

# A large fleet of Soilmec rigs take part in the TEN-T Projects

Rigs from the Soilmec line-up are proving to have an integral role in the development of the trans-European TEN-T network explains Franco Cicognani from the Trevi Group as he tells *GDI* about the company's longstanding relationship with contractor Santacroce Srl

**T**ransport is key to growth and competitiveness, providing the physical networks and services for the movement of people and goods. In this regard, the European TEN-T network aims to create a single transport area based on a renewed trans-European network that is integrated and multimodal by including land, sea and air transport services.

## NAPLES-BARI LINE

As part of the project, the Scandinavian-Mediterranean Corridor has a portfolio of 655 investment projects for a total value of approximately €200 billion (US\$229 billion), including 169 which are monitored in Italy and 55 relating to rail transport (Fora November 2019).

Inside the Scandinavian-Mediterranean Corridor,

a strategic importance is represented by the new Naples-Bari HS (high-speed)/HC (high-capacity) line project which aims to improve the accessibility and connectivity between two important areas that account for nearly 40 per cent of southern Italy products. The expected investment of this portion amounts to €6.2 billion (US\$7.1 billion).

The Italian foundation contractor Santacroce Srl was awarded the lot Apice-Hirpinia from the consortium Hirpinia AV being the entire project contracted by Rete Ferroviaria Italiana. The lot stretches for 18km and will include four viaducts, the longest being 22 spans and just seven for the shortest one and three tunnels.

## FOUNDATION WORKS

The piling job included about 3,000 drilled shafts ranging

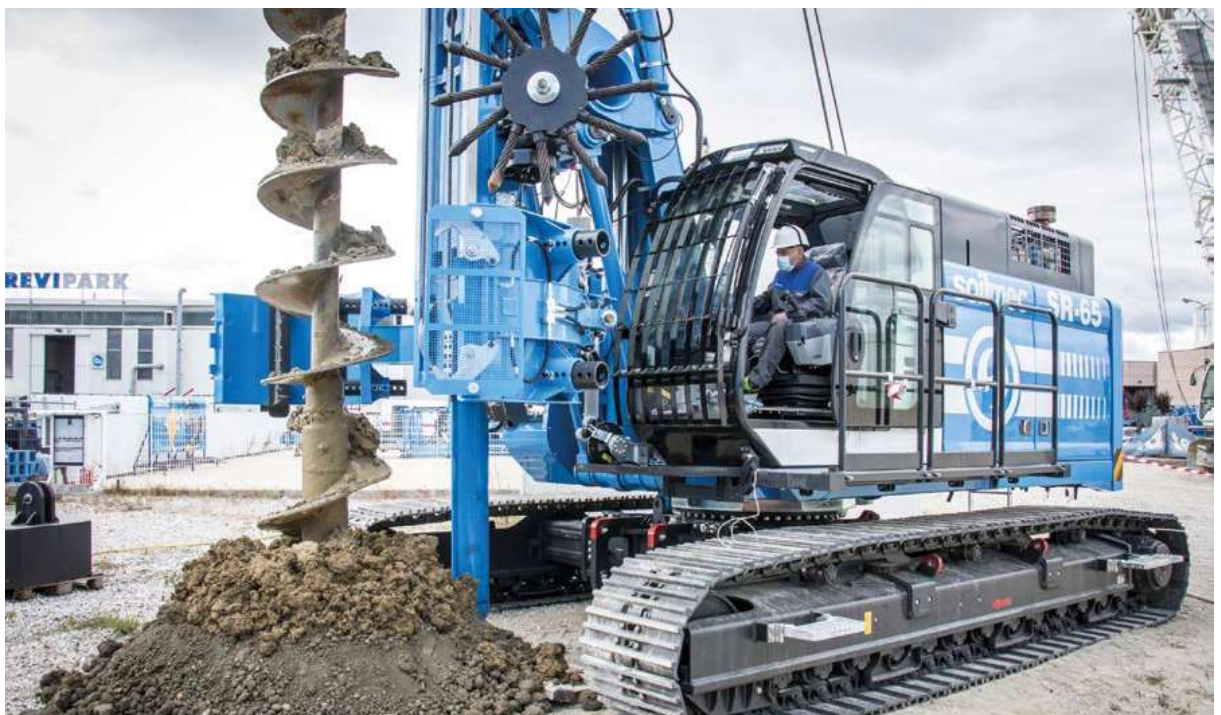
from 1,000mm in diameter to 1,500mm in diameter. About 1,500 additional piles, 800mm in diameter, for provisional purposes, are performed using CFA technology and a plastic mixture instead of cast concrete.

The project foresees also some retaining walls made up of contiguous piles ranging in diameter from 1,000mm to 1,200mm, grout injections, anchoring, VTR tiebacks and drain. In some areas, even JG technology will be used.

The geological area is made up of silty clay with a very low content of sand in the upper part. Locally there are layers of rounded gravel and small cobbles about 1m or 1.5m thick followed by clay and silty clay.

To tackle this challenging project Francesco Santacroce, managing director of the company has put

*The Soilmec SR-65 Blue Tech rigs being used on the trans-European TEN-T network in Italy are described by the contractor as "the best performing rig"*



into work a large fleet of Soilmec units including three units: an SR-30 Evo, an SF-65, and an SR-75 Adv and additionally two SR-65 (one Evo and a new Blue Tech unit) and a couple of old Soilmec crane models: an SC-20 and an SC-40.

### MACHINE ADVANTAGES

According to Santacroce, the new Soilmec SR-65 Blue Tech is the best performing rig. As a matter of fact, the new electric and hydraulic architecture introduced by Soilmec engineers on this rig design is paying off. The distributors and block located nearby the rotary head and the larger size hoses are reducing the losses and the units benefit from a 10 per cent power increase, which directly results in more production.

The rig is fitted with remote control for loading and tramming operation. It is a very handy feature in a viaduct project where the operator often has to move

the rig from one pier to another and needs to get this done quickly and safely. The SR-65 Blue Tech allows for transport of the rig with Kelly bar on in just a single load. This allows for quick mobilisation with the ability to unload the rig and start working in less than 30 minutes.

### CONNECTIVITY

The Soilmec DMS, an in-house engineered device, helps with monitoring the rig's activity and increasing its efficiency. It comes with a number of suites to cover the different areas of any job site: technology, running costs, reporting and maintenance.

During the execution of drilling shafts, the rigs' operators were able to use the DMS Kelly suite for Kelly bar locking. This has proven to be very user friendly and useful. It shows on the display the position of Kelly bar locking slots and tells the user when the pipe is securely interlocked to

the smaller one thus avoiding unwanted slipping between them and damages to the ribs. This function is extremely useful when drilling through hard layers when full torque and heavy load are applied to the pipes.

The SR-65 finds itself as the best option in projects where fast set-up, small footprint, manoeuvrability and low ground pressure are important. Being a mid-range unit, the rig is very versatile since it can perform drilled shaft from 450mm to 2,000mm in diameter (in front of the mast) and CFA piles up to 30m in depth or up to 1,200mm in diameter.

The client confirmed that they are on track with the scheduled production. Santacroce is enthusiastic about the collaboration he has had over the past decade with Soilmec and he says that with the Blue Line innovation and technology are perfectly blended to meet today's site challenges. ▼

**"The piling job included about 3,000 drilled shafts"**



## NOW AVAILABLE: NEW HÜTTE HBR205-2 FOR GEOTHERMAL



**POWER PACK** Cummins B6.7 209 kW

**DOUBLE HEAD UNIT** Type RH40X/T20  
with 40 kNm torque / 15 kNm torque

**BOX MAGAZINE** with extension possibility

**RADIO REMOTE CONTROL** for all functions  
independent control for cathead and winch

**7" DISPLAY**

**FEED GEAR MAST** 200 kN extraction force

**ESTIMATED WEIGHT** approx. 20.5 tons



Hütte Bohrtechnik GmbH  
Ziegeleistraße 36 - D-57462 Olpe - Germany  
info.huette@casagrandegroup.com

**HIGHTECH ON CRAWLERS**

<https://huette-bohrtechnik.com/>