

Coastal protection at Thule Air Base in Greenland

Drilling, blasting, transport and placing



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In the summer of 2010, Aarsleff signed a contract for coastal protection in Greenland. In that connection, we have carried out drilling, blasting, transport and placing of rockfill in front of an old disposal site at Thule Air Base.

Planning is vital

The purpose of the project is to prevent erosion of the coast, and effectiveness in all aspects was the key word, as the working period was limited by weather conditions and the fact that machines could only be transported to the working site twice a year. We placed the rock in four layers on a levelled slope covered with geotextiles. Each layer was placed by means of a specially built excavator with long reach and equipped with GPS. We used the excavated sand for reincorporation in the slope to obtain a better levelling of the slope.

Blasting of 120,000 m³ of rock

We blasted a total of 120,000 cubic metres of rock to have a sufficient amount of rock for the new coastal front. In total, we placed 95,000 cubic metres of rockfill as coastal protection, and the remaining blasted quantity was surplus fractions.

Strict requirements on planning, equipment and employees

At Thule Air Base the construction season is very short, as it only runs from May to mid-September. As shipping is only possible in July, August and September, the planning requirements were very high. With temperatures reaching 40° C below zero in both ends of the working season, the working environment was extreme, and production was a challenge to both equipment and employees.



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Data

- Blasting of 120,000 m³ of rock
- Placing of 95,000 m³ of rockfill
- Excavation of 30,000 m³ of sand.

Client

US Airforce

Type of contract

Turnkey contract

Contractor

Aarsleff

Consultant

ISC rådgivende ingeniører

Execution period

July 2010-September 2011

Contract price

DKK 24 million

Contact

Per Aarsleff A/S
Construction
Estimation & Tender
kalkulation@arsleff.com
Tel +45 8744 2222

ANLÆG-158UK-rev.2 11/2016