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When the Lainz Tunnel has been completed, trains will have swifter access to the city freight terminal and leave a lighter environmental footprint as they cross Vienna. Capacities freed on the Westbahn, Südbahn and Donauländebahn will then be available for improving local passenger transport services. The shift in traffic will also significantly reduce noise and vibration disturbance for thousands of local residents along the existing railway lines and major roads and sharply lower truck-related pollution for the entire population of Vienna.

Project data

Technical data:

Main tunnel

- Double-track tube
Unconsolidated rock driving (L = 3,050 m, A = approx. 130 m²), external diameter approx. d = 13 m;
Waterproofed inner lining d = 50 cm, two starting shafts, lined as emergency exit shafts, four other emergency exit shafts (sunk and lined), including required cross-cuts (F = approx. 21–23 m) and exit buildings
- Temporary groundwater retention above ground, building and property security work, earthworks and road construction, monitoring (vibration, sound and geotechnical measurements)

Carcass work:

Solid spoil	455,000 m ³
Water raised by above-ground wells during construction period	2,600,000 m ³

Support measures:

Wet mix shotcrete	100,000 m ³
Reinforcement	5,200 t
Anchors (4–16 m)	16,000 pcs.
Stakes	265,000 pcs.
Steel support arches	140,000 m

Interior lining:

Concrete	78,000 m ³
Reinforcement	12,000 t

Construction period:

Start	July 2006
Sched. end	late 2010

LT 31—Maxing, Lainz Tunnel, Vienna

More than 25 kilometers in length, the new link between the Westbahn, Südbahn and Donauländebahn rail axes will form part of the European high-speed line between Paris and Budapest. This will considerably ease traffic on Vienna's major transport arteries. The core element of this connection is the 12.8-kilometer Lainz Tunnel, which consists of four zones: Westbahn link, Südbahn link, Donauländebahn link and a connecting tunnel.

A consortium under the technical leadership of HOCHTIEF Construction Austria is responsible for the technical realization of contract lot LT 31 in the connecting tunnel zone. The assignment is for an approximately three kilometer long double-track tunnel with safety exits driven by the drill-and-blast method with wall heading. It runs partially beneath an existing rail line and partially under urban developments. Starting from two vertical access shafts, the tunnel is being driven in both directions.

