
Belly guard, front/rear

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



Belly guard, oil sump

Covers the area located between the rear axle and fuel tank, protecting the engine's oil sump and drain hoses. (L150E-L220E)



Center hinge guards

Rear frame covers, together with center hinge protective plates, keep the exposed components in the rear frame from being damaged. (L60E-L120E)



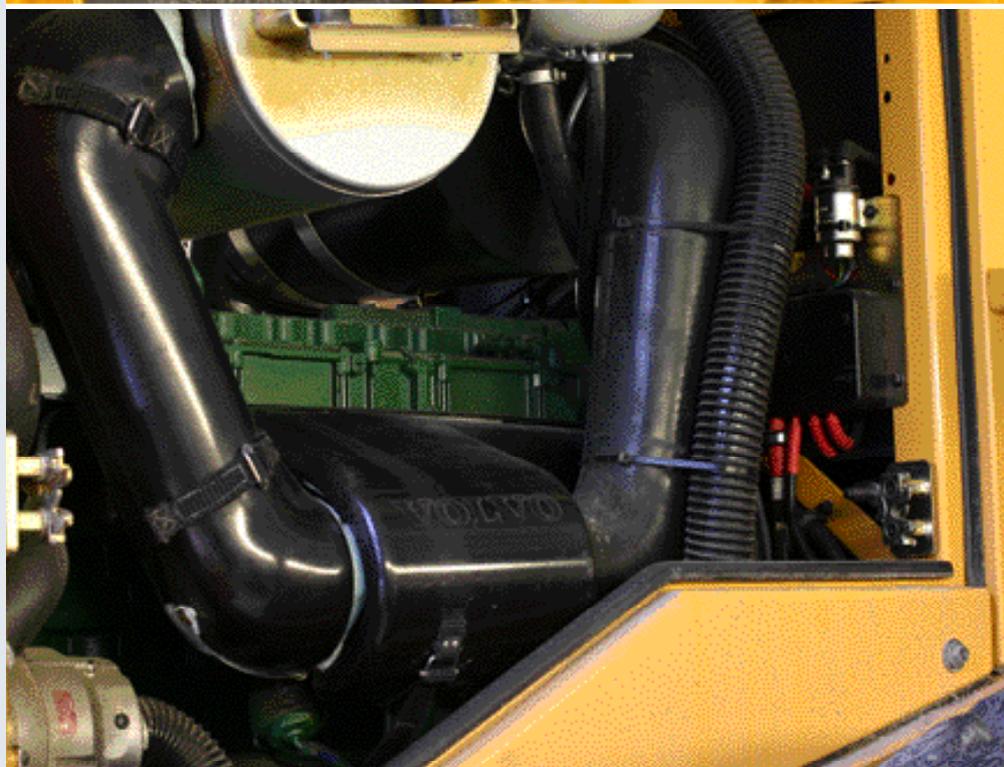
Boom cylinder hose and pipe guards

Designed to protect the boom cylinder hoses and pipes, these "box-type" structures prevent debris from breaking the hoses and/or pipes 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)



Exhaust heat insulation

Extra insulation for turbo, exhaust manifold and flexible exhaust pipe reduces heat radiation. Recommended in applications where combustible materials can easily ignite and cause engine fires. (Standard L110E, L120E, L180E High Lift), (Option L60E-L90E, L150E-L220E)



Two-stage air pre-cleaner

The engine air pre-cleaner expels large foreign particles prior to entry into the air filtration system. (L90E-L220E)



Cab air pre-cleaner

The cab air pre-cleaner is specially designed for very dusty applications. The pre-filter unit is mounted at the back of the cab above the rear window. (L60E-L220E)



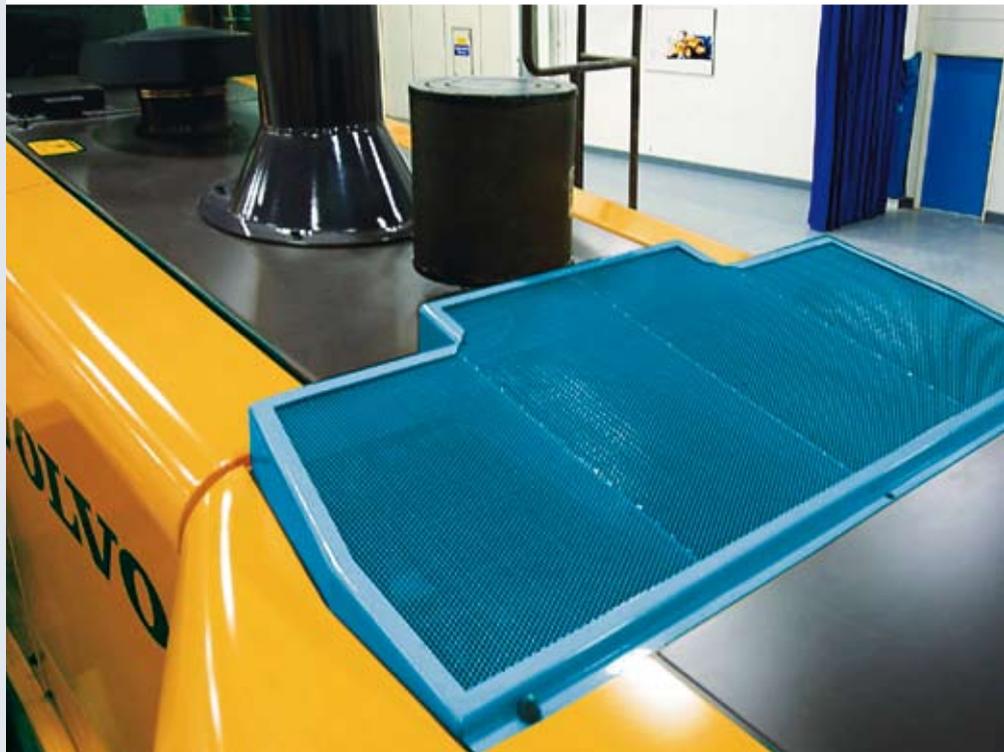
Radiator grille guard

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)



Air intake protection

Grease pipe guards. Guards are used to cover exposed grease tubes and zerks where possible. Some grease tubes have been changed to heavy-duty thick wall tubes. (L60E-L120E)



Grease tube guards

Protective guarding is used to cover exposed grease tubes and zerks where possible. Some grease tubes are changed to heavy-duty thick wall tubes. (L70E-L220E)



Steer cylinder guards

Provide protection for exposed parts in the center hinge area, including the steer cylinders, transmission, as well as 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)



Battery boxes, steel

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



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)



Wheel/axle seal guards

Designed to keep material from wrapping around the axles during operation and damaging the axle seals. (L60E-L220E)



Under cab guard

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



Front and rear mudguard

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

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



Windshield guard, side and rear window guards

The windshield guard protects both the cab glass and operator from debris. It is custom designed purpose-built to minimize glass breakage while maximizing visibility. (L60E-L220E)

The two side window guards are hinged for easy cleaning and maintenance, while the rear window guard can easily be removed using two quick-coupling latches. (L60E-L220E)



ADDITIONAL OPTIONS

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.
(L60E–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 Pre-cleaners

Sy-Klone and Turbo II branded pre-cleaners are available for even better filtering of the engine induction air. In addition to higher cleaning capacity, these air pre-cleaners are highly recommended in fire-hazardous 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)

Easily Accessible Main Battery Disconnect Switch

Additional main battery disconnect switch located inside the cab for quick and easy access in case a power shutdown is necessary. 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 use the wheel loader in different applications where special machines are otherwise required, e.g., forks, material handling arm, sweeper, high-tip bucket.
(L60E–L220E)

CDC (Comfort Drive Control)

The operator can easily switch between using the steering wheel and lever steering, reducing the harmful static muscle loads. With lever steering the operator can maneuver the machine quickly and comfortably.

BSS (Boom Suspension System)

BSS effectively absorbs shocks and reduces the bouncing and rocking that often occurs when operating on rough ground. Volvo's Boom Suspension System offers two different operating modes for faster cycle times, higher productivity and improved operator comfort in all types of applications.





A WIDE SELECTION OF SPECIAL ATTACHMENTS

Volvo offers a wide selection of special attachments for various tasks, such as waste handling. Volvo genuine buckets and wear parts are built to the same quality standard as our wheel loaders.

Refuse Bucket

Refuse Bucket is specifically designed for waste handling. With high strength steel and a spill guard optimized for maximum visibility, these buckets are made to move waste quickly, efficiently and safely.

Refuse Tamping Buckets

Refuse Tamping Buckets, with extra long floor and heavy-duty design, are ideal in push floor operations for both pushing the material and packing (tamping) the material in containers. The optional clamp arm is a valuable tool in different

types of handling, opened to push more material, closed to hold bulky material in the bucket and for limited sorting of material.

Bolt-on steel or rubber edge savers are available for improved bucket protection.

Hi-Tip Light Material Bucket

Hi-Tip Light Material Bucket features increased dump height over standard light material buckets because it is hydraulically lifted from a built-in frame. The Hi-Tip bucket has high capacity for low-density materials and is standard-equipped with steel bolt-on edge saver.

Refuse Bucket



Bale Clamp



Hi-Tip Light Material Bucket



Refuse Tamping Bucket with clamp arm



Refuse tamping bucket with or without clamp arm

Bucket volume		Bucket width		Loader compatibility Hook-on	Loader compatibility Pin-on
m ³	yd ³	mm	ft in		
5,2	6,8	3000	9'10"	L90-L120	L90-L120
6,4	8,4	3700	12'2"	L150-L220	L150-L180
6,4	8,4	3700	12'2"	-	L220

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

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
3,6	4,7	2550	8'4"		
4,1	5,4	2750	9'0"	L70E-L90E	L70E-L90E
4,7	6,2	2750	9'0"		
5,5	7,2	3000	9'10"	L70E-L120E	L70E-L120E
6,0	7,9	3000	9'10"		
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

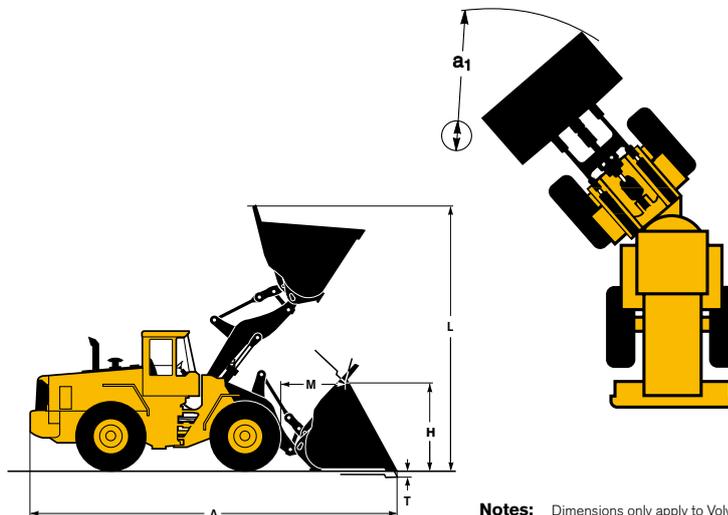


		Volvo L60E		Volvo L70E		Volvo L90E		Volvo L110E	
		REF P BOE (S)*		REF P BOE (S)*		REF P BOE (S)*		REF P BOE (S)*	
		Standard	Long Boom						
Volume, heaped ISO/SAE	m ³	3,1	3,1	4,1	4,1	4,1	4,1	5,5	5,5
Static tipping load, straight	kg	8 280	6 520	8 770	6 980	11 990	9 320	13 400	10 120
at full turn	kg	7 200	5 590	7 510	5 890	10 270	7 900	11 490	8 560
A Overall length	mm	7 500	8 040	7 740	8 210	7 760	8 180	8 340	8 850
H Dump height at full lift and 45° discharge	mm	2 680	3 220	2 520	3 020	2 640	3 060	2 520	3 070
L Overall height with bucket at full raise	mm	5 460	5 970	5 630	6 090	5 720	6 140	6 080	6 090
M Reach at full lift and 45° discharge	mm	1 210	1 210	1 390	1 380	1 380	1 330	1 420	1 430
T Digging depth	mm	56	98	88	102	75	80	51	61
a1 Clearance circle	mm	11 780	12 240	12 080	12 480	12 130	12 450	12 990	13 430
Operating weight	kg	12 210	12 320	14 190	14 430	16 970	16 220	20 220	19 620
Tire size		20.5R25 L5	20.5R25 L5	20.5R25 L5	20.5R25 L5	20.5R25 L5	20.5R25 L5	23.5R25 L5	23.5R25 L5



		Volvo L120E		Volvo L150E		Volvo L180E		Volvo L220E	
		REF P BOE (S)*		REF P BOE (S)*		REF P BOE (S)*		REF P BOE (S)*	
		Standard	Long Boom						
Volume, heaped ISO/SAE	m ³	5,5	5,5	6,8	6,8	7,8	7,8	9,5	9,5
Static tipping load, straight	kg	14 480	11 790	18 280	14 760	21 290	17 530	23 770	20 950
at full turn	kg	12 340	9 960	16 030	12 840	18 580	15 190	20 790	18 230
A Overall length	mm	8 440	8 950	9 100	9 630	9 310	9 780	9 640	9 950
H Dump height at full lift and 45° discharge	mm	2 580	3 100	2 650	3 220	2 730	3 230	2 870	3 240
L Overall height with bucket at full raise	mm	6 150	6 660	6 410	6 980	6 630	7 120	7 120	7 480
M Reach at full lift and 45° discharge	mm	1 460	1 440	1 520	1 500	1 580	1 610	1 640	1 620
T Digging depth	mm	58	106	49	104	92	175	80	85
a1 Clearance circle	mm	13 050	13 490	14 890	15 240	15 210	15 520	16 070	16 310
Operating weight	kg	21 000	21 190	25 690	26 290	28 900	29 180	34 000	34 270
Tire size		23.5R25 L5	23.5R25 L5	26.5R25 L5	26.5R25 L5	26.5R25 L5	26.5R25 L5	29.5R25 L5	29.5R25 L5

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



Notes: Dimensions only apply to Volvo genuine attachments.



Volvo Construction Equipment is different. It's designed, built and supported in a different way. That difference comes from our 170-year engineering heritage. A heritage of thinking first about the people who actually use the machines. About how to help them be safer, more comfortable, more productive. About the environment we all share. The result of that thinking is a growing range of machines and a global support network dedicated to helping you do more. People around the world are proud to use Volvo. And we're proud of what makes Volvo different - **More care. Built in.**



All products are not available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.

VOLVO

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