

Florence, Italy
30th September – 2nd October 2019

(2397)
Trenchless
Technology Case
Studies

HYDROELECTRIC PIPELINE REHABILITATION, BLUELINE - UV LINER SYSTEM

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(the paper ref# will be supplied to authors)

HYDROELECTRIC PIPELINE REHABILITATION,
BLUELINE - UV LINER SYSTEM

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ABSTRACT:

The rehabilitation of the hydroelectric pipeline in Agordo was planned in 2017 and realized in 2018. The solution for rebuilding the steel pipe was economically unfavourable due to the presence of: underground utilities, roads and private properties. The project was oriented towards NoDig technologies. Two systems were considered: The Inversion system (BlueLine) and The Pressure UV Liner System. The client compared those two technologies in order to make the choice that was technically more appropriate. Despite the experience in the field of inversion systems, the first choice fell on the UV system. This could guarantee greater lengths, around 230 m, without foreseeing excavations that would have affected private properties. The BlueLine could not guarantee lengths such as the UV System and also the BlueLine would have foreseen the use of a very big inversion drum. After a meeting with the UV Liner producer, other problems have arisen: excavations with dimensions, about 3m, bigger than the ones already planned, the presence of two curves, 15 and 33 degrees, where the UV lamps could have damaged the liner and the irregularities inside the existing pipeline. The client decided for the UV technology. Unfortunately, due to a fire in the manufacturing company and the time table of the rehabilitation, the final decision fell on the BlueLine System in agreement with the owners of the private areas. The technology was flexible and suited to a successful project.