# VOLVO WHEEL LOADERS WASTE HANDLING





## 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 clean-ing 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)



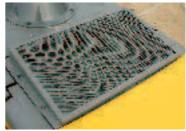
**Headlight guards** Protect the headlights

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



#### 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)



Taillight guardsProtect the taillights and turnsignals from debris that maybreak or damage the lenses.(L60E-L220E)

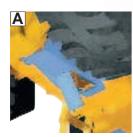


(L150E-L220E)



A

В



#### 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)







#### 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)



Battery boxes, steel Steel battery boxes replace the

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



#### Relocated headlight assemblies

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

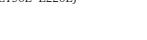


#### Cab ladders, rubber suspended

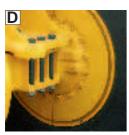
Flexible rubber side members have been extended to support two steps of the cab access ladders. In addition to being flexible, they have also been brought closer to the machine, making it difficult to damage or destroy the ladders in extreme conditions. (L150E-L220E)



(L150E-L220E)



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**Wheel/ axle seal guards** Designed to prevent 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

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)



**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)

F



**Window guards, side and rear** Provide protection for both the

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)



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



#### Windshield guard

Protects both the cab glass and operator from debris. It is custom designed to minimize glass breakage while maximiz-ing visibility. (L60E-L220E)

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## **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 Pre-cleaners**

Sy-Klone and Turbo II branded pre-cleaners are available for increased purification of the engine induction air. In addition to increased cleaning capacity, these air pre-cleaners 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)

#### 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 <sup>3</sup>	yd <sup>3</sup>	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**

Engine output SAEJ1995, gross

at full turn

Α

L

т

. Tire size

Overall length

at full raise

M Reach at full lift and 45° discharge

Digging depth

a1 Clearance circle

**Operating weight** 

Engine output SAEJ1995, gross

at full turn

н

L

Overall length

at full raise

T Digging depth

**Operating weight** 

Tire size

a1 Clearance circle

M Reach at full lift and 45° discharge

ISO 9249, SAEJ1995, net

Volume, heaped ISO/ SAE

Static tipping load, straight

Dump height at full lift and 45°discharge

Overall height with bucket

ISO 9249, SAEJ1995, net

Volume, heaped ISO/ SAE

Static tipping load, straight

H Dump height at full lift and 45°discharge

Overall height with bucket

Volvo L60E			

REF P BOE (S)\*

Standard

103 (140)

102 (139)

3,1

8 280

7 200

7 500

2 680

5 460

1 2 1 0

11 780

12 210

20.5R25 L5

56

kW (hp)

kW (hp)

m

kg

kg

mm

mm

mm

mm

mm

mm

kg

kW (hp)

m

kg

kg

mm

mm

mm

mm

mm

mm

kg



REF P BOE (S)\* Standard

12 080

14 190

20.5R25 L5



Standard

122 (166)

121 (165) 4,1 11 990

10 270

7 760

2 640

5 720

1 380

12 130

16 970

20.5R25 L5

75



REF P BOE (S)\* Standard

155 (210) 154 (209) 5,5 13 400 11 490 8 340
2 520
6 080
1 420 51 12 990 20 220 23.5R25 L5



164 (223)

5,5

11 790

9 960

8 950

3 100

6 660

1 4 4 0

13 490

21 190

106

5,5

14 480

12 340

8 4 4 0

2 580

6 150

1 460

13 050

21 000

23.5R25 L5

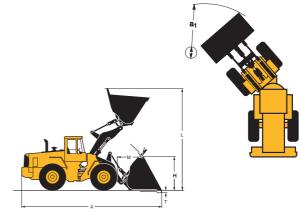
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REF P BOE (S)



Standard	Long Boom	Standard	Long Boor
211 (287) 210 (284)		223 (303) 221 (300)	
6,8	6,8	7,8	7,8
18 280	14 760	21 290	17 530
16 030	12 840	18 580	15 190
9 100	9 630	9 310	9 780
2 650	3 220	2 730	3 230
6 410	6 980	6 630	7 120
1 520	1 500	1 580	1 610
49	104	92	175
14 890	15 240	15 210	15 520
25 690	26 290	28 900	29 180
26.5R25 L5		26.5R25 L5	
		20101120 20	



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.



Volvo L220E

REF P BOE (S)\* Standard Long Boom

Engine output			Ũ		
SAEJ1995, gross	kW (hp)	259 (352)			
ISO 9249, SAEJ1995, net	kW (hp)	258 (351)			
Volume, heaped ISO/ SAE	m <sup>3</sup>	9,5	9,5		
Static tipping load, straight	kg	23 770	20 950		
at full turn	kg	20 790	18 230		
A Overall length	mm	9 640	9 950		
H Dump height at full lift					
and 45°discharge	mm	2 870	3 240		
L Overall height with bucket					
at full raise	mm	7 120	7 480		
M Reach at full lift					
and 45° discharge	mm	1 640	1 620		
T Digging depth	mm	80	85		
a1 Clearance circle	mm	16 070	16 310		
Operating weight	kg	34 000	34 270		
Tire size		29.5R25 L5			



#### **Technology on Human Terms**

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 more.

The tasks they face vary considerably, but they all share one vital feature: technology which helps man to 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 strength of the service and parts organizations; the security of always having immediate access to leadingedge research and technical development are part of the Volvo name. A machine from Volvo meets the very 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.

For more information please visit our website: *www.volvo.com* 

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



#### **Construction Equipment**

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