

Without highly advanced hardware no made-to-measure solutions



*"We can survey with great precision
even under water"*

*"Trouble free measurements under
difficult conditions"*

Geo Plus is an ultramodern geo-company that has a strong team of seventeen people working in all disciplines of geo-information. The independent surveying office has built up extensive experience in land surveying, channel beds, hydrography, civil engineering and GIS. Geo Plus carries out interesting projects, from concept up to and including the finished product, for both national and international clients.

Jan Loots, director: "Geo Plus must be regarded as an independent knowledge centre that deploys know-how and experience to successfully carry out complex projects. The in-house knowledge forms the basis for this, but in this technological branch we also need highly advanced instruments in order to be able to deliver made-to-measure work. An example of this was the project 'Rijksweg 33' between Veendam and Gieten. We have completely redesigned this motorway, including the complete dimensional characteristics. This was an important job that had to be done within a couple of weeks. This job required made-to-measure work, because the specifications demanded extreme accuracy and we had accepted this job as performance specifications. Thus we had to provide the contractor with the exact data of the asphalt layer that was to be milled off and the quantity of new asphalt that had to be applied again. Over such a long distance minimum deviations in the milling figures would have caused serious planning and budgeting problems."

Jan continues: "One of our 'wet projects' is the Brabant Delta, an extensive system of water courses, channels and harbours in West-Brabant. Thanks to our advanced equipment, we have been able to survey the bottom of this 83 km water courses extremely carefully within a few weeks. Our surveying vessel is not only equipped with a multi-beam system, but it also has 'heave, roll and pitch' sensors that compensate all movements of the vessel. All these data are continuously linked to the GPS+ correction signals of our on-shore basic station. This Topcon GPS+ system makes use of many more satellites, being those of the GPS system as well as the satellites of the GLONASS system. To us this means that we can just move on and survey, even with overhanging trees, high embankments, loading and unloading cranes, buildings, etc. without any interruptions. This saves much valuable time and allows us together with our other advanced equipment to measure under water with surveying precision".

