

Title (en)  
SIDE POCKET MANDREL

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Application  
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Abstract (en)  
[origin: WO8603544A2] In accordance with illustrative embodiments of the present invention, a side pocket mandrel (10, 410) having a side pocket laterally offset from the open bore (425) has an opening (29, 430) at the upper end adapted to receive a gas lift valve (21). The axis (428) of the opening is inclined in a downward and inward direction toward the axis (429) of the open bore. The opening can be formed in a short-length seating section (412) that is welded to one end of a central body section (413). A kickover (20) tool for replacing and removing valves includes an orienting section (60) having angularly spaced dogs (26, 92) that are cooperable with a sleeve in the mandrel to cause orientation of the tool and to trigger longitudinal movement of a control rod (94). Rod movement actuates guides on a pivot arm (24) that cooperates with ramps (450) or the like in the mandrel to cause the valve to be inserted through the opening to a position extending upwardly into the annulus with a packing sub thereon engaging the opening.

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