

## Motor Graders (Road Graders)

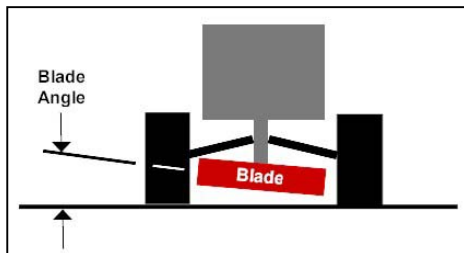
Motor Graders (aka Road Graders) are widely used in the construction of roads, railway beds, airport



runways and commercial building sites. They are instrumental in producing smooth consistent surfaces, either

level or graded. Highways which appear level to the naked eye, are actually graded at a slight angle, to promote and guide 'runoff'.

The uniformity and slope of the finished surface relies solely upon the systems used to control the angle of the blade on the Motor Grader. These are known as 'automatic blade controllers'. During the grading process these systems monitor the blade angle, and make corrections by actuating hydraulic cylinders. The angle of the blade has traditionally been measured using a single axis inclinometer, with an angular measurement range not exceeding +/-45 degrees.



*Spectron* can exceed all the requirements of this application with the SPECTROTILT™ *Ratiometric Electronic Inclinometer*. The wide single ended DC voltage input range, and output, make it ideal for interface into most existing systems. The packaging features such as a hermetically sealed sensing element, full ESD and EMI protection, aluminum housing and fully potted electronics provide superior environmental protection. With the long-term exposure to the elements that a sensor in this type application will have to endure, these features are vital.

With vibration being a major concern in this type application, *Spectron* provides a big advantage. The viscosity of the fluid within the sensing element can be altered to dampen the response, virtually eliminating vibration sensitivity. This feature, coupled with the exceptional packaging makes the SPECTROTILT™ a natural choice.