

**VOLVO WHEEL LOADERS**  
**TIMBER HANDLING**



**VOLVO**

# Volvo knows wheel loaders – and timber handling





With more than 50 years of experience building machines for the log handling industry, Volvo's wheel loaders have a well-deserved reputation for high productivity, efficiency, reliability and flexibility. They've been specially designed to withstand the abuse encountered in tough environments – like the ones timber handlers work in every day.

**More efficient along the entire production chain**

With their high capacity, flexibility and wide range of attachments, Volvo wheel loaders boost productivity in each link of your transport chain... from the forest to finished product.

Their excellent operating characteristics, breakout torque, parallel lift-arm action and long reach permit short cycle times in timber unloading, stacking and feeding sorting bins and feed tables.

Changing attachments is quick and easy, which means you need fewer machines to get the job done. The same machine that takes care of storage and shipping the finished product – paper and pulp bales, paper reels, sawn timber or palletized goods – can also be used to, for example, handle wood chips and clear snow.

**Volvo L180E High-lift means 60% less storage space**

Lift height and long reach give high productivity in applications like unloading logs and pulp, stacking and unloading sorting hoppers and feed tables. The grapple also reduces cycle time with its 360-degree rotation, which makes it possible to reach the logs from every side of the stack.

You can build higher stacks, which means you can reduce the size of the space you need to store your timber. In fact, by using the maximum lift height when you're stacking logs, you can use your stockyard space 60-70% more efficiently than you can using traditional methods.

# Created for the toughest environments. Equipped for the toughest jobs.

You have enough to think about while doing your job, and you shouldn't have to worry whether your equipment is up to the task. That's why every feature in a Volvo Wheel Loader isn't just designed to tackle everything you need to do – it's also rigorously tested to make sure it won't let you down.



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



**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 and through easy accessible side panels.



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





**Breakout torque at maximum lifting height**

The excellent geometry of the TP Linkage allows the breakout torque to actually increase from dump (forward tilt) to maximum roll-back. For example, this is what happens when unloading a logging truck.



**Well-protected, high quality wiring**

All electrical wires are routed through sturdy conduits, protected from dust and abrasion with rubberized connectors and terminal caps. The conduits are securely fastened to the frame in order to protect the wiring from vibration damage. All wiring is water resistant.

**100 % differential lock on front axle**

Excellent rimpull on slippery surfaces.

**Working hydraulics**

**(load-sensing hydraulic system)**

The load-sensing hydraulic system delivers exact hydraulic oil flow to the functions that require it. This is an energy-efficient system which helps to lower fuel consumption.



**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 for cleaning or replacing. Also, the air is vented from all major components with easy to replace breather filters, to prevent dirty air from entering the transmission, axles, fuel tank and hydraulic tank.

# A great place to work – comfort options

The most important asset of any company is its people – and Volvo wheel loaders make anyone who works in them feel pampered. With the comfortable, safety-conscious Care Cab, your wheel loader and its operator will soon be the best of friends.

## 3rd and 4th Hydraulic functions

Volvo wheel loaders can be equipped with third and fourth hydraulic functions, which are operated with additional control levers. These functions are necessary when there's a need to operate a third and fourth hydraulic function at the same time, such as when using timber grapple with a hydraulic heel kick-out.

## Comfort Drive Control (CDC)

With CDC there is a significant reduction of repetitive and tiring steering wheel movements. CDC provides comfortable operation of steering and shifting with user-friendly controls integrated in the left armrest.

## Boom Suspension System (BSS)

Accumulators connected to the lift cylinders effectively absorb shocks and reduce the bouncing and rocking that often arises when running on rough ground. The Boom Suspension System yields faster cycle times and improved operator comfort.



3rd and 4th Hydraulic functions



Comfort Drive Control



Boom Suspension System (BSS)



# Whatever the job, we have the tools - optional equipment

The following additional options are recommended in timber handling applications to increase productivity, efficiency, comfort, versatility, service-ability, and safety.

## External axle oil cooling

Provides effective cooling of the axle oil and brakes in applications where heavy loads and constant braking are common. (Standard on L180E High-lift and L330E, option for L110E-L220E)

## Turbine air pre-cleaners

Sy-klone and Turbo II branded pre-cleaners increase purification of air inducted into the engine. In addition to increasing cleaning capacity, these pre-cleaners are highly recommended in fire-sensitive applications, as they are not connected to the exhaust system.

## Alternator air filter

The alternator cooling air is filtered, which increases both its effectiveness and lifetime in dirty and dusty conditions.

## Rear view camera with monitor

Engine hood mounted camera eliminates blind spots when reversing. Monitor located inside the cab shows the operator what's happening to the rear. Especially useful when working in tight areas.

## Hydraulic attachment bracket

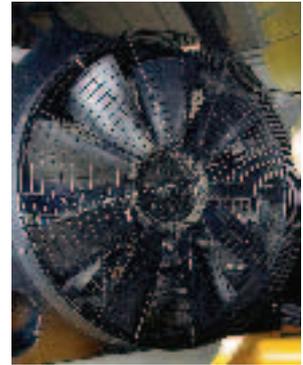
Allows you to use the wheel loader more effectively in applications where special machinery is usually required, e.g. forks and high-tip bucket.

## Other optional equipment

Air conditioning with  
Automatic Temperature Control (ATC)  
Single lever hydraulic control with 3rd function  
Limited slip rear differentials  
Logging counterweight

## 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 for extended maintenance intervals.



## Central lubrication system

Volvo's factory-mounted central lubrication system automatically lubricates service points on the machine. It cuts maintenance costs and time spent in the workshop, which means more productivity and reduced operating costs.



## Log pusher

Recommended for all handling of roundwood. Permits timber to be stacked higher and clears a path in front of the wheel loader. (Only available for L180E High-lift)



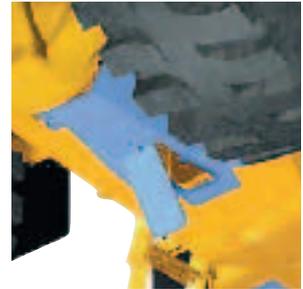
# Protection options

Volvo lets you choose from a full range of equipment specifically designed for your business. You choose the protection that's right for you and your application. The equipment on this page is recommended for applications where additional, but not excessive – protection is needed.



## 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–L330E)



## Headlight and taillight guards

In an environment where debris is common, these guards protect the lenses of your wheel loaders' headlights, worklights and taillights.

## 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–L330E)

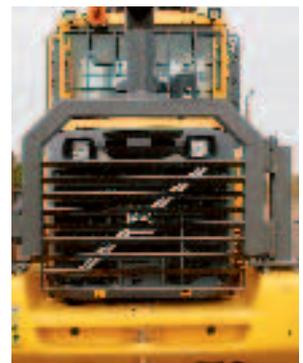


## Window and windshield guards

Protection for both the front, side and rear windows. These guards are custom-made to minimize glass breakage.

## Radiator grille guard

Protects the grille, cooling fan, radiator and condenser cores from damage in severe environments and working conditions. Hinged for easy cleaning and maintenance.

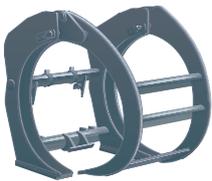


# Volvo genuine attachments for timber handling

We are the only wheel loader manufacturer who designs and manufactures a comprehensive range of attachments for timber handling. Volvo timber grapples, high-lift grapples and high-dump light materials buckets are designed together with our wheel loaders to give you the perfect interplay between machine and attachment that is a prerequisite for optimum productivity. Make use of the full capacity of your wheel loader – choose a Volvo genuine attachment.



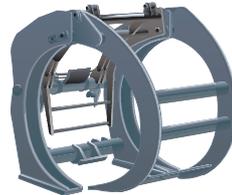
**Attachment bracket**  
Hydraulic attachment bracket permits quick changes between different Volvo attachments.



**Unloading grapple**  
For unloading from vehicles.  
Area 1,8–4,0 m<sup>2</sup>.



**Sorting grapple**  
For feeding sorting plants.  
Area 1,0–4,0 m<sup>2</sup>



**Heel/kickout**  
For holding a single log and making higher stacks. Requires 4th hydraulic function.



**General purpose grapple**  
For different types of timber, including tree length logs.  
Area 0,7–1,8 m<sup>2</sup>.



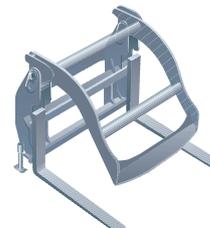
**Wide tree length grapple**  
For handling tree length stems.  
Area 1,7–2,0 m<sup>2</sup>.



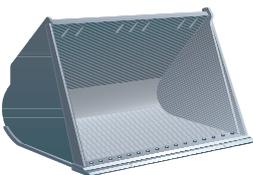
**Tropical timber grapple**  
For large, heavy tropical timber logs.  
Area 1,1–1,6 m<sup>2</sup>.



**Swivel wood clamp**  
For loading or unloading from the top of the stack. 360 degree rotation capabilities.  
Area 0,5–2,0 m<sup>2</sup>.



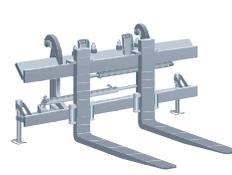
**Combi-fork with one-piece clamp**  
For palletized lumber and roundwood. Area 1,1–1,5 m<sup>2</sup>.



**Light material bucket**  
For wood chips, etc.  
Volume 2,2–14,0 m<sup>3</sup>.



**High-tip light material bucket**  
For unloading light material when extra dump height is required.  
Volume 1,8–13,0 m<sup>3</sup>.



**Fork attachments**  
In many different widths and lengths. Classified and inspected according to applicable standards.



**Lumber fork and backrest**  
For safe handling of lumber packages.

See product brochure for respective machine or [www.volvoce.com](http://www.volvoce.com) for more detailed information.

# Specifications



Volvo L50E



Volvo L60E



Volvo L70E



Volvo L90E

**Engine output**

|                              |                | Volvo L50E | Volvo L60E | Volvo L70E | Volvo L90E |
|------------------------------|----------------|------------|------------|------------|------------|
| SAEJ1995, gross              | kW (hp)        | 74,9 (102) | 103 (140)  | 113 (154)  | 122 (166)  |
| ISO 9249, SAEJ1349 net       | kW (hp)        | 74 (101)   | 102 (139)  | 112 (152)  | 121 (165)  |
| <b>Operating weight,</b>     | t              | 9,0        | 12,0       | 14,0       | 16,8       |
| <b>Recommended work load</b> | kg             | 3 000      | 4 300      | 4 500      | 5 200      |
| with grapple area*           | m <sup>2</sup> | 0,7        | 0,7        | 0,9        | 1,3        |
| <b>Recommended work load</b> | kg             | 2 700      | 3 600      | 4 000      | 5 000      |
| with grapple area**          | m <sup>2</sup> | 1,0        | 1,3        | 1,5        | 1,8        |
| <b>Grapple</b>               | m <sup>2</sup> | 0,7–1,3    | 0,7–1,3    | 0,9–1,5    | 1,3–2,4    |



Volvo L110E



Volvo L120E



Volvo L150E



Volvo L180E

**Engine output**

|                              |                | Volvo L110E | Volvo L120E | Volvo L150E | Volvo L180E |
|------------------------------|----------------|-------------|-------------|-------------|-------------|
| SAEJ1995, gross              | kW (hp)        | 155 (210)   | 165 (224)   | 211 (287)   | 223 (303)   |
| ISO 9249, SAEJ1349 net       | kW (hp)        | 154 (209)   | 164 (223)   | 210 (284)   | 221 (300)   |
| <b>Operating weight,</b>     | t              | 19,8        | 20,7        | 25,4        | 28,4        |
| <b>Recommended work load</b> | kg             | 6 800       | 7 100       | 9 100       | 10 900      |
| with grapple area*           | m <sup>2</sup> | 1,3         | 1,3         | 1,8         | 1,8         |
| <b>Recommended work load</b> | kg             | 6 000       | 6 300       | 7 900       | 9 000       |
| with grapple area**          | m <sup>2</sup> | 2,4         | 2,4         | 3,1         | 3,5/3,7     |
| <b>Grapple</b>               | m <sup>2</sup> | 1,1–2,4     | 1,1–2,4     | 1,6–3,5     | 1,6–3,7     |



Volvo L180E HL



Volvo L220E



Volvo L330E Log Loader

**Engine output**

|                              |                | Volvo L180E HL | Volvo L220E | Volvo L330E Log Loader |
|------------------------------|----------------|----------------|-------------|------------------------|
| SAEJ1995, gross              | kW (hp)        | 223 (303)      | 259 (352)   | 370 (503)              |
| ISO 9249, SAEJ1349 net       | kW (hp)        | 221 (300)      | 258 (351)   | 369 (502)              |
| <b>Operating weight,</b>     | t              | 34,0–36,0      | 32,5        | 61,0                   |
| <b>Recommended work load</b> | kg             | 8 600          | 12 300      |                        |
| with grapple area*           | m <sup>2</sup> |                | 1,8         |                        |
| <b>Recommended work load</b> | kg             | 8 600          | 10 000      |                        |
| with grapple area**          | m <sup>2</sup> |                | 4,0         |                        |
| <b>Grapple</b>               | m <sup>2</sup> | 2,3–4,8        | 1,7–4,0     | 5,5–6,3                |

\* General purpose grapple  
\*\* Sorting grapple

See product brochure for respective machine or [www.volvoce.com](http://www.volvoce.com) for more detailed information.



## 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 leading-edge 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](http://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.*

# VOLVO

## Construction Equipment

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