CLAIMS

1. A surface treatment system comprising:

a blast hose;

a deadman assembly coupled with the blast hose, the deadman assembly further comprising:

a primary deadman signal device;

a base frame, with the primary deadman signal device coupled with the base frame; and

a trigger member movably coupled with the base frame, the trigger member configured to contact and move the primary deadman signal device to a signal-flow position, the trigger member further comprising:

a first plunger cavity; and

a first plunger movably disposed in the first plunger cavity; and

a fluid source configured for fluid communication with the blast hose;

wherein a first bias member is disposed around the first plunger, and facilitates a range of motion of the trigger member while a first plunger is engaged with the primary deadman signal device, and the primary deadman signal device is in the signal flow position.

2. The surface treatment system of claim 1, wherein the first plunger comprises a plunger lip.

3. A method of abrasive blasting, the method comprising:

providing a blast hose, the blast hose operatively configured with a deadman assembly;

feeding an abrasive media to the blast hose;

operating the deadman assembly in a manner to discharge the abrasive media from a spray nozzle end of the blast hose,

wherein the deadman assembly comprises:

a primary deadman signal device;

a base frame, with the primary deadman signal device coupled with the base frame; and

a trigger member pivotably coupled with the base frame, the trigger member configured to contact and move the primary deadman signal device to a signal-flow position, the trigger member further comprising:

a first plunger cavity;

a first plunger movably disposed in the first plunger cavity; and

a first bias member disposed around the first plunger,

wherein the first bias member facilitates a range of motion of the trigger member while a first plunger is engaged with the primary deadman signal device, and the primary deadman signal device is in a signal flow position.

4. A deadman assembly comprising:

a primary deadman signal device;

a base frame, with the primary deadman signal device coupled with the base frame; and

a trigger member movably coupled with the base frame, the trigger member configured to contact and move the primary deadman signal device to a signal-flow position, the trigger member further comprising:

a first plunger cavity; and

a first plunger movably disposed within the first plunger cavity, the first plunger configured to contact and move the primary deadman signal device to a signal-flow position; and

a first biased member disposed around the first plunger, the first biased member configured to facilitate the first movable plunger engaging the primary deadman signal device,

wherein the first bias member facilitates a range of motion of the trigger member while a first plunger is engaged with the primary deadman signal device, and the primary deadman signal device is in the signal-flow position.

5. The deadman assembly of claim 4, wherein the first plunger comprises a plunger lip.

6. The deadman assembly of claim 5, wherein the first plunger cavity comprises a cavity lip, and wherein the first bias member is maintained between the plunger lip and the cavity lip.

7. The deadman assembly of claim 5, wherein the first plunger cavity comprises a hollow narrowed by the cavity lip, and wherein the first bias member is maintained in engagement with both the plunger lip and the cavity lip.

8. The deadman assembly of claim 4, wherein the deadman assembly comprises a sloped guard profile having a guard profile end, and a winged member having a winged member end proximate the guard profile end, wherein the guard profile end has a lateral profile radial greater than a lateral member radial of the winged member end.

9. The deadman assembly of claim 4, wherein the first plunger comprises: a first plunger end configured for direct physical contact with the primary deadman signal device.

10. A deadman assembly comprising:

a primary deadman signal device;

a base frame, with the primary deadman signal device coupled with the base frame; and

a trigger member movably coupled with the base frame, the trigger member further comprising:

a first plunger cavity; and
a first plunger movably disposed in the first plunger cavity,
a first bias member;

wherein the first plunger comprises a plunger lip,

wherein the first plunger cavity comprises a cavity lip, and
wherein the first bias member is disposed around the first plunger, and maintained between the plunger lip and the cavity lip.

11. The deadman assembly of claim 10, wherein the first bias member facilitates a range of motion of the trigger member while the first plunger is engaged with the primary deadman signal device.

12. The deadman assembly of claim 11, wherein the first plunger cavity comprises a hollow narrowed by the cavity lip.

13. The deadman assembly of claim 10, wherein the first plunger is external of the base frame.

14. The deadman assembly of claim 10, wherein the deadman assembly comprises a sloped guard profile having a guard profile end, and a winged member having a winged member end proximate the guard profile end, wherein the guard profile end has a lateral profile radial greater than a lateral member radial of the winged member end.

15. The deadman assembly of claim 10, wherein the first plunger comprises: a first plunger end configured for direct physical contact with the primary deadman signal device.

16. A deadman assembly comprising:

a deadman signal device;

a base frame, with the deadman signal device coupled with the base frame; and

a trigger member movably coupled with the base frame, the trigger member configured to contact and move the deadman signal device to a signal-flow position, the trigger member further comprising:

a first plunger cavity; and

a first plunger movably disposed within the first plunger cavity, the first plunger configured to contact and move the deadman signal device to a signal-flow position; and

a first biased member disposed around the first plunger, the first biased member configured to facilitate the first movable plunger engaging the deadman signal device.

17. The deadman assembly of claim 16, wherein the first plunger comprises a plunger lip, wherein the first plunger cavity comprises a cavity lip, and wherein the first bias member is disposed around the first plunger, and maintained between the plunger lip and the cavity lip.