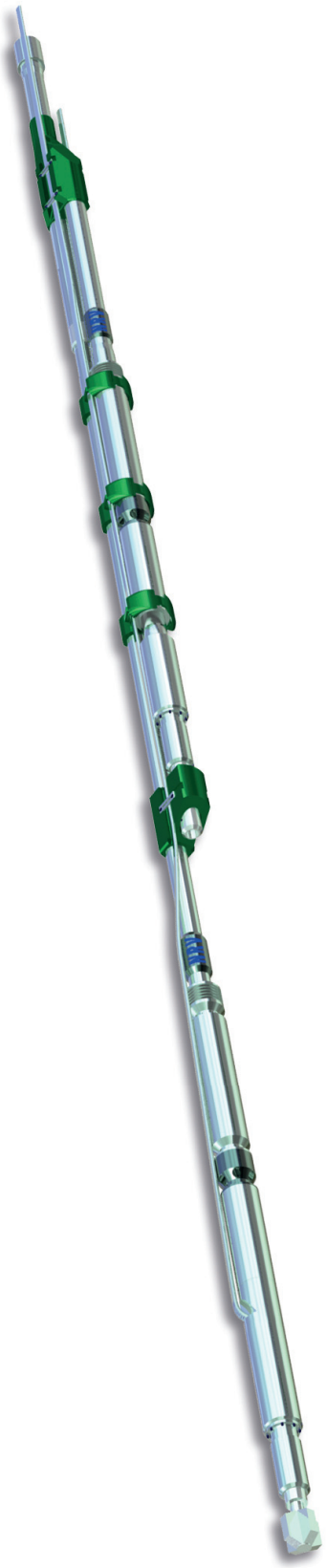
Redundancy Single Y-Tool - Dual ESP System



As the originators of Dual ESP technology, RMSpumptools' in-depth background and expertise in Dual ESPs, translates into an unparalleled range of systems that cater for the wide variety of completion needs demanded by today's sophisticated ESP user.

Description

The RMSpumptools dual ESP system utilising one Y-Tool and two ESPs, to allow the operator to run two complete ESP systems in one well, to provide a downhole back-up system. Typically both units are identical, but one unit can be sized differently for anticipated later life production.

Check Valves are positioned above each ESP discharge: NRV version above the upper ESP with the Pump Chek version above the lower ESP. The Pump Chek has a pressure burst disk that can be activated before pulling the completion, to prevent the need to pull a wet string.

Operation

An individual cable powers each ESP and either the upper or lower ESP system can be selectively operated, without any well intervention.

When failure of the first operating ESP eventually occurs, the second ESP is then activated to provide extended operating time between workovers.

Application

For high workover cost environments such as offshore and remote locations and for where rig access to well for workover may not be immediate.

Advantage

RMSpumptools Dual ESP redundancy system will radically improve well profitability by lowering workover costs and by cutting deferment. Initial installation time is minimised.

Utilising only one Y-Tool for the upper ESP only, this simple configuration provides a dual ESP completion with the redundancy benefits of halving workover costs, requiring minimal additional downhole equipment.