Smartest Engineers and Technicians of the Future



#2015CECECEMASummit

23 - 24 September, Brussels

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PTS (Parallel to Surface): Background and Requirements

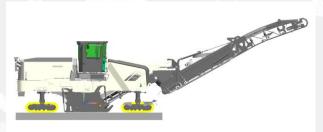
Parallel to Surface (PTS) defines a function implemented in the LEVEL PRO onboard levelling system. PTS ensures the longitudinal parallelism of the machine to the road surface during the entire milling process. Even in the case of a process interruption such as lifting the machine up above a manhole or water inlet, parallelism is ensured by the PTS.



(a) Machine at the start of the cutting process without PTS

In general it is fairly difficult for a machine operator to visually judge the levelled condition of the machine during regular operation. So PTS helps to reduce the operator's daily work as well as the complexity and thus minimizes the risk of mistakes.

In addition to this the overall process is accelerated.



(b) Machine at the start of the cutting process with PTS





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Benefits of the project:

- Reduction of operator's work
- Acceleration of operation process (cost cutting)
- Increase of the cutting quality

Project development:

- The Algorithm was developed by one person
- Engineering PTS from the initial idea until serial production took one year
- The software was implemented within a period of 6 months

Market:

- The PTS-System is installed in all of our large milling machines
- Large milling machines are currently distributed worldwide
- The PTS-System is an elementary part of machine for today and in the future

Additional information:

- High durability of intensively tested soft- and hardware components
- Up to now, more than 1,500 units have been sold without any problems









