Claims

What is claimed as invention is:

1. A pipe reeling load simulator for bending a pipe specimen having first and second ends, comprising:
a. a rigid frame;
b. a pipe bending form pivotally mounted on the rigid frame;
c. means for connecting the first end of the pipe specimen to the pipe bending form;
d. a beam pivotally attached to the rigid frame at a separate location from the pipe bending form;
e. means for selectively causing movement of the beam;
ef. a table mounted on the beam for rotational and translational movement on the beam;
fg. means for connecting the second end of the pipe specimen to the table;
gh. means for driving the pipe bending form; and
hi. means for determining the driving torque used to draw the pipe specimen over the pipe bending form.

2. The pipe reeling load simulator of claim 1, wherein the means for determining the driving torque comprises a load cell engaged with the means for driving the pipe bending form.

3. The pipe reeling load simulator of claim 1, further comprising a first guide track attached to the rigid frame on which the pipe bending form moves.

4. The pipe reeling load simulator of claim 1, further comprising a second guide track attached to the rigid frame on which the beam moves.

5. The pipe reeling load simulator of claim 1, wherein the table is rotatably mounted on a truck that is movably mounted on the beam for translational movement thereon.

6. The pipe reeling load simulator of claim 5, further comprising means for selectively causing rotational movement of the table.

~~7. The pipe reeling load simulator of claim 1, further comprising means for selectively causing movement of the beam.~~

78. A pipe reeling load simulator for bending a pipe specimen having first and second ends, comprising:
a. a rigid frame;
b. a pipe bending form pivotally mounted on the rigid frame;
c. means for connecting the first end of the pipe specimen to the pipe bending form;
d. a beam pivotally attached to the rigid frame at a separate location from the pipe bending form;
e. means for selectively causing movement of the beam;
ef. a table mounted on the beam for rotational and translational movement on the beam;
fg. means for selectively causing rotational and translational movement of the table;
gh. means for connecting the second end of the pipe specimen to the table;
hi. means for driving the pipe bending form; and

ij. a load cell engaged with the means for driving the pipe bending form for determining the driving torque used to draw the pipe specimen over the pipe bending form.

89. The pipe reeling load simulator of claim 87, further comprising a first guide track attached to the rigid frame on which the pipe bending form moves.

910. The pipe reeling load simulator of claim 87, further comprising a second guide track attached to the rigid frame on which the beam moves.

1011. The pipe reeling load simulator of claim 87, wherein the table is rotatably mounted on a truck that is movably mounted on the beam for translational movement thereon.

~~12. The pipe reeling load simulator of claim 8, further comprising means for selectively causing movement of the beam.~~

1113. A pipe reeling load simulator for bending a pipe specimen having first and second ends, comprising:
a. a rigid frame;
b. a pipe bending form pivotally mounted on the rigid frame;
c. means for connecting the first end of the pipe specimen to the pipe bending form;
d. a beam pivotally attached to the rigid frame at a separate location from the pipe bending form;
e. means for selectively causing movement of the beam;
ef. a truck mounted on the beam for translational movement thereon;
fg. means for selectively causing translational movement of the truck on the beam;
gh. a table mounted on the truck for rotational movement thereon;
hi. means for selectively causing rotational movement of the table;
ij. means for connecting the second end of the pipe specimen to the table;
jk. means for driving the pipe bending form; and
kl. a load cell engaged with the means for driving the pipe bending form for determining the driving torque used to draw the pipe specimen over the pipe bending form.

1214. The pipe reeling load simulator of claim 1311, further comprising a first guide track attached to the rigid frame on which the pipe bending form moves.

1315. The pipe reeling load simulator of claim 1311, further comprising a second guide track attached to the rigid frame on which the beam moves.

~~16. The pipe reeling load simulator of claim 13, further comprising means for selectively causing movement of the beam.~~