CLAIMS

What is claimed is:

1. A hang-off assembly for supporting a riser string from an off-shore drilling rig, ~~including~~comprising:

a housing with a passage through the housing and an open section allowing access to the entire length of the passage through the side of the housing;

a gate member movable relative to the housing from an open position to a closed position, the gate member preventing access to the passage through the open section when in the closed position;

a motor that moves the gate member between the open and closed positions; and

an adapter attachable to the riser string, the adapter including a profile landable in the housing and supportable by the gate member to support the riser string when connected to the adapter.

2. The hang-off assembly of claim 1, wherein the housing, the passage, and the gate member are curved and the gate member rotates between the open and the closed positions.

3. The hang-off assembly of claim 1, further including an alignment member profiled to position the adapter when landed in the housing and absorb at least some of the impact forces from the adapter during landing of the riser string in the housing.

4. The hang-off assembly of claim 3, wherein the alignment member is attached to and moves with the gate member.

5. The hang-off assembly of claim 1, wherein the housing further includes a locking mechanism that engages the adapter to secure the adapter to the housing.

6. The hang-off assembly of claim 5, wherein the locking mechanism is hydraulically actuated.

7. The hang-off assembly of claim 5, wherein the locking mechanism includes an indicator identifying the locking mechanism as engaged or not engaged.

8. The hang-off assembly of claim 1, wherein the motor is a hydraulic drive motor.

9. The hang-off assembly of claim 1, wherein the adapter profile includes a shock absorber to absorb impact forces between the adapter and the housing.

10. The hang-off assembly of claim 1, wherein the housing is mountable to a support structure.

11. An off-shore drilling rig comprising:

a platform including a moon pool;

a riser string;

a hang-off assembly for supporting the riser string from the platform through the moon pool, the hang-off assembly including:

a housing with a passage through the housing and an open section allowing access to the entire length of the passage through the side of the housing;

a gate member movable relative to the housing from an open position to a closed position, the gate member preventing access to the passage through the open section when in the closed position;

a motor that moves the gate member between the open and closed positions; and

an adapter attached to the riser string, the adapter including a profile landable in the housing and supportable by the gate member to support the riser string.

12. The off-shore drilling rig of claim 11, wherein the housing, the passage, and the gate member of the hang-off assembly are curved and the gate member rotates between the open and the closed positions.

13. The off-shore drilling rig of claim 11, wherein the hang-off assembly further includes an alignment member profiled to position the adapter when landed in the housing and absorb at least some of the impact forces from the adapter during landing of the riser string in the housing.

14. The off-shore drilling rig of claim 13, wherein the alignment member of the hang-off assembly is attached to and moves with the gate member.

15. The off-shore drilling rig of claim 11, wherein the housing of the hang-off assembly further includes a locking mechanism that engages the adapter to secure the adapter to the housing.

16. The off-shore drilling rig of claim 15, wherein the locking mechanism is hydraulically actuated.

17. The off-shore drilling rig of claim 15, wherein the locking mechanism includes an indicator identifying the locking mechanism as engaged or not engaged.

18. The off-shore drilling rig of claim 11, wherein the motor of the hang-off assembly is a hydraulic drive motor.

19. The off-shore drilling rig of claim 11, wherein the adapter profile of the hang-off assembly includes a shock absorber to absorb impact forces between the adapter and the housing.

20. The off-shore drilling rig of claim 11, wherein the housing of the hang-off assembly is mounted to a support structure on the drilling rig.