

Waterproofing Systems and Technical Solutions



Pralognan Penstock

The project relates to the repair and protection of special precast concrete units which in turn protect a concrete pipe against the extreme environment that exist in the area. These include low temperatures and avalanches. The length of the penstock is 1,610 m, the head valve is located at 1,620 m, the electric plant at 906 m giving a height difference of 714 meters.

The block section is composed of 450 units, these are 1 meter in length. The vaulted precast units are set on concrete "pile blocks". In total some 2,225 m² of concrete repair were carried out.

The jobsite is located in the National Vanoise Park in the French Alps. It was necessary to take into account the constraints of the environment and also the access to the terrain. Due to the mountainous location, all products and equipment had to be delivered by helicopter to specific drop zones allowing employee safety and evacuation if necessary. The project consisted of the following aspects:

- Complete cleaning of all the support blocks
- Any damaged concrete was cut back to the rebar
- The rebar was cleaned and protected against corrosion using LANKO 760 - The concrete was subsequently repaired by applying LANKOREP 731 using a spray technique
- All the joints between each precast unit have been done with LANKO 668 - Final protection and waterproofing was done using LANKO 228 LANKOLASTIC reinforced by a mesh (RM mesh).

> LOCATION

Pralognan – France

> CUSTOMER

Electricité De France (EDF) / Hydraulic Engineering Center (CIH) Grenoble – France

> MARKET SEGMENT

Concrete Repair

> SUBSEGMENT FUNCTION

Structural Repair

> YEAR

2014

APPLIED PRODUCTS



- PRECAST SEGMENTS REPARATION WITH LANKO 731
- PRECAST SEGMENTS PROTECTION WITH LANKO 228

ALSO

- LANKO 760
- LANKO 668

TECHNICAL DETAILS

- Surface : 2,25 m²
- Volume : 43 tons of LANKO 731, 7,315 tons of LANKO 228

BRAND

PAREX LANKO

PAREX
Building expertise, together