

BUILDING DESIGN & CONSTRUCTION

THE ONLY
MAGAZINE
FOR THE
BUILDING TEAM

APRIL 1999

around the industry

Parallel parking

Robotic concept increases car capacity on limited sites

Americans have a profound love of cars. It's finding a place to park them that causes that love to fade.

Urban planners across the nation pay witness to this disenchantment daily as drivers endlessly circle city blocks only to be rewarded with packed streets and full parking garages. Facing that same problem, the city of Hoboken, N.J., has come up with an innovative solution: a \$6.4 million computerized parking facility that uses a modular system of steel lifts and pallets to transfer and store 324 vehicles on a series of shelves.

Scheduled to be completed by the end of this year, the 56-ft.-tall garage is the first in the U.S. to use the Modular Automated Parking System (MAPS). Developed by Letonia, Ohio-based Robotic Parking Inc., MAPS automatically parks and retrieves cars in multilevel parking structures. A driver parks his car in a ground-floor bay that is similar in size to a single-car, residential garage, locks the car and inserts a passcard into a computer terminal. The car is then automatically

transported on pallets through the garage to an available compartment. To retrieve the car, the driver again uses the passcard and is delivered his automobile in about two minutes.

Planned for a 10,000-sq.-ft. site in downtown Hoboken, the MAPS facility can be built on a lot as small as 60 feet by 60 feet and requires only 200 square feet per car rather than the 350 square feet required by conventional parking structures. The system can be built up to 20 stories high, above ground or underground.

According to Robotic Parking president and CEO Gerhard Haag, the system virtually eliminates the risk of vehicle damage or theft, and the risk of personal injury or robbery because drivers remain outside the building at all times. In addition, the need for ventilation and lighting is reduced, allowing a more flexible exterior design.

For example, project architect Gilgary Associates of Red Bank, N.J., is using a red-brick facade with false windows on the Hoboken facility to complement its residential location.

Automated garages have been used since the 1950s throughout Europe and Asia, but the U.S. has been slow to jump on the wagon. Robotic Parking Inc. is currently under negotiations to build garages in Chicago, San Francisco and New York City. ■