

4,500te Korean Airlines Hangar Roof

Client: Hanjin Engineering & Construction Ltd.



www.fagiolipsc.com

CIVIL 26



Above: To the right is a temporary tower which was built directly opposite of the back lifting column to aid stability during the 30m lift.

The steel roof structure of this new Korean Airlines Hangar was specially designed to optimize the width of the hangar entrance span. The design chosen lent itself ideally to the use of a strand jack system to lift the complete structure.

The lift solution involved a three point lift taking up the load at each end of the two main arch members.

At the two corner lifting points, 2 No. L600 and 2 No. L300 jacks were arranged in a symmetrical pattern around the permanent support columns. At the back centre lifting point the arrangement consisted of 4 No. L600 and 2 No. L300 jacks.



Left: The beginning of the lift. The roof has been lifted from its trestling and is travelling up the column towards its final position just below the jack mounting and access platform area.

Right: Detail of the two types of fixed anchor connections, each arranged opposite to its pair. To the right is a typical fixed anchor in its housing with a pin connection used for the L300 jacks. The L600 connection used a typical fixed anchor block arrangement which required extra structural strength at these points.

