

# The Saverne Tunnel

The **Saverne Tunnel** (*French: Tunnel de Saverne*), also known as the **Ernolsheim-lès-Saverne Tunnel** (*French: Tunnel d'Ernolsheim-lès-Saverne*),<sup>[6]</sup> is a twin-bore 4-kilometre-long (2.5 mi), **high-speed rail tunnel** in western **Bas-Rhin**, **France**. It carries the **LGV Est** line of France's **TGV** high-speed rail network through the narrowest part of the **Vosges** mountain range, beneath **Mont Saint-Michel** and adjacent to the **Saverne Pass**. The tunnel consists of two bores, containing one rail track each, that are connected by passageways every 500 metres (1,600 ft). The LGV Est crosses the 270 m (890 ft) Haspelbaechel viaduct near the western end of the tunnel. The tunnel was excavated by a **tunnel boring machine** between November 2011 and February 2013. Civil engineering work on the tunnel ended in April 2014 and it opened with the rest of the second phase of the LGV Est on 3 July 2016.<sup>[2]</sup> The total cost of the tunnel was approximately €200 million.<sup>[7]</sup> The tunnel has been built for a maximum speed of 350 kilometres per hour (220 mph)—320 km/h (200 mph) in commercial operation.<sup>[22][21]:5</sup> It will be remotely monitored from the SNCF Réseau command center at **Pagny-sur-Moselle**.<sup>[10]</sup>

If the TGV train is traveling at maximum speed through the Saverne Tunnel, how long is the train inside the tunnel?

**DRAW A DIAGRAM** to map the problem.

Do not calculate!