Example SensorWise Design Project

SensorWise

Since 1995, SensorWise has designed state-of-the-art equipment for companies ranging from small start-ups to major oil and gas service and equipment providers. The high-tech equipment we design ranks in the top of its class and is critical to our clients’ competitiveness in the international market.

Robotic Downhole Tractor

When deploying downhole e-line tools in oil and gas wells that are deviated or horizontal, a robotic downhole tractor can be used to take over the conveyance when gravity is no longer sufficient due to the high angle. SensorWise designed and developed a robotic downhole tractor with its motion based on two alternatingly gripping anchors and two hydraulic pistons also known as the “inch worm” method. The design includes an embedded processor to control the motion which allows the tractor to run autonomously, hence the name SmarTract™. SensorWise engineered, developed and verified this device which presented significant challenges for electrical, mechanical and software design to assure reliable performance in the downhole environment.

The SmarTract™ equipment is now owned and operated by Smart Completions Ltd. For a further description of the SmarTract™ service and to see a video animation, click on the link below to visit the Smart Completions Ltd website.

“*The SmarTract™ Robotic Downhole Tractor (RDT), designed and built by SensorWise, Inc., is used in Canada by Smart Completions to deploy numerous e-line tools in a wide variety of applications from SAGD wells to high pressure gas wells. The SmarTract™ RDT, with its bi-directional capabilities and reliability, provides it with a competitive advantage when operators are selecting downhole tractor services*” – Smart Completions Ltd.

Click [here](#) to see a video animation on the Smart Completions Ltd. website.