BLIGH TANNER
CONSULTING ENGINEERS

KEY PROJECTS

ALUMINA REFINERY WATER COOLING TOWER, GOVE

Cooling tower

Aerial view of the Gove water cooling tower, three years after completion
(Photo: ALCAN Engineering)

Lifting the precast panels into place and bolting the tower together

Every part of this construction was precast elsewhere in Australia and transported to the site.

This Alcan refinery facility consists of 40m long x 11 m high precast cooling tower at Gove on the Nhulunbuy Peninsula, NT. The remote location of the site played a key role in how the project was brought to success.

The four-cell tower was designed and fully shop detailed by Bligh Tanner for prefabrication of all elements above the substructure. It was constructed on a stiffened ground raft because of the poor ground conditions.

Special design full cell-width access doors were incorporated to meet the operation and maintenance requirements of the facility. Close attention to connection detailing and the selection of a sealant was vital to deal with the very high water temperatures when the tower was in use.

All panels including the 11m high precast inter cell panels were cast on-site and lifted into place using site-available craneage.

CLIENT	ALCAN Engineering
PROJECT PARTNER	ALCAN Engineering