



# **CERN HILUMI LHC PROJECT POINT 1 EXTENSION OF PARTICLE ACCELERATOR GENEVA (CH)**

## **CLIENT**

CERN European Organization for Nuclear Research,  
CH-1211 Geneva

## **DESIGNER**

JV Origin  
Setec als, FR-69006 Lyon  
CSD Ingénieurs SA, CH-1007 Lausanne  
Rocksoil Spa, IT-20121 Milano

## **TIME OF COMPLETION**

04.2018 – 08.2022

## **CONTRACT SUM**

CHF 67.7 Mio.

## **EXECUTION OF THE WORK**

Joint Venture Marti Meyrin

## **CONSORTIUM PARTNERS**

Marti Tunnel AG, CH-3302 Moosseedorf  
Marti GmbH Deutschland, DE-70567 Stuttgart  
Marti GmbH Österreich, AT-8045 Graz

## **LEAD COMPANY – TECHNICAL AND COMMERCIAL LEAD**

Marti Tunnel AG, CH-3302 Moosseedorf

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## PROJECT DESCRIPTION

HiLumi LHC Project Point 1

Extension of particle accelerator

Access Shaft  $\varnothing$  12 m, depth 60 m

Cryogenic Cavern L = 51 m / B = 18 m / H= 20 m

Long Power Converter Tunnel L = 300 m

Service Tunnels 4 pcs /  $\varnothing$  3 m / L = 200 m

5 complex industrial buildings

## WORK DESCRIPTION

Overground

Complex industrial buildings 5 pcs

Underground

Excavation 50'500 m<sup>3</sup>

Shotcrete (unreinforced, with fibres / net) 7'300 m<sup>3</sup>

Anchors 13'300 m

Steel construction 382 t

Formwork 16'300 m<sup>2</sup>

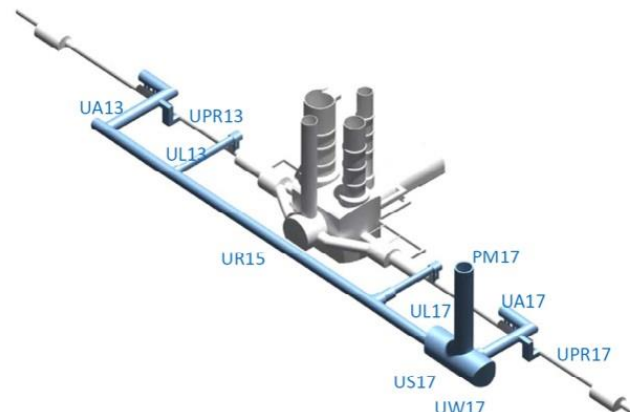
Reinforcement 935 t

In-situ concrete 17'800 m<sup>3</sup>

Waterproofing 16'800 m<sup>2</sup>

## GEOLOGY

- Fresh water molasses:
  - 50% Sandstones
  - 50% marl
- Horizontal storage



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