

RoscoeMossDISPATCH

Field stories and the tools that fuel them.



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Column Pipe : A Spline Lock Success Story



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Pipe attached to a pump bowl assembly which is run inside a water well can go by a variety of names such as Pump Column, Drop Pipe, or Column Pipe. Regardless of its name, its function remains the same: convey water from inside the well to surface.

installation

Pump Column

Mild steel with threaded end fittings has been the usual choice when it comes to Pump Column in potable water aquifers. In corrosive water environments, stainless steel pipe is the correct solution, but unfortunately, stainless steel pipe is not conducive to threading because the softness of the steel causes the threads to gall, which can make connection cumbersome and the opportunity to detach and reattach in the future almost impossible. This drawback allows the installer only “one-shot” to get it installed correctly.



In the spring of 2021, Idaho National Laboratory, which is operated by **Battelle Energy Alliance** for the **Department of Energy**, required stainless steel 304L pump column for its well located in eastern Idaho. **American Pump**, based in Idaho Falls, contacted Roscoe Moss Company after learning about the unique double spline lock couplings that can be used on either well casing or pump column.

Idaho National Laboratory

Case Study

“We knew that threaded stainless steel could have a galling problem and we didn’t want these guys to have any problems while installing the pump. We also wanted them to be able to take the pipe apart with ease in the future... We were impressed with the quality of the product...[and] also amazed at how easy it went together.”

Jacob Hancock – American Pump Installation Supervisor

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Roscoe Moss Company manufactures a Double Spline Lock End Fitting for both carbon and stainless steel.

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This special non-welded and non-threaded fitting allows for incredibly fast installation, plus the ability to detach and reattach pipe joints if necessary. Steel springs are inserted into two grooves within the fittings to lock the joints into place and sealed with o-rings. Because there are no threaded connections, the risk of galling is eliminated.

project specs

PIPE SIZE	6"
WALL THICKNESS	.250"
STEEL TYPE	STAINLESS 304L
SETTING DEPTH	540'
INSTALLATION TIME (PER JOINT)	LESS THAN 60 SECONDS



"I found that the simplicity of the o-ring and spring function of the joints extremely efficient. I also like the speed that can be achieved during assembly is a welcome efficiency to the contractor without the fear of galling threads with screw type."

**Travis Gilchrist - L&L Mechanical
Project General Contractor**