



## Lysefjord Bridge

**Contract Period**  
1993-1997

**Completion**  
1997

**Construction cost**  
NOK 150 mill

**Services rendered**

- Tender design for steel structures
- Detailed design of steel structures
- Construction follow up

**Client**

Norwegian Public Roads  
Administration

Lysefjord Bridge spans the scenic Lysefjorden in the county of Rogaland at the South-West Coast of Norway. The bridge has a main span of 446 m and a ship sailing clearance of 50 m. The bridge has two vehicle lanes and one pedestrian lane. The bridge has concrete pylons and an aerodynamic closed bridge girder. The main cable consists of 6 locked coil cables on either side arranged in one layer and anchored in rock. The side spans are concrete viaducts, thus there are no sidespan hangers.

The bridge was scheduled for completion in spring 1998, the construction work was however completed 19 weeks ahead of schedule thus enabling the bridge to be opened in December 1997.

The work was carried out in a design group headed by the Bridge Department of the Directorate of Public Roads. Aas-Jakobsen was responsible for the design of the steel structures, i.e. the bridge girder.





Opening day



## Lysefjord Bridge, cont'd

### Materials:

Concrete pylons:	C45/C55
Steel box girder:	S355
Cable wire:	1570 MPa

### Geometry:

Main span:	446 m
Total length:	639 m
Pylon height:	102 m
Ship Channel:	H x B = 100 x 50 m
Bridge girder vertical radius:	5250 m
Bridge girder width:	12.3 m
Bridge girder height:	2.7 m
Main span sag/span ratio:	1:10
Side span gradients:	1:2.25/1:2.75
Strand diameter:	100 mm

