



## Mobile yet stable – hydraulic floor-lock systems

Hydraulic floor-lock systems are small, inconspicuous cylinders that fix heavy mobile devices in place and brace them at their site of use. It doesn't matter whether the surface is sloped, slippery or uneven – as soon as the device has been moved to its site of use, the operator can fix it in place with the push of a button. This is thanks to a small yet powerful hydraulic drive that is built into the housing. An established system that has been in use for many years in the medical technology industry, it also offers plenty of benefits for applications in mobile assembly robots, laboratory analysis equipment, labelling machines, and 3D printers in production halls.

Solutions for a World under Pressure

**HAWE**  
HYDRAULIK



## Versatile use – for greater mobility and freedom

### What floor-lock systems can do

Hydraulic floor-lock systems are a good choice for reliably supporting and holding heavy loads in place on even surfaces. They can also be used for damping small dynamic loads. However, they are not designed for lifting loads in any way.

They lock onto the floor using hydraulic cylinders that extend just beyond the height of the castors. These are typically installed between the castors or separately, close to the castors. As such, systems like this are useful for a wide range of heavy devices and plants that need to be moved either occasionally or regularly.

### You too can enjoy these benefits:

- High manoeuvrability
- Compensation for uneven surfaces
- Compact system built directly into the device
- High stability
- Simple installation and commissioning



### Easy to connect and low-maintenance

HAWE's hydraulic kits for floor-lock applications are delivered with Plug&Play capability – already filled with oil and ready for use. They can be fixed into the base frame of the device as stand-alone units and connected to the power supply or a battery and the device's control system. No hydraulics knowledge is required for connection or commissioning. Together with their hydraulic lines, the units form sealed systems. This means that they do not leak. They offer low maintenance and a long service life.

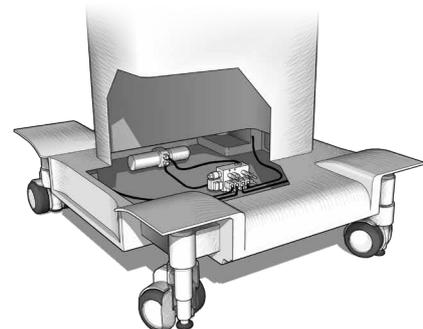
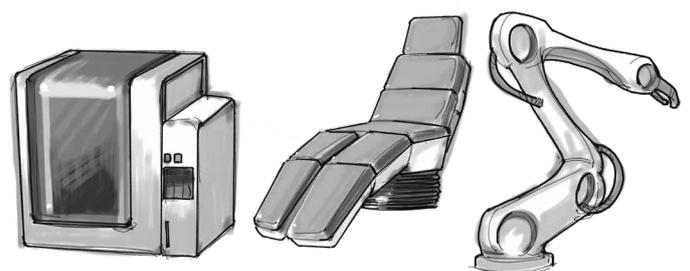


### What is in a floor-lock system?

A **mini hydraulic power pack** generates the required power with the aid of a hydraulic fluid. The hydraulic power pack is a sealed unit that connects to the power supply via a plug. Hydraulic power packs offer high power density, which makes them very efficient drives.

Once extended and hydraulically braced against the ground, the compact **cylinders** guarantee secure and stable footing for the devices. Once the cylinders have been retracted, the device can be moved as usual.

**Hose lines** are used to connect the cylinders to the hydraulic power pack. HAWE Hydraulik's floor-lock systems are delivered fully assembled. These lines are also connected to the **manifold**, which controls the extension speed of the cylinders.





## Product Portfolio

HAWE Hydraulik's standard floor-lock kits contain solutions that are optimised for their use. We also offer custom solutions. Thanks to our many years of experience in fulfilling individual demands, we can fulfil your needs quickly and efficiently. Just contact us!

### Classic system

In our classic systems, the castors and jack cylinders are structurally separate from one another. These systems are popular mainly in markets where price is a priority. A compact system built into the base of the device, this solution offers flexibility in terms of the positioning of the cylinders.

- Load capacity: 250 kg per cylinder
- Compensation level: Up to 10 mm
- Stroke: Up to 30 mm



### Integrated system

This integrated system was developed in collaboration with castor manufacturer RHOMBUS (Colson). With a hydraulic cylinder built into the twin castor, it requires less installation space than an external jack system, and also offers greater stability as the supports are positioned closer to the corners. The plastic twin castors with TPU wheels and precision ball bearings run extremely quietly and smoothly.

- Load capacity: 250 kg per castor
- Stroke: Up to 30 mm



### "Self-compensating" expansion option

The "Self-compensating" option can be added to both systems, and automatically compensates for the weight and position of the device. This is achieved by extending two cylinders all the way, thus raising the device approx. 3 mm. The two other cylinders then extend until they touch the floor. A built-in pressure switch sends a signal to the control system when this occurs, then the movement stops following a brief afterrun period. The amount by which the device is raised depends on the load and the pressure switch settings.



### Passive oscillation damping

This mode can be implemented on both systems. When it is active, all four cylinders extend until they touch the floor. The device is not raised. In this mode, the cylinders act exclusively as oscillation dampers. Thanks to the force being exerted on the ground at all four corners of the system, it does not resonate.





## Contact

We're here to help!



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