

Pressurized Air Cable 145 kV, 2500 A

Type tests with external supervision

Build
2021

145 KV
2500A

1x1ph
30m

Main ratings

- ⌘ Transmission power: n/a
- ⌘ Rated voltage: 145kV
- ⌘ Rated current: 2500A
- ⌘ Enclosure type: Single-phase
- ⌘ Isolation medium: Pressurized Air
- ⌘ Rated pressure: 10 bar
- ⌘ Country: AT

Project description

This project was a test campaign of pressurized air cables for 145 kV, 2500 A for an Austrian grid operator. High-voltage tests for AC and BIL were performed to find design limits. High current tests were performed for 2000 A and 2500 A with and without enclosure current. Short-time withstand current tests were done for 50 kA, 1.9s and 125 kA peak current. Internal arc fault tests were done for 20 kA, 300 ms and as a limit tests with 59 kA.

Test pole engineering, assembly and setup in the labs were done by Hivoduct.

The tests were witnessed by customer and independent experts.

"This project was the first test campaign with customer witness for pressurized air cables. It confirmed basic design but also showed its limitations. A great feedback for many design improvements since then."
W. Holaus, CEO Hivoduct

