Truck Mounted Concrete Pumps: Optimum Conveyance of Concrete
The rugged design ensures reliable operation over several years with low operating costs.

Innovative technology, such as the patented support system, provides advantages during everyday operation.
More profit by way of investment

There are many reasons for choosing a Liebherr truck mounted concrete pump:

When purchasing from Liebherr, you are guaranteed high-performance „Made in Germany“ products for the most exacting requirements. With utmost importance attached to quality, we only install components supplied by renowned manufacturers. Extensive test series and field testing, as well as material inspections ensure long life-expectancy of the concrete pumps. The innovative pump units, hydraulic system and state-of-the-art control ensures cost-effective operation of the concrete pump. Numerous technical details simplify servicing: For example, easier and quicker replacement of wear parts.

Over the long-term, a concrete pump from Liebherr will prove a profitable investment as the outlay for servicing and energy costs yield a positive overall balance with regard to life cycle costs.

The higher resale value of German quality products from Liebherr proves yet another positive aspect in the total cost balance.
Liebherr booms are sturdier with improved torsional resistance due to their welding system.
The distributor booms

Distributor booms from Liebherr are available in roll-fold, Z-fold or multi-fold designs (depending on the respective type) featuring three, four or five boom elements.

The balanced weight distribution resulting from alternating pipeline guidance on the left-hand and right-hand boom side, as well as the torsional resistant steel structure, ensures low-vibration guidance of the boom. Arrangement of the pipeline close to the boom, combined with the large-sized pins and hydraulic cylinders contribute to a safe and consistent guidance of the boom.

Pipe bends are predominantly the same, making the storage of wear parts easier. Due to their large radius (R=275), the pipe bends reduce resistance in the concrete line.

High pressure filtering in the boom ensures exceptionally clean hydraulic oil to improve operational safety. Considerably smaller particles can be filtered out in the high-pressure range.

Largely-dimensioned hydraulic cylinders and sturdy hinged pins ensure even and vibration-free movements, contributing to a longer life-expectancy.
Innovative outriggers

Liebherr offers an extensive variety of support systems to ensure that an ideal solution can always be configured for the respective requirement. Outrigger XXH and outrigger XXT are particularly innovative. Both systems are exclusive to Liebherr and offer specific advantages for everyday applications on the building site:

For example, with the narrow support option the front outriggers can be extended up to the front of the vehicle, allowing a greater working range of up to 70% (yellow). In particular, pumping concrete over the operator's cab can often be extremely advantageous, and this would not be possible with other types of outrigger.

**Advantages of the XXH-outrigger:**
- Only simple telescoping of front outrigger necessary - Front outrigger rotatable
- Excellent possibilities for narrow support
- Flexible set-up possibilities
- More storage space

**Advantages of the XXT-outrigger:**
- Direct power transmission from boom to outrigger
- No forces on the frame/chassis
- Only simple telescoping of front outrigger necessary
- All support arms are rotatable around the same centre of rotation
- Optimum possibilities for narrow support
- Flexible set-up possibilities
- Weight reduction

The stability control system XXA guarantees a reliable and safe operation in every situation. Depending on the position of the outrigger system and the boom only safe movements are allowed.

Liebherr comply with all specifications of the new C-Standard DIN EN 12001:2012-11.
Largely-dimensioned hydraulic cylinders allow a powerful change-over with hydraulic pressures of up to 320 bar. Double end-of-stroke damping guarantees smooth and quiet running.

The sturdy S-pipe is designed to ensure a long service life. A split spectacle wear plate can be easily replaced without having to dismantle the S-pipe.
The powerful pump units

**Improved concrete flow**
The shape of the discharge hopper and the large-sized suction openings at the cylinder contribute towards unobstructed pump operation and outstanding suction performance. The left and right-hand agitator paddles are powered by separate motors, therefore no connection shaft is required between the paddles.

**Reduced soiling**
The discharge hopper is designed with smooth surfaces and no protruding edges. Deposits of residual concrete are kept to a minimum and cleaning is completed quickly and smoothly.

The optimised hopper shape benefits concrete flow and minimises concrete deposits.

Flawless insertion of the concrete due to consistent concrete flow without deflections at the end of the hose.
All hydraulic lines are arranged with protection and are secured or routed with sturdy retainers.

All valves are installed with user-friendliness and service-friendliness in mind.
Reliable hydraulics

Open hydraulic system
Liebherr concrete pumps function with an open hydraulic circuit and precision control. This ensures high pump outputs with excellent efficiency, as well as a powerful changeover from the S-pipe.

The advantages are astounding:
Pump cylinder and S-pipe changeover are pressurised by the main pump
- No storage charging pump necessary,
- No feed pump necessary
- No pressure storage necessary (no risk of accident)
- Therefore full pressure or increased power with S-pipe changeover (up to 320 bar)
- Servicing is simplified
- Improved oil cooling due to increased oil volumes
- Constant swing times for S-pipe, independent of concrete consistency

High-grade components
The hydraulic system is significantly responsible for operation of the concrete pump. Reliability, as well as the extent of servicing work which may be required, is largely dependent upon the quality of components in the hydraulic system. Liebherr therefore only use components from renowned manufacturers which have undergone meticulous testing. The hydraulic circuits are monitored by a diagnostic module.
Liebherr concrete pumps also feature a 100% independent cable-operated remote control.

All signals / commands are issued directly to the valves of the machine via a separate cable-operated remote control featuring a 32-wire cable.

This will continue to function in the event of the radio control failing.
The control: Safe and highly sensitive

**Complete control**
All commands can be transferred to the machine from any unobstructed operator position using the state-of-the-art radio remote-control. The boom can thus be manoeuvred smoothly and practically across the building site.

**Operation without radio control**
Alternatively, operation is also possible via cable-operated remote control wherever radio control is not permitted on the respective application site, for example in military zones.

**Improved operational safety**
Additionally, Liebherr truck mounted concrete pumps feature alternative control options, guaranteeing the possibility of continued pumping in all situations.

- **O** = Normal control mode (operation via sensors and controller)
- **B** = Emergency mode I: Operation without sensors (hydraulic pressure relay)
- **A** = Emergency mode II: Operation without controller (backup control via relay in the switch cabinet)

All housings for the control are made of stainless steel.
24 M4 XH
23.7 m vertical reach
19.7 m horizontal reach

28 Z4 XH
27.7 m vertical reach
23.7 m horizontal reach

32 Z5 XXT
31.7 m vertical reach
27.7 m horizontal reach

32 Z5 XXH
31.7 m vertical reach
27.7 m horizontal reach

33 R4 XXT
32.4 m vertical reach
28.4 m horizontal reach

33 R4 XXH
32.4 m vertical reach
28.4 m horizontal reach

35 Z5 XXH
34.7 m vertical reach
30.7 m horizontal reach

35 Z5 XXT
34.7 m vertical reach
30.7 m horizontal reach

37 R4 XXH
36.8 m vertical reach
32.8 m horizontal reach

37 R4 XXT
36.8 m vertical reach
32.8 m horizontal reach

37 Z4 XXH
36.8 m vertical reach
32.8 m horizontal reach

37 Z4 XXT
36.8 m vertical reach
32.8 m horizontal reach

37 R4 ST
36.8 m vertical reach
32.8 m horizontal reach

37 Z4 ST
36.8 m vertical reach
32.8 m horizontal reach

41 M5 XXT
40.5 m vertical reach
36.5 m horizontal reach

41 M5 XXH
40.5 m vertical reach
36.5 m horizontal reach

43 R4 XXH
42.1 m vertical reach
38.1 m horizontal reach

43 R4 XXT
42.1 m vertical reach
38.1 m horizontal reach

32 Z5 XXH
31.7 m vertical reach
27.7 m horizontal reach

47 M5 ST
46.6 m vertical reach
41.9 m horizontal reach

47 M5 XXT
46.2 m vertical reach
42.2 m horizontal reach

52 M5 ST
51.5 m vertical reach
47.5 m horizontal reach
Variety on wheels

Liebherr truck mounted concrete pumps are available with boom sizes from 24 to 52 m. Various fold designs are possible, depending on the respective type. There is also a diverse range of supports with 4 different variants of outrigger to choose between. Output sizes of between 110 and 170 m³/h can be combined for the pump units.

<table>
<thead>
<tr>
<th>Pump group THP m³/h</th>
<th>Radius vertical</th>
<th>Fold Segments</th>
<th>Outrigger</th>
<th>Truck Axles</th>
</tr>
</thead>
<tbody>
<tr>
<td>H = High pressure · L = Long stroke</td>
<td>m</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>110</td>
<td>125</td>
<td>140</td>
<td>170</td>
</tr>
<tr>
<td>20</td>
<td>110</td>
<td>125</td>
<td>140H</td>
<td>24</td>
</tr>
<tr>
<td>110</td>
<td>125</td>
<td>140H</td>
<td>28</td>
<td>Z4</td>
</tr>
<tr>
<td>30</td>
<td>125</td>
<td>140H</td>
<td>170H</td>
<td>32</td>
</tr>
<tr>
<td>125</td>
<td>140H</td>
<td>170H</td>
<td>33</td>
<td>R4</td>
</tr>
<tr>
<td>125</td>
<td>140H</td>
<td>170H</td>
<td>35</td>
<td>Z5</td>
</tr>
<tr>
<td>125</td>
<td>140H</td>
<td>170H</td>
<td>37</td>
<td>R4</td>
</tr>
<tr>
<td>125</td>
<td>140H</td>
<td>170H</td>
<td>37</td>
<td>Z4</td>
</tr>
<tr>
<td>40</td>
<td>125</td>
<td>140H</td>
<td>170H</td>
<td>41</td>
</tr>
<tr>
<td>125</td>
<td>140H</td>
<td>170H</td>
<td>43</td>
<td>R4</td>
</tr>
<tr>
<td>140H</td>
<td>170H</td>
<td>47</td>
<td>M5</td>
<td>ST</td>
</tr>
<tr>
<td>140HL</td>
<td>170HL</td>
<td>47</td>
<td>M5</td>
<td>XXT</td>
</tr>
<tr>
<td>50</td>
<td>140HL</td>
<td>170HL</td>
<td>52</td>
<td>M5</td>
</tr>
</tbody>
</table>

R = roll-folding, Z = Z-folding, M = multi-folding
Fittings and accessories

Your wish is our command
Liebherr offer an extensive selection of fittings and accessories. An optimum solution can be configured for your truck mounted pump to satisfy all requests and requirement.

More storage space
Regardless of the respective configuration of the machine, Liebherr can provide various options for storage facilities. This will ensure that all materials being transported on the vehicle can be tidily arranged in its own safe storage space.

Convenient for everyday operations
For example, a high-pressure lance or the spraying equipment can ease the daily routine of cleaning, saving both time and money.

The list of fittings supplied by Liebherr is extremely extensive. We are therefore always available to offer any advice in this regard.
Utilisation on a global scale...

Liebherr truck mounted concrete pumps are being successfully applied around the world. An extensive service network covering all continents, as well as a rapid and reliable supply of replacement parts guarantees maximum availability.
Concrete technology from Liebherr

Liebherr provide a comprehensive range which encompasses the whole of concrete technology from a single source, from the production of concrete, to concrete transport and installing concrete on the building site. More than 60 years of experience and continued further development has guaranteed Liebherr status as a globally-renowned provider in the concrete production sector.

Many years of experience
Featuring capacities of 5 to 15 m³ nominal volume for the transport of concrete, the fixed-mounted truck mixers provided by Liebherr are compatible with all established chassis. Configuration as a semi-trailer is available in 9 to 15 m³ nominal volume. An extremely comprehensive accessories catalogue completes the range.

Quality and state-of-the-art technologies
Liebherr concrete mixing plants are employed reliably and cost-effectively on a worldwide scale. The product range includes stationary plants in horizontal and vertical configurations, as well as mobile mixing plants for short term building site applications. Liebherr's own mixing systems, capable of discharge rates between 30 and 300 m³, are installed in the concrete mixing plants. Liebherr also provide optimum solutions for residual concrete. The residual concrete recycling plants are available in "trough" and "screw" type series and feature washing outputs of between 4 and 22 m³ per hour.

System solutions from a single source
The conveyor belt mounted on the truck mixer is also perfectly suited for applications on smaller building sites. Featuring a radius of up to 16.4 m, the conveyor belt is operational in no time. As well as concrete, the conveyance of materials such as sand and gravel is also possible.

The correct solution for every requirement
Liebherr truck mounted concrete pumps featuring various configurations with boom sizes of up to 58 metres radius are perfectly designed for cost-effective supply of concrete onto the building site. Powerful stationary concrete pumps are available as trailer concrete pumps or as self moving concrete pumps mounted on a crawler. The concrete pump range also includes concrete distributors or climbing booms. Truck mixer concrete pumps are ideal for smaller building sites.

www.liebherr.com