



HERRENKNECHT press information.

June 17, 2009

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## **GOTTHARD BREAKTHROUGH IS CHEERED IN AMSTEG. HUGE RECEPTION FOR TUNNEL BORING MACHINE GABI 1.**

**The Herrenknecht tunnel boring machine 'Gabi 1' reached its target destination of Amsteg in the middle of June 2009 – six months ahead of schedule. Politicians, tunnel workers and 650 guests cheered on the tunnel boring machines as it arrived. This final breakthrough by the first machine in the Erstfeld-Amsteg section constitutes the achievement of an important milestone at the Gotthard Base Tunnel. Moritz Leuenberger, member of the Swiss Federal Council, congratulated the tunnel constructors on their excellent performance at the last stage target.**

**Amsteg, Switzerland / Schwanau, Germany, June 17, 2009.** With the new Gotthard Base Tunnel, Switzerland is creating a monumental construction project which is breaking new ground in the management of traffic and transportation. After completion, the 2 adjacent 57km-long traffic tunnels through the Gotthard mountain range will be the longest in the world and will allow Europe to come closer together at its North-South axis. That is why there was a great deal of excitement as, on June 16, 2009 at 11:58 am, the Herrenknecht tunnel boring machine (Ø 9.58m), which had been given the name 'Gabi 1', broke through the last meters of gneiss in the eastern tube of the Gotthard Base Tunnel at the target destination of Amsteg. 650 guests were waiting there, cheering the rotating cutterhead on, its steel polished clean by the rock and glowing under a flurry of camera flashes to greet it. Shortly before that, the member of the Swiss Federal Council, Moritz Leuenberger, had announced the arrival of the tunnel boring machine, describing it as "the last stage goal before achieving the final goal". He thanked the tunnel workers and tunnel constructors who worked tirelessly day and night on the project. The Federal Councilor also stated that this achievement was a victory of strong will over the skeptics.

What has been achieved by completing the eastern tunnel of the Erstfeld-Amsteg section – the last section on the north side – is extremely impressive. In only 18 months, the hard rock tunnel boring machine (Gripper TBM) managed a mountain stretch of 7.2 kilometers under the construction management of the Gotthard Base Tunnel North Consortium (AGN, Arbeitsgemeinschaft Gotthard Nord) The section was completed six months earlier than planned. The breakthrough was made with the utmost precision. The axis at destination only deviated 4mm horizontally and 8mm vertically from target. The average daily tunnelling performance through very hard rock and mountain overburdens of up to 1,000 meters was approx. 14 meters. The best daily performance achieved was almost 40 meters of excavated and secured tunnel.

### **Sprinter in the mountain rock.**

'Gabi 1' (Herrenknecht Gripper TBM S-229) had already proved to be a 'sprinter' during its first operation on the Amsteg lot in the direction of Sedrun. After being put into operation in May 2003 and taking up high-performance tunnelling in October 2003, this TBM completed a stretch of 11.3 kilometers from north to south by June 2006 with a nine-month advance on the construction program. After this breakthrough, the TBM was disassembled below ground, brought out of the tunnel using the mine train, subject to comprehensive overhauling and then

reassembled in front of the north portal entry in Erstfeld. From there, on December 4, 2007, the day of their patron, Saint Barbara, the tunnel workers started their mechanized tunnelling work towards Amsteg, the last stage target. The breakthrough on June 16, 2009 caused a great deal of excitement and celebrations.

The Herrenknecht tunnel boring machine 'Gabi 2' is still on its way there. By the middle of June 2009, the giant with a total length of 441 meters like its sister machine, and a cutterhead power of 5,000 HP, had already managed 5,908m of tunnel in this section. 83% of the stretch has already been excavated. The western tube is expected to be completed in autumn 2009. All in all, what has already been achieved in the Gotthard means that Switzerland is coming ever closer to its grand and historical goal in traffic management.

### **A victory for Europe.**

At the celebrations in Amsteg, Moritz Leuenberger, Swiss Federal Councilor for Transport, described the construction project as "the first Wonder of the World in Switzerland and the longest Wonder in the World." He said that completion of the tunnel was a victory for Europe. It would provide Europe with a high-performance rail corridor through the middle of the Alps, making it possible to transport goods from Rotterdam to Genoa in an environmentally friendly way. Leuenberger called his "friends in Europe" to follow Switzerland's example. Without shifting part of the traffic from road to track, people would be miserably stuck in the permanent traffic jams caused by 60-ton trucks.

The construction work on the Gotthard axis is well underway according to AlpTransit Gotthard AG. From the tunnel tubes, shafts and tunnels of the Gotthard Base Tunnel, with their overall length of 153.5 kilometers, 133.9 kilometers or around 87.3% have already been excavated. The two other Herrenknecht tunnel boring machines in the southern section between Faido and Sedrun are moving forward at a good rate after successfully overcoming the Piora Basin in October 2008 and February 2009 respectively. 6,644m (61%) have been excavated in the eastern tube and 6,048m (53%) in the western tube. According to the construction schedule, the tunnel workers will be able to celebrate the main breakthrough at the beginning of 2011. The timetable sees commercial rail traffic going into operation at the end of 2017.

For further information on the Gotthard Base Tunnel project please visit the AlpTransit AG website: [www.alptransit.ch](http://www.alptransit.ch)