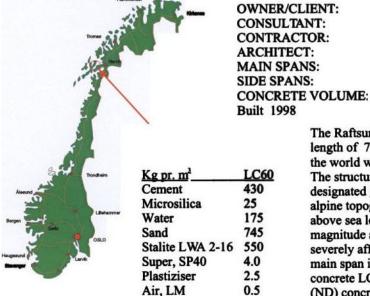
## Elkem Microsilica®

## Raftsundet Bridge

C4-24 Reference Project





## **Norwegian Road Authorities, Nordland**

Dr. Ing Aas-Jakobsen AS Anlegg

Boarch Arkitekter A/S

202 + 298 m 86 + 125 m

LC60: 2400 m<sup>3</sup>/C45: 1600 m<sup>3</sup>/C65: 10700 m<sup>3</sup>

The Raftsundet bridge, with a main span of 298 m and a total length of 711 m, was the longest concrete cantilevered span in the world when the cantilevers were joined on June 24th, 1998. The structure is exposed to a severe wind climate with a designated gust wind speed of nearly 60 m/s. The surrounding alpine topography with high mountains rising up to 1000 m above sea level, creates fluctuating wind forces of large magnitude against the bridge. The dynamic wind climate severely affects the slender columns and the bridge beam. The main span is built in high-strength lightweight aggregate (LWA) concrete LC60, and the side spans and piers in normal density (ND) concrete C65. The bridge is high level, providing a ship channel of 45 x 180 m.

CONCRETE

REFERENCE PROJECT

**JUNE 2000** 

C4-24

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