

Merla HDTP Kickover Tool

Slickline Downhole Tools

Merla HDTP series positioning tools are used to install or retrieve 1 1/2" OD valves into Merla TGPD and TGD types of side pocket mandrels.

For running a valve, the HDTP positioning tool can be used with either a Merla TER or Merla RR running tool or alternatively a Camco JC-3 running tool.

For pulling a valve, the HDTP positioning tool can be used with either a Merla TRP, a CAMCO® 2" JDC or an Otis® 2" SM pulling tool.

Especially suited for use in deviated wells, the HDTP positioning tool consists of a fishing neck with a threaded pin connection on the upper end, a main housing containing a locating key, trigger, latching and kick springs, a pivot arm assembly and a knuckle joint with box threaded adapter on the lower end for attachment to a running or pulling tool.

Running and pulling procedures are identical except for the use of a running tool or pulling tool. To install a gas lift valve, the running tool is first lowered past the target mandrel, then the string is slowly moved back up, which causes the positioning tool to position the locating key in the mandrel's orientating sleeve.

Upward movement causes the positioning tool to rotate until the key enters the orientating slot in the sleeve. A noticeable increase in tension will occur when the tool reaches the end of the slot.

A further gradual increase in tension will cause the tool to "kick over" and latch in place, directly above the mandrel's pocket. The tool string is then lowered slowly until the line tension drops off, this being a positive indication that the valve has entered the pocket. The tool string is now jarred down to seat the valve. An overpull is taken to confirm valve is set. Once confirmed upward jarring will shear running tool.

Further upward travel will cause the trigger to realign in the positioning sleeve, then the tool is jarred once more to shear the pin holding the guide key in place, after which the tool will no longer align in each mandrel as it is pulled to surface. As the tool is pulled through the orienting sleeve, the "kicked over" arm will straighten and lock in the straight position. This feature eliminates unnecessary wear on the tool caused by rubbing on the tubing wall when pulling out of the well.

Hunting HDTP Kickover Tools are available with various connections to suit customer requirements

