

HIGH-TECH CONVENTIONAL FORMWORKS AND SEGMENT MOULDS FOR PRECISE TUNNEL LINING





# TAILOR-MADE TUNNEL LINING SOLUTIONS

### **Building perfect tunnels**

Euroform is a reliable and well-known partner in the tunnel lining sector, highly specialised in the design and manufacture of formwork and equipment for both conventional and mechanised tunnelling.

All our systems are customised to satisfy the specific requirements of each project, enabling our customers to construct tunnels that adhere accurately to the design concept and consistently meet the highest quality standards.

New products are constantly being developed to expand our portfolio, always incorporating available and field-proven technological innovations and drawing on our decades of experience in the field.

We work closely with our customers throughout the project, from design and manufacture of the equipment, to its commissioning, maintenance, decommissioning, and the training of on-site personnel. Our clients are supported at every stage and they can rely on high-quality products and services to successfully complete the entire scope of their work.





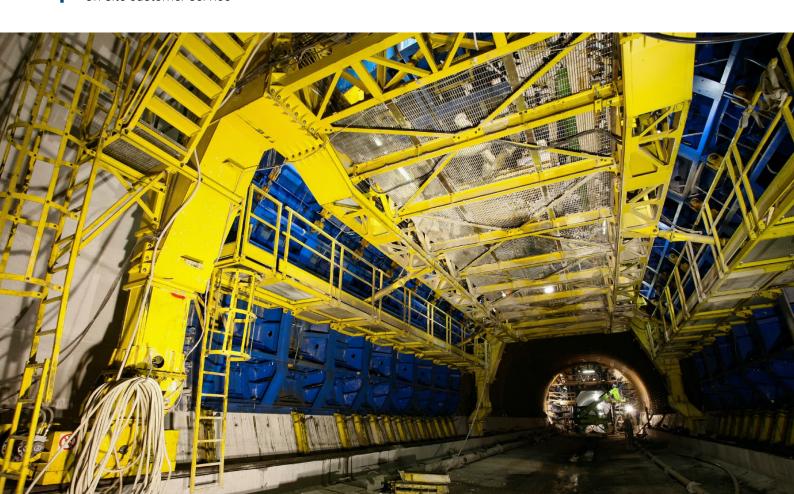




# Whatever you need

Euroform covers all possible applications, from tunnel lining to integrated complementary systems.

- Conventional tunnelling formwork and service gantries
- Segment moulds and carousel plants
- Back-end work equipment
- Project management
- On-site customer service





# **CONVENTIONAL TUNNELLING**

### **Tailor-made solutions**

Each tunnel is different in terms of diameter, cross-section, and geology. Euroform offers an extensive selection of bespoke equipment to suit the unique characteristics of each tunnel.

Specifically designed systems ensure that all equipment operates efficiently. They are installed by highly skilled professionals and thoroughly tested before being made available for use.

# Our portfolio for conventional tunnelling

- Vault tunnel formwork
- Slab formwork
- Invert formwork
- Niche formwork
- Fullround formwork
- Rebar gantry
- Membrane gantry
- Curing gantry
- Concrete distribution systems for tunnels with small and large cross sections

### Modular forming systems

When lining multiple tunnels, each with its own cross-profile, Euroform complements its standard portfolio with a modular formwork system that can be quickly and easily reconfigured for different sections.

Thanks to its modularity, the same formwork can be used for lining several tunnels without the need for any structural modifications; it is sufficient to reassemble the formwork according to the required layout, thus reducing procurement and transport costs, as well as storage space.







### MECHANISED TUNNELLING

### No compromise in precision

Segment moulds are fundamental for the construction of mechanically excavated tunnels, and must faithfully reproduce the segment geometry of the original design to ensure the functionality and structural stability of the tunnel. To this end, Euroform designs and manufactures high-quality moulds for all ring configurations, in full compliance with the design requirements.

The structure of the moulds ensures the optimal transfer of vibrations to concrete, thus guaranteeing uniform material distribution and increased strength of the segments.

We pay great attention to the design, construction and adjustment of the moulds, enabling customers to produce segments with dimensional tolerances down to tenths of a millimetre.

Our carousels allow for defined and consistent process times, thanks to highly efficient work cycles specifically adjusted to the execution of each phase.

### **Auxiliary equipment and services**

Euroform also offers a complete range of equipment and services for segment handling and production.

- Extrados and intrados vacuum segment lifters
- Segment tilting devices
- Standard and tilting clamps for segments
- Multi-segment transfer carts
- Concrete buckets and conveyors
- Stripping and vibrating stations
- Refurbishment of existing equipment
- Laser tracker measurement of moulds, segments and mock-up rings







# **EQUIPMENT FOR BACK-END WORK**

# Back-up system independent of excavation work

When mechanically excavated tunnels require the installation of a secondary tunnel for utilities or vehicles, Euroform offers the Internal Structure Installation Gantry (ISIG), a self-propelled bridge that carries prefabricated culverts and places them on the primary lining to form the service tunnel within the main structure.

For the placement of the culverts, a sliding platform is opened in the centre of the gantry deck, and a special crane installed on top of the ISIG lifts the prefabricated elements and moves them to their final position. All operations are radio controlled.

To permit passage to and from the Tunnel Boring Machine, the ISIG is equipped with an integrated ramp that allows wheeled site vehicles to drive over the culvert installation area when the crane is not in operation.

The ISIG is decoupled from the TBM and does not interfere with the excavation of the main tunnel.









# Integrated solutions for mechanised lining

Euroform also offers a comprehensive range of complementary equipment for mechanised tunnel lining.

- Modular formwork for lining of metro stations
- Formwork for casting corbels for slab support
- Scabbling and drilling gantry for preparation of corbel base
- Rebar gantry
- Gantry for installation of service pipes
- Gantry for laying slabs for road decks and smoke ducts













# **EUROFORM**

Euroform is a subsidiary of Herrenknecht AG, the market leader at the cutting edge of mechanised tunnelling.

We develop and supply high-tech formwork systems and equipment for both conventional and mechanised tunnelling.



