

Project identification

Schiphol Airport

Assessment existing structures for increased aircraft loads

Type of project
Various



Client
Amsterdam Airport Schiphol

In co-operation with

Project assignment
Assessment structural integrity of existing structures

Country
The Netherlands

Location
Amsterdam

Project duration
2003-2012

Project phase
Operation phase

Construction cost
N.A.

Consultancy fee
€ 508.000,-
(excl. VAT)

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Project description

Schiphol Airport is one of the largest airports in Europe. Since 1990 Schiphol has had a very large increase of the number of travellers, reaching the number of 48 million in 2008. To allow further growth the Airport has to be able to receive the most recent and future aircrafts. These aircrafts have a tendency of growing larger and larger. As a consequence all terminals and infrastructure have to be checked against the conditions associated with these bigger aircrafts and strengthened where needed.

Scope of work

TEC was requested by Amsterdam Airport Schiphol to carry out structural assessments of all civil structures on the airport (bridges and tunnels) potentially subjected to increased aircrafts loads, in order to be able to receive aircrafts such as the B747-8 and the A380 (up to 725 tons). Extensive studies were carried out paying special attention to shear force capacity and fatigue verified against the most recent codes and standards. Inspections of the structures and material tests were carried out and were used to adjust material properties and to support the re-calculations of these structures. Where needed reinforcing measures were developed to ensure that structures are able to accommodate the increased aircraft loads with the requested safety level.