length of the linear beam. This continues as the gripper chains force the tubing into or out of the wellbore.

Tubular members introduced into the wellbore may not have a constant cross-section. For example, a variety of outside diameters of tubing may be used in a particular drilling operation, or a pipe joint or connector between two reels of coiled tubing may result in a change in outside diameter of the tubular member directed into the wellbore through the injector. Existing injector systems that accommodate a range of tubing diameters have a number of disadvantages. For example, certain systems utilize two injectors stacked on top of one another to allow the injectors to pass an upset (i.e., a change in diameter) that could not otherwise pass through either injector with the linear beams closed (i.e., with the gripper chains engaging the tubular member). Other injector systems require costly stoppages to make adjustments and modifications to the injector and the tubing.

SUMMARY

According to a first aspect of the present invention, there is provided an injector apparatus for moving a tubular member in and out of a well comprising: a support structure; an injector located above the support structure and comprising: a base; a carriage extending upward from the base and coupled to the base; and a gripper chain system mounted in the carriage and comprising one or more gripper chains and one or more linear beams supporting the one or more gripper chains; one or more hydraulic cylinders coupled to the support structure, wherein the one or more hydraulic cylinders are operable to move the injector; a slip bowl assembly coupled to the support structure and located below the injector base.

According to a second aspect of the present invention, there is provided an injector and slip bowl system for moving a tubular member in and out of a well comprising: an injector apparatus comprising: a support structure; an injector located above the support structure and comprising: a base; a carriage extending upward from the base and coupled to the base; a gripper chain system mounted in the carriage and comprising one or more gripper chains and one or more linear beams supporting the one or more gripper chains; a lifting means coupled to the support structure; and a slip bowl assembly coupled to the support structure and located below the base.

According to a third aspect of the present invention, there is provided a method for moving a tubular member in and out of a well comprising: directing the tubular member

downhole through an injector; wherein the tubular member comprises a first segment, a second segment, and a third segment, and wherein the second segment has a larger diameter than the first segment and third segment; wherein the injector comprises a base, a carriage extending upward from the base and coupled to the base, a gripper chain system mounted in the carriage and comprising one or more gripper chains and one or more linear beams supporting the one or more gripper chains, a lifting means coupled to the support structure, and a slip bowl assembly coupled to the support structure and located below the base; wherein the gripper chains engage the first segment of the tubular member until the injector encounters the second segment; engaging the slip bowl assembly, wherein the slip bowl assembly imparts a compressive force on the first segment of the tubular member; moving the linear beams of the injector away from one another; wherein the movement of the linear beams disengages the tubular member from the gripper chains; actuating the lifting means to move the injector vertically with respect to a base of the injector until the injector is positioned above the second segment of the tubular member; moving the one or more linear beams of the injector toward one another; wherein the movement of the linear beams causes the gripper chains to engage the third segment of the tubular member; and disengaging the slip bowl assembly from the first segment of the tubular member.