VOLVO’S BEEN AROUND THE BLOCK

With Volvo on the job, moving large, heavy blocks quickly and efficiently is easily done. That’s because Volvo block handlers are specially equipped with features that ensure heavy lifting and high breakout forces. Together with a full line of attachments and equipment adapted for block handling, even the largest rocks are no match for Volvo’s block handlers.

Volvo knows block handling
With the L330E block handler at the top of the range, Volvo wheel loaders have the power, force, and durability required for working in large block quarries. High capacity and excellent rimpull is the result of well-matched components working together in perfect harmony. A wide range of Volvo genuine attachments and optional equipment allows you to tailor the machine for the job at hand, guaranteeing you the efficiency, productivity, and comfort you demand. Together with a well-established service and support network, Volvo Wheel Loaders offers the complete package solution for your business needs.

Volvo’s been around the block for a long time. So when your job calls for the handling of large blocks, look no further than the full line of Volvo wheel loaders. Whether you’re carrying granite blocks, loading trucks, or maintaining the yard, you’ll be hard pressed to find a more dependable or durable wheel loader than a Volvo.

Volvo standard features

Volvo genuine attachments

Volvo optional equipment

Machine specifications
Many standard features built into today’s Volvo wheel loaders are specifically developed to withstand tough applications like block handling.

Get more done
- Volvo’s high performance, low emission engines develop high torque already at low rpm. This ensures the necessary power and rimpull for handling heavy loads.
- Volvo’s linkage systems, including the unique TP-linkage, feature excellent rollback angles while keeping the load close to the front axle in carry position for good load retention and better stability.
- Volvo block handlers utilize the same linkage systems as the standard machines, meaning they can easily be used as bucket machines to load trucks. This is an advantage over competitive block handlers equipped with shortened booms.

Operating economy
- All systems and components are perfectly matched for operator efficiency, quality and reliability, and low fuel consumption.
- Heavy-duty frames and widely spaced, well-sealed center hinge bearings contribute to long life and low operating costs.

Work more comfortably
- Volvo’s Care Cab is vibration-isolated for a comfortable ride and sound insulated for extremely low internal sound levels.
- The cab filtration system not only cleans the incoming air, but also the re-circulated air inside the cab, making it one of the cleanest cabs on the market.

Keep it running
- Contronic electronic monitoring system continuously controls, monitors, informs, and warns the operator of the machine’s status. Other features include monitoring of oil and fluid levels, fuel consumption data, and service intervals.
- Your Volvo dealer is fully equipped and trained to support every aspect of our products and your business with parts support, service assistance, and training.

Safe and environmentally friendly operation
- Angled ladders, anti-slip walkways, and a large door opening provide easy and safe access to the machine.
- Volvo’s compact design ensures a tight turning circle, a feature which is important in crowded or confined work areas.
Volvo genuine block handling attachments are built to the same quality standard as our wheel loaders. As a machine manufacturer, we have both the knowledge and information to design our attachments as an integral part of the loader. Machines and attachments that are made for each other obviously work best together.

**Attachment Bracket**
The hydraulic attachment bracket makes it quick and easy to change between different block handling attachments depending on the task required.

**Hook-on Spade Nose Rock Bucket for Block Applications**
Because of its strength and performance, the hook-on spade nose rock bucket is the best choice for loading out rock or overburden in block quarries. It uses wear resistant steel to give maximum strength for long life.

**Block Forks**
Heavy-duty fork tines are designed for lifting and maneuvering blocks in quarry operations. The fork tine geometry keeps the load close to the front axle in carry position for good load retention and safe handling.

**Breaker Tine**
The heavy-duty single fork tine is designed for breaking out loose blocks from the face and moving raw blocks. The center mounted tine allows the forces on the machine to be evenly distributed and also maximizes the usable force. A notch built into the end of the extra thick tine gives better leverage.

**Clearing Rake**
The clearing rake is used for moving objects or clearing debris.
<table>
<thead>
<tr>
<th>Attachment</th>
<th>Volvo L150E**</th>
<th>Volvo L180E**</th>
<th>Volvo L220E**</th>
<th>Volvo L330E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Width</td>
<td>Length</td>
<td>Weight</td>
<td>Volume</td>
</tr>
<tr>
<td>Attachment bracket</td>
<td>1340</td>
<td>-</td>
<td>580</td>
<td>-</td>
</tr>
<tr>
<td>Spade nose</td>
<td>3030</td>
<td>1610</td>
<td>2270</td>
<td>3,6</td>
</tr>
<tr>
<td>rock bucket (H)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block forks</td>
<td>1480</td>
<td>1225</td>
<td>950</td>
<td>-</td>
</tr>
<tr>
<td>Breaker tine</td>
<td>1450</td>
<td>1400</td>
<td>1800</td>
<td>-</td>
</tr>
<tr>
<td>Clearing rake</td>
<td>2500</td>
<td>8730</td>
<td>5000</td>
<td>-</td>
</tr>
</tbody>
</table>

(H) Hook-on

** Spade nose rock bucket equipped with Volvo Tooth System and segments
Volvo offers a full range of equipment that has been specifically designed for your business. You pick the options that are right for you and your operation. The following equipment can be added to the standard L150E-L330E wheel loaders to help increase productivity, economy, comfort, serviceability, and safety when working in block handling applications.

1. **L330E Block Handler**
   The L330E block handler is available in two different versions, standard and heavy-duty. This flexibility allows you to choose the right machine for your application. Depending on the size of the blocks being handled, you can choose the configuration that best suits your needs.
   - **Standard L330E Block Handler Kit**
     - Additional counterweight +2400 kg
     - Larger lift cylinders
     - Limited slip differential, rear
     - Heavy-duty rims
     - Tires: Goodyear RL5K two star
   - **Heavy-Duty L330E Block Handler Kit**
     - Additional counterweight +7300 kg
     - Larger lift and tilt cylinders
     - Limited slip differential, rear
     - Reinforced rear frame
     - Heavy-duty rims
     - Tires: Goodyear RL5K two star

2. **Boom Suspension System (BSS)**
   BSS effectively absorbs shocks and reduces the bouncing and rocking that often occurs when operating on rough ground. Volvo’s Boom Suspension System offers 2 different operating modes for faster cycle times, higher productivity and improved operator comfort in all types of block handling applications.

3. **Comfort Drive Control (CDC)**
   When operating with CDC, there is a significant reduction of repetitive and tiring steering wheel movements. Comfort Drive Control provides comfortable operation of steering and shifting with user-friendly controls integrated in the left armrest.

4. **Automatic Lubrication System**
   Volvo’s factory mounted central lubrication system automatically lubricates service points on the machine so you don’t have to. It cuts maintenance costs and downtime, which means higher productivity and reduced operating costs.

5. **Rearview Camera with Color Monitor**
   Engine hood mounted camera eliminates blind spots when reversing. The color monitor located inside the cab shows the operator what’s happening to the rear. This is especially useful when working in tight areas.

6. **Extra Counterweights**
   Additional counterweight is available to increase stability when handling heavy loads. Some restrictions may apply. Be sure to check with your dealer regarding the use of extra counterweights. (L150E-L220E)

7. **Extra Hydraulic Oil Cooler**
   Under extreme working conditions, including high ambient temperatures, the hydraulic oil can get rather hot, generating wasted energy. An extra hydraulic oil cooler is available for higher availability of hydraulic components. (L180E-L330E)

**Limited Slip Differential on the Rear Axle (std L330E)**
An automatic limited slip differential on the rear axle can be combined with the 100% differential lock on the front axle for maximum traction in all types of conditions. (L150E-L220E)

**External Axle Oil Cooling**
Axle oil coolers provide effective cooling of the axle oil and brakes in applications where heavy loads, frequent braking and long transport distances are common.

**Tires**
L-5 two star radial tires are most often recommended in heavy block handling applications. The L-5 tread compound is hard for longer life and better cut resistance, while the two star rating indicates greater strength and a higher load carrying capacity for extremely heavy loads.

* Volvo recommends always consulting a tire manufacturer prior to selecting a tire model.

For a complete list of available options, please consult each machine’s respective product brochure.
The graphs below show the tipping load and lifting force versus hinge pin height. The maximum rated load should be calculated according to ISO 14397-1, which is based on the following criteria:

- Machine speed less than 2 km/h
- Machine in straight-ahead position
- Load fully rolled back
- Load lifted to the maximum moment arm (maximum reach)
- Center of gravity of load at X: 900 mm and Y: 800 mm
- Maximum tipping load utilization at 80% when operating on firm and level ground

* Equipped with logging counterweight and L5 tires. (L220E equipped with extra counterweight for block handling.)
<table>
<thead>
<tr>
<th><strong>Volvo L150E</strong></th>
<th><strong>Volvo L180E</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Engine</strong></td>
<td>D9A LBE2</td>
</tr>
<tr>
<td>SAE J1995 gross</td>
<td>211 kW (287 hp)</td>
</tr>
<tr>
<td>ISO 9249, SAE J1349 net</td>
<td>210 kW (284 hp)</td>
</tr>
<tr>
<td>A Overall length</td>
<td>8880 mm</td>
</tr>
<tr>
<td>R, Rollback angle at carry</td>
<td>34,7°</td>
</tr>
<tr>
<td>T Digging depth</td>
<td>96 mm</td>
</tr>
<tr>
<td>a, Clearance circle**</td>
<td>14 580 mm</td>
</tr>
<tr>
<td>H Dump height at full lift and 45° discharge**</td>
<td>2770 mm</td>
</tr>
<tr>
<td>Operating weight</td>
<td>24 500 kg</td>
</tr>
<tr>
<td>Tire size</td>
<td>26.5 R25 L5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Volvo L220E</strong></th>
<th><strong>Volvo L330E</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Engine</strong></td>
<td>D12C LBE2</td>
</tr>
<tr>
<td>SAE J1995 gross</td>
<td>259 kW (352 hp)</td>
</tr>
<tr>
<td>ISO 9249, SAE J1349 net</td>
<td>258 kW (351 hp)</td>
</tr>
<tr>
<td>A Overall length</td>
<td>9550 mm</td>
</tr>
<tr>
<td>R, Rollback angle at carry</td>
<td>45,5°</td>
</tr>
<tr>
<td>T Digging depth</td>
<td>410 mm</td>
</tr>
<tr>
<td>a, Clearance circle**</td>
<td>15 650 mm</td>
</tr>
<tr>
<td>H Dump height at full lift and 45° discharge**</td>
<td>3210 mm</td>
</tr>
<tr>
<td>Operating weight</td>
<td>33 320 kg</td>
</tr>
<tr>
<td>Tire size</td>
<td>29.5 R25 L5</td>
</tr>
</tbody>
</table>

Notes: Dimensions only apply to Volvo original attachments. For additional dimensions, see standard machine specification brochure.

** Equipped with hook-on spade nose rock bucket, Volvo Tooth System and segments.
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.