

A YARD FOR THE PEOPLE

RESTORATION OF THE MONT BLANC TUNNEL



KEY FACTS

- Occurrence: March 24 1999
- Assignment of the mission beginning March 2000 (longsome negotiations)
- Restoration within 7 weeks!
- Deployment: Shift working – day and night – with up to 300 people
- 6 hours working, 12 hours driving as well as rest period
- Ashes elimination: approx. 6.000 t
- 12 km roof tunnel and street surface area cleaning: 270.000 m²
- Haust- and exhaust duct clearing and cleaning: 220.000 m²
- Clearing and decontamination of wire ducts
- Decontamination of the central ventilation station (i.e. cavern, machines, steerings)



THE RECLAMATION OF THE MONT BLANC TUNNEL

In 2000 BELFOR Italia and BELFOR France were called to a task of great importance and international prestige, it was to restore the Mont Blanc tunnel, the traffic route of vital importance for the economic and cultural relations between Italy and France.

The tunnel has been closed after a fire on 23 March, 1999 killed 39 people. The blaze, which at times reached temperatures over 1000 degrees centigrade, started when a truck caught fire in the tunnel which passes under western Europe's highest mountain. The ensuing fire trapped around 40 vehicles in dense and poisonous smoke. Fire services needed several days to extinguish the blaze.

Equipment – some figures:

- 10.000 m flexible pressure tubing for high-pressure cleaner / 48 high-pressure cleaners
- 8 electric generators with a distribution every 100 up to 200 kVa
- 1.500 lighting sets
- 200 pumps
- 15.000 m of fire hoses
- 25.000 m 220/380 V of cables
- Sewage plant's capacity : 84 m³/d, max. 7m³/h
- Air flow rate for oxidation : 50 – 200m³/h
- 2 x 8 m³ basins of sedimentation with finest sand-, candles and activated carbon filters
- Filter's lifetime : approx.15- 20h



DEWATERING OF TUNNELS **HAS A ROCK WATER QUALITY**

After surveying the tunnel two months after the accident, it became obvious that it was damaged almost along its whole length of 12,6 kilometres.

The SITMB (Società Italia per l'Esercizio del Traforo del Monte Bianco) issued a competitive bid for the technical decontamination of the tunnel and the underground ventilation channels, as well as the restoration of all the technical rooms and devices of the Italian concession of the tunnel (5,8 Km.) under the technical specification of the French Engineering company EMTS and the Italian IMC, that jointly created the technical project of the decontamination activity.

The same bid included the task of taking care of all the pollutant waste created in the tunnel by installing an on-site water treatment plant.

BELFOR Italia won the tender and realized the job in 56 days, four days before the deadline. The realization of the project has been performed through the cooperation of most of the European branches of BELFOR, where BELFOR Suisse supplied most of the technicians working there, BELFOR Austria supplied the core of the water treatment plant mounted in the Italian platform of the Mont Blanc Tunnel.

„Not one part of this job could have been realized without the full-time, enthusiastic commitment of all the persons, technicians, engineers, workers, secretaries of all the BELFOR branches which took part of this job,” Filippo Emanuelli, Managing Director of BELFOR Italia emphasized.

The book „Un cantiere per le genti“ (A site for the people) is definitely dedicated to all of them”

„All of us, journalists and photographers, were somewhat sceptic when Filippo Emanuelli asked us to put together photographic and film records of this BELFOR effort,” remembers Giorgio Tartaro, journalist.

„The months of restoration work created a sense of closeness and unity between the people from different nations and cultures who worked on the tunnel's re-opening. A sense of belonging but also of fearful powerlessness that had us in grip every time we put on overalls, gloves and helmets to enter into that „bowel” to photograph this immense effort, the seemingly interminable work.

Emanuelli concluded: „This book should remind us that everything is possible when we want it.”