

# Only two hours of instruction required



TOPCON  
**AT WORK**

*"We improved the performance of our construction machinery"*

*"Work would not have been possible with GPS only"*

The Thanheimer Steige in the south of Germany is a 2.5 km-long, two-lane road. In the past many accidents happened on the tight and curved road. The local government decided to widen it, to 6.5 meter and make the corners less tight. The L-360, as it is also known, connects the Northern side of Albstadt with the regional A81 and the B27.

The German firm SKS Bau from Tuttlingen uses both Topcon's surveying and 3D Machine Control equipment to handle the task. Foreman Armin Braun explains. "We broke new ground in surveying and 3D machine control; we improved the performance of our machinery and reduced construction times. After two hours of instruction on the Topcon HiPer Pro, I could immediately mark out all the points relevant to the construction work to the nearest centimeter. Without needing any on-site surveying, I could document all work (built as planned) and supplementary work in a transparent and comprehensible manner."

"It's easier than a folding rule. We made efficient progress in the construction work, as there was no longer any delay for the surveyor, stoppages or conversions. The HiPer Pro stored the entire project – the rough grading with embankments and cuttings and the finished roadway– as a digital terrain model (DTM). Furthermore, all the discrete structures such as mountings and pipes could be called up on a color display."

Additionally, SKS have equipped a Cat 325C crawler excavator with a Topcon-3Dxi machine control system. "For positioning accuracies to centimeter level, the HiPer Pro and 3D excavator control system use American GPS and Russian GLONASS satellites. When used together, they provide a greater level of accuracy than GPS alone. Moreover, the work can be carried out without problems where there is a high degree of GPS-shadowing. It would have been impossible to carry out work on the Thanheimer Steige with GPS only." Topcon daughter to be mentioned.

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