

References

Project: Ems tunnel at Leer/Ostfriesland – Technical Details

Period: 1980 - 1991

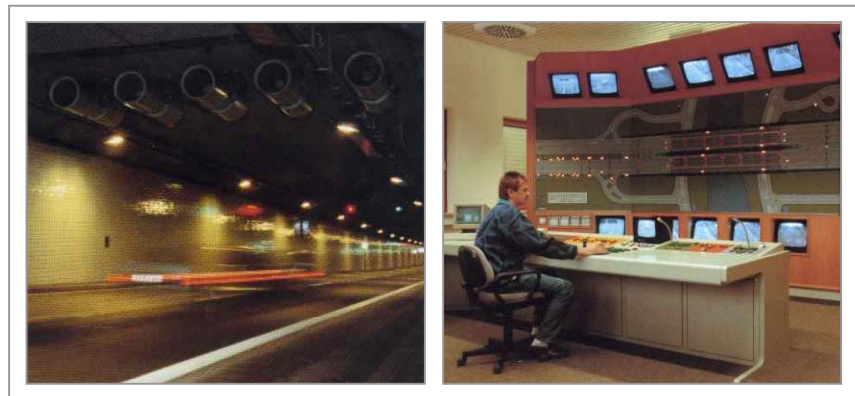
Contract Volume: approx. 800,000 DEM approx. 409,000 €

Construction Cost: approx. 25 Mio. DEM approx. 12,782,000 €

Client: Niedersächsisches Landesamt für Straßenbau (NLStB)
Abt. Brücken- und Ingenieurbau

Short Description: Technical specification plans of the Emstunnel at Leer/Ostfriesland along the A 28/31.

- Technical specifications for the twin tube tunnel:
 - * Length: Approx. 945 m with trough distance of 2,295 m
 - * RQ: 26T
 - * Average daily traffic capacity: 23,000 vehicles per day



- Project management with the expert witnesses, planner and special field experts
- Basic investigation with construction with help of expertise from ventilation and lighting
- Preliminary planning and design planning with the following inclusions:
 - * Energy provision
 - * Lighting and ventilation
 - * Drainage facilities
 - * Water supply for fire emergencies
 - * Safety installations for user and operator
 - * Traffic management installations
 - * Information and communication installation (Lightning conduction, cable network etc.)
- Permit planning, preparation for tender award
- Assistance in tender process
- Construction management and supervision
- Assistance with documentation
- Education of the operation team and emergency drill practice