



Innovative Carousel Hangar Solutions

FOR MORE than 40 years, Schaez Design & Construction GmbH in Germany have been involved in the design and construction of innovative aircraft hangars. More than 250 units have been built throughout Europe, and there are new vertical storage designs now being built in Singapore. Do-it-yourself construction kitsets are also available for export worldwide including to New Zealand.

The core of the company's product offering is the Schaez Carousel, designed to eliminate the frequent need to rearrange aircraft in a crowded hangar and therefore also eliminate the all too common 'hangar rash' that results. Of equal benefit is the much more efficient use of available hangar space.

The Carousel is based on an engine-driven rotating turntable that facilitates one-man handling and relocation of any aircraft in the hangar toward the hangar door, of which there need be just one – another significant cost saving of the approach. The system works like a large 'Lazy Susan', allowing any aircraft to be extricated from the turntable when requested within only 90 seconds.

Standard designs are available for turntable diameters of 22m, 24m, 27m and 32m with loads of up to 60 tonnes able to be brought directly through the turning platform into the foundation. A 3kW engine can be mounted sub-surface or above ground.

The company recently won the 'Innovator' category of the 2012 Singapore Concrete Institute Excellence Awards for their newly patented and world first, Vertical Aircraft Parking System. Such a design, utilising stacked carousels has been in operation in MAJ's General Aviation Centre

at Seletar Airport in Singapore since February 2012. Where land and lease costs are at a premium, the land occupied by the hangar was reduced from 1200m² to 450m², with the hangar being able to accommodate up to 14 aircraft on two decks. The automated mechanical parking and lifting system provides easy and safe

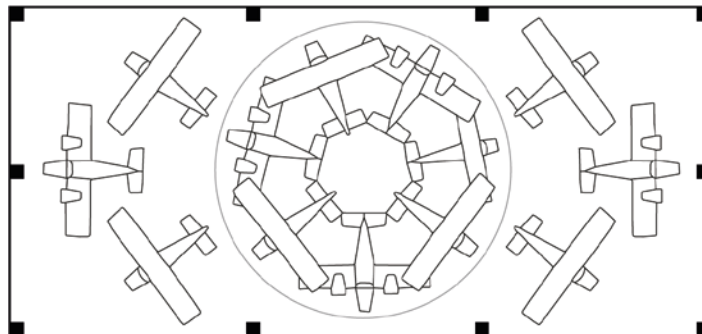
parking and relocation of general aviation aircraft, helicopters and small business jets up to 14.5m wingspan and 3.5 tonnes of take-off weight. A hydraulic lift moves the aircraft 7m vertically back and forth between the mezzanine and the ground level. The carousel is easily operated by only one operator from a video controlled switchboard which allows the operator to move the carousel precisely to the centre of the hangar opening. After a quick installation process with prefabricated steel parts, the machine was installed and ready to operate within 12 days.

Florian Schätz, Director of Schaez Design & Construction GmbH (Germany) says, "The system is very straightforward and easy to maintain. Our design and construction success is attributable to the reduction in the cost of material, land, operations and maintenance while maximising the use of the material to full functional capacity."

Currently, Schätz and his team are developing a compact multi-level storage facility for business jets with up to 35m wingspan.



The latest award winning hangar design from Schaez Design and Construction is this multi level carousel system built in Singapore. Carousel hangars (multi or single level) save space, time, money and reduce hangar damage to aircraft.



Schaez Carousels can be integrated into purpose built or conventional hangar designs. Kits can be purchased for import into New Zealand.

For more information

Enquiries from New Zealand for hangar design and carousel componentry supply can be directed to Florian Schätz via: info@aircraft-carousel.com or visit www.aircraft-carousel.com for more information.



Currently under development is a nested carousel system to park 110 business jets in low energy hangars using less than two football fields of land.