

Claims:

What is claimed is:

1. A running tool for replacing a component of a subsea production tree comprising:
a body having an axis;
a connector on an end of the body that selectively attaches to a subsea wellhead assembly;
and
a hoist assembly on the body having a winch and a line.
2. The running tool of claim 1, further comprising a swivel on the body distal from the connector that rotates the hoist assembly selectively about the axis of the body.
3. The running tool of claim 2, further comprising a motor in the body and attached to the swivel for rotating the swivel.
4. The running tool of claim 1, wherein the hoist assembly comprises a jib member that extends radially outward from the body and a line support that is selectively moveable along the jib member, where the line depends from the line support.
5. The running tool of claim 1, further comprising a motor in the body that rotates the winch.
6. The running tool of claim 4, wherein the line support comprises a pulley.
7. The running tool of claim 1, further comprising a replacement component for a subsea well.
8. The running tool of claim 1, further comprising a parking location on the body for releasably carrying a subsea component.

9. The running tool of claim 1, further comprising a lift line attachment on the body for connecting to a lift line of a surface platform to lower the running tool from a surface platform.

10. The running tool of claim 1, further comprising a funnel attachment depending from a lower end of the connector for guiding the running tool onto a production tree mandrel.

11. The running tool of claim 1, further comprising a connector on an end of the line and that is selectively attached to a component for the subsea wellhead tree.

12. A method of handling a control module subsea comprising:

providing a running tool comprising: a body having an axis and a hoist assembly having a winch and line;

deploying the running tool subsea on a lift line to a subsea wellhead assembly;

connecting the body to the subsea wellhead assembly;

deploying the line with the winch and engaging a subsea component on the subsea wellhead assembly;

swiveling the hoist assembly to an angular position about an axis of the body to position the line with the subsea component;

attaching the line to the subsea component and reeling the line to the running tool

releasing the component from the hoist assembly;

disconnecting the running tool; and

retrieving a the running tool from the wellhead assembly.

13. The method of claim 12, further comprising stowing the retrieved component onto the body.

14. The method of claim 12, wherein the running tool further comprises a swivel on the body that is selectively rotated about the axis of the body, wherein the hoist is attached to the swivel, the method further comprising attaching a replacement component to the body that is deployed with the running tool, after rotating the swivel to align the hoist with the replacement control module, and using the hoist to move the replacement subsea component from the body onto the subsea wellhead assembly.

15. The method of claim 12, wherein the subsea component comprises an original subsea component, the method further comprising providing a replacement subsea component on the body, lowering the running tool subsea with the replacement subsea component parked on the running tool.

16. The method of claim 15, further comprising detaching the original subsea component from the line, swiveling the hoist to position the line for attachment to the replacement subsea component, attaching the line to the replacement subsea component, and moving the replacement subsea component from the body to the subsea wellhead assembly in the location from where the original subsea component was retrieved.

17. The method of claim 12, further comprising using a remotely operated vehicle in conjunction with the running tool.

18. The method of claim 12, wherein only the wire line is used for deploying the running tool.

CLAIMS

What is claimed is:

1. A running tool for replacing a component of a subsea production tree comprising:
a body having an axis and configured for deployment subsea to a subsea wellhead assembly;
a connector on an end of the body that selectively attaches to the subsea wellhead assembly; and
a hoist assembly on the body comprising,
a winch,
a jib,
a line support selectively moveable between a position proximate the body, positions along a length of the jib, and a position distal from the body, and
a line having an end coupled, with the winch and a middle portion supported on the line support.
2. The running tool of claim 1, further comprising a swivel on the body distal from the connector that rotates the hoist assembly selectively about the axis of the body, so that the line depends downward from the line support and into selective engagement with an object on the body.
3. The running tool of claim 2, further comprising a motor in the body and attached to the swivel for rotating the swivel.
4. The running tool of claim 1, further comprising a motor in the body that rotates the winch.
5. The running tool of claim 1, wherein the line support comprises a pulley.
6. The running tool of claim 1, further comprising a replacement component for a subsea well.
7. The running tool of claim 1, further comprising a parking location on a lateral side of the body for releasably carrying a subsea component, and wherein the body is an elongate substantially cylindrical member.
8. The running tool of claim 1, further comprising a lift line attachment on the body for connecting to a lift line of a surface platform to lower the running tool from the surface platform.
9. The running tool of claim 1, further comprising a funnel attachment depending from a lower end of the connector for guiding the running tool onto a production tree mandrel.
10. The running tool of claim 1, further comprising a connector on an end of the line and that is selectively attached to a component for the subsea wellhead tree.
11. A method of handling a control module subsea comprising:

providing a running tool comprising: a body having an axis, a swivel on the body that is selectively rotated about the axis of the body, a hoist assembly mounted on the swivel, a winch, and a line having an end coupled with the winch;

providing a replacement component onto the body;

deploying the running tool subsea on a lift line to a subsea wellhead assembly;

connecting the body to the subsea wellhead assembly;

swiveling the hoist assembly to an angular position about the axis of the body to position the line with a subsea component;

attaching an end of the line distal from the winch to the subsea component, and reeling the line onto the winch to raise the subsea component towards the running tool;

releasing the subsea component from the hoist assembly;

rotating the swivel to align the hoist assembly with the replacement component;

attaching the line to the replacement component;

using the hoist assembly to move the replacement subsea component from the body onto the subsea wellhead assembly;

disconnecting the body from the wellhead assembly; and

retrieving the running tool from the wellhead assembly.

12. The method of claim 11, further comprising stowing the retrieved component onto the body.

13. The method of claim 11, wherein the replacement subsea component replaces the subsea component on the wellhead assembly.

14. The method of claim 13, wherein the replacement subsea component is moved from the body to the subsea wellhead assembly in the location from where the original subsea component was retrieved.

15. The method of claim 11, further comprising using a remotely operated vehicle in conjunction with the running tool.

16. The method of claim 11, wherein only a wire line is used for deploying the running tool.