CLAIMS

1. A system for conducting subterranean operations comprising:

a tubular storage area;

a well center area; and

a robotic arm configured to move tubulars, the robotic arm comprising:

a base coupled to a rig floor and configured to traverse a distance between the well center area toward the tubular storage area, and

characterized in that: an articulating arm comprises a first portion, a second portion and a third portion,

wherein the first portion is configured to rotate relative to the base about a first axis that is substantially perpendicular to the rig floor,

wherein the second portion is configured to rotate relative to the first portion about a second axis that is parallel with the rig floor,

wherein the third portion is configured to rotate relative to the second portion about a third axis that is perpendicular to the second axis,

wherein the articulating arm is configured to support an entire weight of the tubular, wherein the robotic arm comprises a gripper coupled to the third portion, and

wherein the gripper is configured to grip the tubular and spin the tubular about a longitudinal axis of the tubular.

2. The system of claim 1, wherein the robotic arm is coupled to a track on the rig floor and the robotic arm is configured to traverse the distance between the tubular storage area and well center area on the track.

3. The system of claim 1, further comprising a tubular handling system in the tubular storage area, wherein the robotic arm and the tubular handling system are configured to interact and exchange objects.

4. The system of claim 3, wherein the robotic arm is configured to exchange a sub-type tubular with the tubular handling system in the tubular storage area.

5. The system of claim 4, wherein the gripper is configured to hold the sub-type tubular and pass the sub-type tubular to a gripper of the tubular handling system in the tubular storage area.

6. The system of claim 1, wherein the robotic arm is configured for automated movement without external commands.

7. A method for conducting subterranean operations comprising:

engaging a tubular with a gripper of a robotic arm, the robotic arm comprising a base and an articulating arm, with the articulating arm comprising a first portion, a second portion, a third portion, and the gripper, wherein the first portion is rotationally coupled to the base, the second portion is rotationally coupled to the first portion; the third portion is rotationally coupled to the second portion, and the gripper is coupled to the third portion;

rotating the first portion relative to the base about a first axis that is perpendicular to a rig floor;

rotating the second portion relative to the first portion about a second axis that is parallel to the rig floor;

rotating the third portion relative to the second portion about a third axis that is perpendicular to the second axis;

moving the tubular between a well center area and a tubular storage area by the robotic arm, wherein the robotic arm is configured to traverse at least a portion of a distance between the well center area and the tubular storage area;

carrying an entire weight of the tubular while rotating the first portion about the first axis; and

spinning the tubular, via the gripper, about a longitudinal axis of the tubular.

8. The method of claim 7, wherein moving includes engaging the tubular in the well center area.

9. The method of claim 7, wherein moving includes engaging the tubular in the tubular storage area.

10. The method of claim 7, wherein moving includes engaging the tubular near the tubular storage area.

11. The method of any one of claims 7, 8, and 9, wherein engaging includes gripping the tubular with the gripper of the robotic arm to support the entire weight of the tubular in the gripper.

12. The system of claim 1, further comprising a pipe storage system in the tubular storage area, the pipe storage system comprising:

a plurality of pipe storage arms;

a plurality of pipe storage bays established between adjacent pipe storage arms,

a plurality of protrusions extending from the pipe storage arms into each pipe storage bay, the plurality of protrusions establishing a plurality of channels, wherein each channel is established between a pair of adjacent protrusions; and

a plurality of latches, wherein the latches are movable from between a retracted position in which the latches are retracted to establish a series of first pipe storage openings between opposing channels and an extended position in which the latches extend into the pipe storage bay to establish a series of second pipe storage openings between opposing protrusions.

13. The system of claim 12, wherein the latches move substantially in unison.

14. The system of claim 13, wherein the first pipe storage openings are larger than the second pipe storage openings.

15. The system of claim 12, wherein the latches are mechanically actuated or electrically actuated.