Kickover Tools
Slickline service tools for installing and retrieving devices in all orienting-style side pocket mandrels

APPLICATION
- Installation and retrieval of side pocket devices by standard slickline methods

BENEFIT
- Field-proven design made with specially hardened material for durability

FEATURES
- Industry-standard top connection and fishing neck
- Availability in premium alloys

The Camco kickover tool and Merla® kickover tool are run into the well using standard slickline methods. When the locating finger of the tool contacts the stop in the orienting guide sleeve in the mandrel, the kick spring pivots the lower section of the tool, the running tool, and the valve into the kicked-over position. The orienting guide sleeve in the mandrel ensures correct installation. Once the slickline device is installed, a shear pin in the finger housing and the release plunger assembly are sheared, permitting the tool to be returned to the surface.

Running procedure
In the running procedure, the valve, latch, and kickover tool are made up onto the slickline tool string and lowered through the tubing until the tool is below the selected mandrel (Fig. 1).

The kickover tool is slowly raised through the tubing until the finger on the tool contacts the orienting sleeve slot and stops. Tension is placed on the slickline tool string by pulling until the tool releases and kicks over (Fig. 2). The tools are then lowered until a loss of weight indicates that the tool has located the side pocket of the mandrel.

Downward jarring drives the valve and latch into the side pocket mandrel (Fig. 3). Upward jarring shears a pin in the latch and releases the running tool from the valve and latch (Fig. 4). The tool string can then be retrieved from the well.
Pulling procedure
In the pulling procedure, the kickover tool and pulling tool are made up onto the slickline tool string and lowered through the tubing until the tool is below the selected mandrel (Fig. 5).

The kickover tool is slowly raised through the tubing until the finger on the tool contacts the orienting sleeve slot and stops. Tension is placed on the slickline tool string by pulling until the tool releases and kicks over (Fig. 6). The tools are then lowered until a loss of weight indicates that the tool has located the side pocket of the mandrel.

Downward jarring securely connects the pulling tool to the latch (Fig. 7). Upward jarring shears a pin in the latch and releases the valve from the mandrel (Fig. 8). The tool string and valve can then be retrieved from the well.