



RESEARCH & DEVELOPMENT

Machines & Components

New applications

OFD

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> U-Park

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00 Your Selected Files

U-Park

U-Park®

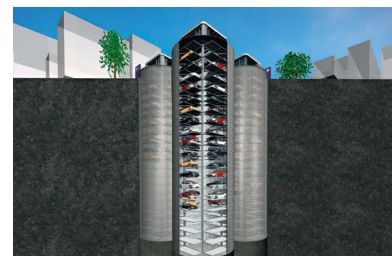
Automatic parking in deep shafts

To relieve tense, inner-city parking situations, many parking lots are being created on small plots of land within shafts. This is achieved by a combination of VSM technology for creating shafts and automatic parking towers, which are accommodated in shafts. A shaft with a diameter of 11 meters and a depth of 65 meters, for example, offers enough space for 90 parking lots.

More parking lots, despite space constraints in large cities

Since the beginning of 2007, the number of people living in large cities has become more than those living in the countryside. This fact poses significant problems for people and the environment alike, above all in the so-called mega-cities. It is therefore vital to keep pace with these new challenges in terms of mobility and environmental protection. The new U-Park® concept provides the intelligent solution. Various parking shafts below ground provide generous parking space for all types of private automobiles.

Thus, the time-consuming search for somewhere to park in city centers will be a thing of the past. An intelligent, computer-based system installed at surface level ensures that the various parking shafts are filled efficiently from top to bottom. U-Park® systems will have no effect on the external appearance of the city. A car to be parked is driven on to an automatic platform at surface level which then takes the vehicle down into the parking shaft. The car engine is switched off during the entire process. This dispenses with the need for installing expensive ventilation and filtration systems - a further environmental benefit.



The clever solution: U-Park® by Herrenknecht offers up to 90 parking lots.

Tried and tested VSM technology for shaft construction

Shaft construction is a combination of excavation and wall lining. At the same time as the earth is being broken up and removed from the



Perfectly suitable for U-Park® the compact VSM technology can be used in urban locations even under restricted space requirements.

groundwater-filled shaft by the remote-controlled shaft drilling machine, the walls of the shaft are being lined with pre-fabricated segments. This is a technically unique principle which protects the immediate vicinity around the construction site from critical drops in groundwater levels while also guarding against damage to buildings. The technology behind this controlled method of shaft construction not only saves time but provides a high level of safety for people and machinery. Reference projects in Germany, the United States, Spain, Italy, Saudi Arabia, Russia, Kuwait, Indonesia and the Middle East among others highlight the successful development of the Herrenknecht shaft drilling technology. Numerous shafts at construction speeds of more than 4m/shift have been sunk down to depths of 100m. The compact construction method and great flexibility of the shaft drilling equipment means that shaft drilling technology can be used even under extremely restricted space requirements.

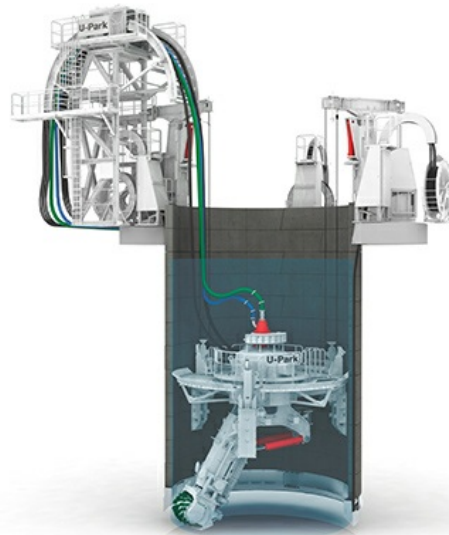


Illustration of a typical U-Park® Vertical Shaft Sinking Machine with segmental lining.
