

Florence, Italy
30th September – 2nd October 2019

Paper Ref #
(the paper ref# will be supplied to authors)

Recent developments of GRP solutions in the booming transportation market

Abstract:

GRP pipes of any size or shape have been used for more than 50 years in the water market both in open cut and trenchless ways of installation in the main following fields:

- Sewerage market : gravity collectors, WWTP and pressurized sewer mains including access chambers and ancillaries
- Storm water market : drainage and collectors
- Drinking water mainly for water mains

Today we see an impressive development of GRP open cut and particularly trenchless pipe solutions in one of the world's largest industries : the transportation market.

Transportation sectors range from roads to motorways, airports, high speed and freight railways, urban tramways, container ports, multimodal platforms, ...

Transportation is a vital service to every other sector of the economy and massive investments for new and existing infrastructures are made all over the world with objectives of ensuring efficient, long lasting and environmental friendly systems.

Among the significant advantages of trenchless GRP solutions we can mention:

- Implementation of an innovating comprehensive solutions (e.g. tailor made for any challenging shape - ovoid, arch shaped...-, onepass long jacked deep pipelines without interruption of traffic,...)
- Clear design in line with severe service conditions (e.g. heavy traffic...)
- Quick and safe installation in complex ongoing sites conditions (e.g. tight schedules constraints,...)
- Long life expectancy
- Environmentally friendly techniques

The paper will present how we can apply GRP solutions to the booming transportation market and how we can adapt them to meet its specific needs and constraints. Several case studies jobs will be presented to illustrate this.

Keywords: circular & noncircular GRP pipes, transportation infrastructures, prefabricated lining, sliplining, microtunneling, jacking