

Your solution provider **Sustainability**

Soilmec has a long-standing commitment to sustainability, to protect the health and safety of everyone that works with us and lives in the communities where we operate.

Wherever we are, we conduct our business with respect and care for the environment, guaranteeing products and services that meet the best quality criteria.

The growing environmental issues together with more stringent regulations have been leading to an energy transition.

We are supporting our customers to a lower-carbon footprint future through developments of new products, technologies and services.

Sustainability in

- **supporting customers**
- **new products**
- **new technologies**
- **services**

Soilmec headquarter

Officially opened in January 2011, the main Soilmec production plant is a green self-sustainable building. The structure, with an area of 8000 square meters, was built using geothermal energy for heating and cooling. In addition, the roof is completely covered with photovoltaic panels capable of powering the overhead cranes, the lighting system, other utilities inside the building and of course the geothermal pumps.

<https://www.youtube.com/watch?v=MADCVAasoeA>

facts & numbers



Geothermal field

80 vertical probes, depth 120m

Closed-loop geothermal system



Geothermal installed power

500 kW



Production in the last 10 years

225.000 kWh



Photovoltaic roof

1700 panels



Photovoltaic installed power

390 kW



Production in the last 10 years

4.860.000 kWh

Products ... the Blue Tech line

Based on the experience and success of the first generation, **the new SR machines of the Blue Tech line have been designed to improve their productivity and operational flexibility to an ever-greater extent, reducing operating costs and emissions** as well as dedicated care on comfort, ergonomics and safety of operator and staff on site.

The design of the Blue Tech Lines is based on the optimization of power transmission and on the minimization of energy dissipation. Particular attention has been given to the main parts of the machine which are normally involved during the work cycle. In this way they improve combustion and cooling efficiency and ultimately reduce noise pollution.

All these solutions and improvements reduce the fuel consumption and the carbon footprint emissions.

BLUE TECH 

...and also



Increased production rate

Improved mechanical performance thanks to the reduction of losses

BLUE TECH 

...and also



Less fuel consumption

Saving up to 10,4 l/h
(based on a standard working cycle)

BLUE TECH 

...and also



Healthier and safer working environment

Lower noise and lower CO2 emissions

Products ... the e tech line

Built to shape a safer world, engineered to create a better future, e tech is the new generation of Soilmec machines.

The project was born with the aim of creating the first electric drilling machine, evolving that path started decades ago, with the advent of the first electric motorized machines for drilling and consolidation works in internal environments and in tunnels (ST-20, ST-60, SM-5E etc ..).



With future in mind, we design.
Trusting the future, we work.

**Built to shape a safer world,
engineered to create a better future,
e tech is the new generation
of Soilmec machines.**

It is no longer a simple “engine replacement” where the diesel engine is replaced by an electric motor, but this is referred to as an electrical power supply aligned with the latest developments in the sector, which within the power transmission sees permanent magnet electric motors, lithium battery, alternatives to cable power supplies and control inverters, therefore very far from previous technologies.

This represents the first step in the development of a whole range of electrified SOILMEC machines, what we call **e tech**, the **zero emission** Soilmec brand new line. A new line of machines, from micropiles, piles and cranes, which responds to the increasingly frequent demands of the market in terms of reducing polluted and acoustic emissions, increasing efficiency and reducing operating costs.

Ikea Workshop

Rimini (Italy)

Geothermal



The shopping centre in Rimini is one of the five Ikea stores with a geo-exchange plant, among other things one of the largest in Italy; **120 geothermal probes** that descend into the ground up to **80 meters deep**. In the subsoil the temperature is constantly at 15°; thus the fluid that circulates in the pipes when it returns to the surface acts as a cooler in the summer and assists the heating system in the winter. The air conditioning costs of the Emilia-Romagna shop have thus been halved.

Anse du Portier

Commercial Area (Principality of Monaco)

EJG Elliptical Jet Grouting

Anse du Portier in Monte Carlo is the new **eco-district designed by Renzo Piano** Building Workshop. The job site is located on the sea and is surrounded by two marine reserves to be protected, so were compulsory strict procedures concerning the emissions of rigs and the oils used, exclusively chosen among the biodegradable ones. Furthermore, the waste water deriving from the processing is treated on site, in order to minimise the transport to the disposal facilities.



DP Displacement piles

Monselice Hospital

(Italy)

12,5 km
of energy piles to provide heating and cooling to the hospital



The area was formerly the site of ancient volcanoes and still features geothermal activity; hot water springs and hot thermal muds have allowed the spa industry to flourish. Designers decided to exploit the site's geothermal resources for the heating and thermal needs of the hospital fitting the reinforced cages of the foundation piles with geothermal probes.

Eastern Dockyard Naples (Italy)

DP/CSP/DW/MP



The “Darsena di Levante” is the **new container terminal in the port of Naples**. The project faced major environmental and construction challenges, due both to the position on the sea and the environmental requirements to be met. A cofferdam structure was constructed to the seaward and the landward side, which requires the use of some of the most cutting-edge technologies and materials existing today, from low impact concreting plants to fibreglass pipes and special cements.

Landfill cleanup & reclamation Manfredonia (Italy)

TDDT Directional Drilling

The Pariti 1-RSU and Conte di Troia landfills have been disused for decades; they are located in the city of Manfredonia. In the years after the landfill was abandoned, ground water analyses were carried out in the area of the city of Manfredonia and significant traces of leachate percolation were found. To **complete the permanent securing and environmental restoration project of the landfills** was used the **directional drilling technology**.

**Sub-vertical drilling
49170 lm**

**Sub-horizontal drilling
58380 lm**



DW Diaphragm wall HDPE
Micropiles

Syndial (ex-ACNA Cengio) Savona (Italy)

The former ACNA plant was built at the end of the past century in Val Bormida, near Cengio, in the North-West of Italy. The plant was originally established for the production of explosives and, during the time, it has modified its activities, being able to produce 374 different types of chemical compounds, most of them extremely polluting. The project consisted in the execution of all restraining works of the underground water surrounding the plant, the perfect seal of the system, and the realization of their drainage.

