

# Progress through Versatility: Liebherr Demolition Excavators.



# LIEBHERR



# Maximum Economy on Every Project

Whether it's an old building or a bridge, whether it's a factory or a water tower, when it comes to demolition it's the equipment that determines how economical the job is going to be.

## 1 The Perfect Solution for Every Application

Demolition excavators from Liebherr offer a versatility that provides ultimate performance and that means on every project. Innovative solutions, excellent technical design, and components with long service lives mean that the range of machines and configurations guarantee the best possible results in every aspect of selective demolition.

## 2 Flexibility from the System Specialists

Liebherr hydraulic excavators have a wide range of accessories and optional tools all ready to be added. This means the machine can be configured to meet any of the specialized demands of demolition. All these components and variants are developed and manufactured exclusively by Liebherr: Perfection, all from one source.

## 3 Safety Means Success

With demolition excavators from Liebherr, safety means economy too. The best possible stability characteristics, reliable operating performance, and excellent ergonomic design all add up to an absolute advantage when it comes to operational quality and value – plain and simple.





# The Perfect Solution for Every Application

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Liebherr demolition excavators set new standards for efficiency and economy in the industry, and the focus is absolutely on versatility. No matter how varied the circumstances may turn out be, the wide range of models and the wide range of equipment to go with them mean the ideal combination for every situation is easy to find. With the R 934 C, R 944 C, R 954 C, R 974 C, and R 984 C, the right hydraulic excavator can be provided for every size of building and every type of task.

The unique range of extensions, booms, intermediate elements, and demolition stick units allow for best possible performance in every phase of work. Another strength of the Liebherr attachment concept is the flexibility in operation. An attachment change can be executed extremely rapidly and without much effort, which means that the same unit can take on demolition work as well load demolition debris.

## Powerful Design

The stable uppercarriage with continuous box beams provide the excavator with an extremely strong foundation, and provides for optimum conducting of the power flow from the unit. This creates a double advantage for the equipment fittings and steel superstructure: High operational reliability and long service life.

## Top Quality for Top Performance

The projects may change, but the level of performance stays at the maximum. This is guaranteed by the superb quality of each individual component, quality that makes Liebherr demolition excavators famous the whole world over. Their robust construction, designed to withstand the most extreme conditions, means exceptional availability and performance. Components such as the undercarriage, rotating deck, bearings, bolts, and equipment fittings, are all planned and prepared to withstand extreme stresses and demands over long periods of time. That makes a Liebherr excavator an investment that will pay for itself many times over. And the versatile Liebherr range provides the ideal solution every time, whatever the task may be.

## Our Experience - Your Capital Advantage

With more than 60 years of experience in design, construction, operations, and service with demolition excavators, Liebherr can provide you with complete expertise in every situation relating to demolition and selective deconstruction. As a Liebherr customer, you have all this know-how at your disposal, and at any time. Our aim is clear – together with you, we'll find the most economical and most successful way to achieve your goals.



# Flexibility from the System Specialists

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The wide range of equipment configurations for Liebherr demolition excavators means complete versatility, and all from one source. The selection extends from demolition with the intention of recycling, through material separation, and up to loading of all kinds. All booms and standard options are manufactured exclusively by Liebherr, and are perfectly matched to one another, right down to the last detail. Thanks to the carefully tailored combination of a basic machine unit and attachment, a total system can be created which provides optimum use with ideal performance and handling qualities. And that is precisely why you can rely on Liebherr in every situation and with every equipment combination; for speed, reliability, and productivity.

## Performance Made to Measure

The Liebherr modular system, with different boom lengths and shapes, different bucket stick lengths, and the wide range of versatile operating equipment elements and options all make it possible to configure a unit which precisely meets your specific demands.

## Long Live Quality

Thanks to high strength sheet steel and tough cast steel components at all connection points of the attachment components, every piece of the machine will stand up to the hardest conditions, for a long time.

## Speed Saves Time and Costs

One particular advantage of the Liebherr concept is that the basic machine, the equipment elements, and the working tools can be assembled and disassembled with minimal effort. This leads to a clear reduction in times and costs in comparison with other systems. Depending on the frequency of the equipment change, Liebherr offers two different interface variants between the basic machine and the operating equipment: There is the mechanically detachable interface making use of expander bolts, and the hydraulic locking and unlocking of the bolts in a way similar to the Liebherr quick-coupling system.

The high-pressure lines between the basic boom and the boom are connected by quick-action couplings. Low-pressure and lubrication lines are gathered together in the Multifast locking system, and can be released or connected by means of a handle. As an option, there is also a multi-coupling system available for high-pressure lines, which again allows for enormous time savings in comparison with quick-couplings when changing equipment.

The Liebherr quick coupler with the positive-fit connection system provides a major time advantage when tools need to be changed frequently. And in order to save even more time when it comes to tool changes, Liebherr can also offer the innovative hydraulic coupling system Likufix to connect up the hydraulic lines.



# Safety – the Key to Success

# 3

Safety for the operator and safety for the excavator on demolition projects has top priority. This is why all Liebherr demolition excavators are provided with a highly developed safety concept, which integrates passive and active components, such as the automatic reach limitation system, and at the same time perceptibly increases the operational value of the machine.

## Safety Thanks to State-of-the-art Ergonomics

Liebherr demolition excavators provide the operator with the ideal conditions for relaxed, fatigue-free, and effective work. The special demolition cab is designed in accordance with the very latest ergonomic technology and equipped with comfortable fixtures and fittings to match. This means the operator can concentrate and focus on the work at hand.

- The generously-dimensioned armoured glass in the front and roof windows provides an excellent view of the working area and the surroundings, and the high-strength impact protection adds extra safety.
- The monitor display allows the operator to keep an eye on all important operating status parameters, all the time.
- The design and arrangement of the seat, control system, and display are perfectly matched to each other in an overall ergonomic concept. The cab is also equipped with full climate control.
- The driver's seat is vibration-damped, and can be adjusted to suit the driver's individual requirements. An air-suspension seat is also available as an option.
- Always the best outlook: As an option, Liebherr demolition cabs can also be tilted by 30°.

## Liebherr Demolition Control System LDC

These active safety components, ergonomically arranged in the driver's field of view, provide details in real time of the tool position and the standing inclination of the machine. If a critical measured value is exceeded, the LDC automatically activates the electronic reach limitation system. When the limit is reached, the system ensures that no further movements of the equipment elements are possible which might reduce the stability of the excavator.







## **Maximum Stability**

Depending on the size of the machine, a range of different undercarriages are available, rigid or mechanically or hydraulically adjustable. These rugged, heavy undercarriages have a wide stance to ensure optimum stability, letting the operator work in confidence and with precision. This eases the stress not only on the track components but on the machine as a whole. Even on uneven ground, the excavator remains safe and stable in every situation.

## **Compact for Relocation**

For rapid and problem-free transport, the mechanically or hydraulically adjustable undercarriages of Liebherr demolition excavators can be reduced to an outer width which makes transport simpler and even more convenient.

## **Turning Instead of Maneuvering**

As a unique performance feature, Liebherr demolition excavators provide a 360° working radius with absolute stability and consistent reach. This makes for definite time advantages if demolition material needs to be removed from the work area, or a tool change is to be carried out.



# Liebherr Demolition Excavators – an

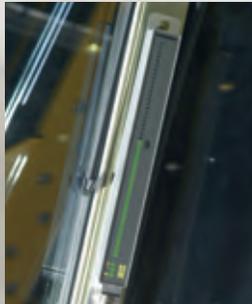
**Hydraulic quick coupling system for booms**  
for rapid change of the working equipment elements (optional, not for R 974 C)



**Piston rod protection for boom cylinders**  
helps to prevent damage to the cylinders (optional - R 954 C and up)



**LDC Display**  
to display the reach limitation in the cab, for maximum safety during demolition work



**Integrated protective guards**  
in two versions, for maximum operator safety (optional)



**Demolition cab, 30° tiltable**  
for an excellent view of the working area and fatigue-free working (optional)

**VD-HD undercarriage**  
Hydraulically-adjustable undercarriage for optimum stability when working and reduced width for transport (optional)



**Folding access steps**  
for easy access and reduced transport width (VH-HD undercarriages only)



**Track guide**  
prevents the track from sliding off when forces are exerted transverse to the direction of travel and simultaneous travel (optional in a number of versions)



# Overview



**Piston rod protection for tilting cylinder** prevents damage to the cylinder



**One of three LDC sensors on the attachment** for permanent monitoring of the equipment position



**Likufix** for rapid change of the add-on tools (optional)

**Multi-coupling system for high-pressure lines** for very rapid change of operational equipment elements within 15 minutes (optional)



**Quick release fastenings for high-pressure lines and Multifast locking system for low-pressure lines** for easy change of operating equipment



**Counterweight can be hydraulically lowered** for lowering the weight during transport



**Superstructure protection** prevents damage to the superstructure



# Range of Versatility

## Characteristic Data and Demolition Equipment Combinations

### R 934 C Litronic

Engine output	150 kW / 202 HP(I)**	
Undercarriage variant	S-HD	VH-HD hydraulically adjustable
Track gauge	7'10"	7'7"-10'6"
Reach height at stick end	63'12"	63'12"
Tool weight at stick end with reach up to	26'3" 4.400 lb	5.500 lb
Demolition boom	24'7"	•
Intermediate boom	6'11"	•
Demolition stick	17'1"	•
Operating weight	approx. 93.700 lb	approx. 104.700 lb

### R 944 C Litronic

Engine output		
Undercarriage variant		HD-SL
Track gauge		8'6"
Reach height at stick end		68'11"
Tool weight at stick end with reach up to	32'10"	4.400 lb
Demolition boom	23'11"	•
Demolition boom	30'06"	—
Intermediate boom	7'5"	•
Demolition stick	20'8"	•
Operating weight		approx. 48.5 t

### R 954 C Litronic

Engine output					
Undercarriage variant	HD	V mechanically adjustable	S-HD	HD-EW	V-HDW mechanically adjustable
Track gauge	9' 6"	7' 10" - 9' 6"	9' 6"	11' 12"	9' 6" - 11' 2"
Reach height at stick end	83' 12"	83' 12"	83' 12"	83' 12"	83' 12"
Tool weight at stick end with reach up to	39' 4" 5,500 lb	6,000 lb	6,000 lb	6,600 lb	6,600 lb
Demolition boom	28' 10"	•	•	•	•
Demolition boom	37' 1"	—	—	—	—
Intermediate boom	8' 2"	•	•	•	•
Demolition stick	28' 1"	•	•	•	•
Operating weight	approx. 133.400 lb	approx. 140.000 lb	approx. 144.400 lb	approx. 152.000 lb	approx. 159.000 lb

### R 954 C Litronic 111' 7" m

Engine output	240 kW / 322 HP(I)**
Undercarriage variant	VH-HDW hydraulically adjustable
Track gauge	9' 4" - 12' 8"
Reach height at stick end	111' 7"
Tool weight at stick end with reach up to	45' 11" 6,600 lb
Demolition boom	47' 7"
Intermediate boom	8' 2"
Demolition stick	36' 1"
Operating weight	approx. 188.500 lb

### R 974 C Litronic

Engine output	400 kW / 536 HP(I)**	
Undercarriage variant	HD-EW	VH-HD hydraulically adjustable
Track gauge	15' 1"	11' 2" - 15' 5"
Reach height at stick end	134' 6"	134' 6"
Tool weight at stick end with reach up to	59' 1" 6,600 lb	6,600 lb
Demolition boom	55' 9"	•
Intermediate boom	8' 10"	•
Demolition stick	44' 3"	•
Operating weight	approx. 280.000 lb	approx. 290.000 lb

The useful loads on the stick apply to a swing radius of 360°, including quick coupling system, attachment plate, and add-on tool or special attachment.

190 kW / 255 HP(l)**					
S-HD	V mechanically adjustable	VH-HD hydraulically adjustable	S-HD	V mechanically adjustable	VH-HD hydraulically adjustable
9'6"	7' 10" - 9' 6"	7'10" - 10'10"	9'6"	7'10" - 9'6"	7' 10" - 10' 10"
68'11"	68'11"	68'11"	75'6"	75'6"	75'6"
5.500 lb	6.000 lb	6.600	5.000 lb	5.500 lb	6.600 lb
•	•	•	—	—	—
—	—	—	•	•	•
•	•	•	•	•	•
•	•	•	•	•	•
approx. 115.000 lb	approx. 121.300 lb	approx. 129.000 lb	approx. 117.000 lb	approx. 124.000 lb	approx. 131.000

240 kW / 322 HP(l)**					
VH-HD hydraulically adjustable	V mechanically adjustable	S-HD	HD-EW	V-HDW mechanically adjustable	VH-HD hydraulically adjustable
7' 10" - 10' 10"	7' 10" - 10' 10"	9' 6"	11' 12"	7' 10" - 10' 10"	7' 10" - 10' 10"
83' 12"	91' 10"	91' 10"	91' 10"	91' 10"	91' 10"
6,600 lb	2.25 t	2.25 t	6,600 lb	6,600 lb	6,600 lb
•	—	—	—	—	—
—	•	•	•	•	•
•	•	•	•	•	•
•	•	•	•	•	•
approx. 164.200 lb	approx. 142.200 lb	approx. 146.600 lb	approx. 154.100 lb	approx. 161.200 lb	approx. 166.700 lb

### R 984 C Litronic \*

Engine output		504 kW /676 HP(l)**
Undercarriage variant		VH-HDW hydraulically adjustable
Track gauge		9' 4" - 12' 8"
Reach height at stick end		121' 5" - 213' 3"
Tool weight at stick end with reach up to	121' 5"	13,000 lb
Tool weight at stick end with reach up to	213' 3"	5,500 lb
Operating weight		approx. 485.000 lb

\* Details at request

\*\* HP(l) according to SAE J1349



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