Downhole Tractor

The Sondex downhole tractor is used on mono-conductor wireline in highly deviated wells for conveyance of logging tools, perforating guns etc. Easy to use, easy to transport, the device can operate in varying well diameters, and has constant communication with the surface giving absolute control.

Tractor Tool
The tractor is 2 1/8” in diameter and 24.5 feet long and can be used to push other tools in wells with casing sizes up to 9”L. It is normally made up with two sets of deployable drive wheels and two strong centralisers. Extra drive sections can be added for use in wells with complex construction or far use in Open Hole.

Also included in the tool are a Casing Collar Locator and a Head Tension tool together with an electronics section to provide complete control arid transmit status data to the surface.

Tractor Surface Equipment
To control the tractor only a small power panel and notebook computer are required. Most of the control is achieved using the computer which prompts for manual changes to the supply voltage provided by the panel.

The computer also displays the applied power, drive arm status and position, tractor load, head tension, depth, speed and CCL log.

WEST
The Well Entry Simulation Toolkit (WEST) will plot the shape of a well and predict the tractor loading with depth. It will show if a particular combination of tools and cable can be expected to reach the required depth. During a job, deviations from a prediction and the displayed data can be early indications of potential problems caused by collapse or debris. This level of planning has resulted in the Sondex tractor making hundreds of successful deployment operations.