

## Bucher Hydraulics

As an independent and internationally leading manufacturer in the mobile and industrial hydraulics field, Bucher Hydraulics designs and produces hydraulic drive and control equipment for specific customers and particular applications.

In airports, train stations, shopping centres, and residential and commercial buildings, ultra-reliable hydraulic elevator components from Bucher Hydraulics are used in passenger and goods elevators with travel heights up to 25 metres and payloads from 320 kg to more than 40 000 kg.

The components can also be used to modernise existing installations and they offer very wide creative scope to architects. For example, the problem of insufficient space can be solved by MRL (machine room-less) hydraulic systems.

The systems impress operators by their low maintenance requirements, high energy efficiency, long service life, outstanding cost/benefit ratio, and very high levels of ride comfort for passengers.

With sales subsidiaries in Europe, Asia and the USA, Bucher Hydraulics makes sure that it is always close to its customers.

**The Bucher Industries group comprises five specialised divisions in the industrial sectors of the machine- and vehicle-building industries:**

**Kuhn Group**  
Agricultural machinery



**Bucher Municipal**  
Municipal vehicles



**Bucher Process**  
Process equipment for food-stuffs and pharmaceuticals



**Emhart Glass**  
Glass-container production technology



**Bucher Hydraulics**  
Mobile and industrial hydraulics



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## State of the Art Elevator Installations with the most up to date hydraulic systems





Elevator installations with a hydraulic drive system

# The latest generation of hydraulic systems


Architects need a good deal of creative scope when fashioning their designs, and they must be able to rely on practical elevator modules that function faultlessly. With the advantage of such modules, they can then implement their ideas without any constraints. Elevator installations powered by hydraulics offer such benefits and also guaranteed low-maintenance and economic operation.

You will seldom see or even be aware of Bucher Hydraulics products, because they fit into most architectural concepts without difficulty, operating quietly and reliably while also conserving energy.


	Hydraulic 	Traction 
<b>Design and space</b>	<ul style="list-style-type: none"> <li>• Smaller space requirement in the shaft</li> <li>• Flexible machine room location</li> <li>• A great deal of design freedom for architects</li> <li>• No rooftop structure is required</li> <li>• No constraints on doorways or the shape of the car</li> <li>• Machine rooms do not need to be in the immediate vicinity of the shaft</li> <li>• Elevator designs can be customised</li> </ul>	<ul style="list-style-type: none"> <li>• Smaller car due to the considerable space needed for the sheave assembly and counterweight, alternatively a larger shaft cross-section and head height</li> <li>• Architectural design scope is very restricted</li> </ul>

	Hydraulic	Traction
<b>Safety</b>	<ul style="list-style-type: none"> <li>• Emergency evacuation procedures are very simple and completely safe</li> <li>• Much safer when used in earthquake zones</li> <li>• Safety during service and repair work, since there is no moving counterweight</li> </ul>	<ul style="list-style-type: none"> <li>• Complicated, and in some respects hazardous, emergency evacuation procedures</li> <li>• In an earthquake, the danger from drive components or the counterweight falling on the car</li> </ul>
<b>Performance</b>	<ul style="list-style-type: none"> <li>• Particularly high load ratings</li> <li>• All vertical loads act in the shaft pit only</li> <li>• Modern technology and weight-optimisation ensure an extremely attractive price/performance ratio</li> </ul>	<ul style="list-style-type: none"> <li>• Poor load ratings</li> </ul>
<b>Maintenance and service</b>	<ul style="list-style-type: none"> <li>• Technically straightforward and familiar principle reduces the amount of installation work in the shaft</li> <li>• Low-maintenance drive technology</li> <li>• No wear on pulleys and ropes</li> <li>• Replacement parts are seldom needed</li> <li>• Free choice of maintenance companies</li> <li>• Replacement parts are less expensive, not tied to a particular manufacturer, and available on the open market</li> <li>• Technicians can work on the drive from outside the shaft. They are consequently not exposed to any hazard and thus save time</li> </ul>	<ul style="list-style-type: none"> <li>• Heavy wear on traction sheave and ropes</li> <li>• Complicated work procedures, and hazardous working situations</li> <li>• Long repair and maintenance times</li> <li>• With manufacturer-dependent systems, the operator is „locked in“ for maintenance and repairs; independent service providers are shut out</li> </ul>
<b>Installation</b>	<ul style="list-style-type: none"> <li>• Simple and economical assembly</li> <li>• Hydraulic elevators are particularly suitable for projects where retrofitting is involved</li> </ul>	<ul style="list-style-type: none"> <li>• The drive system in the shaft head is difficult to access and assembly work is hazardous</li> </ul>
<b>Costs</b>	<ul style="list-style-type: none"> <li>• For buildings with up to five floors, the cost effectiveness of hydraulic elevators is virtually unbeatable</li> </ul>	<ul style="list-style-type: none"> <li>• Very high costs for service and replacement parts</li> </ul>

## Bucher Hydraulics offers a broad range of components for hydraulic elevators.



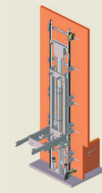
**Lift control valves (LRV)**  
First-class ride comfort, irrespective of load and temperature.




**Power units**  
For a wide (and energy-saving) spectrum of loads and travel speeds.



**Cylinders**  
Rugged and reliable.



**Frame kits**  
*Pluto*: a series of frame kits for hydraulic passenger elevators and goods/employee elevators with payloads up to 1 600 kg.  
*Jupiter*: a series of tandem frame kits particularly suitable for goods/employee elevators with payloads up to 6 000 kg.



**MRL systems**  
*BERIPACT™*: maximum travel performance with minimum energy consumption.  
*Tiger*: the system for compact shaft dimensions.



**Modernisation**  
*MULTIKIT™*: the recipe for the ideal elevator-drive refurbishment project, and without replacing the elevator control system.