



Tenaris for geothermal

Ensuring efficiency and reliability to European geothermal operations

Global expertise and local presence

With over **30 years of experience in the international geothermal industry**, Tenaris delivers integrated solutions that combine **specialized products, dedicated services, and comprehensive after-sales support** — from well design to on-site installation.

Building on a **proven track record in geothermal projects**, we provide cost-effective tubular solutions across the full spectrum of deep geothermal wells — from low-enthalpy developments to the most demanding high-enthalpy applications — **ensuring reliability, performance, and efficiency** at every stage of project development.

In Europe, where geothermal operations have seen significant growth in recent years, Tenaris has played a key role in major geothermal projects, supporting the expansion of this energy segment with premium products, expert services, and close technical collaboration.

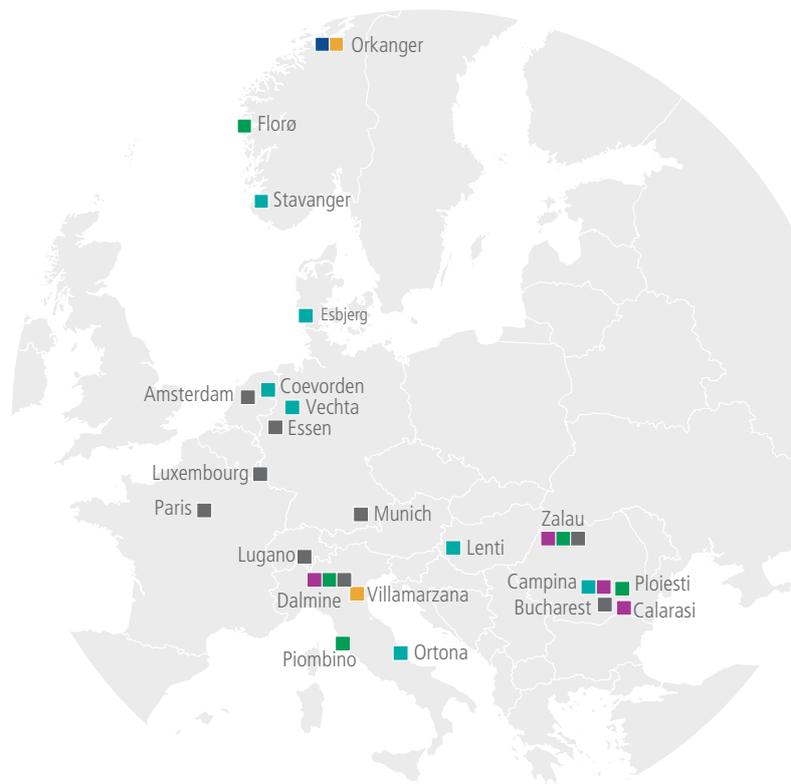
A solid industrial system for sustainable production

Tenaris's integrated industrial system in Europe, featuring two Electric Arc Furnaces, is designed to efficiently produce a wide range of steel grades, from low-alloy carbon steels to 13 Super Chromium, covering seamless OCTG range up to 24 1/2". This capability enables low-carbon steel production and aligns with our commitment to sustainability. As part of our path toward carbon neutrality, we aim to reduce CO₂ emissions intensity by 30% by 2030 compared to 2018 levels.

An extensive industrial, commercial and service network in Europe

Through our extensive network of facilities, offices, and service centers across Europe, we respond quickly to every customer need — from technical support to logistics and field assistance. In times of uncertainty, our close proximity to partners enables us to ensure on-time deliveries, prompt service, and reliable logistics, enhancing the efficiency and security of your geothermal operations.

- Manufacturing centers
- Service centers
- Commercial/administrative centers
- R&D Centers
- Coating facilities
- Licensees



Tubular solutions for the geothermal industry

Tenaris offers seamless tubing and casing pipes ranging from 2 3/8" to 24 1/2", complemented by premium connections designed to meet the full spectrum of geothermal well requirements, including the most demanding projects. We also provide a comprehensive range of proprietary steel grades with enhanced properties to optimize pipe performance, including High Collapse, Sour Service-resistant grades and 13% Chromium materials.

Premium connections for geothermal wells



TenarisHydril ER™

- Casing sizes from 7" to 24 1/2"
- Easy stabbing, fast make up and reduced cross threading risk
- 100% compression efficiency thanks to pin to shoulder contact
- Large track record with 250 km installed in the most demanding geothermal projects



TXP® BTC

- Tubing and Casing sizes from 4 1/2" to 16"
- Compatible with API BTC
- Enhanced torque and fatigue performance
- 100% Compression efficiency thanks to pin-to-shoulder contact
- Improved ID flow to minimize erosion/corrosion
- More robust connection, suitable for Drilling with Casing



TenarisHydril Blue®

- Tubing and Casing sizes from 2 3/8" to 13 5/8"
- Gas tight metal to metal seal connection. CAL IV qualified on all the dimensional range
- Installed by over 300 operators in 80 countries
- Qualified under protocol TWCCEP



TenarisHydril Wedge™ Series

- Casing sizes from 7" to 18 5/8"
- Exceptional torque strength
- Superior compression rating compared to the other integral connection technologies
- Flush and Semi-Flush OD connections, improving clearance and maximizing flow rate
- Available with 100% pressure-rated metal seal, maintaining gas sealing capability under high axial loads

A full range of services

Our geothermal portfolio also includes a comprehensive suite of expert services, delivered through our Rig Direct® service model to ensure efficient operations at every stage.



Well planning and integrity

- Material selection support from R&D and tailor made corrosion tests
- String design assistance
- Field service for tubular inspections
- Running assistance



Product package

- Full range of accessories
- Threading services through a wide licensee network
- Packages with perforated, slotted and threadlocked casing
- Coated and GRE lined tubulars



Supply chain integration

- Stock management
- Just-in-time delivery to well site
- Casing preparation for running (RunReady™)
- Inventory management



Digital services

- PipeTracer®: our digital solution for a full pipe-by-pipe traceability simply through a data matrix and a dedicated App freely available.
- Full access to the relevant technical information and possibility to create digital tallies.
- CaDIS: Advanced solution for Drilling with Casing, optimizing the process and avoiding failures through dedicated tools and software backed by numerical models.
- Torque&Turn Monitoring (TTM): Advanced solutions for Make-up graphs for Premium Connections, data interpretation and KPIs generation with the possibility to access real-time data remotely.

An unmatched track record in European geothermal projects

Tenaris has played a key role in numerous major geothermal projects across Europe, delivering tubular solutions that combine technical expertise, reliable supply, and operational efficiency. Our contributions span several countries, including Germany, France, Austria, Romania, Italy, and Switzerland.

Main projects

Germany

- Laufzorn II district heating
- Kirchweidach II power plant
- Graben-Neudorf power plant
- MTU geothermal heating

France

- Lithium de France (geothermal lithium production)
- Bonneuil-sur-Marne heating network

Switzerland

- Haute-Sorne EGS geothermal plant

Italy

- Larderello Enel geothermal area
- Ferrara district heating
- Verona district heating

Romania

- Bucharest Hospital
- Beius district heating

Austria

- OMV-Wien Energie deep geothermal heating
- Loipersdorf thermal area



Learn more about our geothermal solutions
<https://www.tenaris.com/en/products-and-services/low-carbon-energy/geothermal>