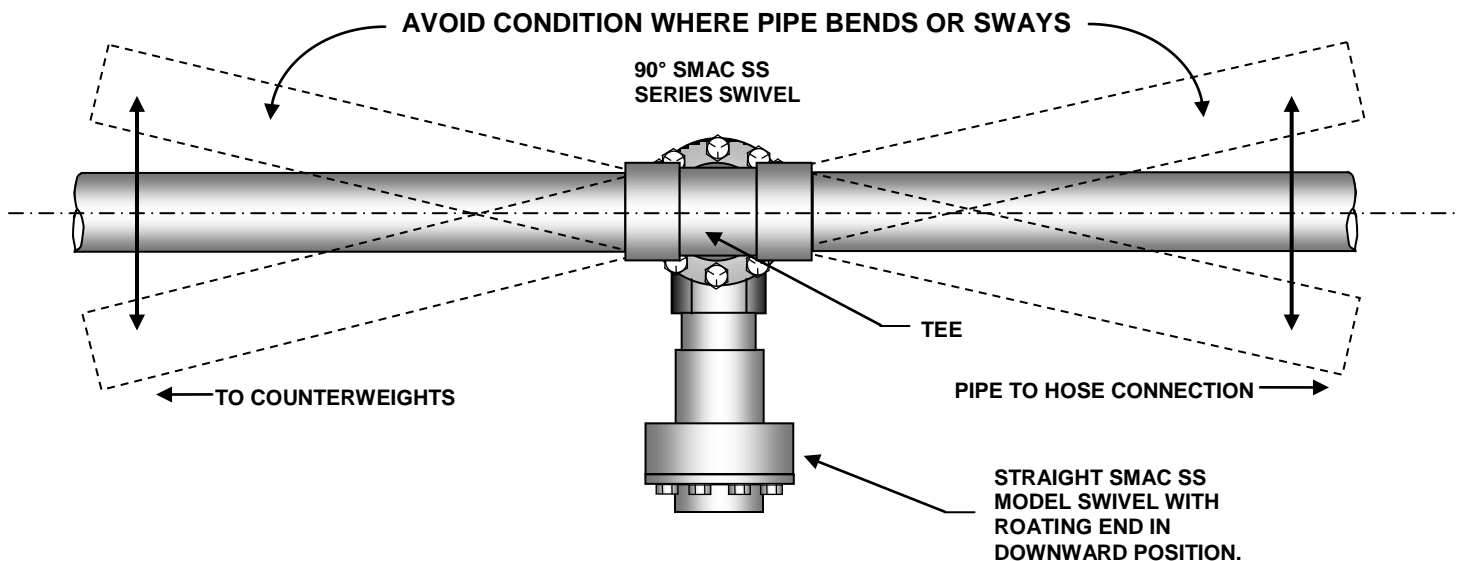


IMPORTANT NOTES FOR PROPER LOADING ARM DESIGN

Failure to follow these guidelines will lead to premature swivel failure and/or seal leakage.

- (1) Only SS model swivels are recommended for loading arm assemblies. Avoid conditions where counterweight pipe and/or pipe to hose connection are allowed to bend, or sway. This will overload the swivel ball bearing, causing seal leakage. Keep pipe lengths short and support if required.



- (2) Total weight of counterweight and pipe/hose should not exceed 250 pounds. Inertial weight due to pipe bending or swaying will exceed this limit.
- (3) Install straight swivel in the position as shown above so that the rotating end is in the downward position.
- (4) Install counterweight as close to swivels as possible. 3 feet or less is recommended. The heavier the counterweight, the closer it should be to the swivels.
- (5) Keep pipe to hose as short as possible to minimize load on swivels. Use longer length of hose as required.
- (6) Do not modify the swivel loading arm assembly by increasing the length of the short nipples.