

# Facts and figures on the Spitalamm dam

## NEW DAM WALL

**Type:** double curvature dam  
**Costs:** approx. CHF 125 million  
**Construction time:** from May to October 2019–2025  
**Submission of application for planning permission:** May 2017  
**Start of construction:** June 2019

# 80 000

**cubic metres foundation excavation**



Visualisation of the new Spitalamm dam, including the old dam wall

**Height:** 113 metres  
**Crest length:** 212 metres  
**Foundation:** rock  
**Volume of concrete:** 220 000 cubic metres  
 No reinforcement



## approx. 100 workers

engineers, site supervisors, foreman, miners, masons, mechanics, explosive experts, machine operators, etc.

1–3 cranes



# 520 000

**tonnes of concrete will be used**

## CHALLENGES

- Construction site at 1,900 metres above sea level
- Weather conditions
- Exacting logistics

### Executors

Grimsel joint venture  
 Frutiger AG (main responsibility): 42.5 percent  
 Implenia Schweiz AG: 42.5 percent  
 Ghelma AG Baubetriebe: 15 percent

### Estimated share of added value

Oberhasli: approx. 10–20 percent  
 Canton of Bern: approx. 50–70 percent  
 Switzerland: approx. 70–90 percent

# OLD DAM WALL

**Type:** arch-gravity dam

**Costs:** CHF 21.6 million (for Spitallamm and Seeuferegg)

**Construction time:** 1925–1932

# 50 000

cubic metres foundation excavation



Old Spitallamm construction site

**Height:** 114 metres

**Crest length:** 258 metres

**Foundation:** rock

No reinforcement

Cable cranes  
with launders



# 338 000

cubic metres volume of concrete (cast concrete)

## SPECIAL INFORMATION

- Pioneering achievement in the 1930s
- The old dam wall will be flooded in 2025

### Executors

Bauunternehmung Grimsel-Staumauern A.G.

O. & E. Kästli, Bern

Bürgi, Grosjean & Co, Bern

A. Marbach, Bern

J. Frutiger's Söhne, Oberhofen

### Data on Lake Grimsel

Impoundment volume:	94 million cubic metres
Drainage area:	89.5 square kilometres
Lake surface area:	272 hectares
Lake length:	5.3 kilometres

### Origin of the name "Spitallamm":

**Lamm** = Klamm ("gorge"), "a rock cleft hollowed out by the throughflow of water, narrow passage of a brook or river, ravine"\*

**Spital or Spittel** = ("hospital"), "institution for the admission, catering and care of those in need of help"\*, e.g. a hospice

\*as per the "Schweizerisches Idiotikon" ("Swiss dialect dictionary")