

A PipeSak® Buoyancy Control System vs Concrete Coated Pipe

Assume a 24 in (610 mm) pipeline with a wall thickness of 0.325 in (8.3 mm) requires one PipeSak every 15.8 ft (4.8 m). The thickness of concrete coating for equivalent buoyancy control would be 3.6 in (91 mm). With 3.6 in of concrete coating, the pipe to be handled is now four times heavier – directly influencing overall project costs. The direct purchase price may be comparable, however, the total installed cost should be considered when comparing different methods of buoyancy control.

In addition, transportation costs for concrete coated piping are higher; as are equipment costs (more side booms are required to handle the heavy pipe); welding costs increase (many more in-trench welds); and joints require additional support following welding. Overall, the whole construction process is slowed-down. These additional costs (as much as six times) are often hidden and can be difficult to quantify, but they are included when only concrete coated pipe is specified.

Concrete coating certainly has its place, but using it for onshore applications has been an expensive option for the pipeline industry.

The use of concrete coated pipe is limited to situations where a weighted pipeline must be dragged into place. We believe the industry evolved to using concrete coating as extensively as it does today because there were no apparent alternatives to concrete set-on weights. There is now.

PipeSak® weights are set on the pipeline following its placement in the trench. The pipe is hauled to site, welded and lowered-in as usual. With PipeSak® you get a product that will never biodegrade; use local, natural gravel as ballast; be soft on the pipe and the coating; limit any shielding of the cathodic protection system; and save project costs.



Give PipeSak® a try on your next pipeline project

If, for example, the construction plan calls for 3,000 ft of concrete coating for a 24 in pipeline – order 2,500 ft concrete coating and 32 PipeSak® weights as insurance. Once the trench is open, it may be determined that only 2,600 ft requires weighting. Now, instead of wasting 400 ft of expensive concrete coating, just fill and install seven PipeSak® weights.

Save the rest for the next project, or sell them back to us.

