

The Toulouse and Lille subway's (1993)

⌚ Toulouse and Lille subways

⌚ Realization :
in contact with the SOFRETU
research department dependent
on the RATP

Toulouse subway :
line intended to serve
the Grand Toulouse Village
from south east to north west,
crossing by the town centre
(10km)



Toulouse and Lille underground (1993)

⌚ Specifications :

- High mechanical strength at young age
- 18 000 m³ of concrete
- 1 300 t of steel

⌚ Admixtures :

- **Chrysofluid GT** (superplasticiser) used for the realisation of B40 concrete segments, to obtain 12 MPa at 8h with a HPR cement from Lafarge Lexos and 50 MPa after 90 days.
- The raft concrete, of category B30, with a Lafarge Martres CPA HP, has been used containing **Chrysofluid 15** (superplasticiser) to obtain 10 MPa at 14 hours and 60 MPa at 90 days.
- Lille subway : realization of segments reaching a 10 MPa strength after removing of the formwork.